

Risk Factors Comparison 2025-03-31 to 2024-04-01 Form: 10-K

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An investment in our securities involves a high degree of risk. You should carefully consider all of the risks described below, together with the other information contained in this report, including the financial statements, before making a decision to invest in our common stock. If any of the following events occur, our business, financial condition and operating results may be materially and adversely affected. In that event, the trading price of our securities could decline, and you could lose all or part of your investment. The risk factors described below are not necessarily exhaustive and you are encouraged to perform your own investigation with respect to us and our business. Risks Relating to our Business Our revenue, earnings, margins and other operating results have fluctuated significantly in the past and may fluctuate significantly in the future. If demand for our products fluctuates, because of economic conditions or for other reasons, our revenue and profitability could be impacted. We incurred net losses of \$ **11,242,404 in 2024 and \$ 2,465,439 in 2023** ~~and \$ 677,107 in 2022~~. As of December 31, **2023-2024**, we had an accumulated deficit of \$ **9-21,769-012,723-127**. These losses and our accumulated deficit reflect the substantial investments we have made to develop our products. Our future operating results will depend on many factors affecting our new market segments, including the following, many of which are out of our control: the continued market acceptance of our current and new products for 5G, cryogenic quantum computing, internet of things (IoT) and MMICs. Although hard to predict under the current global environment, we believe our core LNA product line, as well as Spectrum Semiconductor Material and 5G product lines will continue to be in demand and generate top line revenue and cash flow to sustain ongoing activities. **There is no assurance that the Asset Purchase Agreement will close or that even if we close we will realize the anticipated benefits. On March 26, 2025, the Company entered into the Asset Purchase Agreement. The closing of the Asset Purchase Agreement is subject to the occurrence of certain closing conditions, which include actions to be taken by a certain third-party customer. There can be no guarantees that the closing conditions will be met satisfied. Even if the transactions contemplated by the Asset Purchase Agreement is completed, the acquisition of the assets may not materialize into purchase orders and new customers and generate the financial and strategic benefits we expected. In addition, purchase orders are subject to cancellation, modification or delays, which could negatively impact our revenues and return on investment. In addition, we may face operational challenges and unforeseen liabilities that may negatively impact our business. We have entered into non-binding letter of intent for purchase orders and there no assurance that we will enter into definitive purchase orders or generate revenues as expected. On March 20, 2025, the Company entered into a non-binding letter of intent with a contract manufacturer on behalf of its end user for the purchase of \$ 78 million of the Company's Oran radios. There is no assurance that the letter of intent will result in a series of definitive purchase orders or generate revenues as expected. Even if we enter into definitive purchase orders, they are subject to delay, modification or cancellation, which may adversely affect our revenue and financial performance.** The Company is dependent on the global supply chain and has ~~in the past~~ experienced supply chain constraints, as well as increased costs on components and shipping. The Company has experienced supply chain constraints which have slowed down production ~~and will~~ **which may** negatively impact the timing of deploying ASRs (Available Supply Rate) to our clients. These supply constraints include, but are not limited to, semiconductor shortages as well as shortages of certain commodities. Extended lead times on certain parts as well as a lack of immediate availability may delay our ability to deploy ASRs, and consequently, may delay our ability to recognize revenue. In addition, the Company has also faced increased costs of components and freight. Further, current or future governmental policies may increase the risk of inflation **and tariffs**, which could further increase the costs of raw materials and components for our business. Similarly, if the costs of goods continue to increase, our suppliers may seek price increases from us. If we are unable to mitigate the impact of supply chain constraints and inflationary pressure through price increases or other measures, our results of operations and financial condition could be negatively impacted. Even if we can raise the prices of our products, consumers might react negatively to such price increases, which could have a material adverse effect on, among other things, our brand, reputation, and sales. If our competitors substantially lower their prices, we may lose customers and mark down prices. Our profitability may be impacted by lower prices, which may negatively impact gross margins. Even though we are working to alleviate supply chain constraints through various measures, we are unable to predict the impact of these constraints on the timing of revenue and operating costs of our business in the near future. Raw material supply shortages and supply chain constraints, including **tariffs and** cost inflation, ~~have may impacted~~ **impact** cost of components and freight as well as ongoing delays in production are likely to have an impact on sales and profitability throughout 2024. Our market is very competitive. If we fail to compete successfully, our business and operating results will suffer. We face significant competition in the amplifier industry from both established and emerging players such as Lucix, Erzia, and Narda-Miteq. Some of our competitors have longer operating histories and significantly greater financial, research and development, marketing and other resources than us. As a result, some of these competitors can devote greater resources to the development, promotion, sale and support of their products. These competitors may also provide discounted pricing on their products to gain market share. In addition, consolidation in the amplifier industry could intensify the competitive pressures that we face. Many of our existing and potential competitors may be better positioned than we are to acquire other companies, technologies or products. Some of our customers may also maintain diverse supplier bases to enhance competition and maintain multiple providers of amplifier products. Our ability to increase order sizes from these customers and maintain or increase our market share would be constrained by these policies. In addition, any decline in the quality or availability of our products or any increase in the number of suppliers that such a customer use may decrease demand for our products and adversely affect our operating results, business and prospects. Our ability to compete successfully depends on numerous factors, including our ability to: ● maintain and increase our market share and the strength of our brand in amplifiers; ● maintain and expand our relationships with channel partners; ● secure products in large volume in a cost-effective and timely manner from our suppliers; ● develop innovative, differentiated, high-performance products relative to our competitors' solutions; and ● protect our intellectual property. We cannot assure you that our solutions will compete favorably or that we will be successful in the face of increasing competition from new products and enhancements introduced by our existing competitors or new companies entering our market. In addition, we cannot assure you that our competitors do not have or will not develop processes or product designs that currently or in the future will enable them to produce competitive products at lower costs than ours. Any failure to compete successfully would materially adversely affect our business, prospects, operating results and financial condition. Global economic uncertainty and financial market volatility caused by political instability, changes in international trade relationships and conflicts, such as the conflict in the Middle East or the conflict between Russia and Ukraine, could make it more difficult for us to access financing and could adversely affect our business and operations. Our abilities to raise capital and operate our business are subject to the risk of adverse changes in the market value of our securities. Periods of macroeconomic weakness or recession and heightened market volatility caused by adverse geopolitical developments could increase these risks, potentially resulting in adverse impacts on our ability to raise further capital on favorable terms. The impact of geopolitical tension, such as a deterioration in the bilateral relationship between the US and China, the ~~war conflicts~~ **in the Middle East or an and escalation in conflict** between Russia and Ukraine, including any resulting sanctions, export controls or other restrictive actions that may be imposed by the US and / or other countries against governmental or other entities ~~in, for example, Russia, also~~ could lead to disruption, instability and volatility in global trade patterns, which may in turn impact our ability to source necessary reagents, raw materials and other inputs for our operations. **Changes in US trade policy, including the imposition of tariffs and the resulting consequences, may have a material adverse impact on our business and results of operations. Changes in the import and export policies, including trade restrictions, new or increased tariffs or quotas, embargoes, sanctions and countersanctions, safeguards or customs restrictions by the U. S. and / or other foreign governments, could require us to change the way we conduct business and adversely affect our financial condition, results of operations, reputation and our relationships with customers, suppliers and employees in the short- or long- term. On February 1, 2025, the U. S. government announced a 25 % tariff on product imports from certain countries, including Mexico and Canada, and 10 % tariffs on product imports from certain countries, including China. On February 3, 2025, the prospective tariffs on Canada and Mexico were deferred for 30 days, though the execution of these tariff increases remain possible beyond the current short- term reprieve. The 10 % additional tariff on all imports from China went into effect, and on February 4, 2025, China retaliated with various levels of tariffs on certain products imported into that country from the U. S. The extent and duration of the tariffs and the resulting impact on general economic conditions and on our business are uncertain and depend on various factors, such as negotiations between the U. S. and affected countries, the responses of other countries or regions, exemptions or exclusions that may be granted, availability and cost of alternative sources of supply, and demand for our products in affected markets. Further, actions we take to adapt to new tariffs or trade restrictions may cause us to modify our operations or forgo business opportunities. There can be no assurances that these disruptions will not continue or increase in the future, with the previously mentioned countries or additional countries with which we do business. We cannot predict future trade policy or the terms of any renegotiated trade agreements and their impact on our business. The adoption and expansion of trade restrictions, the occurrence of a trade war, or other governmental action related to tariffs or trade agreements or policies has the potential to adversely impact demand for our products, our costs, our customers, our suppliers, and the US economy, which in turn could adversely impact our business, financial condition and results of operations. Economic conditions may adversely impact our business, operating results and financial condition. Economic conditions, market and political instability, changes in trade agreements and conflicts, such as the conflict in the Middle East or the conflict between Russia and Ukraine, could adversely affect global markets and**

transactions and may adversely affect our customers and suppliers. Any adverse financial or economic impact to our customers may impact their ability to pay in a timely manner or result in their inability to pay. It may also impact their ability to fund future purchases or increase the sales cycles which could lead to a reduction in revenue and accounts receivable. Our suppliers may increase their prices or may be unable to supply the necessary raw materials on a timely basis which could result in our inability to meet customers' demand or affect our gross margins. Our suppliers may also impose more stringent payment terms on us. The timing and nature of any recovery from the effects of adverse economic conditions or market and political instability on credit and financial markets is uncertain, and there can be no assurance that market conditions will improve in the near future or that our results will not be materially and adversely affected. Changes in our product mix could cause our overall gross margin to decline, which may adversely affect our operating results and financial condition. Our gross margin is dependent on product mix. A shift in sales mix away from our higher margin products could adversely affect our gross margins, and there can be no assurance that we will be able to maintain our historical gross margins. In addition, as our product mix becomes more customer specific and diversified, our cost of manufacturing has increased. If revenue from LNAs and customer-specific products continues to grow relative to our other products and services, our company-wide gross margin will likely decline. Additionally, increased competition and the existence of product alternatives, weaker than expected demand and other factors may lead to further price erosion, lower revenue and lower margins for us in the future, adversely affecting our operating results and financial condition. Our products must meet exact technical and quality specifications. Defects, errors in or interoperability issues with our products or the failure of our products to operate as expected could affect our reputation, result in significant costs to us and impair our ability to sell our products. Our products may contain defects or errors or not operate as expected, which could materially and adversely affect our reputation, result in significant costs to us and impair our ability to sell our products in the future. Our customers have demanding specifications for quality, performance and reliability that our tag and reader products must meet. Our products are highly technical and designed to be deployed in large and complex systems, networks and other settings under a wide variety of conditions. Customers and end users may discover errors, defects or incompatibilities in our products only after they have been fully deployed. In addition, users of our products may experience compatibility or interoperability issues between our products and their enterprise software systems or networks, or between our products and other amplifying products they use. We may also experience quality problems with our products that are combined with or incorporated into products from other vendors, such as tags produced by our inlay manufacturers, or that are assembled by subcontractors. We may have difficulty identifying and correcting the source of problems when third parties are combining, incorporating or assembling our products. If we are unable to fix errors or other problems, we could experience: ● loss of customers or customer orders; ● lost or delayed market acceptance and sales of our products; ● loss of market share; ● damage to our brand and reputation; ● impaired ability to attract new customers or achieve market acceptance; ● diversion of development resources; ● increased service and warranty costs; ● replacement costs; ● legal actions by our customers; and ● increased insurance costs. We may be required to indemnify our customers against liabilities arising from defects in our products or their solutions which incorporate our products. These liabilities may also include costs incurred by our customers or end users to correct the problems or replace our products. While we test our products for defects or errors prior to product release, defects or errors are occasionally identified by our customers. Such defects or errors have occurred in the past and may occur in the future. To the extent product failures are material, they could adversely affect our business, operating results, customer relationships, reputation and prospects. We may face claims of intellectual property infringement, which could be time consuming, costly to defend or settle and result in the loss of significant rights. Our industry is characterized by companies that hold large numbers of patents and other intellectual property rights and which may vigorously pursue, protect and enforce their intellectual property rights. We may in the future be required to license patents and other intellectual property rights to technologies that are important to our business, which may be costly or prohibitively expensive to our business operations. We may also receive assertions against us, our customers or distributor, claiming that we infringe patent or other intellectual property rights. Claims that our products, processes, technology or other aspects of our business infringe third-party intellectual property rights, regardless of their merit or resolution, could be costly to defend or settle and could divert the efforts and attention of our management and technical personnel. If we decline to accept an offer, the offering party may allege that we infringe such patents, which could result in litigation. In addition, many of our customer agreements require us to indemnify and defend our customers from third-party infringement claims and pay damages in the case of adverse rulings. Moreover, we may not know whether we are infringing a third party's rights, due to the large number of patents related to amplifiers or to other systemic factors. For instance, patent applications in the United States are maintained in confidence for up to 18 months after their filing or, in some cases, for the entire time prior to issuance as a patent. Thus, we would not be able to account for such rights before publication. Competitors may also have filed patent applications or received patents and may obtain additional patents and proprietary rights that block or compete with our patents. Claims of this sort could harm our relationships with our customers or distributor and might deter future customers from doing business with us. We do not know whether we will prevail in any such future proceedings given the complex technical issues and inherent uncertainties in intellectual property litigation. If any pending or future proceedings result in an adverse outcome, we could be required to: ● cease the manufacture, use or sale of the infringing products, processes or technology; ● pay substantial damages for infringement; ● expend significant resources to develop non-infringing products, processes or technology; ● license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all; ● cross-license our technology to a competitor to resolve an infringement claim, which could weaken our ability to compete with that competitor; or ● pay substantial damages to our customers or end users to discontinue their use of or to replace infringing technology sold to them with non-infringing technology. Any of the foregoing results could have a material adverse effect on our business, financial condition and operating results. We may incur substantial costs enforcing or acquiring intellectual property rights and defending against third-party claims as a result of litigation or other proceedings. We may incur substantial costs enforcing or acquiring intellectual property rights and defending against third-party claims as a result of litigation or other proceedings. In connection with the enforcement of our own intellectual property rights, the acquisition of third-party intellectual property rights or disputes related to the validity or alleged infringement of third-party intellectual property rights, including patent rights, we may be subject to claims, negotiations or complex, protracted litigation. Intellectual property disputes and litigation may be costly and can be disruptive to our business operations by diverting the attention and energies of management and key technical personnel, and by increasing our costs of doing business. If we fail to prevail in any future litigation and disputes, it could adversely affect our results of operations and financial condition. Third-party intellectual property claims asserted against us could subject us to significant liabilities, require us to enter into royalty and licensing arrangements on unfavorable terms, prevent us from assembling or licensing certain of our products, subject us to injunctions restricting our sale of products, cause severe disruptions to our operations or the marketplaces in which we compete or require us to satisfy indemnification commitments with our customers, including contractual provisions under various license arrangements. In addition, we may incur significant costs in acquiring the necessary third-party intellectual property rights for use in our products. Any of these could seriously harm our business. If we are unable to obtain patent protection for our products or otherwise protect our intellectual property rights, our business could suffer. Our success depends, in part, on our ability to obtain patent protection for or maintain as trade secrets our proprietary products, technologies and inventions and to maintain the confidentiality of our trade secrets and know-how, operate without infringing upon the proprietary rights of others and prevent others from infringing upon our business proprietary rights. Despite our efforts to protect our proprietary rights, it is possible that competitors or other unauthorized third parties may obtain, copy, use or disclose our technologies, inventions, processes or improvements. We cannot assure you that any of our existing or future patents or other intellectual property rights will be enforceable, will not be challenged, invalidated or circumvented, or will otherwise provide us with meaningful protection or any competitive advantage. In addition, our pending patent applications may not be granted. If our patents do not adequately protect our technology, our competitors may be able to offer additive manufacturing systems or other products like ours. Our competitors may also be able to develop similar technology independently or design around our patents, and we may not be able to detect the unauthorized use of our proprietary technology or take appropriate steps to prevent such use. Any of the foregoing events would lead to increased competition and lower revenues or gross margins, which could adversely affect our operating results. Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information, and our inability to maintain the confidentiality of that information, due to unauthorized disclosure or use, or other events, could have a material adverse effect on our business. In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce, and any other elements of our product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by patents. Trade secrets, however, may be difficult to protect. We seek to protect our proprietary processes, in part, by entering into confidentiality agreements with our employees, consultants, advisors, contractors and collaborators. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, advisors, contractors, and collaborators might intentionally or inadvertently disclose our trade secret information to competitors. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, or misappropriation of our intellectual property by third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results and financial condition. We are subject to order and shipment uncertainties. Inaccuracies in our estimates of customer demand and product mix could negatively affect our inventory levels, sales and operating results. We derive revenue primarily from customer purchase orders rather than long-term purchase commitments. To ensure the availability of our products, in some cases we start manufacturing based on forecasts provided by customers in advance of receiving purchase orders from them. In some cases, our supply chain has been affected by both tariffs and **supply chain disruptions** by the COVID-19 pandemic. Some of our

products are manufactured according to our estimates of customer demand, which requires us to make demand forecast assumptions for every customer, and which may introduce significant variability into our aggregate estimate. We typically sell to channel partners and end users, and we consequently have limited visibility into future end-user demand, which could adversely affect our revenue forecasts and operating margins. Additionally, we sometimes receive soft commitments for larger order sizes which do not materialize. If we manufacture more products than we can sell to our customers or channel partners, we will incur losses and our results of operation and financial condition will be harmed. Our sales and marketing efforts may be unsuccessful in maintaining and expanding existing sales channels, developing new sales channels and increasing the sales of our products. To grow our business, we must add new customers for our products in addition to retaining and increasing sales to our current customers. Our ability to attract new customers will depend in part on the success of our sales and marketing efforts. There can be no guarantee that we will be successful in implementing our sales and marketing strategy. If suitable sales channels do not develop, we may not be able to sell certain of our products in significant volumes and our operating results, business and prospects may be harmed. Our business would be adversely affected by the departure of members of our executive management team. Our success depends, in large part, on the continued contributions of Fawad Maqbool, our Chairman, President and Chief Executive Officer. Mr. Maqbool is not bound by any employment contract to remain with us for a specified period. Although we have additional engineering, technical and sales personnel, the loss of Mr. Maqbool's service could harm our ability to implement our business strategy and respond to the rapidly changing market conditions in which we operate. If we are unable to attract, train and retain qualified personnel, especially our design and technical personnel, we may not be able to effectively execute our business strategy. Our future success depends on our ability to attract, retain and motivate qualified personnel, including our management, sales and marketing, finance and especially our design and technical personnel. ~~For example, we currently have a limited number of personnel for the assembling and testing processes.~~ We do not know whether we will be able to retain all these personnel as we continue to pursue our business strategy. As the source of our technical and product innovations, our design and technical personnel are a significant asset. The competition for qualified personnel in the New York area where we are headquartered constrains our ability to attract qualified personnel. The loss of the services of one or more of our key employees, especially of our key design and technical personnel, or our inability to attract, retain and motivate qualified personnel could have a material adverse effect on our business, financial condition and operating results. **We have material weaknesses in our internal accounting control over financial reporting and Failure failure** to remediate a material weakness in internal accounting controls could result in material misstatements in our financial statements. Our management has identified material weaknesses in our internal control over financial reporting related to lack of segregation of duties resulting from our limited personnel and ineffective control over financial statement disclosure as controls were not designed and in place to ensure that all disclosures required were originally addressed in our financial statements and has concluded that, due to such material **weakness weaknesses**, our disclosure controls and procedures were not effective as of December 31, 2024 and 2023. ~~If~~ **In addition, during the three months ended March 31, 2024, we made several transactions in digital currency in the total amount of approximately \$ 3.25 million (the "Digital Currency Investment") which was fraudulently induced. As a result, we identified further additional material weaknesses regarding our internal controls over financial reporting including, but not limited to, the lack of segregation of duties involved in the execution and approvals of wire transfers for material investments in digital assets. We have identified certain steps necessary to address the material weaknesses, and we continue to implement the remedial procedures. However, if** not remediated, or if we identify further material weaknesses in our internal controls, our failure to establish and maintain effective disclosure controls and procedures and internal control over financial reporting could result in material misstatements in our financial statements and a failure to meet our reporting and financial obligations, each of which could have a material adverse effect on our financial condition and the trading price of our common stock. **On October 31, 2024, the Company received a shareholder letter demanding that the Company's Board take action against certain and / or former officers and directors of the Company asserting violations of fiduciary duties of good faith, loyalty and due care, and / or the aiding and abetting of such breaches of fiduciary duty in connection with the Digital Currency Investment. We have established a Board committee to review this letter and to prepare a response thereto. In addition, as previously discussed, the Company's Board has taken steps and adopted procedures in response to the material weakness related to the Digital Currency Investment. If not remediated, or if we identify further material weaknesses in our internal controls, our failure to establish and maintain effective disclosure controls and procedures and internal control over financial reporting could result in material misstatements in our financial statements and a failure to meet our reporting and financial obligations, each of which could have a material adverse effect on our financial condition and the trading price of our common stock.** If we fail to implement proper and effective internal controls, our ability to produce accurate financial statements would be impaired, which could adversely affect our operating results, our ability to operate our business and our stock price. We must ensure that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis. We have tested our internal controls and identified ~~two~~ material weaknesses and may find additional areas for improvement in the future. Remediating these material weaknesses will require us to hire and train additional personnel. Implementing any future changes to our internal controls may require compliance training of our directors, officers and employees, entail substantial costs to modify our accounting systems and take a significant period to complete. Such changes may not, however, be effective in establishing the adequacy of our internal control over financial reporting, and our failure to produce accurate financial statements on a timely basis could increase our operating costs and could materially impair our ability to operate our business. In addition, investors' perceptions that our internal control over financial reporting is inadequate or that we are unable to produce accurate financial statements may materially adversely affect our stock price. We may need to raise additional capital, which may not be available on favorable terms, if at all, and which may cause dilution to holders of our common stock, restrict our operations or adversely affect our ability to operate our business. If we need to raise additional funds due to material expenditures or if our operating results are worse than expected, we cannot be certain that we will be able to obtain additional financing on favorable terms, if at all, and any additional financings could result in additional dilution to holders of our common stock. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, expending capital or declaring dividends, or which impose financial covenants on us that limit our ability to achieve our business objectives. If we need additional capital and cannot raise it on acceptable terms, we may not be able to meet our business objectives, our stock price may fall, and you may lose some or all your investment. Breaches of network or information technology security, natural disasters or terrorist attacks could have an adverse effect on our business. Cyber-attacks or other breaches of network or information technology (IT) security, natural disasters, terrorist acts or acts of war may cause equipment failures or disrupt our systems and operations. We may be subject to attempts to breach the security of our networks and IT infrastructure through cyber-attacks, malware, computer viruses and other means of unauthorized access. ~~We have previously been subject to the unauthorized~~ **Unauthorized** use of certain company credentials that were used to issue a false press release in April 2018. ~~While we were able to have the false press release withdrawn, any similar unauthorized~~ use of company credentials or other information could compromise our systems and operations, materially adversely impact our financial condition and subject us to scrutiny and / or litigation from regulators and our customers. A failure to protect the privacy of customer and employee confidential data against breaches of network or IT security could result in damage to our reputation. The unfavorable outcome of any future litigation or administrative action could negatively impact us. Our financial results could be negatively impacted by unfavorable outcomes in any future litigation or administrative actions. We cannot assure favorable outcomes in litigation or administrative proceedings. Costs associated with litigation and administrative proceedings are very high and could negatively impact our financial results. Non-compliance with, or changes in, the legal and regulatory environment in the countries in which we operate could increase our costs or reduce our net operating revenues. Our business is subject to various laws and regulations in the US and in the countries throughout the world in which we do business, including laws and regulations relating to commerce, intellectual property, trade, environmental, health and safety, commerce and contracts, privacy and communications, consumer protection, web services, tax and state corporate laws and securities laws, and specifically those conducting business of electronics, many of which are still evolving and could be interpreted in ways that could harm our business. There is no assurance that we will be completely effective in ensuring our compliance with all applicable laws and regulations. Changes in applicable laws or regulations or evolving interpretations thereof, including increased government regulation, may result in increased compliance costs, capital expenditures and other financial obligations for us and could affect our profitability or impede the production or distribution of our products, which could affect our net operating revenues. ~~U. S. government audits and investigations could adversely affect our business. Federal government agencies, including the Defense Contract Audit Agency and the Defense Contract Management Agency, routinely audit and evaluate government contracts and government contractors' administrative processes and systems. These agencies review the Company's performance on contracts, pricing practices, cost structure, financial capability and compliance with applicable laws, regulations and standards. These agencies also review the adequacy of the Company's internal control systems and policies, including the Company's purchasing, accounting, estimating, compensation and management information processes and systems. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit or investigation of our business were to uncover improper or illegal activities, then we could be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U. S. government. In addition, responding to governmental audits or investigations may involve significant expenses and divert management attention.~~ Acquisitions may expose us to additional risks. We may acquire or make investments in businesses, technologies or products, whether complementary or otherwise, to expand our business, if appropriate opportunities arise. There can be no assurance that we will be able to identify suitable candidates or consummate these transactions on favorable terms. If required, the financing for these transactions could result in an increase in our indebtedness, dilute the interests of our stockholders or both. The purchase price for some acquisitions may include additional amounts to be paid in cash in the future, a portion of which may be contingent on the achievement of certain future operating results

of the acquired business. If the performance of any such acquired business exceeds such operating results, then we may incur additional charges and be required to pay additional amounts. Acquisitions including strategic investments or alliances entail numerous risks, which may include: ● difficulties in integrating acquired operations or products, including the loss of key employees from, or customers of, acquired businesses; ● diversion of management's attention from our existing businesses; ● adverse effects on existing business relationships with suppliers and customers; ● adverse impacts of margin and product cost structures different from those of our current mix of business; and ● conforming standards, controls, procedures, accounting and other policies, business cultures, and compensation structures between the two companies. Many of these factors are outside of our control and any one of these factors could result in, among other things, increased costs and decreases in the amount of expected revenues, which could materially adversely impact our business, financial condition, and results of operations. In addition, even if we can successfully integrate acquired businesses, the full benefits, including the synergies, cost savings, revenue growth, or other benefits that are expected, may not be achieved within the anticipated time frame, or at all. All of these factors could decrease or delay the expected accretive effect of the acquisitions, and negatively impact our business, operating results, and financial condition. Our revenue and operating results can fluctuate from period to period. We derive revenue primarily from customer purchase orders rather than long-term purchase commitments. Our revenue from period to period can significantly fluctuate for a variety of reasons, including, without limitation, our supply chain as well as receipt of customer orders. Such fluctuations may have a material adverse impact on our results of our operations. **We and / or certain of our current and former officers and directors, may face litigation and legal proceedings which could adversely affect our business, financial condition, results of operations or cash flows. We are subject to lawsuits, legal proceedings and claims in the normal course of our business, which can be expensive, lengthy, and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict. These proceedings and any other regulatory proceedings or actions may be time consuming, could cause us to incur significant defense costs and could damage our reputation or adversely affect our stock price. Any adverse ruling or unfavorable resolution in any legal or regulatory proceeding or action could have a material adverse effect on our business, operating results or financial condition.** Risks Relating to our Common Stock and our Listed Warrants **If our business developments and achievements do not meet the expectations of investors or securities analysts or for other reasons the expected benefits do not occur, the market price of shares of our Common Stock traded on Nasdaq may decline. If our business developments and achievements do not meet the expectations of investors or securities analysts, the market price of shares of our Common Stock traded on Nasdaq may decline. The trading price of shares of our Common Stock could be volatile and subject to wide fluctuations in response to various factors, some of which are beyond our control. Any of the factors mentioned in this " Risk Factors " section and elsewhere in this report could have a negative impact on your investment in our securities and our securities may trade at prices significantly below the price you paid for them. In such circumstances, the trading price of our securities may not recover and may experience a further decline. The price of shares of our Common Stock has fluctuated substantially and the price of our common stock could be volatile and could decline at a time when you want to sell your holdings. The price of shares of our Common Stock has fluctuated substantially. Therefore, some investors who have purchased our Common Stock at high prices face the risk of losing a significant portion of their original investment if they have to sell at a time when the price of shares of our Common Stock has declined. For example, during the fourth quarter of 2024, and in particular the months of November and December 2024, the price of our Common Stock and trading volume significantly increased. During this period, we did not make any significant announcements other than our financial condition and results of operations for the three and nine months ended September 30, 2024. Accordingly, the market price of our Common Stock may fluctuate dramatically and may decline rapidly, irrespective of any developments in our business. In addition, the volatility of our stock price could cause other consequences including causing a short squeeze due to the difference in investment decisions by short sellers of shares of our Common Stock and buy- and- hold decisions of longer investors. An investment in securities can be risky, and you should invest in securities only if you can withstand a significant loss and wide fluctuations in the market value of your investment.** Numerous factors, many of which are beyond our control, may cause the market price of our common stock to fluctuate significantly. ~~These~~ Some factors include that may cause the market price of shares of our Common Stock to fluctuate, in addition to the other risks mentioned in this " Risk Factors " section and elsewhere in this report, are: ● sale of shares of our Common Stock by our stockholders; ● volatility in trading volumes of our shares of Common Stock; ● our ability to obtain financings to conduct and complete our business activities; ● possible delays in the expected recognition of revenue due to lengthy and sometimes unpredictable sales timelines; ● failures to meet external expectations or management guidance; ● changes in our capital structure and future issuances of securities; ● our cash position; ● announcements and events surrounding financing efforts; ● changes in general economic, political and market conditions in any area in which we conduct our business; ● analyst research reports, recommendations and changes in recommendations, price targets, and withdrawals of coverage; ● quarterly variations in our results of operations or those of our competitors; ● delays in end- user deployments of products ; ● announcements by us or our competitors of acquisitions, new products, significant contracts, commercial relationships or capital commitments; ● intellectual property infringements; ● our ability to develop and market new and enhanced products on a timely basis; ● commencement of, or our involvement in, litigation; ● major changes in our Board of Directors or management, including the departure of Mr. Maqbool; ● changes in governmental regulations; ● changes in earnings estimates or recommendations by securities analysts; ● the impact of the political instability, changes in international trade relationships and conflicts, such as the conflict in the Middle East or the conflict between Russia and Ukraine; ● our failure to generate material revenues; ● our public disclosure of the terms of any financing which we may consummate in the future; ● any acquisitions we may consummate; ● announcements by us or our competitors of significant contracts, new services, acquisitions, commercial relationships, joint ventures or capital commitments; ● cancellation of key contracts; ● short selling activities; and ● changes in other events or factors, many of which may be out of our control. **In addition, if the market valuations of similar companies; and ● for stocks in our industry or industries related to our industry, or the stock market in general economic, experiences a loss of investor confidence, the trading price of shares of our Common Stock could decline for reasons unrelated to our business, financial conditions – condition and slow results of operations. If any of the foregoing occurs, it could cause or our negative growth of end markets. Securities class action litigation is often instituted against companies following periods of volatility in their stock price . This type of litigation to fall and may expose us to lawsuits that, even if unsuccessful, could be costly result in substantial costs to us defend and divert our a distraction to management 's attention and resources.** Moreover, securities markets may from time- to- time experience significant price and volume fluctuations for reasons unrelated to operating performance of companies, such as rising inflation and interest rates , **global economic uncertainty and political instability** the rapidly developing conflict in Ukraine. These market fluctuations may adversely affect the price of our common stock and other interests in our company at a time when you want to sell your interest in us. Future sales or perceived sales of our common stock could depress our stock price. If the holders of our currently outstanding shares of common stock were to attempt to sell a substantial amount of their holdings at once, the market price of our common stock could decline. Moreover, the perceived risk of this potential dilution could cause shareholders to attempt to sell their shares and investors to short the common stock, a practice in which an investor sells shares that he or she does not own at prevailing market prices, hoping to purchase shares later at a lower price to cover the sale. As each of these events would cause the number of shares of our common stock being offered for sale to increase, our common stock market price would likely further decline. All of these events could combine to make it very difficult for us to sell equity or equity- related securities in the future at a time and price that we deem appropriate. Our common stock may be affected by limited trading volume and price fluctuations, which could adversely impact the value of our common stock. Our common stock has experienced, and is likely to experience in the future, significant price and volume fluctuations, which could adversely affect the market price of our common stock without regard to our operating performance. In addition, we believe that factors such as quarterly fluctuations in our financial results and changes in the overall economy or the condition of the financial markets could cause the price of our common stock to fluctuate substantially. These fluctuations may also cause short sellers to periodically enter the market in the belief that we will have poor results in the future. We cannot predict the actions of market participants and, therefore, can offer no assurances that the market for our common stock will be stable or appreciate over time. Provisions in our articles of incorporation and bylaws could discourage a change in control, or an acquisition of us by a third party, even if the acquisition would be favorable to you, thereby adversely affecting existing shareholders. Our articles of incorporation and bylaws contain provisions that may have the effect of making it more difficult or delaying attempts by others to obtain control of our Company, even when these attempts may be in the best interests of our shareholders. For example, our articles of incorporation authorize our Board of Directors, without stockholder approval, to issue one or more series of preferred stock, which could have voting and conversion rights that adversely affect or dilute the voting power of the holders of common stock. These provisions and others that could be adopted in the future could deter unsolicited takeovers or delay or prevent changes in our control or management, including transactions in which stockholders might otherwise receive a premium for their shares over then- current market prices. These provisions may also limit the ability of stockholders to approve transactions that they may deem to be in their best interests. The ability of Fawad Maqbool, our Chairman, to sell his stake in us and speculation about any such sale may adversely affect the market price of our common stock. Mr. Maqbool owns a significant number of shares of our outstanding common stock, and he may sell any or all of his shares at any time without approval by other shareholders. Speculation by the press, stock analysts, our shareholders or others regarding the intention of Mr. Maqbool to dispose of his shares could adversely affect the market price of our common stock. Moreover, the market price of our common stock may be adversely impacted by the fact that the public float of our common stock is relatively small. Because Fawad Maqbool, our Chairman controls a significant number of shares of our voting capital stock, he has the ability to influence actions requiring stockholder approval. As of the date of this report, Fawad Maqbool, our Chairman, President Chief Executive Officer, held ~~14.29-07%~~ % of our outstanding shares of common stock. As a result, Mr. Maqbool could significantly influence the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger,

consolidation or sale of all or substantially all of our assets. In addition, Mr. Maqbool could influence the management and affairs of our company. Accordingly, any investors who purchase shares will likely be minority shareholders and as such will have little to no say in the direction of us and the election of directors. Additionally, this concentration of ownership might harm the market price of our common stock by: • delaying, deferring or preventing a change in corporate control; • impeding a merger, consolidation, takeover or other business combination involving us; or • discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us. Because we do not intend to pay cash dividends on our shares of common stock, any returns will be limited to the value of our shares. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the increase, if any, of our share price that stockholders may be able to realize if they sell their shares. **You may experience future dilution as a result of future equity offerings and other issuances of our common stock or other securities. In addition, future equity offerings and other issuances of our common stock or other securities may adversely affect our common stock price. In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share paid by you. We may not be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by you, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or securities convertible into common stock in future transactions may be higher or lower than the price per share you paid. You will incur dilution upon exercise of any outstanding stock options, warrants or upon the issuance of shares of common stock under our stock incentive programs. In addition, the sale of any future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of common stock or the availability of those shares for sale will have on the market price of our common stock.** There can be no assurance that we will be able to comply with the continued listing standards of the Nasdaq Capital Market, a failure which could result in the de-listing of our common stock. The **listing of our Common Stock on The Nasdaq Capital Market requires that the trading price of its listed stocks remain above one dollar for the stock to remain listed. If a listed stock trades below one dollar for more than 30 consecutive trading days, then it is subject to delisting from the contingent upon our compliance with The Nasdaq Capital Market's conditions for continued listing. In addition, to maintain a listing on the Nasdaq Capital Market listing requirements, we must satisfy including the minimum bid price, satisfaction of minimum financial and other continued listing requirements and standards, including those regarding director independence and independent committee requirements, minimum stockholders' equity and certain corporate governance requirements, and do not regain compliance, we may be subject to delisting by Nasdaq.** If we are unable to satisfy these requirements or standards, we could be subject to delisting, which would have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we would expect to take actions to restore our compliance with the listing requirements, but we can provide no assurance that any such action taken by us would allow our common stock to become is no longer listed again for trading on Nasdaq, stabilize the market our trading volume and share price or improve the liquidity of may decrease and you may have a difficult time selling our your shares of common stock. In addition, prevent we may experience difficulties in raising capital which could materially adversely affect our common stock operations and financial results. Further, delisting from dropping below Nasdaq markets could also have the other minimum bid price requirement or prevent future non-compliance with the negative effects, including potential loss of confidence by partners, lenders, suppliers and employees. Finally, listing delisting requirements could make it harder for you and the Company to sell the securities and hard for us to raise capital.

The Listed Warrants are speculative in nature. The Listed Warrants do not confer any rights of common stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of our common stock at a fixed price for a limited period of time. Specifically, commencing on the date of issuance, holders of the Listed Warrants may exercise their right to acquire the common stock and pay an exercise price of \$ 7.00 per share, prior to five years from the date of issuance, after which date any unexercised Listed Warrants will expire and have no further value. In addition, there can be no assurance that an active trading market for the Listed Warrants will develop. Holders of the Listed Warrants will have no rights as common stockholders until they acquire our common stock. Until holders of the Listed Warrants acquire shares of our common stock upon exercise of the Listed Warrants, the holders will have no rights with respect to shares of our common stock issuable upon exercise of the Listed Warrants. Upon exercise of the Listed Warrants, the holder will be entitled to exercise the rights of a common stockholder as to the security exercised only as to matters for which the record date occurs after the exercise. Provisions of the Listed Warrants could discourage an acquisition of us by a third party. Certain provisions of the Listed Warrants could make it more difficult or expensive for a third party to acquire us. The Listed Warrants prohibit us from engaging in certain transactions constituting "fundamental transactions" unless, among other things, the surviving entity assumes our obligations under the Listed Warrants. These and other provisions of the Listed Warrants offered by this prospectus could prevent or deter a third party from acquiring us even where the acquisition could be beneficial to you. ITEM 1B.

UNRESOLVED STAFF COMMENTS **None** ~~Smaller reporting companies are not required to provide the information required by this item.~~ ITEM 1C.

CYBERSECURITY Cybersecurity Risk Management and Strategy The Company depends on the proper functioning, availability and security of its information systems, including financial, data processing, communications and operating systems. Several information systems are software applications provided by third parties. Although risks from cybersecurity threats have to date not materially affected, and we do not believe they are reasonably likely to materially affect, us, our business strategy, results of operations or financial condition, like other companies in our industry, we could, from time to time, experience threats and security incidents related to our and our third-party vendors' information systems, including attempts to gain unauthorized access to our confidential data, and other electronic security breaches. Such cybersecurity attacks can range from individual attempts to gain unauthorized access to our information technology systems to more sophisticated security threats. While we employ a number of measures to prevent, detect and mitigate these threats, there is no guarantee such efforts will be successful in preventing a cybersecurity attack. A cybersecurity attack could compromise the confidential information of our employees, customers and vendors. A successful cybersecurity attack could disrupt and otherwise adversely affect our business operations. Assessment, identification and management of cybersecurity related risks are integrated into our overall risk management process. Cybersecurity related risks are included in the risk universe we evaluate to assess top risks to the Company at least annually. To the extent our processes identify a heightened cybersecurity related risk, risk owners are assigned to develop risk mitigation plans, which are then tracked to completion. Cybersecurity Governance Our Board of Directors considers cybersecurity risk as part of its risk oversight function and has delegated oversight of cybersecurity risk strategy and governance and of other information technology risks to the Audit Committee of the Board of Directors (the "Audit Committee"). The Audit Committee reports to the full Board of Directors regarding its activities, including those related to cybersecurity. Senior management, including the Company's Chief Executive Officer, Chief Financial Officer and Chief Operating Officer, is responsible for assessing and managing cybersecurity risk, and provides briefings regarding the assessment and management of such risk to the Audit Committee, which then reports, as necessary, to the Board of Directors. Although members of our senior management do not have direct cybersecurity expertise obtained through certifications, their experience managing the Company, which includes consulting and coordinating as necessary with in-house information-technology specialists, enables them to effectively assess and manage material risks from cybersecurity threats. The Company relies on in-house information-technology specialists to assist in managing relevant risks. Any cybersecurity incident would be reported promptly to management and material and potentially material incidents would be assessed by management and the Audit Committee for remediation and future prevention and detection. The Company, at least annually, updates its policies or procedures that could help mitigate cybersecurity risks. Notwithstanding the extensive approach we take to cybersecurity, we may not be successful in preventing or mitigating a cybersecurity incident that could have a material adverse effect on us. The Company has incorporated cybersecurity coverage in its insurance policies; however, there is no assurance that the insurance the Company maintains will cover all cybersecurity breaches or that policy limits will be sufficient to cover all related losses. ITEM 2. PROPERTIES **As of April 1, 2022,..... for administrative offices and for manufacturing.** On September 15, 2019, the Company entered a five-year lease on property located at 120 Raynor Avenue, Ronkonkoma, NY with an option to buy the property during the first two years of the lease for \$ 1.2 mm and then at fair market value for the remainder of the lease term. The option to buy the property has expired and was not exercised. The lease commenced with a monthly rental expense of \$ 7,500, with annual rent increases by 3 % in each successive lease year beginning on January 1, 2021. This property was used by Specialty Microwave for manufacturing and engineering services. On April 13, 2023, this lease was terminated subject to the terms of a Surrender Agreement between the Company and landlord. As a result, a gain on termination of right-of-use operating lease was recognized of \$ 8,461. On December 15, 2021, the Company assumed the SSM lease agreement **for of approximately 11,500 square feet of office and warehouse space in San Jose, CA, with the same lease terms and conditions as previously stipulated in the lease agreement prior to the lease assumption. The Effective February 1, 2020, the** lease term will expire on January 31, 2025, with a monthly base rent of \$ 24,234 for the first 12 months and **increase increases** by approximately 3 % every year. **As of December 6, 2024, the lease was amended extending the lease term to March 31, 2023-2030 while, all the facilities described above were in good operating condition, well-maintained maintaining the base rent of \$ 24,234 and in regular use 3 % increases for each year thereafter. We believe that Since April 1, 2022, our existing facilities are sufficient principal executive office consisting of approximately 20,000 square feet has been located at 155 Plant Avenue, Hauppauge, NY. The property at this location is leased by the Company at a monthly rental expense of \$ 28,854 for a term of seven years and to two meet months. The yearly base rent of \$ 346,248 shall increase at a rate of 2.75 % per year to begin on the first anniversary of the lease commencement date and each year thereafter. In the event the landlord decides to sell the property, the Company shall have the right of first offer to purchase**

subject property. Our wholly owned subsidiary, AmpliTech, Inc., and the Company's divisions, Specialty Microwave and AGTGSS, also operate out of our operational needs principal executive office. This property is used for the foreseeable future administrative offices and for manufacturing. On January 15, 2024, the Company entered a triple net lease agreement for a 1,900 square foot facility in Allen, Texas for a term of five years and one month. The yearly base rent of \$ 53,675 shall increase at a rate of 2.5% per year to begin on the first anniversary lease commencement date and each year thereafter. The first month's rent shall be abated following the commencement lease date. Upon lease execution, the Company paid two months of rent as a security deposit and one month's rent totaling \$ 17,999. The Company expects moved into the new facility on August 1, 2024. As of December 31, 2024, all the facilities described above were in good operating condition, well maintained and in regular use. We believe that our existing facilities are sufficient to be fully meet our operational at needs for the foreseeable future new MMIC division facility May 1, 2024.

ITEM 3. LEGAL PROCEEDINGS There are no pending legal proceedings to which we are a party or of which any of our property is the subject. From time to time, we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. Litigations are subject to inherent uncertainties and an adverse result in these, or other matters may arise from time to time and harm our business. ITEM 4. MINE SAFETY DISCLOSURES Not applicable. PART II ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES Market Information Up through February 16, 2021, our common stock traded on the over-the-counter market and was quoted on the OTCQB market under the symbol "AMPG". Our common stock and warrants have been approved for listing on the NASDAQ Capital Market, or NASDAQ, under the symbols "AMPG" and "AMPGW", respectively, and commenced trading on the NASDAQ on February 17, 2021. **Holders of Record of Common Stock** As of March 27-21, 2024-2025, there were approximately 44 holders of record of our common stock. This does not reflect the number of persons or entities who held stock in nominee or street name through various brokerage firms. Dividend Policy We have never declared or paid dividends on our common stock. We do not anticipate paying any dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. Any future determination to declare dividends will be subject to the discretion of our Board of Directors and will depend on various factors, including applicable laws, our results of operations, financial condition, future prospects and any other factors deemed relevant by our Board of Directors. **Recent Sales of Unregistered Securities Unregistered securities sold by the Company during the period covered by this report have been previously reported in a Quarterly Report on Form 10-Q or Current Report on Form 8-K. Purchases of Equity Securities Equity Compensation Plan Information** The following table summarizes information about our equity compensation plans as of December 31, 2024: **Number of securities to be issued upon exercise of outstanding options, warrants, and rights Weighted-average price of outstanding options, warrants and rights Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (a) (b) (c) Equity compensation plans approved by security holders 1, 295, 000 \$ 2. 28 760, 142 Equity compensation plans not approved by security holders Total 1, 295, 000 \$ 2. 28 760, 142** ITEM 6. [RESERVED] ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS This Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to provide a reader of our financial statements with a narrative from the perspective of our management on our financial condition, results of operations, liquidity, and certain other factors that may affect our future results. The following discussion and analysis should be read in conjunction with our audited consolidated financial statements and the accompanying notes thereto included in "Item 8. Financial Statements and Supplementary Data." Forward-Looking Statements In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. See "Forward-Looking Statements." Our results and the timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors. **Non-GAAP Financial Measures** We believe that presenting non-GAAP financial measures provides management and investors with useful measures to evaluate the performance and trends of the total company and its businesses. This includes adjustments in recent periods to GAAP financial measures to increase period-to-period comparability following actions to strengthen our overall financial position and how we manage our business. Business Overview AmpliTech Group Inc. ("AMPG," "AmpliTech" or the "Company"), incorporated in 2010 in the state of Nevada, is the parent company of AmpliTech, Inc., and the Company's divisions Specialty Microwave, Spectrum Semiconductor Materials, AmpliTech Group MMIC Design Center ("AGMDC") and AmpliTech Group True G Speed Services ("AGTGSS"). AmpliTech Inc. designs, engineers and assembles micro-wave component-based amplifiers that meet individual customer specifications. Our products consist of RF amplifiers and related subsystems, operating at multiple frequencies from 50kHz to 44GHz, including low noise amplifiers ("LNA"), medium power amplifiers, cryogenic amplifiers, and custom assembly designs for the global satellite communications, telecom (5G & IoT), space, defense, and quantum computing markets. We also offer non-recurring engineering services on a project-by-project basis, for a predetermined fixed contractual amount, or on a time plus material basis. We have both domestic and international customers in such industries as aerospace, governmental, defense and commercial satellite. Specialty Microwave designs and manufactures state-of-the-art precision SATCOM microwave components, RF subsystems and specialized electronic assemblies for the military and commercial markets, flexible and rugged waveguides, wave guide adapters and more. On November 19, 2021, AMPG entered into an Asset Purchase Agreement with Spectrum Semiconductor Materials Inc. ("SSM"), a globally authorized distributor of integrated circuit (IC) packaging and lids for semiconductor device assembly, prototyping, testing, and production requirements founded in 1990 and headquartered in San Jose, CA, pursuant to which AMPG acquired substantially all of the assets of the Company (the Acquisition). The Acquisition was completed on December 15, 2021. In 2021, the Company opened a monolithic microwave integrated circuits ("MMIC") chip design center in Texas and has started to implement several of its proprietary amplifier designs into MMIC components. MMICs are semiconductor chips used in high-frequency communications applications. MMICs are widely desired for power amplification solutions to service emerging technologies, such as phased array antennas and quantum computing. MMICs carry a smaller footprint enabling them to be incorporated into a broader array of systems while reducing costs. AGMDC designs, develops and manufactures state-of-the-art signal processing components for satellite and 5G communications networks, defense, space and other commercial applications, allowing the Company to market its products to wider base of customers requiring high technology in smaller packages. In August 2022, the AGTGSS division was formed to enable "true G speeds" to the industry. AGTGSS' main function will be to plan and configure 5G radio systems and make them O-RAN compliant. AGTGSS will implement AmpliTech's low noise amplifier devices in these systems to promote greater coverage, longer range and faster speeds. **Recent Debt Reduction** On July 23, 2024, the Company entered into a business loan and security agreement with Altbanq Lending II LLC in the amount of \$ 1,300,000, which included an origination fee of \$ 26,000 and an original issue discount of \$ 403,000. The loan is payable within 76-weeks through 38 bi-weekly payments of \$ 44,816 and bore an annual interest rate of 21.2% with prepayment options available. The loan was secured by the Company's assets through a UCC filing, and proceeds were used for working capital, 5G licensing and certification fees. During the year ended December 31, 2024, the Company repaid the loan in full, through principal payments of \$ 1,534,000, and recorded \$ 260,000 in debt discount amortization. **Recent Financings** On September 9, 2024, the Company entered into a Securities Purchase Agreement with a single institutional investor to sell 1,369,488 shares of the Company's common stock, par value \$ 0.001 per share at a per share price of \$ 0.7302. The closing of the offering occurred on September 11, 2024. The gross proceeds to the Company from this offering was approximately \$ 1 million, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 180,000. On November 24, 2024, we entered into a Securities Purchase Agreement with three institutional investors pursuant to which we sold in a registered direct offering 1,425,377 shares of our common stock, at a per share price of \$ 0.92 and prefunded warrants to purchase 177,882 shares of common stock, at \$ 0.919 per prefunded warrant ("Prefunded Warrant") (the "November Offering"). The closing of the registered direct offering occurred on November 26, 2024. The exercise price of each Prefunded Warrant is \$ 0.001 and 177,882 warrants were exercised in full immediately. The gross proceeds to the Company from the offering was approximately \$ 1,474,998, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 200,000. On December 11, 2024, we entered into a Securities Purchase Agreement with three institutional investors pursuant to which we sold in a registered direct offering 1,352,500 shares of our common stock at a per share price of \$ 1.60 (the "December Offering"). The closing of the registered direct offering occurred on December 13, 2024. The gross proceeds to the Company from this offering was approximately \$ 2,164,000 before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 220,000. On December 16, 2024, we entered into a Securities Purchase Agreement with two institutional investors pursuant to which we sold in a registered direct offering 1,516,680 shares of our common stock at a per share price of \$ 2.10 (the "Second December Offering"). The closing of the registered direct offering occurred on December 18, 2024. The gross proceeds to the Company from this offering was approximately \$ 3,185,028 before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 290,000. On December 24, 2024, we entered into a Securities Purchase Agreement with three institutional investors pursuant to which we sold in a registered direct offering 1,871,000 shares of our common stock at a per share price of \$ 3.10 (the "Third December Offering"). The closing of the registered direct offering occurred on December 27, 2024. The gross proceeds to the Company from this offering was approximately \$ 5,800,100 before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 490,000. On December 27, 2024, we entered into a Securities Purchase Agreement with three institutional investors pursuant to which we sold in a registered direct offering 2,173,920 shares of our common stock, par value \$ 0.001 per share, at a per share price of \$ 4.60 ("Fourth December Offering"). The closing of the registered direct offering occurred on December 31, 2024. The gross proceeds to the Company from this offering was approximately \$ 10,000,032 before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 660,000. Pursuant to the Securities Purchase

Agreements entered into in the November Offering, December Offering, Second December Offering, Third December Offering and Fourth December Offering we agreed to, among other things, not issue any shares of common stock for a period of 45 days after such Offerings' respective closing dates. Investors who participated in the November Offering, December Offering, Second December Offering and Third December Offering agreed to waive this 45-day prohibition on issuing securities in connection with the Fourth December Offering. On March 21, 2025, we entered into an equity distribution agreement, or the Equity Distribution Agreement, with Maxim Group LLC, or Maxim, relating to offer and sell shares of our common stock having an aggregate offering price of up to \$ 25 million from time to time through Maxim, acting as our exclusive sales agent, in an " At- the- Market Offering " at our discretion. Recent Developments Asset Purchase Agreement On March 26, 2025, the Company entered into an asset purchase agreement with Titan Crest, LLC, a Delaware limited liability company (the " Seller "), and its affiliate, to purchase certain assets including intellectual property used in developing, manufacturing, marketing and selling products that use radio frequency technology (" 5G ORAN radio products ") (the " Asset Purchase Agreement "). The Asset Purchase Agreement contains customary representations and warranties and covenants by each party. In addition to customary closing conditions, the closing of the transactions and the payment of the purchase price contemplated by the Asset Purchase Agreement is conditioned upon certain conditions, including but not limited to (i) the issue of a purchase order from Telus for fiscal year delivery to the Company, (ii) a purchase order between the Company and the Seller or its affiliate pursuant to which the Seller will assist in manufacturing the products to be sold to Telus to meet its purchase order, and (iii) receipt of correspondence from Telus to the Company, indicating Telus' intention to issue purchase orders (including Telus' initial purchase order) which purchase orders will be spread out over 3 years (" Telus Subsequent Purchase Orders "). The aggregate purchase price for the assets is \$ 8, 000, 000 which consists of \$ 3, 000, 000 in cash and \$ 5, 000, 000 in restricted shares of common stock of which the first \$ 2, 500, 000 in cash and \$ 2, 500, 000 in restricted common stock will be issued upon the procurement of the Telus' initial purchase order and receipt of assurance of the Telus Subsequent Purchase Orders; and that the remaining \$ 500, 000 in cash to be paid on December 5, 2025 and \$ 2, 500, 000 in shares of restricted common stock will be issued to Company upon the transfer of the 5G ORAN radio products' technology and intellectual property rights by the Seller to the Company. In addition, under the Asset Purchase Agreement, the parties are obligated, subject to certain limitations, to indemnify the other for certain customary and other specified matters, including breaches of representations and warranties, breaches of covenants and for certain liabilities and third- party claims. Further, the Seller and its affiliate, jointly and severally, agreed for a period of 10 years not to engage in certain competitive activities with respect to the business or proposed business relating to the assets sold to the Company. In addition, the Asset Purchase Agreement contemplates that after the closing, the Company and the Seller will enter short- term transition services agreements for up to two of the Seller' s employees to provide Company assistance in the assignment and transfer of the purchased assets from the Seller to the Company for a fee not to exceed \$ 430, 000. In connection with the transaction, Seller' s affiliate agreed to transfer all of its rights, title and interest in 5G ORAN radio products technology and intellectual property rights to Seller. Subsequent to the transaction, Seller' s affiliate will continue its business and retain its employees focusing on software solutions and services. Revolving Line of Credit On March 25, 2025, AmpliTech Group, Inc., a Nevada corporation (the " Company "), entered into a Bank Loan Agreement (the " Loan Agreement ") with Dime Community Bank (the " Bank ") for a revolving line of credit for up to \$ 750, 000 (the " Revolving Line of Credit "). The Company has established the Revolving Line of Credit for general working purposes and uses, as needed. As of the date of this filing, there is no outstanding balance on the Revolving Line of Credit. The term of the Loan Agreement expires once all indebtedness under the Revolving Line of Credit has been paid in full, or until such time as the Bank and the Company agree in writing to terminate the Loan Agreement. In addition to interest, the Company agreed to pay an annual fee of \$ 500. 00 on the anniversary date of each year the Loan Agreement is in effect, subject to change by the Bank with notice. Pursuant to an Assignment of Deposit Agreement dated March 25, 2025 between us and the Bank, the Revolving Line of Credit is secured by a demand deposit account with the Bank which requires us to have a balance no less than \$ 814, 635. The Revolving Line of Credit is evidenced by a promissory note, which is due on demand, or if there is no demand, then on March 1, 2026, unless extended, modified or renewed (the " Note "). The Company has agreed to pay regular monthly payments of all accrued unpaid interest due as of each payment date, beginning April 1, 2025, with all subsequent interest payments to be due on the same day of each month thereafter. The Note bears a variable interest rate based on changes in the Wall Street Journal Prime Rate as published in the Wall Street Journal from time to time, plus 1. 000 %, provided however, under no circumstances will the interest rate be less than 6. 250 % per annum or more than the maximum rate allowed by applicable law. Late payment is subject to a fee of 5. 000 % of the regularly scheduled payment. In the event of default, the Note bears an interest at a rate per annum equal to 5. 000 % above the rate that is otherwise applicable to such amounts. Among other things, the Loan Agreement contains customary representations and warranties, events of default, negative and affirmative covenants and financial covenants, and certain limitations on dispositions of assets. The Loan Agreement also contains usual and customary events of default (with customary grace periods, as applicable) and provides that, upon the occurrence of an event of default, payment of all amounts payable under the Note may be accelerated at the Bank' s option and / or the Bank' s commitment and obligations will terminate without notice to the Company. Letter of Intent On March 20, 2025, the Company entered into a non- binding letter of intent with a contract manufacturer on behalf of its end user for the purchase of \$ 78 million of the Company' s Oran radios. If fulfilled, deliveries of the order are expected to start in FY2025 and will substantially increase each year thereafter into 2027. The non- binding letter of intent is subject to the parties entering into a series of definitive purchase orders. No assurance can be given that the Company will enter into any purchase orders for the total amount of \$ 78 million. Results of Operations As of December 31, 2023-2024, the Company had a working capital of \$ 15-26, 649-795, 254-745 and an accumulated deficit of \$ 9-21, 769-012, 723-127. The Company recorded a net loss of \$ 11, 242, 404 and \$ 2, 465, 439 and \$ 677, 107 for the years ended December 31, 2023-2024 and December 31, 2022-2023, respectively. For Years Ended December 31, 2023-2024 and December 31, 2022-2023 Revenues Sales decreased from \$ 49-15, 394-584, 492-577 for the year ended December 31, 2022-2023 to \$ 45-9, 584-508, 577-372 for the year ended December 31, 2023-2024, a decrease of \$ 3-6, 809-076, 915-205 or approximately 19-38, 64-99 %. Spectrum sales decreased by \$ 4-3, 328-288, 316-527, or 32-35, 0-76 %. AmpliTech and Specialty' s, a decline attributable primarily due to a decrease in international sales. The effect COVID placed on the supply chain in 2021 and 2022 triggered higher demand for our integrated circuit, or IC, products. With COVID restrictions and worldwide supply chain concerns easing, the demand for IC packaging has decreased. Sales in the manufacturing and engineering divisions increased by \$ 518-2, 401-787, 678 or 8-43, 83-64 %, primarily. This decrease in sales is attributable to the telecommunication applications decrease in global demand and recessionary market dynamics affecting most of our customers across all divisions and product lines, specifically in the Asian markets. Our RFQ (Request for Quote) activity has since increased in the first quarter of 2025 resulting in an increase in our backlog which we believe should translate to increased sales. Cost of Goods Sold and Gross Profit Cost of goods sold decreased to \$ 8-6, 308, 949 in 2023- 023, 265 in 2024 from \$ 40-8, 469-308, 628-949 in 2022-2023, a decrease of \$ 2, 460-285, 679-684 or approximately 20-27, 64-51 %. This decrease is directly related to the decline in sales. As a result, the gross profit was \$ 3, 485, 107 for 2024 compared to \$ 7, 275, 628 for 2023 compared to \$ 8, 924, 864 for 2022, a decrease of \$ 1-3, 649-790, 236-521 or 18-52, 48-10 %. Gross profit as a percentage of sales increased decreased to 46-36, 69-65 % from 46, 02-69 %, representing Spectrum reported a shift in the sales mix away from our higher gross profit margin products, of 48. 42 % while maintaining fixed production and overhead expenses. AmpliTech' s gross profit margin was 44. 19 %. Selling, General and Administrative Expenses Selling, general and administrative expenses decreased increased to \$ 7, 511-856, 319-471 in 2023-2024 from \$ 7, 622-511, 644-319 in 2022-2023, a decrease increase of \$ 118-345, 325-152, or approximately 1-4, 55-60 %. The Company experienced a decrease increase in professional fees parent company expenses, such as accounting, legal and consulting fees as well as stock compensation -, offset by the decrease in officers' compensation in the second half of the year and other other general and administrative expenses such as sales commissions and relocation expenses have decreased as well. Goodwill Intangible asset impairment As of December 31, 2022-2024, goodwill intangible assets, consisting of trade name, customer relationships and intellectual property related to the acquisition purchase of Specialty was Microwave were deemed impaired in the amount of \$ 420-467, 928-136. There were no indicators of goodwill impairment for the year ended December 31, 2023. Research and Development Expenses Research and development expenditures are charged to operations as incurred. The major components of research and development costs include employee salaries and benefits, consultants, outside service, and supplies. The Company' s research and development initiative to expand its product line of low noise amplifiers to include its new 5G and wireless infrastructure products and MMIC designs is has progressing progressed significantly. Our combined engineering and manufacturing resources are expected to complement the development of new subsystems for satellite, wireless, and 5G infrastructure, as well as advanced military and commercial markets. Research and development costs for the years ended December 31, 2024 and 2023 and 2022 were \$ 3, 590, 695 and \$ 2, 341, 845 and \$ 1, 024, 127, respectively. Research and development expenses have increased by \$ 1, 317-248, 718-850, or by 128-53, 67-33 %, mainly attributable to a result of hiring additional personnel for the AGMDC division as it completes completion of our massive MIMO 64T64R Oran Cat B radio network, which provides true 5G speeds with improved signal strength, enhanced coverage, increased user capacity and adheres to the ORAN specifications promoting openness and interoperability in radio access networks. This radio its- is MMIC design releases. The currently being tested and certified at Northeastern University and is expected to become the company Company' s flagship research and development costs include the launch of over 75 new products- product -, such as passive products and the new MMIC based LNA- s, Coaxial in line low noise amplifiers as well as Coaxial in line band pass filters. In addition, research and development costs were incurred for cryogenic amplifiers for quantum computing and 5G CAT B 64T64R ORAN Radios. Income (Loss) From Operations As a result of the above, the Company has a loss from operations of \$ 8, 429, 987 and \$ 2, 577, 536 and income from operations of \$ 150, 957 for the years ended December 31, 2024 and 2023, respectively. Other Income (Expenses)

As a result of the fraudulent digital currency transactions noted above, during the year ended December 31, 2023-2024, the Company recorded and an impairment loss 2022, respectively. Other Income (Expenses) As part of § 3 the acquisition of Spectrum Microwave, the purchase agreement contained a revenue adjustment 248, 911 related to digital assets. The revenue adjustment Loss on disposal of property and equipment was determined to be an amount equal to 25% of two years' net revenues minus \$ 20-16 403,000,000. The fair value of the revenue adjustment was determined to be \$ 2, 180, 826 an increase of \$ 815, 788 as previously recorded in December 31, 2021. As such, a loss on contingent revenue earnout of \$ 815, 788 was recorded for the year ended December 31, 2022. On March 20, 2023, In 2024, the revenue earnout of Spectrum was able to reclaim \$ 2-716, 180, 826 was paid to the Seller 943 of gold contained in its obsolete / slow moving inventory. Due to market fluctuations, the Company recorded an unrealized gain on investments of \$ 1, 697 and for the year ended December 31, 2023. Realized gain on investments, resulting from the redemption of treasury bills, was \$ 2-26, 343-746 and \$ 131, 522 for the years ended December 31, 2024 and 2023 and 2022, respectively. Interest income and interest expense, net for December 31, 2023 and 2022, were \$ 19, 281 and \$ 13, 013, respectively. Realized gain on investments, resulting from the redemption of treasury bills, was \$ 131, 522 for the year ended December 31, 2023-2024. Loss on disposal of property and equipment was \$ 16-292, 403-195 and \$ 1-interest income, 606-net for the years year ended December 31, 2023 and was \$ 19, 281. Interest expense increased as a result of debt financing obtained during the year with Altbanq. The outstanding obligations under the loan was paid in full as of December 31, 2022-2024, respectively. Net Loss The Company reported a net loss of \$ 11, 242, 404 and \$ 2, 465, 439 and \$ 677, 107 in 2024 and 2023 and 2022, respectively. Liquidity and Capital Resources Operating Activities The net cash used in operating activities for the year ended December 31, 2023-2024 was \$ 3-5, 470-295, 890-714, resulting primarily from net loss, the impairment of intangible assets and the loss on investment of digital assets, as well as the operating changes in accounts receivable, inventories, prepaid expenses, accounts payable and accrued expenses as well as customer deposits and operating lease liability. The net cash used in operating activities for the year ended December 31, 2022-2023 was \$ 3, 425-470, 246-890 resulting primarily from net loss and the operating changes in accounts receivable, inventories, prepaid expenses, accounts payable and accrued expenses, as well as customer deposits and operating lease liability. Investing Activities The net cash used in investing activities for the year ended December 31, 2024 was \$ 3, 291, 831 for the purchase of property and equipment and the net investment in marketable securities. The net cash used in investing activities for the year ended December 31, 2023 was \$ 725, 899 for the purchase of property and equipment offset with the net investments in marketable securities. The net cash used in investing activities for the year ended December 31, 2022 was \$ 1, 079, 183 for the purchase of property and equipment, net investment in marketable securities and SN2N. Financing Activities The net cash used in provided by financing activities for the year ended December 31, 2024 was \$ 21, 177, 516, a result of the proceeds received from the registered direct offerings and net proceeds received from notes payable offset by the repayment of financing lease liabilities and notes payable. The net cash used in financing activities for the year ended December 31, 2023 was \$ 2, 367, 420, for the repayment of financing lease liabilities, notes payable and the revenue earnout. As of The net cash used in financing activities for the year ended December 31, 2022 was \$ 224-2024, 223, for the repayment of financing lease liabilities and notes payable. We have historically financed our operations by the issuance of debt from third party lenders, equity offerings, notes issued to various private individuals and personal funds advanced from time to time by our largest shareholder, who is also the President and Chief Executive Officer of the Company. As of December 31, 2023, we had cash and cash equivalents of \$ 6-19, 726-315, 013-984, working capital of \$ 15-26, 649-795, 254-745 and an accumulated deficit of \$ 9-21, 769-012, 723-127. We intend to continue to finance our internal growth with cash on hand and cash provided from operations, borrowings, debt or equity offerings, or some combination thereof. We believe that our cash provided from operations and cash on hand will provide enough working capital to fund our operations for the next twelve months. Critical Accounting Policies, Estimates and Assumptions The SEC defines critical accounting policies as those that are, in management's view, most important to the portrayal of our financial condition and results of operations and those that require significant judgments and estimates. The discussion and analysis of our financial condition and results of operations is based upon our financial statements that have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities. On an on-going basis, we evaluate our estimates including the allowance for doubtful accounts, the salability and recoverability of inventory, the impairment analysis of intangible assets and goodwill, the valuation of stock-based compensation, income taxes and contingencies. We base our estimates on historical experience and on other assumptions that we believe to be reasonable under the circumstances, the results of which form our basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We cannot predict what future laws and regulations might be passed that could have a material effect on the results of operations. We assess the impact of significant changes in laws and regulations on a regular basis and update the assumptions and estimates used to prepare our financial statements when we deem it necessary. Basis of Accounting The accompanying consolidated financial statements have been prepared using the accrual basis of accounting. Principles of Consolidation The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. Use of Estimates The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. Actual results could differ from those estimates. Reclassifications Certain reclassifications have been made to the prior years' financial statements to conform to the current year's presentation. Certain expenses were reclassified from selling, general and administrative expenses to other income / expenses. These reclassifications have no effect on previously reported results of operations. Cash and Cash Equivalents The Company considers deposits that can be redeemed on demand and investments and marketable securities that have original maturities of less than three months, when purchased, to be cash equivalents. As of December 31, 2023-2024, the Company's cash and cash equivalents were deposited in five-four financial institutions. The Company's policy is to place its cash and cash equivalents with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. Accounts at each financial institution are insured by the Federal Deposit Insurance Corporation ("FDIC") up to \$ 250, 000. Additionally, cash and cash equivalents maintained with investment institutions are insured by the Securities Investor Protection Corporation ("SIPC") up to \$ 500, 000, which includes a \$ 250, 000 limit for cash. In addition, the investment institution provides additional "excess of SIPC" coverage, which insures up to \$ 600 million. The Company has not experienced any losses to date resulting from this policy. At December 31, 2024 and 2023 and 2022, the Company had \$ 18, 749, 154 and \$ 3, 170, 500 and \$ 12, 040, 022 in excess of FDIC, SIPC, and excess SIPC-insured limits, respectively. The Company has not experienced any losses in such accounts. Accounts Receivable Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with ASC Topic 326, "Financial Instruments - Credit Losses," the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of our customers, prevailing economic conditions, and reasonable and supportable forward-looking information. An allowance of \$ 0 has been recorded at December 31, 2024 and 2023 and 2022, respectively. Marketable Securities The Company's investments in marketable securities are classified based on the nature of the securities and their availability for use in current operations. The Company's marketable securities are stated at fair value with all realized and unrealized gains and losses on investments in marketable equity securities recognized in other income, net. The realized and unrealized gains and losses on marketable securities are determined using specific identification methods-method. Inventories Inventories, which consists-consist primarily of raw materials, work in progress and finished goods, are stated at the lower of cost (first-in, first-out basis) or market (net realizable value). Inventory quantities and related values are analyzed at the end of each fiscal quarter to determine those items that are slow moving and obsolete. An inventory reserve is recorded for those items determined to be slow moving with a corresponding charge to cost of goods sold. Inventory items that are determined obsolete are written off currently with a corresponding charge to cost of goods sold. As of December 31, 2024 and 2023 and 2022, the reserve for inventory obsolescence was \$ 1, 146-062, 000 and \$ 1, 128-146, 000, respectively. Property and Equipment Property and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements. Property and equipment are depreciated as follows: Description Useful Life Method Office equipment 3 to 7 years Straight-line Machinery and/shop equipment 7 to 10-15 years Straight-line Computer equipment and/software 1 to 7 years Straight-line Vehicles 5 years Straight-line Leasehold improvements 7 years Straight-line Intangible Assets Definite-lived intangible assets including customer relationships and intellectual property are subject to amortization. Intangible assets are amortized over their estimated useful life on a straight-line basis. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows. Indefinite-lived intangible assets are not subject to amortization. Intangible assets are amortized as follows: Description Useful Life Method Trade names Indefinite N / A Customer relationships 15 to 20 years Straight-line Intellectual property 15 years Straight-line Long-Lived Assets The Company reviews the carrying value of long-lived assets such property and equipment, right-of-use ("ROU") assets, and definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Circumstances which could trigger a review include, but are not limited to; significant decrease in the market price of the asset; significant adverse changes in the business climate or legal factors; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount

of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount of fair value less costs to sell and would no longer be depreciated. The depreciable basis of assets that are impaired and continue in use is their respective fair values. ~~During the years ended December 31, 2023 and 2022, there were no impairments of long-lived assets.~~ Goodwill and Indefinite-Lived Intangible Assets We follow the acquisition method of accounting to record the assets and liabilities of acquired businesses at their estimated fair value at the date of acquisition. We initially record goodwill for the amount the consideration transferred exceeds the acquisition-date fair value of net tangible and identifiable intangible assets acquired. Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are tested for impairment annually on December 31, or more frequently when events or circumstances indicate an impairment may have occurred. When assessing the recoverability of goodwill and indefinite-lived intangible assets, the Company may first assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit, including goodwill, or an indefinite-lived intangible asset is less than its carrying amount. The qualitative assessment is based on several factors, including the current operating environment, industry and market conditions, and overall financial performance. The Company may elect to bypass this qualitative assessment for some or all of its reporting units or other indefinite-lived intangible assets and perform a quantitative assessment, based on management's judgment. If we quantitatively test goodwill and indefinite-lived intangible assets for possible impairment, we calculate the fair value for the reporting unit and indefinite-lived assets and compare the amount to their carrying amount. If the fair value of a reporting unit and indefinite-lived asset exceeds their carrying amount, the reporting unit and indefinite-lived assets are not considered impaired. If the carrying amount of the reporting unit and indefinite-lived assets ~~exceeds~~ **exceed** their fair value, the reporting unit and indefinite-lived assets are considered to be impaired, and an impairment charge is recognized for the difference. We estimate the fair value of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our ~~indefinite-lived intangible assets.~~ **During the years ended December 31, 2023 and 2022, we recorded goodwill impairments of \$ 0 and \$ 120, 136, respectively.** ~~During the years ended December 31, 2023 and 2022, there were no impairments of indefinite-lived intangible assets.~~ Investment Policy- Cost Method Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Company's share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held \$ 348, 250 of investments without readily determinable fair values at December 31, **2024 and December 31, 2023, respectively.** (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the ~~year~~ **years** ended December 31, **2024 and 2023.** **Investment in Digital Assets We account for all digital assets as indefinite-lived intangible assets in accordance with ASC Topic 350, "Intangibles — Goodwill and Other." The Company presents digital assets separately from other intangible assets, recorded as digital assets on the consolidated balance sheets. The digital assets are initially recorded at cost and are subsequently remeasured at cost, net of any impairment losses incurred since acquisition. We conducted an analysis to identify whether events or changes in circumstances, principally decreases in the quoted prices on active exchanges, indicate that it is more likely than not that our digital assets are impaired. In determining if an impairment has occurred, we consider the lowest market price of one unit of digital asset quoted on the active exchange since acquiring the digital asset. When the then current carrying value of a digital asset exceeds the fair value determined each quarter, an impairment loss has occurred with respect to those digital assets in the amount equal to the difference between their carrying values and the prices determined. Gains are not recorded until realized upon sale (s), at which point they are presented net of any impairment losses for the same digital assets. In determining the gain to be recognized upon sale, we calculate the difference between the sales price and carrying value of the digital assets sold immediately prior to sale.** Leases We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and / or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks. Revenue Recognition We sell our products through a combination of a direct sales force in the United States and independent sales representatives in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each party's rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred. Identify the performance obligations in the contract. ~~Our~~ **Generally, our** contracts with customers do not include multiple performance obligations to be completed over a period. Our performance obligations ~~generally~~ **generally** relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds. We do not have significant returns. We do not typically offer extended warranty or service plans. Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we evaluate if collectability is reasonably assured. None of our contracts as of December 31, ~~2023~~ **2024** contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues. Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customer's control at contractually stated pricing. Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue. Cost of Sales We include product costs such material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales. Shipping and Handling Shipping and handling charges are generally incurred at the customer's expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in ~~the~~ **the** cost of sales. **In accordance with ASC Topic 730, "Research and Development," the Company expenses research and development costs expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies. Research and development costs for the years ended December 31, 2024 and 2023 were \$ 3, 590, 695 and \$ 2, 341, 845, respectively.** Income Taxes The Company's deferred tax assets and liabilities for the expected future tax consequences of events ~~that~~ **have** been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using ~~enacted~~ **enacted** tax rates ~~in effect~~ **in effect** in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary ~~to~~ **to** reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At December 31, **2024 and 2023 and 2022,** the Company had no material unrecognized tax benefits. **Earnings Loss** Per Share Basic **earnings loss** per share ("EPS") are determined by dividing the net earnings by the weighted-average number of shares of common shares outstanding during the period. Diluted EPS is determined ~~calculated~~ **calculated** by dividing net earnings ~~loss~~ **loss** by the weighted average number of shares of common ~~stock~~ **stock** outstanding during each period. Diluted loss per share is calculated by adjusting the weighted average number of shares used in the basic EPS calculation ~~plus~~ **plus** the number of common shares that stock outstanding for the dilutive effect, if any, of common stock equivalents. Common stock equivalents whose effect would be ~~anti-~~ **anti-** issued assuming conversion of all potentially dilutive securities outstanding under are not included in diluted loss per share. The Company uses the treasury stock method to determine the dilutive effect, which assumes that all common stock equivalents have been exercised at the beginning of the period and that the funds obtained from those exercises were used to repurchase shares of common stock of the Company at the average closing market price during the period. As of December 31, **2024**

and 2023 and 2022, there were 4, 594, 442 and 4, 545, 442 and 4, 235, 442, respectively, potentially -- potential dilutive shares that need to be considered as common share equivalents -- As a result of from stock options, warrants and restricted stock units which have been excluded from the net diluted loss per -- the potentially dilutive shares -- share calculations that need to be considered as common share equivalents, for their effect is years ended December 31, 2023 and 2022, are anti-dilutive. Fair Value Measurements The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices, and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date. Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly. Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment. Cash and cash equivalents, receivables, inventory inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest. Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when the derived fair value is below carrying value in the consolidated balance sheets. Stock-Based Compensation The Company records stock-based compensation in accordance with ASC Topic 718, Compensation -- Share -- Stock Compensation-Based Payments. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period. Concentration of Credit Risk Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable. The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. Sales to the Company's largest customer represented approximately 13.97% and 8.45% of total sales for the year years ended December 31, 2024 and 2023, respectively. As of December 31, 2022-2024, there were two customers that each accounted for 25-98% and 40-60% of total revenue. As of December 31, 2023 and 2022, there were two vendors that accounted for 33.05% and 11.69%, and 33.14% and 17.18% and 44.15% and 29.29%, respectively, of total component parts purchased. Recent/Recently Adopted Accounting Pronouncements In June 2016, the FASB issued..... on our consolidated financial statement disclosures. In November 2023, the FASB issued ASU 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures," which updates reportable segment requires a public entity to disclose disclosure requirements by requiring disclosures of significant reportable segment expenses that are regularly and other segment items on an annual and interim basis and to provide provided in interim periods all disclosures about to the Chief Operating Decision Maker ("CODM") and included within each reportable -- reported measure of a segment's profit or loss and assets that are currently. ASU 2023-07 also required requires annually disclosure of the title and position of the individual identified as the CODM and an explanation of how the CODM uses the reported measures of a segment's profit or loss in assessing segment performance and deciding how to allocate resources. ASU 2023-07 is effective for fiscal years annual periods beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. The with early adoption of ASU 2023-07 did not have a material permitted. These amendments are to be applied retrospectively. We are currently evaluating the impact this standard will have on our the Company's consolidated financial statement statements disclosures. Recently Issued Accounting Pronouncements Not Yet Adopted In August 2023, the FASB issued ASU 2023-05, "Business Combinations -- Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement," which requires a newly-formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are The Company is currently evaluating the impact this standard will have on our its consolidated financial date based on historical experience, current conditions, and reasonable and supportable forecasts. Financial institutions and other organizations will now use forward-looking information to better inform their credit loss estimates. As a smaller reporting company, the guidance was effective for our fiscal years beginning after December 15, 2022. The adoption of this guidance did not have an impact on our consolidated financial statements. In December 2023, the FASB issued ASU 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures," which enhances the transparency and decision usefulness of income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are The Company is currently evaluating the impact this standard will have on our its consolidated financial statement statements. In November 2024, the FASB issued ASU 2024-03, "Income Statement -- Reporting Comprehensive Income -- Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses," which requires the disaggregated disclosures -- disclosure -- of specific expense categories, including purchases of inventory, employee compensation, depreciation, and amortization included in each relevant expense caption presented on the statement of operations. The standard also requires disclosures -- disclosure of qualitative description of the amounts remaining in relevant expense captions that are not separately disaggregated quantitatively, as well as the total amount of selling expenses and an entity's definition of selling expenses. ASU 2024-03 is effective for annual periods beginning after December 15, 2026, and interim periods beginning after December 15, 2027. The Company is currently evaluating the impact this standard will have on its consolidated financial statements. The Company currently believes there are no other issued and not yet effective accounting standards that are materially relevant to its consolidated financial statements. Off Balance Sheet Transactions As of December 31, 2023-2024, we did not have any off-balance sheet arrangements. ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK The Company is a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and is not required to provide the information required under this item. ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA The AmpliTech Group, Inc. Index to Consolidated Financial financial Statements statements For required by this item begin on page F-1 with the Years Ended index to financial statements followed by the financial statements. ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE ITEM 9A. CONTROLS AND PROCEDURES Evaluation of Disclosure Controls and Procedures Under the supervision and with the participation of management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, customers. Andrew Lee, age 41-40, has served as a director of the Company since January 2021. Mr. Lee serves as the chairman of the Audit Committee. Mr. Lee is a licensed CPA and holds his MBA degree from Washington State University. Mr. Lee received his Bachelor of Business Administration, with concentrations in Finance and Accounting, from Walla Walla University. Mr. Lee is currently serving began working at RealWear in 2017, as a CFO of Seythe Robotics. Prior to joining RealWear Seythe Robotics, Mr. Lee served led Finance and Operations as the CFO of RealWear and Ryonet Corporation, a high-growth firm in Vancouver, Washington. Mr. Lee's finance and accounting experience qualifies him to serve on our board Board of directors Directors. Daniel Mazziota, age 87-86, has served as a director of the Company since January 2021. He serves as the chairman of the Compensation Committee. Mr. Mazziota founded Microwave Power Devices, Inc. in 1967, which he sold in 1980-1981 to Macom Technology Solutions, a Nasdaq listed developer and producer of radio, microwave, and millimeter wave semiconductor devices and components. He served as the President of Microwave Power Devices, Inc. until his retirement in 1988. He is currently has served as president of IDM Consulting since 1965, which 2023, the Board adopted a Policy for the Recovery of Erroneously Awarded Compensation (the "Clawback Policy") with and an 2022 Report effective date of Compensation Committee until the first trading day after release of such information. ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS The following table sets forth certain information with respect to the beneficial ownership of our voting securities by (i) each director and named executive officer, (ii) all executive officers and directors as a group, and (iii) each shareholder known to be the beneficial owner of 5% or more of the outstanding common stock of the Company as of March 27 13, 2025-2024. Beneficial ownership is determined in accordance with the rules of the SEC. Generally, a person is considered to beneficially own securities: (i) over which such person, directly or indirectly, exercises sole or shared voting or investment power, and (ii) of which such person has the right to acquire beneficial ownership at any time within 60 days (such as through exercise of stock options or warrants). For purposes of computing the percentage of outstanding shares held by each person or group of persons, any shares that such person or persons has the right to acquire within 60 days are deemed to be outstanding but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person. The inclusion herein of any shares listed as beneficially owned does not constitute an admission of beneficial ownership. Unless otherwise indicated below, the address of each person listed in the table below is c / o 155 Plant Avenue, Hauppauge, NY 11788. Amount and Nature of Beneficial Ownership Common Stock (1) Name and Address of Beneficial Owner No. of Shares % of Class Directors and Officers Fawad Maqbool, Chairman, President, and Chief Executive Officer 2, 898-824, 364-504 (2) 14-29, 6-07% Louisa Sanfratello, Chief Financial Officer 127-97, 500 (3) * 1.0%

Jorge Flores 122-76, 500-917 (4) * % Daniel Mazziota 276-237, 618 (5) +2, 40-45 % Matthew Kappers 43,750 (6) * Andrew Lee 59,750 43750 (6) * Shailesh "Sonny" Modi - * All officers and directors as a group (7-6 persons) 3, 484-324, 732-16 039 34, 22 0-% 5 % Stockholders Bard Associates, Inc. 135 South LaSalle Street, Suite 3700 Chicago, IL 60603-1,741,019 8.8-% * Less than 1 % 1) Based on 19-9, 658-717, 960-113 shares of common stock issued and outstanding. 2) Includes and common stock issuable upon exercise of vested stock options. 2-to purchase 175,000 shares of common stock, 3) Includes 87 (i) 2,663,364 shares of common stock and (ii) options to purchase 235,000 shares of common stock, 3) Includes (i) 10,000 shares of common stock and (ii) 117,500 options to purchase shares of common stock. 4) Includes (i) 62,917 options to purchase shares of common stock. 5) 25- Includes 34,375 options to purchase shares of common stock 6) Includes 13,750 options to purchase of common stock ITEM 13. CERTAIN RELATIONSHIP AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE. We had no transactions since the beginning of the fiscal year of 2022, or any currently proposed transaction, in which the Company was to be a participant and the amount involved exceeded or exceeds \$ 120,000 shares of common stock and in which any related person had or will have a direct or indirect material interest (other than compensation described Independent Registered Public Accounting Firm The following table shows the aggregate fees incurred for professional services provided to us for 2024 and 2023: 2024 Audit Fees \$ 255,460 150,100 Audit- Related Fees \$ - Tax Fees \$ 10,885 \$ 6,665 All Other Fees-- Total \$ 266,345 \$ 156,765 \$ 205,030 Audit Fees For the years ended December 31, 2023-2024 and 2022-2023, we paid-incurred \$ 113-255, 600-460 and \$ 130-150, 062-100, respectively for professional services rendered for the audit and review of our financial statements. Audit Related Fees For the years ended December 31, 2023-2024 and 2022-2023, we paid-incurred approximately \$ 0, 36,500 and \$ 71,548, respectively, for audit related services. Tax Fees For our years ended December 31, 2023-2024 and 2022-2023, we paid-incurred \$ 10,885 and \$ 6,665 and \$ 3,420, respectively, for professional services rendered for tax compliance, tax advice, and tax planning. All Other Fees We did not incur any other fees related to services rendered by our independent registered public accounting firm for the years ended December 31, 2023-2024 and 2022-2023. Policy on Pre- Approval by Audit Committee Policies and Procedures As of Services Performed by January 20, 2021, the Board of Directors appointed three independent Independent Auditors The directors to a newly appointed audit committee and appointed Andrew Lee as the chairman of the audit committee. In its capacity, the audit committee pre- approves all audits (including audit- related) and permitted non- audit services to be performed by the independent auditors. The audit committee will annually approve the scope and fee estimates for the year- end audit to be performed by the Company's independent auditors for the fiscal year. With respect to other permitted services, the audit committee pre- approves specific engagements, projects and categories of services on a fiscal year basis, subject to individual projects and annual maximums. To date, the Company has not engaged its auditors to perform any non- audit related service. The Audit Committee pre- approved all services provided by our independent registered public accounting firm. All the above services and fees during 2023 were pre- approved by our Audit Committee. All the above services in 2023-2024 were reviewed and approved by our Audit Committee either before or after the respective services were rendered. Item 15. Exhibits and Financial Statement Schedules. (a) Documents filed as part of this Annual Report. 1. Report of Independent Registered Public Accounting Firm (PCAOB ID 3627) Consolidated Balance Sheets as of December 31, 2023 and (PCAOB ID 3627) F-1 Consolidated Balance Sheets as of December 31, 2024 and 2023 and 2022 F- 2 Consolidated Statements of Operations for the years ended December 31, 2023 and 2022 F- 3 Consolidated Statements of Operations Stockholders' Equity for the years ended December 31, 2024 and 2023 and 2022 F- 4 Consolidated Statements of Cash Flows Changes in Stockholders' Equity for the years ended December 31, 2024 and 2023 and 2022 F- 5 Consolidated Statements of Cash Flows for the years ended December 31, 2024 and 2023 F- 6 Notes to Consolidated Financial Statements F- Fees-- Total \$ 156,765 \$ 205,030 Audit Fees For the years ended December 31, 2023 and 2022, we paid \$ 113,600 and \$ 130,062 respectively for professional services rendered for the audit and review of our financial statements. Audit Related Fees For the years ended December 31, 2023 and 2022, we paid approximately \$ 36,500 and \$ 71,548, respectively, for audit related services. Tax Fees For our years ended December 31, 2023 and 2022, we paid \$ 6,665 and \$ 3,420, respectively, for professional services rendered for tax compliance, tax advice, and tax planning. All Other Fees We did not incur any other fees related to services rendered by our independent registered public accounting firm for the years ended December 31, 2023 and 2022. Pre- Approval Policies and Procedures As of January 20, 2021, the Board of Directors appointed three independent directors to a newly appointed audit committee and appointed Andrew Lee as the chairman of the audit committee. In its capacity, the audit committee pre- approves all audits (including audit- related) and permitted non- audit services to be performed by the independent auditors. The audit committee will annually approve the scope and fee estimates for the year- end audit to be performed by the Company's independent auditors for the fiscal year. With respect to other permitted services, the audit committee pre- approves specific engagements, projects and categories of services on a fiscal year basis, subject to individual projects and annual maximums. To date, the Company has not engaged its auditors to perform any non- audit related service. The Audit Committee pre- approved all services provided by our independent registered public accounting firm. All the above services and fees during 2023 were pre- approved by our Audit Committee. All the above services in 2023 were reviewed and approved by our Audit Committee either before or after the respective services were rendered. Item 15. Exhibits and Financial Statement Schedules. (a) Documents filed as part of this Annual Report. 1. Report of Independent Registered Public Accounting Firm (PCAOB ID 3627) Consolidated Balance Sheets as of December 31, 2023 and 2022 F- 2 Consolidated Statements of Operations for the years ended December 31, 2023 and 2022 F- 3 Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2023 and 2022 F- 4 Consolidated Statements of Cash Flows for the years ended December 31, 2023 and 2022 F- 5 Notes to Consolidated Financial Statements F- 6 2. Financial Statement Schedules Exhibits: Exhibit No. Description 3.1 Amended and Restated Articles of Incorporation of AmpliTech Group, Inc. (incorporated by reference to the Current Report on Form 8- K filed on December 28, 2020) 3.2 Amended and Restated Bylaws of AmpliTech Group, Inc. (incorporated by reference to the Current Report on Form 8- K filed on December 28, 2020) 3.3 Amended and Restated Series A Convertible Preferred Stock Certificate of Designation (incorporated by reference to the Current Report on Form 8- K filed on December 28, 2020) 3.4 Certificate of Amendment, filed with the Secretary of State of Nevada (incorporated by reference to the Current Report on Form 8- K filed on February 19, 2021) 3.5 Certificate of Correction, filed with the Secretary of State of Nevada (incorporated by reference to the Current Report on Form 8- K filed on February 19, 2021) 4.1 Form of Common Stock Purchase Warrant (incorporated by reference to the Current Report on Form 8- K filed on February 19, 2021) 4.2 * Warrant Agency Agreement dated February 14, 2024 by and between AmpliTech Group, Inc. and VStock Transfer LLC (incorporated by reference to the Annual Report on Form 10K filed on April 1, 2024) 4.3 Form of Representative's Warrant (incorporated by reference to the Current Report on Form 8- K filed on February 19, 2021) 4.4 * Description of Capital Stock (incorporated by reference to Form 10- K filed March 31, 2021) 4.5 Form of Warrant (incorporated by reference to the Current Report on Form 8- K filed on April 15, 2021) 4.6 Form of Prefunded Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8- K filed on November 26, 2024) 10. 1-3 Commercial guaranty of AmpliTech Group, Inc., dated September 12, 2019 (incorporated by reference to the Current Report on Form 8- K filed on September 18, 2019) 10. 2-4 Lease agreement, dated September 12, 2019, by and between AmpliTech Group, Inc. and Stephen J. Faber, as Trustee of the Revocable Trust of Stephen J. Faber, dated August 29, 2017 (incorporated by reference to the Current Report on Form 8- K filed on September 18, 2019) 10. 3-5 Exclusive Distribution Agreement, dated November 9, 2016, by and between AmpliTech Inc. and distributor (incorporated by reference to Exhibit 10.8 to the Company's Registration Statement on Form S- 1 filed on December 10, 2020) 10. 4-6 Advisory Agreement, dated February 14, 2018, by and between AmpliTech Group, Inc. and with Sunbiz Holdings Corp. (incorporated by reference to Exhibit 10.9 to the Company's Registration Statement on Form S- 1 filed on December 10, 2020) 10. 5-7 Business Loan Agreement with BNB Bank, dated November 20, 2020 (incorporated by reference to Exhibit 10.10 to the Company's Registration Statement on Form S- 1 filed on December 10, 2020) 10. 6-8 Promissory Note issued to BNB Bank, dated November 20, 2020 (incorporated by reference to Exhibit 10.10 to the Company's Registration Statement on Form S- 1 filed on December 10, 2020) 10. 7-9 Amended and Restated 2020 Equity Incentive Plan (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S- 8 filed on February 6, 2024) 10. 8-10 Asset Purchase Agreement dated November 19, 2021 (incorporated by reference to the Current Report on Form 8- K filed on November 19, 2021) 10. 9-11 Employment Agreement with Jorge Flores dated February 21, 2022 (incorporated by reference to the Current Report on Form 8- K filed on February 22, 2022) 10. 10-12 Amendment to Employment Agreement with Jorge Flores dated March 27, 2023 (incorporated by reference to the Annual Report on Form 10- K filed on March 31, 2023) 10. 11-13 Amendment to Employment Agreement with Jorge Flores dated March 20, 2024 (incorporated by reference to the Current Report on Form 8- K filed on March 26, 2024) 10. 12-14 Form of Director Agreement (incorporated by reference to the Current Report on Form 8- K filed on January 26, 2022) 10. 13 Business Loan and Security Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8- K filed on July 29, 2024) 10. 14 Licensing Product Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8- K filed on August 1, 2024) 10. 15 Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8- K filed on September 11, 2024) 10. 16 Form of Placement Agency Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8- K filed on September 11, 2024) 10. 17 Form of Lock- Up Agreement (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8- K filed on September 11, 2024) 10. 18 Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8- K filed on November 26, 2024) 10. 19 Form of Placement Agency Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8- K filed on November 26, 2024) 10. 20 Form of Lock- Up Agreement (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8- K filed on November 26, 2024) 10. 21 Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8- K filed on December 13, 2024) 10. 22 Form of Placement Agency Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8- K filed on December 13, 2024) 10. 23 Form of Lock- Up Agreement (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8- K filed on December 13, 2024) 10. 24 Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8- K filed on December 26, 2024) 10. 25 Form of Placement Agency Agreement (incorporated

by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on December 26, 2024) 10.26 Form of Lock-Up Agreement (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on December 26, 2024) 10.27 Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on December 30, 2024) 10.28 Form of Placement Agency Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on December 30, 2024) 10.29 Form of Lock-Up Agreement (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on December 30, 2024) 10.30 Form of Director Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on January 21, 2025) 10.31 Equity Distribution Agreement (incorporated by reference to Exhibit 1.1 to the Current Report on Form 8-K filed on March 24, 2025) 10.32 ~~†~~ Form of Asset Purchase Agreement 10.33 ~~*~~ Bank Loan Agreement 10.34 ~~*~~ Promissory Note 19.1 ~~*~~ Form of Insider Trading Policy 21.1 List of Subsidiaries (incorporated by reference to Exhibit 21.1 to the Company's Registration Statement on Form S-1 filed on August 13, 2012) 23.1 ~~*~~ Consent of Sadler, Gibb & Associates, LLC 31.1 ~~*~~ Rule 13a-14 (a) / 15d-14 (a) Certification of Principal Executive Officer 31.2 ~~**~~ Rule 13a-14 (a) / 15d-14 (a) Certification of Principal Financial Officer 32.1 ~~**~~ Section 1350 Certification of Principal Executive Officer 32.2 ~~**~~ Section 1350 Certification of Principal Financial Officer 97.1 Clawback Policy (incorporated by reference to Exhibit 97.1 to the Company's Annual Report on Form 10-K filed on April 1, 2024) 101.INS ~~*~~ Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document) 101.SCH ~~*~~ Inline XBRL Taxonomy Extension Schema Document 101.CAL ~~*~~ Inline XBRL Taxonomy Extension Calculation Linkbase Document 101.DEF ~~*~~ Inline XBRL Taxonomy Extension Definition Linkbase Document 101.LAB ~~*~~ Inline XBRL Taxonomy Extension Label Linkbase Document 101.PRE ~~*~~ Inline XBRL Taxonomy Extension Presentation Linkbase Document Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101). ~~*~~ filed herewith ~~**~~ furnished herewith ~~†~~ Pursuant to item 601 (b) (10) (iv) of Regulation S-K, certain information has been excluded because it is both not material and the type of information that the registrant treats as private or confidential. ITEM 16. FORM 10-K SUMMARY SIGNATURES Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934 the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. AmpliTech Group, Inc. Date: ~~March 31~~ **April 1, 2025** By: /s/ Fawad Maqbool Fawad Maqbool **President and Chief Executive Officer (Principal Executive Officer)** Pursuant to the requirements of the Securities Exchange Act of 1934 this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. Name Title Date /s/ Fawad Maqbool President, Chief Executive Officer and April 1, 2024 Fawad Maqbool Chairman of the Board of Directors (Principal Executive Officer) /s/ Louisa Sanfratello Chief Financial Officer and Secretary April 1, 2024 Louisa Sanfratello (Principal Financial and Accounting Officer) /s/ Andrew Lee Director April 1, 2024 Andrew Lee /s/ Daniel Mazziota Director April 1, 2024 Daniel Mazziota /s/ Matthew Kappers Director April 1, 2024 Matthew Kappers Exhibit 4.2 AMPLITECH GROUP, INC. VSTOCK TRANSFER, LLC, as Warrant Agent Warrant Agency Agreement Dated as of February 14, 2024 WARRANT AGENCY AGREEMENT WARRANT AGENCY AGREEMENT, dated as of February 14, 2024 ("Agreement"), between AmpliTech Group, Inc., a corporation organized under the laws of the State of Nevada (the "Company"), and VStock Transfer, LLC, a California limited liability company (the "Warrant Agent"). WITNESSETH WHEREAS, the Company previously entered into a certain warrant agency agreement with Manhattan Transfer Registrar Co. ("Manhattan Transfer Agent") dated February 16, 2021 (the "Manhattan Warrant Agency Agreement") pursuant to a registered offering by the Company of 1,371,428 Units (the "Offering"), with each Unit consisting of one (1) share of the Company's ~~REPORT~~ **REPORT** OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM To the Board of Directors and Shareholders of AmpliTech Group, Inc.: Opinion on the Financial Statements We have audited the accompanying consolidated balance sheets of AmpliTech Group, Inc. ("the Company") as of December 31, ~~2024 and 2023 and 2022~~, the related consolidated statements of operations, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, ~~2023-2024~~ and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, ~~2024 and 2023 and 2022~~, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, ~~2023-2024~~, in conformity with accounting principles generally accepted in the United States of America. Basis for Opinion These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U. S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion. Critical Audit Matters ~~The critical~~ **Critical** audit matters ~~communicated below~~ are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that ~~(1) related~~ **relate** to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex ~~judgements~~ **judgments**. The communication of ~~We determined that there were no~~ **We determined that there were no** critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate. ~~Long-Lived Asset Impairment Assessment Critical Audit Matter Description As described in note 2 to the consolidated financial statements, the Company performs impairment testing for its long-lived assets when events or changes in circumstances indicate that its carrying amount may not be recoverable and exceeds its fair value. Due to challenging industry and economic conditions, the Company tested the recoverability of its long-lived asset group that comprises the AmpliTech Inc. division during the year as of December 31, 2023. The Company's evaluation of the recoverability of this long-lived asset group involved comparing the undiscounted future cash flows expected to be generated by this long-lived asset groups to its respective carrying amount. The Company's recoverability analysis requires management to make significant estimates and assumptions related to forecasted sales growth rates and cash flows over the remaining useful life of this long-lived asset group. We identified the evaluation of the recoverability analysis for this long-lived asset group as a critical audit matter because of the significant estimates and assumptions management used in the related cash flow analysis. Performing audit procedures to evaluate the reasonableness of these estimates and assumptions required a high degree of auditor judgment and an increased extent of effort. How the Critical Audit Matter Was Addressed in the Audit Our audit procedures related to the following: • Testing management's process for developing the test for recoverability. • Evaluating the appropriateness of the cash flow model used by management. • Testing the completeness and accuracy of underlying data used in the cash flow model. • Evaluating the significant assumptions used by management related to revenues, EBITDA, and future capital asset and working capital needs to discern whether they are reasonable considering (i) the current and past performance of the entity; (ii) the consistency with external market and industry data; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. • Professionals with specialized skill and knowledge were utilized by the Firm to assist in the evaluation of the discounted cash flow model and discount rate assumptions. /s/ Sadler, Gibb & Associates, LLC We have served as the Company's auditor since 2013. Draper, UT April 1 ~~March 31~~ **2024** ~~2025~~ Consolidated Balance Sheets December 31, December 31, ~~2024~~ ~~2023~~ ~~2022~~ Assets Current Assets Cash and cash equivalents \$ ~~19,315,984~~ ~~6,726,013~~ ~~\$13,290,222~~ Accounts receivable ~~1,256,725~~ ~~2,542,710~~ ~~1,801,769~~ Inventories, net ~~7,588,764~~ ~~6,537,578~~ ~~6,632,121~~ Marketable securities-~~247,450~~ Prepaid expenses ~~169,913~~ ~~1,342,335~~ ~~194,635~~ Total Current Assets ~~28,331,386~~ ~~17,148,636~~ ~~22,166,197~~ Property and equipment, net ~~2,253,695~~ ~~2,599,448~~ ~~2,023,687~~ Operating lease right of use assets ~~4,399,975~~ ~~3,538,798~~ ~~4,197,324~~ Intangible assets, net ~~2,366,119~~ ~~2,984,133~~ ~~3,134,108~~ Goodwill ~~4,696,883~~ ~~4,696,883~~ Cost method investment ~~348,250~~ ~~348,250~~ Security ~~Long-term~~ deposits ~~824,174~~ ~~91,481~~ ~~143,185~~ Total Assets ~~\$43,220,482~~ ~~\$31,407,629~~ ~~\$36,679,634~~ Liabilities and Stockholders' Equity Current Liabilities Accounts payable and accrued expenses ~~941,408~~ ~~\$846,179~~ ~~\$860,366~~ Customer deposits ~~128,089~~ ~~14,239~~ ~~210,848~~ Current portion of ~~financing~~ **finance** lease obligations ~~16,522~~ ~~16,799~~ ~~33,480~~ Current portion of operating lease obligations ~~449,622~~ ~~541,324~~ ~~586,379~~ Current portion of notes payable ~~80,841~~ ~~144,358~~ Revenue ~~earnout~~ ~~2,180,826~~ Total Current Liabilities ~~1,535,641~~ ~~1,499,382~~ ~~4,016,257~~ Long-term Liabilities ~~Financing~~ **Finance** lease obligations, net of current portion ~~15,478~~ ~~32,537~~ ~~49,336~~ Operating lease obligations, net of current portion ~~4,139,562~~ ~~3,171,979~~ ~~3,768,932~~ Deferred tax liability ~~39,000~~ ~~24,000~~ ~~Notes payable, net of current portion~~ ~~89,597~~ Total Liabilities ~~5,729,681~~ ~~4,727,898~~ ~~7,924,122~~ Commitments and Contingencies-- Stockholders' Equity Common stock, par value \$ 0.001, 500,000,000 shares authorized, ~~19,656,460~~ ~~and 9,714,613~~ ~~and 9,634,613~~ shares issued and outstanding, respectively ~~19,656~~ ~~9,715~~ ~~9,635~~ Additional paid-in capital ~~58,483,272~~ ~~36,439,739~~ ~~36,050,161~~ Accumulated deficit ~~(21,012,127)~~ ~~(9,769,723)~~ ~~(7,304,284)~~ Total Stockholders' Equity ~~37,490,801~~ ~~26,679,731~~ ~~28,755,512~~ Total Liabilities and Stockholders' Equity ~~\$43,220,482~~ ~~\$31,407,629~~ ~~\$36,679,634~~ See accompanying notes to the consolidated financial statements AmpliTech Group, Inc. Consolidated Statements of Operations ~~2024~~ For the Years Ended December ~~31, 2023 and 2022~~ ~~2023~~ ~~2022~~ Revenues \$ ~~9,508,372~~ ~~\$15,584,577~~ ~~\$19,394,492~~ Cost of Goods Sold ~~6,023,265~~ ~~8,308,949~~ ~~10,469,628~~ Gross Profit ~~3,485,107~~ ~~7,275,628~~ ~~8,924,864~~ Operating Expenses Selling, general and administrative ~~7,856,471~~ ~~7,511,319~~ ~~7,629,644~~ Goodwill impairment ~~Impairment of intangible assets~~ ~~467,928~~ ~~120,136~~ Research and development ~~3,590,695~~ ~~2,341,845~~ ~~1,024,127~~ Total Operating Expenses ~~11,915,094~~ ~~9,853,164~~ ~~8,773,907~~ Income (Loss) From~~

Operations (~~8,429,987~~) (~~2,577,536~~) ~~150,957~~ Other Income (Expenses) Loss on ~~contingent revenue earnout investment in digital assets (3,248,911)~~ - (815,788) Loss on disposal of property and equipment ~~(16,403)~~ (~~1,606~~) Unrealized gain on investments ~~1,697~~ ~~2~~ Other income ~~716~~ ~~343~~ ~~943~~ Realized gain on investments ~~26,746~~ ~~131,522~~ Interest Income (expense), net ~~(292,195)~~ ~~19,281~~ (~~43,013~~) Total Other Income (Expenses) ~~(2,797,417)~~ ~~136,097~~ (~~828,064~~) Net Loss Before Income Taxes ~~(11,227,404)~~ (~~2,441,439~~) (~~677,107~~) Provision For Income Taxes ~~15,000~~ ~~24,000~~ -Net Loss \$ (~~11,242,404~~) \$ (~~2,465,439~~) \$ (~~677,107~~) Net Loss Per Share; Basic and diluted \$ (~~1.08~~) \$ (~~0.26~~) \$ (~~0.07~~) Weighted Average Common Shares Outstanding; Basic and diluted ~~10,432,416~~ ~~9,659,421~~ ~~9,609,208~~

Consolidated Statements of Stockholders' Equity For The Years Ended December 31, 2023 and 2022--Shares Value Capital Deficit Equity Common Stock Additional Total Number of Par Paid- In Accumulated Stockholders' Shares Value Capital Deficit Equity Balance, December 31, 2021 ~~9,582,113~~ ~~9,582~~ ~~35,651,088~~ \$ (~~6,627,177~~) \$ ~~29,033,493~~ Stock based compensation-- ~~399,126~~ ~~399,126~~ Common stock issued for vesting of RSU's ~~52,500~~ (~~53~~) -- Net loss for the year ended December 31, 2022 ~~(677,107)~~ (~~677,107~~) Balance, December 31, 2022 ~~9,634,613~~ ~~9,635~~ ~~36,050,161~~ \$ (~~7,304,284~~) \$ ~~28,755,512~~ Balance ~~9,634,613~~ ~~9,635~~ ~~36,050,161~~ \$ (~~7,304,284~~) \$ ~~28,755,512~~ Stock based compensation-- ~~389,658~~ ~~389,658~~ Common stock issued for vesting of RSU's ~~80,000~~ ~~80~~ -- Net loss for the year ended December 31, 2023 ~~(2,465,439)~~ (~~2,465,439~~) Balance, December 31, 2023 ~~9,714,613~~ ~~9,715~~ ~~36,439,739~~ \$ (~~9,769,723~~) \$ ~~26,679,731~~ Balance ~~9,714,613~~ ~~9,715~~ ~~36,439,739~~ \$ (~~9,769,723~~) \$ ~~26,679,731~~ See accompanying notes to Stock based compensation-- ~~517,781~~ ~~517,781~~ Common stock issued for vesting of RSU's ~~55,000~~ ~~55~~ -- Common stock issued in offering ~~9,886,847~~ ~~9,886~~ ~~21,525,807~~ ~~21,535,693~~ Net loss for the consolidated financial statements year ended December 31, 2024 ~~(11,242,404)~~ (~~11,242,404~~) Net loss ~~(11,242,404)~~ (~~11,242,404~~) Balance, December 31, 2024 ~~19,656,460~~ ~~19,656~~ ~~58,483,272~~ \$ (~~21,012,127~~) \$ ~~37,490,801~~ Balance ~~19,656,460~~ ~~19,656~~ ~~58,483,272~~ \$ (~~21,012,127~~) \$ ~~37,490,801~~ Consolidated Statements of Cash Flows December 31, December 31, 2024 2023 2022--Cash Flows from Operating Activities: Net loss \$ (~~11,242,404~~) \$ (~~2,465,439~~) \$ (~~677,107~~) Adjustments to reconcile net loss to net cash used in operating activities: Depreciation and amortization ~~538,759~~ ~~531,160~~ ~~412,006~~ Amortization of prepaid consulting ~~42,756~~ Operating lease costs ~~545,532~~ ~~065~~ ~~545,249~~ ~~065~~ Stock based compensation ~~517,781~~ ~~389,658~~ ~~399~~ Amortization of debt discount ~~260~~ ~~426~~ ~~000~~ Loss on disposal of property and equipment ~~16,403~~ ~~1,606~~ Inventory reserve ~~18,000~~ Change in fair value of marketable securities (~~2,278~~) Gain on termination of right- of- use operating lease ~~(8,461)~~ Deferred taxes ~~15,000~~ ~~24,000~~ Impairment of intangible assets ~~467,928~~ Inventory reserve (~~84,000~~) ~~18,000~~ Loss on contingent revenue earnout adjustment investment of digital assets ~~3,248,911~~ ~~815,788~~ Deferred tax liability ~~24,000~~ Impairment of goodwill ~~120,136~~ Changes in Operating Assets and Liabilities: Accounts receivable ~~1,285,985~~ (~~740,941~~) (~~141,891~~) Other receivable ~~201,215~~ Inventories (~~967,186~~) ~~76,543~~ (~~2,439,310~~) Prepaid expenses (~~1,167,949~~) (~~1,147,700~~) Long- term (~~78,007~~) Security deposits (~~732,693~~) ~~21,704~~ ~~9,219~~ Accounts payable and accrued expenses ~~95,229~~ (~~14,187~~) (~~2,145,968~~) Operating lease obligations (~~512,888~~) (~~196,609~~) (~~444,725~~) Customer deposits ~~113,850~~ (~~520,086~~) (~~43,061~~) Net cash used in operating activities (~~5,295,714~~) (~~3,470,890~~) (~~3,425,246~~) Cash Flows from Investing Activities: Purchase of property and equipment (~~42,920~~) (~~973,349~~) (~~735,761~~) Net investment in marketable securities (~~3,248,911~~) ~~247,450~~ (~~245,172~~) Purchase of cost method investment (~~98,250~~) Net cash used in investing activities (~~3,291,831~~) (~~725,899~~) (~~1,079,183~~) Cash Flows from Financing Activities: Net repayment on financing lease liabilities (~~153,114~~) (~~45,195~~) Proceeds proceeds from issuance of common shares in a private equity offering ~~21,535,693~~ Net proceeds from notes payable ~~1,274,000~~ ~~441~~ Repayment on finance lease obligations (~~17,439~~) ~~336~~ (~~153,114~~) Repayment of notes payable (~~1,614,841~~) (~~33,480~~) (~~620,167~~) Payment of revenue earnout (~~2,180,826~~) --Net cash provided by (used in) financing activities ~~21,177,516~~ (~~3,470,890~~) (~~224,223~~) Net change in cash and cash equivalents ~~12,589,971~~ (~~6,564,209~~) (~~4,728,652~~) Cash and Cash Equivalents, Beginning of the Period ~~6,726,013~~ ~~13,290,222~~ ~~48,018,874~~ Cash and Cash Equivalents, End of the Period \$ ~~19,315,984~~ \$ ~~6,726,013~~ \$ ~~43,290,222~~ Supplemental disclosures: Cash paid for interest expense \$ ~~298,811~~ \$ ~~27,259~~ \$ ~~42,450~~ Cash paid for income taxes \$ ~~8,632~~ \$ ~~10,200~~ \$ ~~4,293~~ Non- Cash Investing and Financing Activities: Common Stock issued on vesting of RSUs \$ ~~55~~ \$ ~~80~~ Debt discount on notes payable \$ ~~260~~ ~~53~~ Gain on termination of right- of- use operating lease \$ ~~8,461~~ \$ ~~000~~ Loss on disposal of fixed assets \$ ~~16,403~~ \$ ~~1,606~~ Equipment received for prepaid assets \$ ~~50,644~~ ~~50,644~~ ~~145,630~~ Operating lease right of use asset and liability initial investment measurement \$ ~~1,393,242~~ \$ ~~20,880~~ \$ ~~3,626,985~~ Notes To Consolidated Financial Statements (1) Organization and Business Description

AmpliTech Group, Inc. (" AmpliTech " or the " Company ") was incorporated under the laws of the State of Nevada on December 30, 2010. On August 13, 2012, the Company acquired AmpliTech, Inc., by issuing 833,750 shares of the Company's common stock to the shareholders of AmpliTech, Inc. in exchange for 100 % of the outstanding shares of AmpliTech Inc. (the " Share Exchange "). After the Share Exchange, the selling shareholders owned 60,000 shares of the outstanding ~~889~~ ~~893~~ ~~250~~ ~~750~~ shares of Company common stock, resulting in a change in control. Accordingly, the transaction was accounted for as a reverse acquisition in which AmpliTech, Inc. was deemed to be the accounting acquirer, and the operations of the Company were consolidated for accounting purposes. The capital balances have been retroactively adjusted to reflect the reverse acquisition. AmpliTech designs, engineers and assembles microwave component based low noise amplifiers (" LNA ") that meet individual customer specifications. Application of the Company's proprietary technology results in maximum frequency gain with minimal background noise distortion as required by each customer. The Company has both domestic and international customers in such industries as aerospace, governmental, defense and commercial satellite. On September 12, 2019, AmpliTech Group, Inc. acquired the assets of Specialty Microwave Corporation (" Specialty "), a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty. Specialty designs and manufactures passive microwave components and related subsystems that meet individual customer specifications for both domestic and international customers for use in satellite communication ground networks. On February 17, 2021, AmpliTech Group, Inc., common stock and warrants under the symbols " AMPG " and " AMPGW ", respectively, commenced trading on NASDAQ. A reverse split of the outstanding common stock at a 1- for- 20 ratio became effective February 17, 2021 as of 12: 01 a. m., Eastern Time. In connection with the public offering, 1,371,428 units at an offering price of \$ 7. 00 per unit were sold. Each unit issued in the offering consisted of one share of common stock and one warrant. In 2021, the Company opened AGMDC, a monolithic microwave integrated circuits (" MMIC ") chip design center in Texas and has started to implement several of its proprietary amplifier designs into MMIC components. MMICs are semiconductor chips used in high- frequency communications applications. MMICs are widely desired for power amplification solutions to service emerging technologies, such as phased array antennas and quantum computing. MMICs carry a smaller footprint enabling them to be incorporated into a broader array of systems while reducing costs. AGMDC designs, develops and manufactures state- of- the- art signal processing components for satellite and 5G communications networks, defense, space and other commercial applications, allowing the Company to market its products to a wider base of customers requiring high technology in smaller packages. On November 19, 2021, AmpliTech Group, Inc. entered into an Asset Purchase Agreement (the " Purchase Agreement ") with Spectrum Semiconductor Materials Inc. (the " Seller " or " SSM "), pursuant to which AmpliTech would acquire substantially all the assets of the Company (the " Acquisition "). The Acquisition was completed on December 15, 2021. Spectrum Semiconductor Materials (" SSM "), located in Silicon Valley (San Jose, CA), is a global authorized distributor of integrated circuit (" IC ") packaging and lids for semiconductor device assembly, prototyping, testing, and production requirements. In August 2022, AmpliTech Group's True G Speed Services (AGTGSS) division was founded to serve and provide complete system integration and ORAN compliant O- RU's (Radio Units) for telcos, enabling the industry to access ' True 5G Speeds '. AGTGSS provides Managed Services, Cyber Security, Cloud Services, Data Sciences and Telco Cloud Services. AGTGSS will also be providing full installation of Private 5G Networks (P5G) which includes the deployment of AmpliTech Group's developed radio units. AGTGSS will implement AmpliTech's low noise amplifier devices in these systems to promote greater coverage, longer range and faster speeds.

(2) Loss on Investment of Digital Assets During the three months ending March 31, 2024, the Company made several transactions in digital currency in the total amount of approximately \$ 3. 25 million. The Company believes that it was fraudulently induced to hold its digital currency with a custodian whom the Company believed to be valid but no longer exists. The Company is taking steps in an attempt to seek recovery of the funds including discussions with local, federal, and international law enforcement agencies and private consultants and is currently conducting a review of its processes and procedures related to this investment. At the present time, the Company is not aware of and does not expect any additional losses arising out or relating to the above- described investment. In addition, the Company does not believe that the Company's systems, records, or other assets were otherwise affected or compromised in connection with these investments. As a result of the fraudulent digital currency transactions noted above, the Company was a victim of a cyber phishing scam that defrauded the Company. During the year ended December 31, 2024, the Company recorded a complete loss from the investment in digital assets of \$ 3,248,911. As of December 31, 2024, the remaining balance of digital assets was \$ 0. (3) Summary of Significant Accounting Policies The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. F- 8 7 Certain reclassifications have been made to the prior years' financial statements to conform to the current year's presentation. These reclassifications have no effect on previously reported results of operations. The Company considers deposits that can be redeemed on demand and investments and marketable securities that have original maturities of less than three months, when purchased, to be cash equivalents. As of December 31, 2023, the Company's cash and cash equivalents were deposited in five financial institutions. The Company's policy is to place its cash and cash equivalents with high- quality, major financial and investments investment in marketable securities institutions to limit the amount of credit exposure. Accounts at each financial institution are insured by classified based on the nature of the securities and their-- the Federal Deposit Insurance availability for use in current operations Corporation (" FDIC ") up to \$ 250,000. At December 31, 2024 and 2023, the Company had \$ 18,749,154 and \$ 3,170,500 in excess of FDIC insured limits, respectively. The Company has not experienced any's marketable securities are stated at fair value with all realized and unrealized gains and losses on investments in such accounts marketable equity securities recognized in other income, net. The realized and unrealized gains and losses on marketable securities are determined using specific

identification method. Inventory quantities and related values are analyzed at the end of each fiscal quarter to determine those items that are slow moving and obsolete. An inventory reserve is recorded for those items determined to be slow moving with a corresponding charge to cost of goods sold. Inventory items that are determined obsolete are written off currently with a corresponding charge to cost of goods sold. F- 8-9 Schedule of property **Property** and equipment **Equipment** depreciated Description **Depreciated Description** Useful Life Method Office equipment 3-to 7 years Straight- line Machinery / shop equipment 7-to 15 years Straight- line Computer equipment / software 4-to 7 years Straight- line Vehicles 5-years Straight- line Leasehold improvements 7-years Straight- line Schedule of **Amortization of Intangible Assets** Assets Description Description Useful Life Method Trade names Indefinite N / A Customer relationships to 20 years Straight- line Intellectual property years Straight- line F- 9 F- 10 Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non- marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Company's share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held \$ 348, 250 of investments without readily determinable fair values at December 31, 2023 and 2022, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the years ended December 31, 2023 and 2022. F- 11 Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each party's rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred. Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period. Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds. Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue. F- 12 F- 13 The Company's deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates enacted in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de- recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At December 31, 2024 and 2023 and 2022, the Company had no material unrecognized tax benefits. F- 14 The 12 Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to of a financial instrument is their the short-term nature amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The carrying Financial assets are marked to bid prices, and financial liabilities are marked to offer prices. Fair value of measurements do notes not include transaction costs. A payable and short and long-term debt also approximates fair value since hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following these three categories instruments bear market rates of interest. F- 14 In November 2023, the FASB issued ASU 2023- 07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segment's profit or loss and assets that are currently required annually. ASU 2023- 07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. These amendments are to be applied retrospectively. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. F- 15 F- 16 (3-4) Revenues The following table presents sales disaggregated based on geographic regions and for the years ended: Schedule of Disaggregated Disaggregated revenue Revenue AmpliTech Inc. and Specialty Microwave December 31, 2023-2024 December 31, 2022-2023 AmpliTech Inc. and Specialty Microwave Domestic sales \$ 2, 660, 340 \$ 5, 120, 694 \$ 4, 922, 237 International sales \$ 940, 135 \$ 1, 267, 459 \$ 947, 515 Total sales \$ 3, 600, 475 \$ 6, 388, 153 \$ 5, 869, 752 Spectrum Domestic sales \$ 64, 234 \$ 88, 934 \$ 483, 678 \$ 798, 234 \$ 713, 934 International sales \$ 1, 819, 414 \$ 2, 961, 490 \$ 6, 726, 927 Total sales \$ 5, 907, 897 \$ 9, 196, 424 \$ 13, 524, 740 Total sales for the year ended December 31, 2024 and 2023 and 2022, were \$ 9, 508, 372 and \$ 15, 584, 577 and \$ 19, 394, 492, respectively. F- 17 (4-5) Segment Reporting ASC Topic 280, "Segment Reporting", establishes standards for reporting information about operating segments on a basis consistent with the Company's internal organizational structure as well as information about geographical areas, business segments and major customers in financial statements for details on the Company's business segments. Operating segments are components of an enterprise for which separate discrete financial information is available and regularly evaluated by the CODM to allocate resources and assess performance. The Company has identified its Chief Executive Officer ("CEO") as the CODM and has determined that it operates in two reportable segments: the manufacturing and engineering segment, which is operated by AmpliTech Inc. and Specialty Microwave; and the distribution segment, which is operated by Spectrum. The manufacturing and engineering segment assembles microwave components, and the distribution segment is a global distributor of integrated circuits packages and lids. The Company provides general corporate services to its segments; however, these services are not considered when making operating decisions and assessing segment performance. These services are reported under "Corporate" below and include costs associated with executive management, financing activities and public company compliance. F- 16 The following table presents summary information by segment for the year ended December 31, 2023-2024: Schedule of Segment Reporting Manufacturing AmpliTech Inc. and Specialty Spectrum Engineering Distribution Corporate Total Revenue \$ 63, 388, 600 \$ 53, 475 \$ 5, 907, 897 \$ 9, 196, 508 \$ 424, 372 Cost of goods sold \$ 3, 227, 140 \$ 2, 796, 125 \$ 6, 023, 265 Net income (loss) (7, 379, 725) \$ 1, 146, 548 (5, 009, 227) (11, 242, 404) Research and development (1) \$ 3, 590, 695-- 3, 590, 695 Total assets \$ 27, 344, 872 \$ 15, 821, 000 \$ 584, 541 \$ 410, 577 Cost of Goods Sold \$ 3, 565, 467 \$ 4, 743, 432 \$ 20, 422 \$ 43, 220, 482 Depreciation and amortization \$ 418, 733 \$ 120, 026 \$ 8, 538, 308 \$ 759 Interest expense, net \$ 25, 949 Net Income (Loss) (2, 465, 439) Total Assets \$ 11, 461, 268 \$ 16, 540, 789 \$ 3, 405, 572 \$ 31, 407, 629 Depreciation and Amortization \$ 362, 663 \$ 168, 497 \$ 531, 160 Interest Income, net \$ 26, 266, 901 \$ 979, 292, 195 F- 18 (7-620) 19, 281 The following table presents summary information by segment for the year ended December 31, 2022-2023: Manufacturing AmpliTech Inc. and Specialty Spectrum Engineering Distribution Corporate Total Revenue \$ 56, 869, 388 \$ 752, 153 \$ 139, 524 \$ 196, 740 \$ 424, 515 \$ 15, 584, 577 Cost of goods sold \$ 3, 565, 467 \$ 4, 743, 482 \$ 8, 308, 949 Net income (loss) (3, 619, 842) \$ 2, 060, 234 (905, 831) (2, 465, 439) Research and development (2) \$ 2, 341, 845-- 2, 341, 845 Total assets \$ 11, 461, 268 \$ 16, 540, 789 \$ 3, 405, 572 \$ 31, 407, 629 Depreciation and amortization \$ 362, 663 \$ 168, 497 \$ 531, 160 Interest expense, net \$ 26, 901- (7, 620) \$ 19, 281 \$ 394, 492 Cost of Goods Sold \$ 3, 257, 367 \$ 7, 212, 261 \$ 10, 469, 628 Net Income (Loss) (2, 478, 429) \$ 2, 878, 476 (1, 077, 154) Research (677, 107) Total Assets \$ 17, 682, 013 \$ 16, 979, 383 \$ 2, 018, 238 \$ 36, 679, 634 Depreciation and development for the year ending Amortization \$ 279, 470 \$ 132, 536 \$ 412, 006 Interest Expense, net (159) \$ 1, 289 \$ 11, 883 \$ 13, 013 F- 17 (5) Marketable Securities The following table is a summary of marketable securities at December 31, 2023 2024: Schedule was comprised of Marketable Securities Adjusted Cost Unrealized Gains Unrealized Losses Fair Value Level 1 (1) Money Market Fund \$ 12, 079-- \$ 12, 079 US Treasury Bills \$ 245, 172 \$ 2, 278-- 247, 450 Total \$ 2, 637, 030, 339 \$ 071 of SG expenses and \$ 1, 697-- 560, 624 of MMIC design expenses. (2) Research and development for the year ending December 31, 2023 was comprised of \$ 157, 984 of SG expenses and \$ 2, 639, 036 The following table is a summary of marketable securities at December 31, 2022: Adjusted Cost Unrealized Gains Unrealized Losses Fair Value Level 1 (1) Money Market Fund \$ 1, 759, 299-- \$ 1, 759, 299 US Treasury Bills \$ 245, 172 \$ 2, 278-- 247, 450 Total \$ 2, 004, 471 \$ 2, 278-- 2, 006, 749 Cash and cash equivalents at December 31, 2023 and 2022 was \$ 2, 639, 036 and \$ 1, 759, 299, respectively. (1) Level 1 fair value estimates are based on quoted prices in active markets for identical assets or liabilities. When evaluating an investment for impairment, the Company reviews factors including the length of time and extent to which fair value has been below cost basis, the financial condition of the issuer, changes in market interest rates and whether it is more likely than not the Company will be required to sell the investment before recovery of the investment's cost basis. As of December 31, 2023 and 2022, the Company does not consider any of its investments to be impaired. F- 18 183, 861 of MMIC design expenses. (6) Inventories The inventory consists of the following at December 31, 2024 and 2023 and 2022: Schedule of Inventory December 31, December 31, 2024 2023 2022 Raw Materials \$ 1, 261, 307 \$ 959, 645 \$ 872, 184 Work- in Progress \$ 190, 818 \$ 51, 140 \$ 229, 771 Finished Goods \$ 7, 198, 639 \$ 6, 672, 793 \$ 6, 658, 166 Subtotal \$ 78, 683 \$ 50, 578 \$ 764, 683 \$ 7, 760 \$ 683 \$ 121 \$ 578 Less: Reserve for Obsolescence (1, 062, 000) (1, 146, 000) (1, 128, 000) Less: Reserve for Obsolescence (1, 062, 000) (1, 146, 000) (1, 128, 000) Total \$ 67, 521 \$ 537 \$ 588 \$ 764 \$ 6, 632 \$ 537 \$ 121 \$ 578 F- 19 (7) Property and Equipment Property and Equipment consisted of the following at December 31, 2024 and 2023 and 2022: Schedule of Property and Equipment December 31, December 31, 2024 2023 2022 Lab Equipment \$ 3, 429, 447 \$ 3, 400, 207 \$ 2, 455, 045 Manufacturing Equipment 129, 745 129, 745 207, 335 Computer Equipment and Software 146, 785 194, 238 210, 240 Leasehold

Improvements 84, 172 78-84, 042-172 Furniture and Fixtures 170, 643 148-170, 987-643 Subtotal 3, 968, 127 3, 986, 340 3, 029, 394 Less: Accumulated Depreciation (1, 714, 432) (1, 386, 892) (1, 005, 707) Total \$ 2, 599, 253, 448 695 \$ 2, 022, 599, 687 448 Depreciation expense for the years ended December 31, 2024 and 2023 and 2022 was \$ 388, 673 and \$ 381, 185 and \$ 262, 032, respectively, of which \$ 308, 071 and \$ 256, 248 and \$ 194, 456, respectively were included in cost of goods sold. Property and equipment purchased in the amount of \$ 234, 036 under financing leases is included in the totals above (see Note 10). As Disposals of property and equipment as of December 31, 2024 and 2023 was and 2022, the outstanding balance of the financing leases were \$ 49 61, 336 133 and \$ 0 82, 816, respectively. F-19 (8) Goodwill and Intangible Assets Goodwill is related to the acquisition of Specialty Microwave Corporation on September 12, 2019 and the acquisition of Spectrum Semiconductor Materials Inc. on December 15, 2021. Goodwill is primarily related to expected improvements and technology performance and functionality, as well as sales growth from future product and service offerings and new customers, together with certain intangible assets that do not qualify for separate recognition. Goodwill is generally not amortizable for tax and financial statement purposes. As of December 31, 2022-2024 and , goodwill related to the acquisition of Specialty was deemed impaired in the amount of \$ 120, 136. As of December 31, 2023 and 2022, goodwill was \$ 4, 696, 883, respectively. F-20 Other Intangible Assets Intangible assets with an estimated useful life of fifteen and twenty years consisted of the following at December 31, 2023-2024: Schedule of Intangible Assets Gross Carrying Accumulated Weighted Amount Amortization Net Average Life Trade name \$ 514, 284 \$- \$ 514, 284 Indefinite Customer relationships 2, 178, 631 326, 796 1, 851, 835 16. 97 Total \$ 2, 692, 915 \$ 326, 796 \$ 2, 366, 119 Intangible assets consisted of the following at December 31, 2023: Gross Carrying Accumulated Weighted Amount Amortization Net Average Life Trade name \$ 584, 517 \$- \$ 584, 517 Indefinite Customer relationships 2, 591, 491 336, 330 2, 255, 161 16. 81 Intellectual Property property 202, 771 58, 316 144, 455 10. 71 Total \$ 3, 378, 779 \$ 394, 646 \$ 2, 984, 133 Amortization expense for the years ended December 31, 2024 and 2023 and 2022 was \$ 149 150, 975 086 and \$ 149, 974 975, respectively. Intangible asset impairments, consisting of trade name, customer relationships and intellectual property related to the purchase of Specialty Microwave, for the years ended December 31, 2024 and 2023, were \$ 467, 928 and \$ 0, respectively. Annual amortization of intangible assets are as follows: Schedule of Amortization of Assets 2023-149, 976 2024-149, 976 2025-149 108, 976 932 2026-149 108, 976 932 2027-149 108, 976 932 2028 108, 932 2029 108, 932 Thereafter 1, 649 307, 736 175 Total \$ 2 1, 399 851, 835 616 F-20 (9) Cost Method Investment On June 10, 2021, the Company entered into a membership interest purchase agreement with SN2N, LLC for an aggregate purchase price of \$ 350, 000, to be paid in four tranches. Each tranche represents represented a 5 % membership interest, and in aggregate a 20 % membership interest. On June 15, 2022, an amendment to the membership interest purchase agreement was made to reflect a 19. 9 % membership interest. Considering in light of this amendment, the Company overpaid \$ 1, 750 for the membership interest and was subsequently reimbursed. As of December 31, 2023-2024 and 2022, the Company has made an investment of \$ 348, 250 for a 19. 9 % membership interest. F-21 (10) Leases The following was included in our balance sheet as of December 31, 2024 and 2023 and 2022: Schedule of Lease Assets and Liabilities December 31, 2023-2024 December 31, 2022-2023 Operating leases Assets ROU operating lease assets \$ 4, 399, 975 \$ 3, 538, 798 \$ 4, 497, 324 Liabilities Current portion of operating lease \$ 449, 622 \$ 541, 324 \$ 586, 379 Operating lease, net of current portion \$ 3 4, 171 139, 979 562 \$ 3, 768 171, 932 979 Total operating lease liabilities \$ 4, 589, 184 \$ 3, 713, 303 \$ 4, 355, 311 Financing leases Assets Property and equipment, gross \$ 234, 036 \$ 234, 036 Accumulated depreciation (190, 217) (151, 919) (113, 621) Property and equipment, net \$ 43, 819 \$ 82, 117 \$ 120, 415 Liabilities Current portion of financing lease \$ 16, 522 \$ 16, 799 \$ 33, 480 Financing lease, net of current portion \$ 15, 478 \$ 32, 537 \$ 49, 336 Total financing lease liabilities \$ 32, 000 \$ 49, 336 \$ 82, 816 F-21 22 The weighted average remaining lease term and weighted average discount rate at December 31, 2024 and 2023 are and 2022 were as follows: Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate Weighted Rate Weighted average remaining lease term (years) December 31, 2023-2024 December 31, 2022-2023 Operating leases 7. 95 9. 36 9-40 Financing leases 2. 08 2. 97 2-80 Weighted average discount rate Operating leases 4 6 45 40 % 4. 49 45 % Financing leases 4. 65 % 4. 72 % 234 for the first 12 months and increase by approximately 3 % every year. On October 15, 2021, the Company entered a new lease for a 20,000 square foot facility at 155 Plant Avenue, Hauppauge, New York, for a term of seven years and two months. The yearly base rent of \$ 346,242 shall increase at a rate of 2.75 % per year to begin on the first anniversary lease commencement date and each year thereafter. The first two months of basic rent shall be abated following the commencement lease date. In the event the landlord decides to sell the property, the Company shall have the right of first offer to purchase subject property. Upon lease execution, the Company paid two months of base rent as a security deposit and one month's rent totaling \$ 86,560. The Company moved into the new manufacturing and headquarters facility April 1, 2022. On December 15, 2021, the Company assumed the SSM lease agreement for office and warehouse space in San Jose, CA, with the same terms and conditions. Effective February 1, 2020, the lease term will expire on January 31, 2025, with a base rent of \$ 24,234 for the first 12 months and increases by approximately 3 % every year. On September 6, 2024, the lease was amended extending the lease term to March 31, 2030 while maintaining the base rent of \$ 24,234 and 3 % increases for each year thereafter. On August 9, 2023, the Company entered a 39- month agreement for \$ 20,880 to lease an automobile with a monthly payment of \$ 605. F-23 The following table reconciles future minimum operating lease payments to the discounted lease liability as of December 31, 2023-2024: Schedule of Future Minimum Operating Lease Payments 2024 696,362 2025 400,580 2026 389,397 2027 393,899 2028 404,721 Thereafter 2,313,460 Total lease payments 4,605,419 Less imputed interest (892,116) Total lease obligations 3,713,303 Less current obligations (541,324) Long- term lease obligations \$ 3,171,979 4 - 70 %, 589, 184 Less current obligations (449, 622) Long- term lease obligations \$ 4, 139, 562 Financing Lease The Company entered into several 60- month lease agreements to finance certain laboratory and office equipment. As such, the Company has accounted for these transactions as a financing lease. The following table reconciles future minimum financing lease payments to the discounted lease liability as of December 31, 2023-2024: Schedule of Future Minimum Lease Payments For Finance Lease 2024 18, 751 2025 18 17, 186 630 2026 11, 976 982 2027 3, 992 994 Total lease payments 52 33, 905 606 Less imputed interest (3 1, 569 606) Total lease obligations 49 32, 336 000 Less current obligations (16, 799 522) Long- term lease obligations \$ 32 15, 537 478 F- 22 Operating Leases On December 4, 2025 with a base rent of \$ 24, 234 for the first 12 months, obligations \$ 3, 171, 979 (11) Notes Payable Promissory Note: On September 12, 2019, AmpliTech Group, Inc. acquired Specialty, a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty. The total consideration paid was \$ 1, 143, 633, consisting of \$ 668, 633 in cash and a \$ 475, 000 promissory note with an interest rate of 6 %. Beginning November 1, 2019, payment of principal and interest shall be due payable in fifty- nine (59) monthly payments of \$ 9, 213 with a final payment due October 1, 2024 of \$ 9, 203. As of December 31, 2023-2024 and 2022, the balance of this promissory note was \$ 0 80, 841 and \$ 183, 014, respectively. Principal payments of \$ 102 80, 841 171 and \$ 96, 105 along with interest expense of \$ 8 2, 082 were 391 and \$ 14, 460 was paid during the years year ended December 31, 2023-2024 and 2022, respectively. Loan Payable: On September 12, 2019, the Company was approved for a \$ 250, 000 equipment leasing facility which was subsequently increased to \$ 500, 000. The Company has borrowed against the leasing facility as follows: • On December 20, May 14, 2019-2020, the Company borrowed \$ 58 27, 492 494 to be paid over a three- year term with monthly payments of \$ 815 1, 726 at an interest rate of 5 4. 26 27 % - The balance as of December 31, 2023 and 2022 was \$ 0, respectively. Principal payments of \$ 0 3, 230 and interest expense of \$ 48, 630 30 were made paid for the years year ended December 31, 2023 and 2022, respectively. Total interest expense This loan was paid in full in April for the years ended December 31, 2023 and 2022 was \$ 0 and \$ 466, respectively. F-24 • On May 14, June 10, 2020, the Company borrowed \$ 27 41, 494 015 to be paid over a three- year term with monthly payments of \$ 815 at an interest rate of 4. 27 %. The balance as of December 31, 2023 and 2022 was \$ 0 and \$ 3, 230, respectively. Principal payments of \$ 3, 230 and \$ 9, 402, were made for the years ended December 31, 2023 and 2022, respectively. Total interest expense paid for the years ended December 31, 2023 and 2022 was \$ 30 and \$ 378, respectively. This loan was paid in full in April 2023. • On June 10, 2020, the Company borrowed \$ 41, 015 to be paid over a three- year term with monthly payments of \$ 1, 216 at an interest rate of 4. 28 %. Principal payments The balance as of December 31, 2023 and 2022 was \$ 0 and \$ 6, 012 and interest expense, respectively. Principal payments of \$ 68 6, 012 and \$ 13, 975 were made paid for the years year ended December 31, 2023 and 2022, respectively. Total interest expense paid for the years ended December 31, 2023 and 2022 was \$ 68 and \$ 617, respectively. This loan was paid in full in May 2023. • On May 6, 2022, the Company borrowed \$ 441, 139 to be paid over a three- year term with monthly payments of \$ 13, 341 at an interest rate of 5. 6 %. On June 15, 2022, this equipment order was cancelled resulting in a full refund of \$ 441, 139 less interest paid of \$ 6, 317. The loan was repaid in August 2022. As of March 14, 2023, the Company closed the equipment line of credit of \$ 500, 000, which had \$ 0 balance. All UCC filings on the Company assets have been released as well as the President's personal guarantee. In January 2022, the Company purchased machinery for \$ 91, 795, applying a deposit of \$ 9, 180 and financing the balance of \$ 82, 616 over 24 payments at an interest rate of 1. 90 %. The balance as of December 31, 2024 and 2023 and 2022 was \$ 0, respectively. Principal payments of \$ 0 and \$ 41, 700, respectively. Principal payments of \$ 41, 700 and 40, 916 and interest expense of \$ 0 and \$ 430 were and \$ 1, 215 was paid for the years ended December 31, 2024 and 2023 and 2022, respectively. Future On July 23, 2024, the Company entered into a business loan and security agreement with Altbanq Lending II LLC in the amount of \$ 1, 300, 000, which included an origination fee of \$ 26, 000 and an original issue discount of \$ 403, 000. The loan is payable within 76- weeks through 38 bi- weekly payments of \$ 44, 816 and bore an annual interest rate of 21. 2 % with prepayment options available. The loan was secured by the Company's assets through a UCC filing, and proceeds were used for working capital, 5G licensing and certification fees. During the year ended December 31, 2024, the Company repaid the loan in full, through principal payments over the term of the loans as of December 31, 2023 are as follows: Schedule of Future Principal and Interest Payments Payments 2024 \$ 80 1, 841 Total remaining payments 534, 000, and recorded \$ 80 260, 841 000 in debt discount amortization. F- 25 (12) Income Taxes As of December 31, 2024 and 2023 and 2022, the Company had net operating loss carry forwards of \$ 11. 6 million and \$ 7. 9 million, 010, 000 and \$ 6, 700, 000, respectively, that may be available to reduce future years' taxable income indefinitely. Future tax benefits which may arise as a result of these losses have not been recognized in these consolidated financial statements, as their realization is determined not likely to occur. Accordingly,

the Company has recorded a valuation allowance for the deferred tax asset relating to these tax loss carry-forwards. For the years ending December 31, ~~2024 and 2023~~ ~~and 2022~~, the Company reflects a deferred tax liability in the amount of \$ ~~39,000 and \$24,000 and \$0~~, respectively, due to the future tax liability from an asset with an indefinite life known as a "naked credit." The future tax liability from this indefinite lived asset can be offset by up to 80% of net operating loss carryforwards created after 2017. The remaining portion of the future tax liability from indefinite lived assets cannot be used to offset definite lived deferred tax assets. The components for the provision of income taxes include the following: Schedule of Components for the Provision of Income Taxes December 31, ~~2023-2024~~ December 31, ~~2022-2023~~ Current federal and state \$- \$- Deferred federal and state ~~15,000~~ ~~24,000~~ Total provision for income taxes \$ ~~24-15,000~~ ~~-24,000~~ A reconciliation of the statutory US federal income tax rate to the Company's effective income tax rate is as follows: Schedule of Effective Income Tax Rate December 31, ~~2023-2024~~ December 31, ~~2022-2023~~ Federal tax 21.0% 21.0% State tax 0.8% ~~-0.8%~~ Permanent items (0.1)% (0.4)% ~~(1-2)%~~ Change in rate 0.0% 2.5% ~~-Valuation allowance (21.9)%~~ ~~Valuation Allowance (24.9)%~~ ~~(19-8)%~~ Effective income tax rate (0.2)% (1.0)% ~~-F-25-26~~ Deferred income taxes reflect the net tax effect of temporary differences between amounts recorded for financial reporting purposes and amounts used for tax purposes. The Company has a net cumulative ~~current~~ ~~deferred tax asset of \$0 and a net cumulative long-term~~ deferred tax liability of \$ ~~24-39,000~~. The major components of deferred tax assets and liabilities are as follows: Schedule of Components of Deferred Tax Assets and Liabilities December 31, ~~2023-2024~~ December 31, ~~2022-2023~~ Deferred tax assets Inventory obsolescence \$ ~~250-232,000~~ ~~\$ 250-248,000~~ Allowance for bad debt ~~19,000~~ ROU Assets ~~assets 40,000~~ ~~31,000~~ Stock-based compensation ~~227,000~~ ~~27,000~~ Research and development ~~588,000~~ ~~426,000~~ Loss carryforward ~~1-3,723-474~~ ~~000~~ ~~1,498-723,000~~ Valuation Allowance ~~allowance (4,315,000)~~ ~~(2,150,000)~~ ~~(1,322,000)~~ Total deferred tax assets \$ ~~307-246,000~~ ~~\$ 442-307,000~~ Deferred tax liabilities Fixed assets \$ (~~120,000~~) \$ (~~149,000~~) \$ (~~123,000~~) Cost method investment (~~29,000~~) (~~28,000~~) Intangible assets (~~136,000~~) (~~154,000~~) (~~19,000~~) Total deferred tax liabilities \$ (~~285,000~~) \$ (~~331,000~~) \$ (~~142,000~~) Total net deferred income tax liabilities \$ (~~39,000~~) \$ (~~24,000~~) \$ ~~F-26~~ (13) Stockholders' Equity The total number of shares of stock this Corporation is authorized to issue shall be five hundred one million (501,000,000) shares, par value \$ 0.001 per share. Our authorized capital stock consists of 500,000,000 shares of common stock and 1,000,000 shares of blank check preferred stock. Preferred Stock On July 10, 2013, the Board of Directors of the Company approved a certificate of amendment to the articles of incorporation and changed the authorized capital stock of the Company to include and authorize 500,000 shares of Preferred Stock, par value \$ 0.001 per share. On October 7, 2020, the Board of Directors of the Company approved a certificate of amendment to the articles of incorporation and changed the total number of authorized shares of Preferred Stock to 1,000,000 shares, \$ 0.001 per share. On October 7, 2020, our Board of Directors and our stockholders approved a resolution to amend and restate the certificate of designation of preferences, rights and limitations of Series A Convertible Preferred Stock to restate that there are 401,000 shares of the Company's blank check Preferred Stock designated as Series A Convertible Preferred Stock. The amended and restated certificate clarifies that the Series A Convertible Preferred Stock ~~convert-converts~~ at a rate of five shares of the Company's common stock for every share of Series A Convertible Preferred Stock, and also restates that the Series A Convertible Preferred Stock shall be entitled to vote on all matters submitted to shareholders of the Company for each share of Series A Convertible Preferred Stock owned on the record date for the determination of shareholders entitled to vote on such matter or, if no such record date is established, on the date such vote is taken, or any written consent of shareholders is solicited. The number of votes entitled to be cast by the holders of the Series A Convertible Preferred Stock equals that number of votes that, together with votes otherwise entitled to be cast by the holders of the Series A Convertible Preferred Stock at a meeting, whether by virtue of stock ownership, proxies, voting trust agreements or otherwise, entitle the holders to exercise 51% of all votes entitled to be cast to approve any action which Nevada law provides may or must be approved by vote or consent of the holders of common stock entitled to vote. F- 27 Common Stock: The Company originally authorized 50,000,000 shares of common stock with a par value of \$ 0.001. Effective May 20, 2014, the Company increased its authorized shares of common stock from 50,000,000 to 500,000,000. On February 17, 2021, AmpliTech Group Inc., common stock and warrants under the symbols " AMPG " and " AMPGW ", respectively, commenced trading on NASDAQ. On ~~September 9, 2024, the Company entered into a Securities Purchase Agreement with a single institutional investor to sell 1,369,488 shares of the Company's common stock, par value \$ 0.001 per share at a per share price of \$ 0.7302. The closing of the offering occurred on September 11, 2024. The gross proceeds to the Company from this offering was approximately \$ 1 million, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 180,000. On November 24, 2024, the Company entered into a Securities Purchase Agreement with three institutional investors pursuant to which the Company agreed to sell in a registered direct offering, 1,425,377 shares of the Company's common stock, par value \$ 0.001 per share, at a per share price of \$ 0.92 and prefunded warrants of 177,882 shares of common stock, at \$ 0.919 per prefunded warrant. The closing of the registered direct offering occurred on November 26, 2024. The exercise price of each Prefunded Warrant is \$ 0.001 and 177,882 warrants were exercised in full immediately. The gross proceeds to the Company from the offering was approximately \$ 1,474,998, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 200,000. On December 11, 2024, the Company entered into a Securities Purchase Agreement with three institutional investors pursuant to which the Company agreed to sell in a registered direct offering, 1,352,500 shares of the Company's common stock, par value \$ 0.001 per share, at a per share price of \$ 1.60. The closing of the registered direct offering occurred on December 13, 2024. The gross proceeds to the Company from the offering was approximately \$ 2,164,000, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 220,000. On December 16, 2024, the Company entered into a Securities Purchase Agreement with two institutional investors pursuant to which the Company agreed to sell in a registered direct offering, 1,516,680 shares of the Company's common stock, par value \$ 0.001 per share, at a per share price of \$ 2.10. The closing of the registered direct offering occurred on December 18, 2024. The gross proceeds to the Company from the offering was approximately \$ 3,185,028, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 290,000. On December 19, 2024, the Company granted restricted stock awards under the Company's 2020 Plan to directors of the Company for an aggregate of 45,000 shares of common stock (15,000 each) valued at \$ 90,000. These restricted stock awards vested immediately. On December 24, 2024, the Company entered into a Securities Purchase Agreement with three institutional investors pursuant to which the Company agreed to sell in a registered direct offering, 1,871,000 shares of the Company's common stock, par value \$ 0.001 per share, at a per share price of \$ 3.10. The closing of the registered direct offering occurred on December 27, 2024. The gross proceeds to the Company from the offering was approximately \$ 5,800,100, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 490,000. On December 27, 2024, the Company entered into a Securities Purchase Agreement with three institutional investors pursuant to which the Company agreed to sell in a registered direct offering, 2,173,920 shares of the Company's common stock, par value \$ 0.001 per share, at a per share price of \$ 4.60. The closing of the registered direct offering occurred on December 31, 2024. The gross proceeds to the Company from the offering was approximately \$ 10,000,032, before deducting placement agent's fees and other offering expenses payable by the Company of approximately \$ 660,000. On August 18, 2023, the Company granted restricted stock awards under the Company's 2020 Plan to directors of the Company for an aggregate of 45,000 shares of common stock (15,000 each) valued at \$ 82,800. These restricted stock awards vested immediately. On December 20, 2023, the Company granted 25,000 restricted stock units at an exercise price of \$ 1.73 under the Company's 2020 Plan to a consultant. This restricted stock award vested immediately and the stock compensation was recorded under research and development. On May 20, 2022, 30,000 restricted stock units at an exercise price of \$ 1.96 were issued to a board advisor. Vesting will occur in equal quarterly installments of 2,500 shares beginning on May 20, 2022. As of December 30, ~~2024 and 2023 and 2022~~, 10,000 ~~and 7,500~~ shares of common stock were issued, respectively. On June 17, 2022, the Company granted restricted stock awards under the Company's 2020 Plan to directors of the Company for an aggregate of 45,000 shares of common stock (15,000 each) valued at \$ 88,650. These restricted stock awards vested immediately. F- 28 Equity Incentive Plan: In October 2020, the Board of Directors and shareholders adopted the Company's 2020 Equity Incentive Plan (the " 2020 Plan "), effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1,250,000 shares of common stock to grant shares of the Company's common stock to employees and individuals who perform services for the Company. The purpose of the 2020 Plan is to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for the Company, and to promote the success of the Company's business. The 2020 Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares, and other stock or cash awards as the Board of Directors may determine. F- 28 In 2023, the Board and the shareholders adopted the Company's Amended and Restated 2020 Equity Incentive Plan (the " Amended and Restated Plan "), effective as of December 11, 2023. The Amended and Restated Plan is substantially similar to the 2020 Plan except that it increases the shares of our common stock available for issuance thereunder to 2,250,000 shares of common stock. As of December 31, 2024, all outstanding stock options were issued according to the Company's 2020 Plan, and there remains 760,142 shares of common stock available for future issuance under the 2020 Plan. Stock Options: On January 9, 2024, the Company granted a consultant ten-year stock options to purchase 2,500 shares of common stock according to the Company's 2020 Plan. The stock options vested ~~vest immediately, in quarterly installments over a 5-year period~~ with an exercise price of \$ ~~1-2.86-23~~ per share. The Company has calculated these options estimated fair market value at \$ ~~3-47,800-787~~ using the Black- Scholes model, with the following assumptions: expected term of ~~5-4.00-5~~ years, stock price of \$ ~~1-2.86-23~~, exercise price of \$ ~~1-2.86-23~~, volatility of ~~116-134~~, ~~15%~~, risk-free rate of 3.97-17%, and no forfeiture rate. On January 16, December 20, ~~2024-2022~~, the Company granted Matthew Kappers, Andrew Lee and Daniel Mazziota employee ten-year stock options to purchase 5,000, 5,000 and 7,500 shares of common stock respectively according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five a 5-years-year period commencing on April 16, 2024, with an exercise price of \$ 1.93-92 per share. The Company has calculated these options~~

estimated fair market value at \$ 8-31, 800-275 using the Black- Scholes model, with the following assumptions: expected term of 7. 51-5 years, stock price of \$ 1. 93-92, exercise price of \$ 1. 93-92, volatility of 120-127. 1-5 %, risk- free rate of 4-3, 01-79 %, and no forfeiture rate. On January 25, Equity Incentive Plan In October 2024 2020, the Company granted Board of Directors an independent contractor ten- year stock options to purchase shareholders adopted the “ 2020 Plan ”, effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1, 50-250, 000 shares of common stock according to grant shares of common stock of the Company to employees and individuals who perform services for the Company. The purpose of the 2020 Plan is to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for the Company, and to promote the success of the Company’s business 2020 Plan. 20,000 The 2020 Plan permits the grant of Incentive stock Stock options Options vested immediately and the balance of 30-, Nonstatutory Stock 000 shall vest in equal quarterly installments over three years commencing on June 30, 2024, with an exercise price of \$ 2.19 per share. The Company has calculated these options Options estimated fair market value at \$ 98- 600 using the Black- Scholes model, with the following assumptions: expected term of 10-00 years, stock Stock Appreciation Rights price of \$ 2.19, Restricted Stock, exercise price of \$ 2- On February 27, 2023, the Company granted one employee ten- year stock options to purchase 2, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on May 27, 2023, with an exercise price of \$ 2. 59 per share. The Company has calculated these options estimated fair market value at \$ 4, 800 using the Black- Scholes model, with the following assumptions: expected term of 7. 46 years, stock price of \$ 2. 59, exercise price of \$ 2. 59, volatility of 126. 8 %, risk- free rate of 4. 08 %, and no forfeiture rate. On May 1, 2023, the Company granted one employee ten- year stock options to purchase 5, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on August 1, 2023, with an exercise price of \$ 3. 19 per share. The Company has calculated these options estimated fair market value at \$ 14, 800 using the Black- Scholes model, with the following assumptions: expected term of 7. 51 years, stock price of \$ 3. 19, exercise price of \$ 3. 19, volatility of 126. 0 %, risk- free rate of 3. 62 %, and no forfeiture rate. On June 5, 2023, the Company granted one employee ten- year stock options to purchase 2, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over three years commencing on September 5, 2023, with an exercise price of \$ 2. 40 per share. The Company has calculated these options estimated fair market value at \$ 4, 200 using the Black- Scholes model, with the following assumptions: expected term of 5. 50 years, stock price of \$ 2. 40, exercise price of \$ 2. 40, volatility of 127. 3 %, risk- free rate of 3. 82 %, and no forfeiture rate. F- 29 On June 12, 2023, the Company granted one employee ten- year stock options to purchase 3, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over three years commencing on September 12, 2023, with an exercise price of \$ 2. 49 per share. The Company has calculated these options estimated fair market value at \$ 6, 600 using the Black- Scholes model, with the following assumptions: expected term of 5. 50 years, stock price of \$ 2. 49, exercise price of \$ 2. 49, volatility of 127. 0 %, risk- free rate of 3. 89 %, and no forfeiture rate. F- 29 On August 18, 2023, the Company granted one employee ten- year stock options to purchase 5, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on November 18, 2023, with an exercise price of \$ 1. 84 per share. The Company has calculated these options estimated fair market value at \$ 8, 500 using the Black- Scholes model, with the following assumptions: expected term of 7. 51 years, stock price of \$ 1. 84, exercise price of \$ 1. 84, volatility of 122. 5 %, risk- free rate of 4. 34 %, and no forfeiture rate. On September 25, 2023, the Company granted one employee ten- year stock options to purchase 3, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on December 25, 2023, with an exercise price of \$ 1. 85 per share. The Company has calculated these options estimated fair market value at \$ 5, 100 using the Black- Scholes model, with the following assumptions: expected term of 7. 51 years, stock price of \$ 1. 85, exercise price of \$ 1. 85, volatility of 122. 5 %, risk- free rate of 4. 61 %, and no forfeiture rate. On October 2, 2023, the Company granted one employee ten- year stock options to purchase 5, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on January 2, 2024, with an exercise price of \$ 2. 01 per share. The Company has calculated these options estimated fair market value at \$ 9, 300 using the Black- Scholes model, with the following assumptions: expected term of 7. 51 years, stock price of \$ 4-2, 85-01, exercise price of \$ 2. 01, volatility of 122. 4 %, risk- free rate of 4. 73 %, and no forfeiture rate. On December 20, 2023, the..... no forfeiture rate. F- 30 On December 20, 2023, the Company granted two employees and one consultant ten- year stock options to purchase 95, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in quarterly installments over a 5- year period with an exercise price of \$ 1. 73 per share. The Company has calculated these options estimated fair market value at \$ 149, 907 using the Black- Scholes model, with the following assumptions: expected term of 7. 36 years, stock price of \$ 1. 73, exercise price of \$ 1. 73, volatility of 120. 7 %, risk- free rate of 3. 88 %, and no forfeiture rate. On May 20, 2022, the Company granted four employees five- year stock options to purchase shares of common stock (totaling 45, 000) according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on the grant date, with an exercise price of \$ 1. 96 per share. The Company also granted two employees five- year stock options to purchase shares of common stock (totaling 2, 000) according to the Company’s 2020 Plan. The stock options vest one year from date of grant at an exercise price of \$ 1. 96. In addition, the Company granted two advisors to the Board, ten- year stock options to purchase shares of common stock (totaling 35, 000) according to the Company’s 2020 Plan. Twenty- five thousand (25, 000) stock options vest immediately on date of grant at an exercise price of \$ 1. 96, and the balance of ten thousand (10, 000) stock options vest in equal quarterly installments over one year commencing on the grant date. The Company has calculated these options estimated fair market value at \$ 129, 325 using the Black- Scholes model, with the following assumptions: expected term ranging from 2. 5 to 4. 9 years, stock price \$ 1. 96, exercise price \$ 1. 96, volatility ranging from 136. 2 % to 141. 3 %, risk- free rate ranging from 2. 67 % to 2. 80 %, and no forfeiture rate. On June 14, 2022, the Company granted Mr. Maqbool five- year stock options to purchase 100, 000 shares of common stock according to the Company’s 2020 Plan. In addition, Ms. Sanfratello and Mr. Flores were each granted five- year stock options to purchase 50, 000 shares of common stock. The stock options vest in quarterly installments over a 5- year period with an exercise price of \$ 1. 72 per share. The Company has calculated these options estimated fair market value at \$ 304, 148 using the Black- Scholes model, with the following assumptions: expected term of 4. 9 years, stock price of \$ 1. 72, exercise price of \$ 1. 72, volatility of 138. 3 %, risk- free rate of 3. 61 %, and no forfeiture rate. On August 22, 2022, the Company granted Daniel Mazziota five- year stock options to purchase 25, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in quarterly installments over a 5- year period with an exercise price of \$ 2. 23 per share. The Company has calculated these options estimated fair market value at \$ 47, 787 using the Black- Scholes model, with the following assumptions: expected term of 4. 5 years, stock price of \$ 2. 23, exercise price of \$ 2. 23, volatility of 134. 5 %, risk- free rate of 3. 17 %, and no forfeiture rate. On December 19, 2022, the Company granted one employee ten- year stock options to purchase 3, 000 shares of common stock according to the Company’s 2020 Plan. The stock options vest in equal quarterly installments over three years commencing on March 31, 2023 with an exercise price of \$ 1. 97 per share. The Company has calculated these options estimated fair market value at \$ 5, 275 using the Black- Scholes model, with the following assumptions: expected term of 5. 5 years, stock price of \$ 1. 97, exercise price of \$ 1. 97, volatility of 132. 2 %, risk- free rate of 3. 99 %, and no forfeiture rate. F- 31 On December 20, 2022, the Company granted Mr. Maqbool ten- year stock options to purchase 100, 000 shares of common stock according to the Company’s 2020 Plan. In addition, Ms. Sanfratello and Mr. Flores were each granted stock options to purchase 50, 000 shares of common stock. The stock options vest in quarterly installments over a 5- year period with an exercise price of \$ 1. 92 per share. The Company has calculated these options estimated fair market value at \$ 357, 425 using the Black- Scholes model, with the following assumptions: expected term of 7. 5 years, stock price of \$ 1. 92, exercise price of \$ 1. 92, volatility of 127. 5 %, risk- free rate of 3. 79 %, and no forfeiture rate. On December 20, 2022, the Company granted Matthew Kappers, Andrew Lee and Daniel Mazziota ten- year stock options to purchase 5, 000, 5, 000 and 7, 500 shares of common stock respectively according to the Company’s 2020 Plan. The stock options vest in quarterly installments over a 5- year period with an exercise price of \$ 1. 92 per share. The Company has calculated these options estimated fair market value at \$ 31, 275 using the Black- Scholes model, with the following assumptions: expected term of 7. 5 years, stock price of \$ 1. 92, exercise price of \$ 1. 92, volatility of 127. 5 %, risk- free rate of 3. 79 %, and no forfeiture rate. On December 20, 2022, the Company granted eleven employees and one Board Advisor ten- year stock options to purchase 85, 500 shares of common stock according to the Company’s 2020 Plan. The stock options vest in quarterly installments over a 5- year period with an exercise price of \$ 1. 92 per share. The Company has calculated these options estimated fair market value at \$ 152, 800 using the Black- Scholes model, with the following assumptions: expected term of 7. 5 years, stock price of \$ 1. 92, exercise price of \$ 1. 92, volatility of 127. 5 %, risk- free rate of 3. 79 %, and no forfeiture rate. Below is a table summarizing the changes in stock options outstanding for the year ended December 31, 2024 and 2023: Schedule of Stock Options Outstanding Number of Weighted Average Options Exercise Price (\$) Outstanding at December 31, 2023 1, 236, 000 \$ 2. 30 Granted 72, 500 \$ 1. 92 Exercised- Forfeited or expired (13, 500) \$ 2. 41 Outstanding at December 31, 2024 1, 295, 000 \$ 2. 28 Exercisable at December 31, 2024 706, 202 \$ 2. 64 Number of Weighted Average Options Exercise Price (\$) Outstanding at December 31, 2022 916, 000 \$ 2. 49 Granted 320, 000 \$ 1. 78 Exercised- Forfeited or Expired- expired - \$ Outstanding at December 31, 2023 1, 236, 000 \$ 2. 30 Exercisable at December 31, 2023 483, 344 \$ 2. 95 F- 32 As of December 31, 2023, all outstanding stock options were issued according to the Company’s 2020 Plan, and there remains 869, 000 shares of common stock available for future issuance under the 2020 Plan. Stock- based compensation expense related to stock options of \$ 408, 191 and \$ 248, 996 and \$ 244, 631 was recorded for the years ended December 31, 2024 and 2023, respectively. As of December 31, 2023-2024, the remaining unrecognized compensation cost related to non- vested stock options is \$ 4953, 483 255, 294 and is expected to be recognized over 4. 76-05 years. The outstanding stock options have a weighted average remaining contractual life of 5-4, 26-14 years and a total intrinsic value of \$ 76-3, 540-701, 285. F- 30 Warrants: Effective February 19, 2021, Amphitech Group Inc., common stock and warrants under the symbols “ AMPG ” and “ AMPGW, ” respectively, commenced trading on NASDAQ. In connection with the public offering, 1, 371, 428 units sold at an offering price of \$ 7. 00 per unit. Each unit issued in the offering consisted of one share

of common stock and one warrant. Maxim Group LLC acted as sole book-running manager for the offering. The warrants expire ten years from the date of issuance. Maxim Group LLC acted as sole book-running manager for the offering and partially exercised its overallotment option to purchase 205,714 warrants at the public offering price. The warrants expire ten years from the date of issuance. Effective April 16, 2021, the Company entered into definitive agreements with certain institutional investors to sell 2,715,000 shares of common stock in a registered direct offering priced at the market under NASDAQ rules. Concurrently, the Company agreed to issue to the investors, in a private placement, warrants to purchase an aggregate of 1,900,500 shares of common stock at an exercise price of \$ 8.48 per share with a five-year term. On July 20, 2021, in connection with a product development agreement with an unrelated party, the Company issued warrants to purchase 30,000 shares of common stock. The warrants vest in one year from issuance, with an exercise price of \$ 5.00 per share. The Company has calculated these warrants estimated fair market value at \$ 88,803 using the Black-Scholes model, with the following assumptions: expected term 3.0 years, stock price \$ 3.80, exercise price \$ 5.00, volatility 149.8%, risk-free rate 0.37%, and no forfeiture rate. F-33 Below is a table summarizing the changes in warrants outstanding for the year ended December 31, 2024 and 2023:

| Schedule of Warrants | Outstanding Number of Weighted Average Warrants | Exercise Price (\$) | Outstanding at December 31, 2022 | 2023 | 3, 296, 942 | 7. 83 | Granted-- Exercised-- | Forfeited or Expired | Expired -- | Outstanding at December 31, 2024 | 3, 296, 942 | 7. 83 | Exercisable at December 31, 2024 |
|-------------------------------------|---|----------------------------------|----------------------------------|-------|-----------------------|----------------------|-----------------------|----------------------------------|-------------|----------------------------------|----------------------------------|-------------|----------------------------------|
| Number of Weighted Average Warrants | Exercise Price (\$) | Outstanding at December 31, 2022 | 3, 296, 942 | 7. 83 | Granted-- Exercised-- | Forfeited or Expired | Expired -- | Outstanding at December 31, 2023 | 3, 296, 942 | 7. 83 | Exercisable at December 31, 2023 | 3, 296, 942 | 7. 83 |

Stock-based compensation expense related to warrants of \$ 0 and \$ 48,902 was recorded for the years ended December 31, 2024 and 2023, respectively. As of December 31, 2023-2024, the remaining unrecognized compensation cost related to non-vested warrants is \$ 0. The outstanding warrants have a weighted average remaining contractual life of 2.1, 23 years and a total intrinsic value of \$ 0-4,200. Restricted Stock Units: On December 20, 2023, 25,000 restricted stock units at an exercise price of \$ 1.73 were issued to a consultant. This restricted stock award vested immediately. On May 20, 2022, 30,000 restricted stock units at an exercise price of \$ 1.96 were issued to a board advisor. Vesting will occur in equal quarterly installments of 2,500 shares beginning on May 20, 2022. As of December 31-30, 2024 and 2023 and 2022, 10,000 and 7,500 shares of common stock were issued, respectively. F-34-31 Below is a table summarizing the changes in restricted stock units outstanding for the year ended December 31, 2023-2024:

| Schedule of Changes in Restricted Stock Units | Outstanding Number of Weighted Average RSUs | RSUs -- Exercise Price (\$) | Outstanding at December 31, 2022 | 2023 | 22-12, 500 | 1. 96 | Granted | 70-45, 000 | 1-2, 80 | Exercised | 00 | Vested | (80-55, 000) | 1. 82 | 99 | Forfeited or Expired | Expired |
|---|--|----------------------------------|----------------------------------|-------|------------|------------|---------|------------|---------|-----------|---------------|--------|---------------|----------------------|---------|----------------------|---------|
| Number of Weighted Average RSUs | Exercise Price (\$) <td>Outstanding at December 31, 2022</td> <td>22-12, 500</td> <td>1. 96</td> <th>Granted</th> <th>70-45, 000</th> <th>1-2, 80</th> <th>Exercised</th> <th>00</th> <th>Vested</th> <th>(80-55, 000)</th> <th>1. 82</th> <th>99</th> <th>Forfeited or Expired</th> <th>Expired</th> | Outstanding at December 31, 2022 | 22-12, 500 | 1. 96 | Granted | 70-45, 000 | 1-2, 80 | Exercised | 00 | Vested | (80-55, 000) | 1. 82 | 99 | Forfeited or Expired | Expired | | |

Stock-based compensation expense related to restricted stock units of \$ 109,590 and \$ 140,662 and \$ 105,593 was recorded for the years ended December 31, 2024 and 2023 and 2022, respectively. As of December 31, 2023-2024, the remaining unrecognized compensation cost related to non-vested restricted stock units is \$ 277,245-655. The outstanding restricted stock units have a weighted average remaining contractual life of 1-0, 14 years and a total intrinsic value of \$ 0-12,850. F-35-(14) Commitments and Contingencies On November 19-July 26, 2021-2024, AmpliTech Group, Inc., the Company's AGTSS division entered into a licensing product agreement. Under the terms of the agreement, the licensor agreed to an Asset Purchase Agreement (exclusive United States distribution and global licensing rights for certain 5G telecom equipment for 18 months for the "Purchase Agreement") purpose of marketing, selling, renting, deployment and maintenance of the licensed products with Spectrum Semiconductor Materials Inc. (the "Seller" or "SSM"), pursuant to which AmpliTech would acquire substantially all of the assets of the Company (the "Acquisition"). For services The Acquisition was completed on December 15, 2021 the Company will pay the Licensor certain software IP license fees in the amount of \$ 1,250,000. The purchase agreement contained a revenue earnout adjustment. Within In addition, the licensor may provide certain product certification support forty -- for (40) days after certain fees. As of December 31, 2022-2024, \$ 710 AmpliTech prepared and delivered to Seller a statement setting forth its calculation of Two Years Net Revenues of the business, 000 or the "Revenue Statement". The revenue earnout adjustment was determined to be paid towards this licensing agreement, an and amount equal to 25% of two years' net revenues minus \$ 20,000,000. If the revenue adjustment is a positive number, Buyer shall pay to Seller an amount equal to the revenue adjustment. If the revenue adjustment is a negative number, Seller shall pay to Buyer and amount equal to the revenue adjustment. As of December 31, 2022, the fair value of the revenue adjustment was determined to be \$ 2,180,826, an increase of \$ 815,788 as previously recorded in long-term deposits as of December 31, 2021. This amount was owed to Seller and was recorded as a contingent liability as of December 31, 2022, and subsequently paid on March 20, 2023 the consolidated balance sheet. (15) Subsequent events On January 15-17, 2024-2025, Mr. Matthew Kappers resigned as a director of the Company entered, including his positions as the chairman of the Nominating and Corporate Governance Committee, and as a triple net lease agreement member of the Audit Committee and the Compensation Committee, effective immediately. Mr. Kappers' resignation is for personal reasons a 1,900 square foot facility in Allen, Texas for a term of five years and not due one month. The yearly base rent of \$ 53,675 shall increase at a rate of 2.5% per year to begin on any disagreement with the Company first anniversary lease commencement date and each year thereafter. The first month's management team or rent shall be abated following the commencement lease date. Upon lease execution, the Company paid's board on any matter relating two- to months the operations, policies or practices of rent the Company or any issues regarding the Company's accounting policies or practices. On January 17, 2025, the Board appointed Mr. Shailesh "Sonny" Modi as a security deposit and one month director of the Board of Directors of the Company to fill the vacancy resulting from Mr. Kappers' resignation's rent totaling \$ 17,999. The Company expects Board appointed Mr. Modi to serve as fully operational at the new MMIC division facility May 1 chairman of the Nominating and Corporate Governance Committee, 2024 and a member of the Audit Committee and the Compensation Committee, effective immediately. On January 20, 2024-2025, the current Board of Directors renewed their directors' agreements and shall be issued 15,000 restricted stock units (RSU's) pursuant to the Company entered into a standard form of director's 2020 Equity Incentive Plan. On March 20, 2024, the Company amended the employment agreement with Jorge Flores to extend its each of the foregoing independent directors: Mr. Andrew Lee, Mr. Daniel Mazziotta and Mr. Shailesh "Sonny" Modi. The Director Agreement provides for a one (1) year term unless terminated earlier upon certain to March 20, 2027. The amendment was effective March 20, 2024. F-36 ITEM 9- CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE None. ITEM 9A. CONTROLS AND PROCEDURES Evaluation of Disclosure Controls and Procedures Our management, including our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) under the Exchange Act as of the end of the period covered by this report. Our management does not expect that our disclosure controls and procedures will prevent -- events all error and all fraud. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Based on the evaluation as of December 31, 2023, for the reasons set forth below, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were not effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure. Management's Annual Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to, in general, provide reasonable assurance to our management and the Board of Directors regarding the preparation and fair presentation of published financial statements, but because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. The framework used by management in making that assessment was the criteria set forth in the document entitled "Internal Control -- Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO 2013). Based on that re-evaluation due to material weakness identified below, our management, including our chief executive officer and chief financial officer, concluded that our disclosure controls and procedures were not effective as of December 31, 2023 to ensure that information required to be disclosed in our Exchange Act reports was (1) recorded, processed, summarized and reported in a timely manner, and (2) accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure, because of material weaknesses in our internal controls over financial reporting. We have identified the following material weaknesses: 1. As of December 31, 2023, our management has identified material weaknesses in our internal control over financial reporting related to lack of segregation of duties resulting from our limited personnel and has concluded that, due to such material weakness, our disclosure controls and procedures were not effective. 2. As of December 31, 2023, we did not maintain effective controls over financial statement disclosure. Specifically, controls were not designed and in place to ensure that all disclosures required were originally addressed in our financial statements. Accordingly, management has determined that this control deficiency constitutes a material weakness. Because of these -- the material weaknesses, management has concluded that the Company did not maintain effective internal control over financial reporting as of December 31, 2023 based on the criteria established in "INTERNAL CONTROL -- INTEGRATED FRAMEWORK" issued by the COSO. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. The Company is taking steps to remediate the material weakness listed above by implementing the following: ● Developing written policies and procedures for accounting processes. ● Monitoring written policies and procedures to ensure effectiveness. ● Hiring and training additional personnel with the intent to provide segregation of duties and eliminate excessive amount of control over a process. ● Requiring dual authorization on all ACH payments and bank wires. ● Requiring management to review and approve all expenses. Changes in Internal Control over Financial Reporting There were no changes that have affected, or are reasonably likely to materially affect, our internal control over financial reporting (as defined in Rules 13a-15(f) or

15d-15 (f) under the Exchange Act) during the period covered by this report. ITEM 9B. OTHER INFORMATION ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS. PART III ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Our executive officers and directors are as follows: Name Age Position Fawad Maqbool Chairman, President, Chief Executive Officer, Treasurer, Director **Agreement** Louisa Sanfratello Chief Financial Officer and Secretary, **which Director Jorge Flores (1) Chief,..... 2000 and 2001. His duties included includes,** among other things, **resignation** overseeing the design and development of amplifiers specifically for **or removal** fiber optic communication applications. Mr..... Loewen Group International, Inc.). In addition to his M & A background, he **the** has been the COO and CFO for several small to medium-sized privately held companies. Mr. Kappers earned a B. A. degree from Vanderbilt University and a M. B. A. degree from Miami University. Mr. Kappers' financial and operational knowledge and experience qualifies him to serve on our Board of Directors **Director Agreement also** Andrew Lee, age 40,..... currently president of IDM Consulting, **which** provides consulting services to the microwave component and sub system industry. He received his BEE and MSEE degrees from New York Polytechnic Institute and is a fellow of the Institute. Mr. Mazziota's microwave component and subsystem industry experience qualifies him to serve on our Board of Directors. Term of Office Our directors are appointed for a one-year term to hold office until the next annual general meeting of our stockholders or until removed from office in accordance with our bylaws. Our officers are appointed by our Board of Directors and hold office until removed by the Board of Directors. Family Relationships There are no family relationships between any of our directors or executive officers. Involvement in Legal Proceedings To our knowledge, there have been no material legal proceedings that would require disclosure under the federal securities laws that are material to an evaluation of the ability of our director or executive officers. Potential Conflicts of Interest We are not aware of any current or potential conflicts of interest with our director or executive officers. Board Committees Effective January 20, 2021, we formed an Audit Committee, a Compensation Committee, and a Nominating and Corporate Governance Committee, each of which is comprised of our three independent directors. Mr. Kappers was appointed chairman of the Nominating and Corporate Governance Committee, Mr. Lee as the chairman of the Audit Committee and Mr. Mazziota as the chairman of the Compensation Committee. Mr. Lee's finance and accounting experience qualifies him as the audit committee financial expert. Section 16 (a) Beneficial Ownership Reporting Compliance Section 16 (a) of the Securities Exchange Act requires that our directors and executive officers and persons who beneficially own more than 10% of our common stock (referred to herein as the "reporting persons") file with the SEC various reports as to their ownership of and activities relating to our common stock. Such reporting persons are required by the SEC regulations to furnish us with copies of all Section 16 (a) reports they file. Based solely on our review of copies of the reports filed with the SEC and the written representations of our directors and executive officers, we believe that all reporting requirements for fiscal year 2023 were complied with by each person who at any time during the 2023 fiscal year was a director or an executive officer or held more than 10% of our common stock. Code of Ethics We have adopted a code of ethics that applies to our officers, employees and directors, including our Chief Executive Officer and Chief Financial Officer. Our code of ethics is available on our website. ITEM 11. EXECUTIVE COMPENSATION Summary Compensation Table The following summary compensation table sets forth all compensation awarded to, earned by, or paid to, the named person, during the years ended December 31, 2023 and 2022: Summary Compensation of Named Executive Officers Name and Principal Position Fiscal Year Salary (\$) Bonus (\$) Stock Awards (\$) Option Awards (\$) All Other Compensation (\$) Total (\$) Fawad Maqbool 2023 500,000 -157,797-657,797 Chairman, President and Chief Executive Officer 2022 496,335-330,787-827,122 Louisa Sanfratello 2023 275,000-78,898-353,898 Chief Financial Officer, Secretary 2022 273,558-165,393-438,951 Jorge Flores 2023 275,000-78,898-353,898 Chief Operating Officer 2022 272,408-165,393-437,801 On February 21, 2022, the Company's Board of Directors approved an increase in salary, effective as of January 1, 2022, for Mr. Maqbool, to \$ 500,000 per year, and for Ms. Sanfratello and Mr. Flores to \$ 275,000 per year. Pursuant to the terms of his employment agreement entered into on February 21, 2022, Mr. Flores will receive a base annual salary of \$ 275,000 and is eligible to participate in the Company's 2020 Equity Incentive Plan or successor to such plan. The agreement contains a perpetual confidentiality covenant as well as non-competition and employee and customer non-solicitation covenants that apply during his employment and for a period of one year following his termination. The agreement was amended on March 27, 2023 to extend its term to March 20, 2024 and again on amended on March 20, 2024 to extend its term to March 20, 2027. Outstanding Equity Awards at Fiscal Year End On June 14, 2022, the Company granted Mr. Maqbool stock options to purchase 100,000 shares of common stock according to the Company's 2020 Plan. In addition, Ms. Sanfratello and Mr. Flores were each granted stock options to purchase 50,000 shares of common stock. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.72 per share. The Company has calculated these options estimated fair market value at \$ 304,148 using the Black-Scholes model, with the following assumptions: expected term of 4.9 years, stock price of \$ 1.72, exercise price of \$ 1.72, volatility of 138.3%, risk-free rate of 3.61%, and no forfeiture rate. On December 20, 2022, the Company granted Mr. Maqbool stock options to purchase 100,000 shares of common stock according to the Company's 2020 Plan. In addition, Ms. Sanfratello and Mr. Flores were each granted stock options to purchase 50,000 shares of common stock. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.92 per share. The Company has calculated these options estimated fair market value at \$ 357,425 using the Black-Scholes model, with the following assumptions: expected term of 7.5 years, stock price of \$ 1.92, exercise price of \$ 1.92, volatility of 127.5%, risk-free rate of 3.79%, and no forfeiture rate. The following table sets forth the outstanding equity awards for our named executive officers as of the fiscal year ended December 31, 2023. OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END Name Grant Date Number of Securities Underlying Unexercised Options (#) Exercisable Number of Securities Underlying Unexercised Options (#) Unexercisable Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#) Option Exercise Price (\$) Option Expiration Date Fawad Maqbool December 20, 2023 0-100,000-0-\$ 1.73 December 20, 2033 June 14, 2022 35,000-65,000-0-\$ 1.72 June 14, 2027 December 20, 2022 20,000-80,000-0-\$ 1.92 December 20, 2032 Louisa Sanfratello December 20, 2023 0-50,000-0-\$ 1.73 December 20, 2033 June 14, 2022 17,500-32,500-0-\$ 1.72 June 14, 2027 December 20, 2022 10,000-40,000-0-\$ 1.92 December 20, 2032 Jorge Flores December 20, 2023 0-50,000-0-\$ 1.73 December 20, 2033 June 14, 2022 17,500-32,500-0-\$ 1.72 June 14, 2027 December 20, 2022 10,000-40,000-0-\$ 1.92 December 20, 2032 Directors Compensation Name Fiscal Year Fees earned or paid in cash (\$) Stock awards (\$) Option awards (\$) Non-equity incentive plan compensation (\$) Nonqualified deferred compensation earnings (\$) All other compensation (\$) Total (\$) Matthew Kappers 2023 27,600-27,600-29,550-8,936-38,486 Andrew Lee 2023 27,600-27,600-29,550-8,936-38,486 Daniel Mazziota 2023 27,600-27,600-29,550-8,936-38,486 In connection with their respective appointments, each of Matthew Kappers, Andrew Lee and Daniel Mazziota entered into director agreements with the Company, providing for, among other things, that each of the directors shall be entitled to fees for attendance at virtual meetings and reimbursement of expenses for attending meetings. On August 22, **indemnification and annual compensation of 15** 2022, the Company granted Daniel Mazziota stock options to purchase 25,000 shares of common stock according to the..... Stock Appreciation Rights, Restricted Stock, Restricted Stock Units pursuant to, Performance Units, Performance Shares and other stock or cash awards as the Board of Directors may determine. In 2023, the Board and the shareholders adopted the Company's Amended and Restated 2020 Equity Incentive Plan for services. On March 20 (the "Amended and Restated Plan"), effective as of December 11, 2023-2025, **the Company entered into a non-binding letter of intent with a contract manufacturer on behalf of its end user for the purchase of \$ 78 million of the Company's Oran radios. If fulfilled, deliveries of the order are expected to start in FY2025 and will substantially increase each year thereafter into 2027. The Amended and Restated Plan non-binding letter of intent is subject substantially similar to the 2020 Plan except parties entering into a series of definitive purchase orders. No assurance can be given that it increases the Company will enter into any purchase orders for the total amount of \$ 78 million. On March 21, 2025, we entered into an equity distribution agreement, or the Equity Distribution Agreement, with Maxim Group LLC, or Maxim, relating to offer and sell shares of our common stock available having an aggregate offering price of up to \$ 25 million from time to time through Maxim, acting as our exclusive sales agent, in an "At-the-Market Offering" at our discretion. F-32 On March 25, 2025, AmpliTech Group, Inc., a Nevada corporation (the "Company"), entered into a Bank Loan Agreement (the "Loan Agreement") with Dime Community Bank (the "Bank") for issuance thereunder a revolving line of credit for up to 2-\$ 750,000 (the "Revolving Line of Credit"). The Company has established the Revolving Line of Credit for general working purposes and uses, as needed. As of the date of this filing, there is no outstanding balance on the Revolving Line of Credit. The term of the Loan Agreement expires once all indebtedness under the Revolving Line of Credit has been paid in full, or until such time as the Bank and the Company agree in writing to terminate the Loan Agreement. In addition to interest, the Company agreed to pay an annual fee of \$ 500.00 on the anniversary date of each year the Loan Agreement is in effect, subject to change by the Bank with notice. Pursuant to an Assignment of Deposit Agreement dated March 25, 2025 between us and the Bank, the Revolving Line of Credit is secured by a demand deposit account with the Bank which requires us to have a balance no less than \$ 814,635. The Revolving Line of Credit is evidenced by a promissory note, which is due on demand, or if there is no demand, then on March 1, 2026, unless extended, modified or renewed (the "Note"). The Company has agreed to pay regular monthly payments of all accrued unpaid interest due as of each payment date, beginning April 1, 2025, with all subsequent interest payments to be due on the same day of each month thereafter. The Note bears a variable interest rate based on changes in the Wall Street Journal Prime Rate as published in the Wall Street Journal from time to time, plus 1.000%, provided however, under no circumstances will the interest rate be less than 6.250-% per annum or more than the maximum rate allowed by applicable law. Late payment is subject to a fee of 5.000% of the regularly scheduled payment. In the event of default, the Note bears an interest at a rate per annum equal to 5.000% above the rate that is otherwise applicable to such amounts. The aggregate purchase price for the assets is \$ 8,000,000 which consists of \$ 3,000,000 in cash and \$ 5,000,000 in restricted shares of common stock. In December 2023, the Board of which Directors and shareholders amended and restated the first S current plan to increase the number of shares available for issuance under the plan to 2,250,500 000 shares of in cash and \$ 2,500,000 in restricted common stock will. ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND**

MANAGEMENT AND RELATED STOCKHOLDER MATTERS The following table summarizes information about our equity compensation plans as of December 31, 2023: Number of securities to be issued upon exercise of outstanding options, warrants, the Telus' initial purchase order and receipt rights Weighted average price of assurance outstanding options, warrants and rights Number of securities the Telus Subsequent Purchase Orders; and that the remaining \$ 500 available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (a) (b) (c) Equity compensation plans approved by security holders 1, 236, 000 in cash to be paid on December 5, 2025 and \$ 2, 500 30 869, 000 Equity compensation plans not approved in shares of restricted common stock will be issued to Company upon the transfer of the 5G ORAN radio products' technology and intellectual property rights by security holders the Seller to the Company. In connection with the transaction, Seller's affiliate agreed to transfer all of its rights, title and interest in 5G ORAN radio products technology and intellectual property rights to Seller. Subsequent to the transaction, Seller's affiliate will continue its business and retain its employees focusing on software solutions and services. F 33 Exhibit 4 -- Total 1, 236, 000 \$ 2, 30 869, 000 4 DESCRIPTION OF CAPITAL STOCK The following table sets forth certain information with respect to the beneficial ownership of..... material interest (other than compensation described describes under "Executive Compensation"). Director Independence Mr. Kappers, Mr. Lee and Mr. Mazziota are independent using the definition of independence under NASDAQ Listing Rule 5605 (a) (2). ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES. The following table shows the aggregate fees we paid for professional services provided to us for 2023 and 2022: 2023 2022 Audit Fees \$ 113, 600 \$ 130, 062 Audit-Related Fees \$ 36, 500 \$ 71, 548 Tax Fees \$ 6, 665 \$ 3, 420 All Other-- the Fees-- Total \$ 156, share of the Company's common stock, par value \$ 0. 001 per share, as well as certain provisions of our amended and restated articles of incorporation (the our "Common Articles of Incorporation") and our amended and restated bylaws ("Bylaws"). This description is only a summary. You should also refer to our Articles of Incorporation and Bylaws, which have been filed with the SEC as exhibits to the registration statement of which this prospectus forms a part. Authorized and Outstanding Capital Stock Our authorized capital stock consists of 500, 000, 000 shares of common stock, \$ 0. 001 par value per share, and 1, 000, 000 shares of blank check preferred stock, \$ 0. 001 par value per share. As of March 13, 2025, there are 19, 658, 960 shares of common stock and 0 shares of preferred stock outstanding. Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our Board of Directors out of funds legally available for dividend payments. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued upon completion of this offering will be fully paid and nonassessable. The holders of common stock have no preferences or rights of cumulative voting, conversion, or pre-emptive or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in any of our assets remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any. Our common stock is traded on Nasdaq under the symbol "AMPG." The transfer agent and registrar for our common stock is VStock Transfer LLC. The Board generally will be authorized, without further stockholder approval, to issue from time to time up to and an aggregate of 1, 000, 000 shares of preferred stock, in one or more series. Each series of preferred stock will have the number of shares, designations, preferences, voting powers (or special, preferential or no voting powers), relative, participating, optional or other special rights and privileges and such qualifications, limitations or restrictions as is determined by the Board, which may include, among others, the right to provide that the shares of each such series may be: (i) subject to redemption at such time or times and at such price or prices; (ii) entitled to receive dividends (which may be cumulative or non-cumulative) at such rates, on such conditions, and at such times, and payable in preference to, or in such relation to, the dividends payable on any other class or classes or any other series; (iii) entitled to such rights upon the dissolution of, or upon any distribution of the assets of, the Company; (iv) convertible into, or exchangeable for, shares of any other class or classes of stock, or of any other series of the same or any other class or classes of stock of the Company at such price or prices or at such rates of exchange and with such adjustments, if any; or (v) entitled to the benefit of such limitations, if any, on the issuance of additional shares of such series or shares of any other series of preferred stock. Our stockholders have granted the Board authority to issue the preferred stock and to determine the rights and preferences of the preferred stock in order to eliminate delays associated with a stockholder vote on specific issuances. The rights of the holders of common stock will be subordinate to the rights of holders of any preferred stock issued in the future. The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could adversely affect the voting power or other rights of the holders of common stock, and could make it more difficult for a third party to acquire, or discourage a third party from attempting to acquire, a majority of our outstanding voting stock. Public Warrants In connection with our public offering in February 2021, 1, 371, 428 units) warrant (the "Warrants") to purchase one (1) share of Common Stock (the "Warrant Shares") at an offering price of \$ 7. 00 per unit were sold. Each unit issued in the offering consisted of one share (or 100% of common stock the price of each Unit sold in the Offering); and WHEREAS, pursuant to the Offering the Company granted an and one warrant. On February 17 over-allotment option to purchase up to 15% of the aggregate number of Units sold, including 2021, our public warrants to purchase an additional 205, 714 shares of Common Stock (the "Over-Allotment Option") to the Underwriters, which over-allotment option was fully exercised; and WHEREAS, upon the terms and conditions set forth in the Manhattan Warrant Agency Agreement and pursuant to the effective registration statements on Form S-1, as amended (File No. 333-251260) and Form S-1MEF, as amended (File No. 333-253177) (collectively, the "Registration Statement"), and the terms and conditions of the Warrant Certificate, the Company previously issued the Warrants in book entry form entitling the respective holders of the Warrants (the "Holders," which term shall include a Holder's transferees, successors and assigns and "Holder" shall include, if the Warrants are held in "street name," a Participant (as defined below) or a designee appointed by such Participant); and WHEREAS, the shares of Common Stock and Warrants previously issued in connection with the Offering were issued separately; and WHEREAS, the Common Stock and Warrants have been approved for listing on the NASDAQ Capital Market, under the symbols "AMPG-AMPGW," and "AMPGW," respectively, and commenced trading on Nasdaq Capital Market ("Public the NASDAQ on February 17, 2021; and WHEREAS, on [], 2024, the Warrant Agent is engaged as the Company's new transfer agent; and WHEREAS, the Company wishes the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing so to act, in connection with the issuance, registration, transfer, exchange, exercise and replacement of the Warrants "and, in the Warrant Agent's capacity as the Company's transfer agent, the delivery of the Warrant Shares (as defined below). The NOW, THEREFORE, in consideration of the premises and the mutual agreements herein set forth, the parties hereby agree as follows following summary of: Section 1. Certain certain Definitions. For purposes of this Agreement, all capitalized terms not herein defined shall have the meanings hereby indicated: (a) "Affiliate" has the meaning ascribed to it in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"); (b) "Business Day" means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which the Nasdaq Stock Market is authorized or required by law or other governmental action to close. (c) "Close of Business" on any given date means 5:00 p. m., New York City time, on such date; provided, however, that if such date is not a Business Day it means 5:00 p. m., New York City time, on the next succeeding Business Day. (d) "Person" means an and provisions individual, corporation, association, partnership, limited liability company, joint venture, trust, unincorporated organization, government or our Public political subdivision thereof or governmental agency or other entity. (e) "Warrant Certificate" means a certificate in substantially the form attached as Exhibit 1 hereto, representing such number of Warrant Shares as is indicated therein, provided that any reference to the delivery of a Warrant Certificate in this Agreement shall include delivery of a Definitive Certificate or a Global Warrant (each as defined below). All other capitalized terms used but not otherwise defined herein shall have the meaning ascribed to such terms in the Warrant Certificate. Section 2. Appointment of Warrant Agent. The Company hereby appoints the Warrant Agent to act as agent for the Company in accordance with the terms and conditions hereof, and the Warrant Agent hereby accepts such appointment. Section 3. Global Warrants. Exercisability. (a) The Warrants shall be registered securities and shall be evidenced by a global warrant (the "Global Warrants"), in the form of the Warrant Certificate, which shall be deposited with the Warrant Agent and registered in the name of Cede & Co., a nominee of The Depository Trust Company (the "Depository"), or as otherwise directed by the Depository. Ownership of beneficial interests in the Warrants shall be shown on, and the transfer of such ownership shall be effected through, records maintained by (i) the Depository or its nominee for each Global Warrant or (ii) institutions that have accounts with the Depository (such institution, with respect to a Warrant in its account, a "Participant"). (b) If the Depository subsequently ceases to make its book-entry settlement system available for the Warrants, the Company may instruct the Warrant Agent regarding other arrangements for book-entry settlement. In the event that the Warrants are exercisable not eligible for, or it is no longer necessary to have the Warrants available in, book-entry form, the Warrant Agent shall provide written instructions to the Depository to deliver to the Warrant Agent for cancellation each Global Warrant, and the Company shall instruct the Warrant Agent to deliver to each Holder a Warrant Certificate. (c) A Holder has the right to elect at any time or from time to time a Warrant Exchange (as defined below) pursuant to a Warrant Certificate Request Notice (as defined below). Upon written notice by a Holder to the Company and the Warrant Agent for the exchange of some or all of such Holder's Global Warrants for a separate certificate in the form attached hereto as Exhibit 1 (such separate certificate, a "Definitive Certificate") evidencing the same number of Warrants, which request shall be in the form attached hereto as Exhibit 2 (a "Warrant Certificate Request Notice" and the date of delivery of such Warrant Certificate Request Notice by the Holder, the "Warrant Certificate Request Notice Date" and the surrender by the Holder to the Warrant Agent of a number of Global Warrants for the same number of Warrants evidenced by a Warrant Certificate, a "Warrant Exchange"), the Company and the Warrant Agent shall promptly effect the Warrant Exchange and the Company shall promptly issue and deliver to the Holder a Definitive Certificate for such number of Warrants

in the name set forth in the Warrant Certificate Request Notice. Such Definitive Certificate shall be dated the original issue date of the Warrants, shall be manually executed by an authorized signatory of the Company, shall be in the form attached hereto as Exhibit 1 and shall be reasonably acceptable in all respects to such Holder. In connection with a Warrant Exchange, the Company agrees to deliver the Definitive Certificate to the Holder within ten (10) Business Days of the Warrant Certificate Request Notice pursuant to the delivery instructions in the Warrant Certificate Request Notice ("Warrant Certificate Delivery Date"). If the Company fails for any reason to deliver to the Holder the Definitive Certificate subject to the Warrant Certificate Request Notice by the Warrant Certificate Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$ 1,000 of Warrant Shares evidenced by such Definitive Certificate (based on the VWAP (as defined in the Warrants) of the Common Stock on the Warrant Certificate Request Notice Date), \$ 10 per Business Day for each Business Day after such Warrant Certificate Delivery Date until such Definitive Certificate is delivered or, prior to delivery of such Warrant Certificate, the Holder rescinds such Warrant Exchange. The Company covenants and agrees that, upon the date of delivery of the Warrant Certificate Request Notice, the Holder shall be deemed to be the holder of the Definitive Certificate and, notwithstanding anything to the contrary set forth herein, the Definitive Certificate shall be deemed for all purposes to contain all of the terms and conditions of the Warrants evidenced by such Warrant Certificate and the terms of this Agreement, other than Sections 3 (c), 3 (d) and 9 herein, shall not apply to the Warrants evidenced by the Definitive Certificate. Notwithstanding anything herein to the contrary, the Company shall act as warrant agent with respect to any Definitive Certificate requested and issued pursuant to this section. Notwithstanding anything to the contrary contained in this Agreement, in the event of inconsistency between any provision in this Agreement and any provision in a Definitive Certificate, as it may from time to time be amended, the terms of such Definitive Certificate shall control. (d) A Holder of a Definitive Certificate (pursuant to a Warrant Exchange or otherwise) has the right to elect at any time or from time to time a Global Warrants Exchange (as defined below) pursuant to a Global Warrants Request Notice (as defined below). Upon written notice by a Holder to the Company for the exchange of some or all of such Holder's Warrants evidenced by a Definitive Certificate for a beneficial interest in Global Warrants held in book-entry form through the Depository evidencing the same number of Warrants, which request shall be in the form attached hereto as Exhibit 3 (a "Global Warrants Request Notice" and the date of delivery of such Global Warrants Request Notice by the Holder, the "Global Warrants Request Notice Date" and the surrender upon delivery by the Holder of the Warrants evidenced by Definitive Certificates for the same number of Warrants evidenced by a beneficial interest in Global Warrants held in book-entry form through the Depository, a "Global Warrants Exchange"); the Company shall promptly effect the Global Warrants Exchange and shall promptly direct the Warrant Agent to issue and deliver to the Holder Global Warrants for such number of Warrants in the Global Warrants Request Notice, which beneficial interest in such Global Warrants shall be delivered by the Depository's Deposit or Withdrawal at Custodian system to the Holder pursuant to the instructions in the Global Warrants Request Notice. In connection with a Global Warrants Exchange, the Company shall direct the Warrant Agent to deliver the beneficial interest in such Global Warrants to the Holder within ten (10) Business Days of the Global Warrants Request Notice pursuant to the delivery instructions in the Global Warrant Request Notice ("Global Warrants Delivery Date"). If the Company fails for any reason to deliver to the Holder Global Warrants subject to the Global Warrants Request Notice by the Global Warrants Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$ 1,000 of Warrant Shares evidenced by such Global Warrants (based on the VWAP (as defined in the Warrants) of the Common Stock on the Global Warrants Request Notice Date), \$ 10 per Business Day for each Business Day after such Global Warrants Delivery Date until such Global Warrants are delivered or, prior to delivery of such Global Warrants, the Holder rescinds such Global Warrants Exchange. The Company covenants and agrees that, upon the date of delivery of the Global Warrants Request Notice, the Holder shall be deemed to be the beneficial holder of such Global Warrants. Section 4. Form of Warrant Certificates. The Warrant Certificate, together with the form of election to purchase Common Stock ("Notice of Exercise") and the form of assignment to be printed on the reverse thereof, shall be in the form of Exhibit 1 hereto. Section 5. Countersignature and Registration. The Global Warrant shall be executed on behalf of the Company by its Chief Executive Officer, Chief Financial Officer or Vice President, by facsimile signature, and have affixed thereto the Company's seal or a facsimile thereof which shall be attested by the Secretary or an Assistant Secretary of the Company, by facsimile signature. The Global Warrant shall be countersigned by the Warrant Agent by facsimile signature and shall not be valid for any purpose unless so countersigned. In case any officer of the Company who shall have signed any of the Global Warrant shall cease to be such officer of the Company before countersignature by the Warrant Agent and issuance and delivery by the Company, such Global Warrant, nevertheless, may be countersigned by the Warrant Agent, issued and delivered with the same force and effect as though the person who signed such Global Warrant had not ceased to be such officer of the Company; and any Global Warrant may be signed on behalf of the Company by any person who, at the actual date of the execution of such Global Warrant, shall be a proper officer of the Company to sign such Global Warrant, although at the date of the execution of this Warrant Agreement any such person was not such an officer. The Warrant Agent will keep or cause to be kept, at one of its offices, or at the office of one of its agents, books for registration and transfer of the Global Warrants issued hereunder. Such books shall show the names and addresses of the respective Holders of the Global Warrant, the number of warrants evidenced on the face of each of such Global Warrant and the date of each of such Global Warrant. The Warrant Agent will create a special account for the issuance of Global Warrants. The Company will keep or cause to be kept at one of its offices, books for the registration and transfer of any Definitive Certificates issued hereunder and the Warrant Agent shall not have any obligation to keep books and records with respect to any Definitive Warrants. Such Company books shall show the names and addresses of the respective Holders of the Definitive Certificates, the number of warrants evidenced on the face of each such Definitive Certificate and the date of each such Definitive Certificate. Section 6. Transfer, Split Up, Combination and Exchange of Warrant Certificates; Mutilated, Destroyed, Lost or Stolen Warrant Certificates. With respect to the Global Warrant, subject to the provisions of the Warrant Certificate and the last sentence of this first paragraph of Section 6 and subject to applicable law, rules or regulations, or any "stop transfer" instructions the Company may give to the Warrant Agent, at any time after the **their original issuance** closing date of the Offering, and at or prior to the Close of Business on the Termination Date (as such term is defined in the Warrant Certificate), any Global Warrant or Global **time up to February 19, 2026** The Warrants-warrants may be exercised upon transferred, split up, combined or exchanged for another Global Warrant or Global Warrants, entitling the Holder to purchase a like number of shares of Common Stock as the Global Warrant or Global Warrants surrendered - **surrender of then - the** entitled such Holder to purchase. Any Holder desiring to transfer, split up, combine or exchange any Global Warrant **warrant certificate on or prior** shall make such request in writing delivered to **the expiration date at the offices of** the Warrant Agent, **with** and shall surrender the **exercise** Global Warrant to be transferred, split up, combined or exchanged at the principal office of the Warrant Agent. Any requested transfer of Warrants, whether in book-entry form or **on the reverse side of the warrant** certificate form **completed and executed as indicated**, shall be accompanied by **full** reasonable evidence of authority of the party making such request that may be required by the Warrant Agent. Thereupon the Warrant Agent shall, subject to the last sentence of this first paragraph of Section 6, countersign and deliver to the Person entitled thereto a Global Warrant or Global Warrants, as the case may be, as so requested. The Company may require payment from the Holder of a sum sufficient to cover any tax or governmental charge that may be imposed in connection with any transfer, split up, combination or exchange of Global Warrants. The Company shall compensate the Warrant Agent per the fee schedule mutually agreed upon by the parties hereto and provided separately on the date hereof. Upon receipt by the Warrant Agent of evidence reasonably satisfactory to it of the loss, theft - **the** - destruction or mutilation of a Warrant Certificate, which evidence shall include an affidavit of loss, or in the case of mutilated certificates, the certificate or portion thereof remaining, and, in case of loss, theft or destruction, of indemnity in customary form and amount (but, with respect to any Definitive Certificates, shall not include the posting of any bond by the Holder), and satisfaction of any other reasonable requirements established by Section 8-405 of the Uniform Commercial Code as in effect in the State of Delaware, and reimbursement to the Company and the Warrant Agent of all reasonable expenses incidental thereto, and upon surrender to the Warrant Agent and cancellation of the Warrant Certificate if mutilated, the Company will make and deliver a new Warrant Certificate of like tenor to the Warrant Agent for delivery to the Holder in lieu of the Warrant Certificate so lost, stolen, destroyed or mutilated. Section 7. Exercise of Warrants; Exercise Price; Termination Date. (a) The Warrants shall be exercisable commencing on the Initial Exercise Date. The Warrants shall cease to be exercisable and shall terminate and become void as set forth in the Warrant Certificate. Subject to the foregoing and to Section 7 (b) below, the Holder of a Warrant may exercise the Warrant in whole or in part upon surrender of the Warrant Certificate, if required, with the executed Notice of Exercise and payment of the Exercise Price **price** which may be made, at the option of the Holder, by wire transfer or by certified or official bank check **payable in United States dollars, to us, for the number of Warrants being exercised. Under the terms of** the Warrant Agent at Agreement, we must use our best efforts to maintain **the effectiveness principal office of the registration statement and current prospectus relating to common stock issuable upon exercise of the Warrant Warrants Agent until the expiration of the Warrants. If we fail to maintain the effectiveness of the registration statement and current prospectus relating to the common stock issuable upon exercise of the Warrants, the holders of the Warrants shall have the right to exercise the Warrants solely via a cashless exercise feature provided or for to in** the Warrants, until such time office of one of its agents as may be designated by the Warrant Agent from time to time. In the case of the Holder of a Global Warrant, the Holder shall deliver the executed Notice of Exercise and the payment of the Exercise Price as described herein. Notwithstanding any other provision in this Agreement, a holder whose interest in a Global Warrant is a beneficial interest in a Global Warrant held in book-entry form through the Depository (or another established clearing corporation performing similar functions), shall effect exercises by delivering to the Depository (or such other clearing corporation, as applicable) the appropriate instruction form for exercise, complying with the procedures to effect exercise that are required by the Depository (or such other clearing corporation, as applicable). Delivery of the Warrant Shares shall be made by the Warrant Share Delivery Date. The Company acknowledges that the bank accounts maintained by the Warrant Agent in connection with the services provided under this Agreement will be in its name and that the Warrant Agent may receive investment earnings in connection with the investment at Warrant Agent risk and for its benefit of funds held in those accounts from time to time. Neither the Company nor the

Holders will receive interest on any deposits or Exercise Price. No ink original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. The Company hereby acknowledges and agrees that, with respect to a holder whose interest in a Global Warrant is a beneficial interest in a Global Warrant held in book-entry form through the Depository (or another established clearing corporation performing similar functions), upon delivery of irrevocable instructions to such holder's Participant to exercise such warrants, that solely for purposes of Regulation SHO that such holder shall be deemed to have exercised such warrants. (b) Upon receipt of a Notice of Exercise for a Cashless Exercise the Company will promptly calculate and transmit to the Warrant Agent the number of Warrant Shares issuable in connection with such Cashless Exercise and deliver a copy of the Notice of Exercise to the Warrant Agent, which shall issue such number of Warrant Shares in connection with such Cashless Exercise. (c) Upon the exercise of the Warrant Certificate pursuant to the terms of Section 2 of the Warrant Certificate, the Warrant Agent shall cause the Warrant Shares underlying such Warrant Certificate or Global Warrant to be delivered to or upon the order of the Holder of such Warrant Certificate or Global Warrant, registered in such name or names as may be designated by such Holder, no later than the Warrant Share Delivery Date (as such term is defined in the Warrant Certificate). If the Company is then a participant in the DWAC system of the Depository and either (A) there is an effective registration statement permitting the issuance and current prospectus, **Exercise Limitation. A holder may not exercise any portion of the a Warrant to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would own more than 4.99 % of the outstanding common stock after exercise, as such percentage ownership is determined in accordance with the terms of the Warrant, except that upon prior notice from the holder to us, the holder may waive such limitation up to a percentage not in excess of 9.99 %.** Exercise Price. The exercise price per whole share of common stock purchasable upon exercise of the Warrants is \$ 7.00 per share. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders. **Fractional Shares to or resale. No fractional shares of common stock will be issued upon exercise of the Warrants. If, upon exercise of the Warrant Shares by, a Holder holder would or (B) the Warrant is being exercised via Cashless Exercise, then the certificates for Warrant Shares shall be entitled transmitted by the Warrant Agent to receive a fractional interest in a share the Holder by crediting the account of the Holder's broker with the Depository through its DWAC system. For the avoidance of doubt, if the Company becomes obligated to we will, upon exercise, pay a cash adjustment in respect any amounts to any Holders pursuant to Section 2 (d) (i) or 2 (d) (iv) of the Warrant Certificate, such fraction obligation shall be solely that of the Company and not that of the Warrant Agent. Notwithstanding anything else to the contrary in this Agreement, except in the case of a Cashless Exercise, if any Holder fails to duly deliver payment to the Warrant Agent of an amount equal to such fraction multiplied by the aggregate Exercise exercise Price price of. If multiple Warrants are exercised by the holder at the same time, we shall pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.** Transferability. Subject to applicable laws, the Warrants may be offered for sale, sold, transferred or assigned without our consent. Exchange Listing. The Warrants are listed on the Nasdaq Capital Market under the symbol " AMPGW ". Warrant Shares to Agent; Global Certificate. The Warrants were issued in registered form under a warrant agent agreement between the Warrant Agent and us. The warrants shall initially be purchased represented only by one or more global warrants deposited with the Warrant Agent, as custodian on behalf of The Depository Trust Company (DTC) and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC. Fundamental Transactions. In the event of a fundamental transaction, as described in the Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50 % of our outstanding common stock, or any person or group becoming the beneficial owner of 50 % of the voting power represented by our outstanding common stock, the holders of the Warrants will be entitled to receive the kind and amount of securities, cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. Rights as a Stockholder. The Warrant holders do not have the rights or privileges of holders of common stock or any voting rights until they exercise their Warrants and receive shares of common stock. After the issuance of shares of common stock upon exercise of such the Warrants, each Holder holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders. Governing Law. The Warrants and the warrant agency agreement are governed by New York law. Anti-Takeover Effects of Some Provisions of Nevada Law The following provisions of the Nevada Revised Statutes (" NRS ") could, if applicable, have the effect of discouraging takeovers of our company. Transactions with Interested Stockholders. The NRS prohibits a publicly-traded Nevada company from engaging in any business combination with an interested stockholder for a period of three years following the date that the stockholder became an interested stockholder unless, prior to that date, the Board of Directors of the corporation approved either the business combination itself or the transaction that resulted in the stockholder becoming an interested stockholder. An " interested stockholder " is defined as any entity or person beneficially owning, directly or indirectly, 10 % or more of the outstanding voting stock of the corporation and any entity or person affiliated with, controlling, or controlled by any of these entities or persons. The definition of " business combination " is sufficiently broad to cover virtually any type of transaction that would allow a potential acquirer to use the corporation's Warrant assets to finance the acquisition or otherwise benefit its own interests rather than the interests of the corporation and its stockholders. In addition, business combinations that are not approved and therefore take place after the three year waiting period may also be prohibited unless approved by the board of directors and stockholders or the price to be paid by the interested stockholder is equal to the highest of (i) the highest price per share paid by the interested stockholder within the 3 years immediately preceding the date of the announcement of the business combination or in the transaction in which he or she became an interested stockholder, whichever is higher; (ii) the market value per common share on the date of announcement of the business combination or the date the interested stockholder acquired the shares, whichever is higher; or (iii) if higher for the holders of preferred stock, the highest liquidation value of the preferred stock. Acquisition of a Controlling Interest. The NRS contains provisions governing the acquisition of a " controlling interest " and provides generally that any person that acquires 20 % or more of the outstanding voting shares of an " issuing corporation, " defined as Nevada corporation that has 200 or more stockholders at least 100 of whom are Nevada residents (as set forth in the corporation's stock ledger); and does business in Nevada directly or through an affiliated corporation, may be denied voting rights with respect to the acquired shares, unless a majority of the disinterested stockholder of the corporation elects to restore such voting rights in whole or in part. The statute focuses on the acquisition of a " controlling interest " defined as the ownership of outstanding shares sufficient, but for the control share law, to enable the acquiring person, directly or indirectly and individually or in association with others, to exercise (i) one-fifth or more, but less than one-third; (ii) one-third or more, but less than a majority; or (iii) a majority or more of the voting power of the corporation in the election of directors. The question of whether or not to confer voting rights may only be considered once by the stockholders and once a decision is made, it cannot be revisited. In addition, unless a corporation's articles of incorporation or bylaws provide otherwise (i) acquired voting securities are redeemable in whole or in part by the issuing corporation at the average price paid for the securities within 30 days if the acquiring person has not given a timely information statement to the issuing corporation or if the stockholders vote not to grant voting rights to the acquiring person's securities; and (ii) if voting rights are granted to the acquiring person, then any stockholder who voted against the grant of voting rights may demand purchase from the issuing corporation, at fair value, of all or any portion of their securities. The provisions of this section do not apply to acquisitions made pursuant to the laws of descent and distribution, the enforcement of a judgment, or the satisfaction of a security interest, or acquisitions made in connection with certain mergers or reorganizations. Exhibit 10. 32 CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THE EXHIBIT BECAUSE IT IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL. [* * * * *] INDICATES THAT INFORMATION HAS BEEN REDACTED OR OMITTED. FORM OF ASSET PURCHASE AGREEMENT BY AND BETWEEN AMPLITECH GROUP, INC. TITAN CREST, LLC March 26, 2025 TABLE OF CONTENTS ARTICLE I Purchase and Sale Section 7.1. 01 Purchase and Sale of Assets Section 1. 02 Excluded Assets Section 1. 03 Assumed Liabilities Section 1. 04 Excluded Liabilities Section 1. 05 Purchase Price Section 1. 06 [* * * * *] License to Use the Purchased Assets Section 1. 07 Buyer License Section 1. 08 Transition Services Agreement Section 1. 09 Allocation of Purchase Price Section 1. 10 Withholding Tax Section 1. 11 Closing Section 1. 12 Closing Deliverables. 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Successors and Assigns Section 6. 07 No Third- Party Beneficiaries Section 6. 08 Amendment and Modification Section 6. 09 Waiver Section 6. 10 Governing Law, Dispute Resolution, Venue and Attorneys' Fees. Section 6. 11 Waiver of Jury Trial Section 6. 12 Specific Performance Section 6. 13 Counterparts Appendices Appendix A- Allocation of NRE Payments Exhibit A- Form of Assignment and Assumption Exhibit B- [*****] IP Transfer Agreement ASSET PURCHASE AGREEMENT This Asset Purchase Agreement (this "Agreement"), dated as of March 26, 2025 (the "Effective Date"), is entered into by and between Titan Crest, LLC, a Delaware limited liability company, with its principal office located at 9 E. Looeckerman Street, Suite 311, Dover, Delaware 19901 ("Titan Crest") hereof, (the "Seller"), [*****], a corporation organized under the laws of Canada (solely relating to Section 1. 06 and Articles II, IV and V of this Agreement, "[*****]"), and AmpliTech Group, Inc., an Nevada corporation ("Buyer"). Each Seller, [*****] and Buyer are referred to herein, individually, as a "Party" and, collectively, the "Parties." RECITALS A. Seller, either directly or indirectly through its subsidiary [*****], is in the business of developing, designing, marketing and selling a wide range of [*****] based on ORAN standards ("Seller's Business"); B. Seller's Business includes, but is not limited to, developing, manufacturing, marketing and selling products that use radio frequency technology to make [*****]; C. Prior to execution of this Agreement, [*****] has transferred to Seller all of its right, title and interests, free and clear of any claims, liens and encumbrances, certain assets, including, but not limited to, assets and intellectual property relating to the radio frequency technology used for the [*****] currently being manufactured and sold by the Warrant Share Delivery Date [*****], or in design and development by [*****], (the Warrant Agent "[*****] Assets") under that certain Intellectual Property Assignment And Transfer Agreement, dated March 26, 2025, a copy of which is attached hereto as Exhibit B (the "[*****] IP Transfer Agreement") and Seller desires to sell and Buyer desires to purchase from Seller the [*****] Assets subject to the terms and conditions set forth herein; and D. Seller and [*****] will continue to engage in the business of developing, designing, marketing and selling a wide range of [*****] based on ORAN standards, but will not obligated engage in any activity that develops or supports a technology or design that would compete with the [*****] Assets for a period of 10 years from the Closing. NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows: ARTICLE I Purchase and Sale Section 1. 01 Purchase and Sale of Assets. Subject to the terms and conditions set forth herein, Seller shall sell, assign, transfer, convey and deliver to Buyer, and Buyer shall purchase from Seller, all of Seller's right, title and interest in its [*****] Assets, which consists of the following assets: (a) all related product lines and product specifications listed on Section 1. 01 (a) of the disclosure schedules attached hereto ("Disclosure Schedules") or as transferred to Seller under the [*****] IP Transfer Agreement; (b) a list of all of Seller's customers related to [*****] Assets, as set forth on Section 1. 01 (b) of the Disclosure Schedules or as transferred to Seller under the [*****] IP Transfer Agreement (" [*****] Assets Customers"); (c) Purchased IP (as defined below) listed on Section 1. 01 (c) of the Disclosure Schedules related to the [*****] Assets or as transferred to Seller under the [*****] IP Transfer Agreement; (d) the [*****] IP Transfer Agreement and other contracts of Seller, if any, related to the [*****] Assets set forth on Section 1. 01 (d) of the Disclosure Schedules (the "Included Contracts"); (e) the items and rights related to the [*****] Assets including samples, prototypes, inventory, jigs, molds, etc. set forth in Section 1. 01 (e) of the Disclosure Schedules or as transferred to Seller under the [*****] IP Transfer Agreement. (f) all [*****] Assets related intellectual property listed on Section 1. 01 (f) of the Disclosure Schedules, or as transferred to Seller under the [*****] IP Transfer Agreement including, but not limited, the source code for any software related to the [*****] Assets including the intellectual property being developed by [*****] for future delivery under the [*****] IP Transfer Agreement; (g) all [*****] Assets related data and records, vendor lists, research and development reports and records, production reports and records, operating guides and manuals, product formulas and designs, financial and accounting records, creative materials, advertising materials, promotional materials, studies, and reports or as transferred to Seller under the [*****] IP Transfer Agreement; and (h) other assets set forth on Section 1. 01 (h) of the Disclosure Schedules. Collectively, such assets are referred to herein as the "Purchased Assets" and shall be offered and sold to Buyer free and clear of any mortgage, pledge, lien, charge, security interest, claim or other encumbrance ("Encumbrance"). The [*****] related assets and intellectual property shall be delivered to Buyer within thirty (30) days of the Closing Date. Section 1. 02 Excluded Assets. Notwithstanding the foregoing, the Purchased Assets shall not include Seller's raw materials, work in process, or finished goods ("Seller's Inventory"), whether or not related to the [*****] Assets nor any assets of Seller that are not included in the Purchased Assets (collectively, the "Excluded Assets"). Section 1. 03 Assumed Liabilities. Following the Closing, Buyer will only pay, perform, discharge and satisfy the liabilities and obligations arising out of or relating to the Purchased Assets that are set forth in Section 1. 03 of the Disclosure Schedules and the liabilities and obligations under the Assigned Contracts (as hereinafter defined) arising after the date hereof (collectively, the "Assumed Liabilities"). Section 1. 04 Excluded Liabilities. Notwithstanding any provision in this Agreement to the contrary, other than the Assumed Liabilities set forth in Section 1. 03 of this Agreement, Seller will retain and Buyer is not assuming nor will Buyer be responsible for any liability or obligation of Seller or any affiliate of Seller or arising out of or relating to the Purchased Assets including any Warrant warranty Shares (via DWAC liability for products sold by Seller prior to the Closing. Specifically, the Buyer is not assuming any liability or obligation relating to the Seller's Business, or operation of the Seller's Business, of whatever nature, whether known or unknown, contingent or otherwise, arising out of or relating to Seller's ownership or operation of the Seller's Business and the Purchased Assets prior to the Closing (collectively, the "Excluded Liabilities") until. All Excluded Liabilities will be retained by and remain obligations and liabilities of Seller. Section 1. 05 Purchase Price. Buyer intends to acquire the Purchased Assets free and clear of all liens and encumbrances of any kind or nature for a total consideration of Eight Million United States Dollars (\$ 8, 000, 000) ("Purchase Price") to the Seller to be paid as follows: (a) Cash Payment (i) A first cash payment of Two Million Five Hundred Thousand U. S. Dollars (US \$ 2, 500, 000) (the "Closing Payment") which shall be contingent on the following conditions: 1. Assignment or new issuance of a [*****] purchase order from Telus for fiscal year 2025 delivery to the Buyer; 2. receipt Receipt of correspondence from Telus to Buyer, as determined by Buyer in its sole but reasonable discretion, indicating Telus's intention to issue purchase orders in the amount of [*****] (including the initial purchase order indicated in Section 1. 05 (a) (i) 1 above. These purchase orders are to be spread over three (3) years for [*****] to the Buyer. The purchase orders shall include [*****] for non- recurring engineering (NRE) related to the development of [*****], with such payment allocated in accordance with Appendix A attached hereto. (ii) A second cash payment of Five Hundred Thousand U. S. Dollars (US \$ 500, 000) to be paid on December 5, 2025, contingent on the transfer of fully developed design package for [*****] technology (the "Transfer") as contemplated by the [*****] IP Transfer Agreement and [*****]'s acknowledgment that the documentation / drawing package is suitable for full production purposes. If the Transfer does not occur by October 31, 2025, this milestone payment will be postponed by the same number of days equal to the difference between October 31, 2025 and the day Transfer occurs. (b) Payment in Common Stock. A total of Five Million U. S. Dollars (US \$ 5, 000, 000) to be paid in the form of restricted common stock of Buyer upon achievement of the following milestones: (i) First payment of Two Million Five Hundred Thousand U. S. Dollars (US \$ 2, 500, 000) in the form of Buyer's restricted common stock based on the Volume Weighted Average Price of Buyer's common stock over the preceding thirty (30) trading days from the date the milestone set forth in Section 1. 05 (a) (i) is achieved. (ii) Second payment of Two Million Five Hundred Thousand U. S. Dollars (US \$ 2, 500, 000) in the form of Buyer's restricted common stock based on the Volume Weighted Average Price of Buyer's common stock over the preceding thirty (30) trading days from the date of the Transfer. (c) Issuance of Shares: All share issuances contemplated by this Agreement shall be conducted in full compliance with applicable Warrant U. S. Federal and state securities laws, including, but not limited to, the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder. The common stock contemplated to be issued in connection with the sale of [*****] Assets shall be subject to a six (6) month restriction period, during which Seller shall not be permitted to engage in any sale, transfer, or other disposition of such shares. All Share share Delivery issuances under this Agreement shall be subject to approval by the Buyer's shareholders if, and only if, required by NASDAQ Rule 5635 (d) or similar rule of another National Stock Exchange, if applicable. Section 1. 06 [*****] License to Use the Purchased Assets. [*****] hereby grants to Buyer an irrevocable, perpetual, transferable, sublicensable, royalty free, worldwide exclusive license to use the Purchased Assets set forth in Section 1. 01 of this Agreement, including, but not limited to, (a) make, use, offer to sell, sell, import, advertise, manufacture, market, and distribute products and provide services related to the Purchased Assets and (b) reproduce, publicly perform, transmit, publicly display, distribute and recreate derivative works based on the Purchased Assets through all media, now known or hereafter developed, for any purpose. Buyer has the sole right, in its discretion, and at its expense, to file, prosecute, and maintain all applications, registrations, and patents relating to the licensed intellectual property covered by this Section 1. 06 of this Agreement and [*****], at the request of Buyer, and at Buyer's expense, shall provide any reasonably requested assistance with such filing, maintenance and prosecution. It is the intent of the Parties that the Buyer shall have the sole, exclusive, and unencumbered right to commercialize all of the assets described in Section 1. 01 of this Agreement. Seller and [*****] further agree to take further action reasonably requested by the Buyer to fully effect the intention of the Parties to the license granted in this Section 1. 06 of this Agreement. Section 1. 07 Buyer License. Buyer hereby grants to [*****] and Seller a royalty free, worldwide license to use the Purchased Assets to the extent reasonably necessary for [*****] and / or Seller to perform their respective obligations under this Agreement. Section 1. 08 Transition Services Agreement. Promptly after the Closing, Buyer and Seller shall enter into a short- term transition services agreement for up to two (2) of Seller's employees to provide Buyer assistance in the assignment and transfer of the Purchased Assets from Seller to Buyer for a fee not to exceed Four Hundred Thirty Thousand U. S. Dollars (US \$ 430, 000. 00) (the "Transition Services

Agreement”). Section 1.09 Allocation of Purchase Price. Seller and Buyer agree to allocate the Purchase Price, including any Milestone Payments, among the Purchased Assets for all purposes (including tax and financial accounting) as agreed by their respective accountants, negotiating in good faith on their behalf. Buyer and Seller shall file all tax returns (including amended returns and claims for refund) and information reports in a manner consistent with such allocation. Section 1.10 Withholding Tax Buyer shall be entitled to deduct and withhold from the Purchase Price, Milestone Payments and any other payments contemplated by this Agreement such amounts that Buyer may be required to deduct and withhold under any applicable tax law. All such withheld amounts shall be treated as delivered to Seller hereunder. Section 1.11 Closing. The closing of the transactions contemplated by this Agreement (the “Closing”) shall take place promptly upon the satisfaction of the condition set forth in Section 1.05 (a) (i) of this Agreement (the day on which the Closing takes place being the “Closing Date”) remotely via electronic exchange of signatures. The consummation of the transactions contemplated by this Agreement shall be deemed extended to occur at 12:01 a. m. on the Closing Date. Section 1.12 Closing Deliverables. (a) At the Closing, Seller shall deliver to Buyer the following: (i) an assignment and assumption agreement in form and substance satisfactory to Buyer (the “Assignment and Assumption Agreement”) and duly executed by one-day Seller, effecting the assignment to and assumption by Buyer of the Purchased Assets, in substantially the form attached each day (or part thereof) hereto as Exhibit A; (ii) until such payment copies of all consents, approvals, waivers and authorizations referred to in Section of the Disclosure Schedules; (iii) a certificate of the Secretary or Assistant Secretary (or equivalent officer) of Seller certifying as to (A) the resolutions of the Members of Seller, duly adopted and in effect, which authorize the execution, delivery and performance of this Agreement and the transactions contemplated hereby; (B) the names and signatures of the officers of Seller authorized to sign this Agreement and the documents to be delivered hereunder; (iv) a certificate of the Secretary or Assistant Secretary (or equivalent officer) of [*****] certifying as to (A) the resolutions of the Board of Directors of [*****], duly adopted and in effect, which authorize the execution, delivery and performance of this Agreement, the transactions contemplated hereby and the Intellectual Property Assignment And Transfer Agreement between [*****] and Seller, dated March __, 2025, (the “[*****] IP Transfer Agreement”) a copy of which is attached hereto as Exhibit B; (B) the names and signatures of the officers of [*****] authorized to sign this Agreement and the documents to be delivered hereunder; and to the Warrant Agent. (d-v) The Warrant Agent shall deposit all funds received by it in payment of the Exercise Price for all Warrants in the account of the Company maintained with the Warrant Agent for such purpose (or to such other customary instruments of transfer, assumption, filings or documents, in form and substance reasonably satisfactory to Buyer, as may be required to give effect to this Agreement. (b) At the Closing, Buyer shall deliver to Seller the following: (i) the Closing Payment, by wire transfer of immediately available funds to an account designated in writing by Seller to Buyer no later than five (5) days prior to the Closing Date; (ii) the Assignment and Assumption Agreement duly executed by Buyer; (iii) a certificate of the Secretary or Assistant Secretary (or equivalent officer) of Buyer certifying as to (A directed by the Company in writing) and shall advise the resolutions Company via email at the end of each day on the board of directors of Buyer, duly adopted and in effect, which authorize notices of exercise are received or funds for the exercise of any Warrant are received of the amount so deposited to its account. Section execution 8. Cancellation and Destruction of Warrant Certificates. All Warrant Certificates surrendered for the purpose of exercise, delivery and performance transfer, split up, combination or exchange shall, if surrendered to the Company or to any of its agents, this Agreement and the transactions contemplated hereby; and (B) the names and signatures of the officers of Buyer authorized to sign this Agreement and the documents to be delivered hereunder; (iv) a Purchase Order from buyer to the Warrant Agent [*****] for cancellation or in canceled the same number and form for, or, if surrendered to the same price Warrant Agent, shall be canceled by it, and no Warrant Certificate shall be issued in lieu thereof except as expressly permitted by any of the provisions Purchase Order from Telus described in Section 1.05 (a) (i) of this Agreement. ARTICLE II Representations and warranties of Seller and [*****] Seller and [*****], jointly and severally represent and warrant to Buyer that the statements contained in this Article III are true and correct as of the date hereof and as of the Closing. For purposes of this Article III, “Seller’s knowledge” and “knowledge of Seller” shall mean the actual knowledge (after reasonable investigation) of _____, who is the Managing Director of Seller and authorized agent of [*****]. Section 2.01 Organization and Authority of Seller; Enforceability. Titan Crest is a limited liability company, duly formed, validly existing and in good standing under the laws of the State of Delaware. [*****] is a corporation, duly organized, validly existing and in good standing under the federal laws of Canada. Seller and [*****] each has the requisite power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby. The Company shall execution, deliver delivery to the Warrant Agent for cancellation and performance retirement, and the Warrant Agent shall so cancel and retire, any other Warrant Certificate purchased or acquired by Seller the Company otherwise than upon the exercise thereof. The Warrant Agent shall deliver all canceled Warrant Certificates to the Company, or shall, at the written request of the Company, destroy such canceled Warrant Certificates, and in such case shall deliver a certificate [*****] of destruction thereof to the Company, subject to any applicable law, rule or regulation requiring the Warrant Agent to retain such canceled certificates. Section 9. Certain Representations; Reservation and Availability of Shares of Common Stock or Cash. (a) This Agreement has and the documents to be delivered hereunder and the consummation of the transactions contemplated hereby have been duly authorized by all requisite company or corporate action on the part of Seller and [*****], as the case may be. This Agreement and the documents to be delivered hereunder have been duly executed and delivered by Seller the Company and [*****], and (assuming due authorization, execution and delivery hereof by Buyer) this Agreement and the Warrant Agent, documents to be delivered hereunder constitutes constitute a legal, valid and legally-binding obligation obligations of the Company Seller and [*****], enforceable against each in accordance with their Company respective terms. Section 2.02 No Conflicts; Consents. Other than as set forth on Section 3.02 of the Disclosure Schedules, the execution, delivery and performance by Seller and [*****] of this Agreement and the documents to be delivered hereunder, and the consummation of the transactions contemplated hereby, do not and will not: (a) violate or conflict with the certificate of incorporation, by-laws or other organizational documents of Seller or [*****]; (b) violate or conflict with any judgment, order, decree, statute, law, ordinance, rule or regulation applicable to Seller and [*****] or the Purchased Assets; (c) conflict with, or result in (with or without notice or lapse of time or both) any violation of, or default under, or give rise to a right of termination, acceleration or modification of any obligation or loss of any benefit under any contract or other instrument to which Seller or [*****] is a party or to which any of the Purchased Assets are subject; or (d) result in the creation or imposition of any Encumbrance on the Purchased Assets. No consent, approval, waiver or authorization is required to be obtained by Seller or [*****] from any person or entity (including any governmental authority) in connection with the execution, delivery and performance by Seller and [*****] of this Agreement and the consummation of the transactions contemplated hereby. Section 2.03 Title to Purchased Assets. Seller and [*****] own and have good title to the Purchased Assets, free and clear of Encumbrances, except for: (a) liens for taxes not yet due and payable or being contested in good faith by appropriate procedures; (b) mechanics’, carriers’, workmen’s, repairmen’s or other like liens arising or incurred in the ordinary course of business; and (c) liens arising under original purchase price conditional sales contracts and equipment leases with third parties entered into in the ordinary course of business. Prior to the execution of this Agreement, [*****] has transferred all of its right, title and interest to the Purchased Assets to Seller. Section 2.04 Intellectual Property. (a) “Intellectual Property” means any and all of the following in any jurisdiction throughout the world: (i) trademarks and service marks, including all applications and registrations and the goodwill connected with the use of and symbolized by the foregoing; (ii) copyrights, including all applications and registrations related to the foregoing; (iii) trade secrets and confidential know-how; (iv) patents and patent applications; (v) software, both source code and object code, relating to the Purchased Assets; (vi) designs, BOM, and other documents and handbooks reasonably necessary for the manufacture of products from the Purchased Assets; and (vii) other intellectual property and related proprietary rights, interests and protections (including all rights to sue and recover and retain damages, costs and attorneys’ fees for past, present and future infringement and any other rights relating to any of the foregoing). (b) Section 2.04 (b) of the Disclosure Schedules lists all Intellectual Property owned by Seller and related solely and exclusively to the Seller’s Business that is included in the Purchased Assets (“Purchased IP”). Seller and [*****] own or have adequate rights to use all the Purchased IP, free and clear of all Encumbrances. Seller is not bound by any outstanding judgment, injunction, order or decree restricting the use of the Purchased IP, or restricting the licensing thereof to any person or entity. With respect to the registered Intellectual Property listed on Section 2.04 (b) of the Disclosure Schedules, (i) all registrations for such Intellectual Property are subsisting and in full force and effect; and (ii) Seller has paid all maintenance fees and made all filings required to maintain Seller’s registrations thereof. For all registered Intellectual Property or Intellectual Property for which an application to register has been filed, Section 2.04 (b) of the Disclosure Schedules lists (A) the jurisdiction where the application or registration is located; (B) the application or registration number; and (C) the application or registration date. (c) To the knowledge of Seller and [*****], Seller’s current use and use by [*****] within the last five (5) years of the Purchased IP has not infringed and does not infringe, violate, dilute or misappropriate the Intellectual Property of any person or entity. There are no claims pending or threatened in writing by any person or entity with respect to the ownership, validity, enforceability, effectiveness or use of the Purchased IP. To the knowledge of Seller and [*****], no person or entity is infringing, misappropriating, diluting or otherwise violating any of the Purchased IP, and neither Seller nor any affiliate of Seller has within the last five (5) years made or asserted any claim, demand or notice against any person or entity alleging any such infringement, misappropriation, dilution or other violation. Section 2.05 Assigned Contracts. Section 2.05 of the Disclosure Schedules sets forth each material contract related to the Purchased Assets and, other than as indicated therein, each is included in the Purchased Assets and will be assigned to Buyer as part of the transactions contemplated by this Agreement (the “Assigned Contracts”). Each Assigned Contract is valid and

binding on Seller in accordance with its terms and is in full force and effect. None of Seller or, to Seller's knowledge, any other party thereto is in breach of or default under (or is alleged to be in breach of or default under) or has provided or received any notice of any intention to terminate, any Assigned Contract. No event or circumstance has occurred that, with or without notice or lapse of time or both, would constitute and an event of default under any Assigned Contract or result in a termination thereof or would cause or permit the acceleration or other changes of any right or obligation or the loss of benefit thereunder). Complete and correct copies of each Assigned Contract have been made available to Buyer. To the knowledge of Seller and [* * * *], there are no disputes pending or threatened under any Assigned Contract. Section 2. 06 Permits. Section 2. 06 of the Disclosure Schedules lists all permits, licenses, franchises, approvals, authorizations, registrations, certificates, variances and similar rights obtained from governmental authorities related to the Seller's Business that are included in the Purchased Assets (the " Transferred Permits "). The Transferred Permits are valid and in full force and effect. All fees and charges with respect to such Transferred Permits as of the date hereof have been paid in full. No event has occurred that, with or without notice or lapse of time or both, would reasonably be expected to result in the revocation, suspension, lapse or limitation of any of the Transferred Permits. Section 2. 07 Compliance with Laws. Seller and [* * * *] have been in material compliance, and each is now in material compliance, with all applicable international, federal, state and local laws and regulations applicable to the Seller's Business as conducted at and prior to the Closing relating to the ownership and use of the Purchased Assets. Section 2. 08 Legal Proceedings. There is no claim, action, suit, proceeding or governmental investigation (" Action ") of any nature pending or, to Seller's knowledge, threatened against or by Seller or [* * * *] (a) relating to or affecting the Purchased Assets; or (b) that challenges or seeks to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement. To the knowledge of Seller and [* * * *], no event has occurred or circumstances exist that may give rise to, or serve as a basis, for any such Action. Section 2. 09 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of Seller or [* * * *]. Section 2. 10 Full Disclosure. To the knowledge of Seller and [* * * *], no representation or warranty by Seller or [* * * *] in this Agreement and no statement contained in the Disclosure Schedules to this Agreement contains any untrue statement of a material fact, or omits to state a material fact necessary to make the statements contained herein, in light of the circumstances in which they are made, not misleading. Section 2. 11 Financial Information. The financial information provided by Seller to Buyer relating to the [* * * *] Assets in connection with the transactions contemplated by this Agreement (the " [* * * *] Assets Financial Information ") was prepared by Seller and was based on final versions of financial statements reviewed by Seller's independent accountants and other books and records of Seller kept in the ordinary course of its business. The [* * * *] Assets Financial Information is accurate and complete in all material respects. Section 2. 12 Sufficiency of Assets. Other than as set forth in Section 3. 13 of the Disclosure Schedules, the Purchased Assets constitute all of the [* * * *] Assets and represent all assets reasonably necessary for Buyer's production of radio frequency products derived from the [* * * *] Assets in a manner reasonably consistent with Seller's operation of the Seller's Business prior to the Closing. Section 2. 13 Accredited Investor. Seller represents that it is an Accredited Investor within the meaning of Section 501 (a) of Regulation D promulgated under Securities Act of 1933, as amended. Section 2. 14 No Other Representations and Warranties. Except for the representations and warranties contained in this Article III, neither Buyer nor any other person or entity has made or makes any other express or implied representation or warranty, either written or oral, on behalf of Buyer. ARTICLE III Representations and Warranties of Buyer Buyer represents and warrants to Seller that the statements contained in this Article III are true and correct as of the date hereof. For purposes of this Article III, " Buyer's knowledge " and " knowledge of Buyer " shall mean the actual knowledge (after reasonable investigation) of Fawad Maqbool, Buyer's Chief Executive Officer. Section 3. 01 Organization and Authority of Buyer; Enforceability. Buyer is a corporation duly organized, validly existing and in good standing under the laws of the state of Nevada. Buyer has full corporate power and authority to enter into this Agreement and the documents to be delivered hereunder, to carry out its obligations hereunder and to consummate the transactions contemplated hereby. The execution, delivery and performance by Buyer of this Agreement and the documents to be delivered hereunder and the consummation of the transactions contemplated hereby have been duly authorized - by all requisite corporate action on the part of Buyer. This Agreement and the documents to be delivered hereunder have been duly executed and issued delivered by Buyer the Company and, and (assuming due authentication thereof authorization, execution and delivery by Seller) this Agreement the Warrant Agent pursuant hereto and payment therefor by the documents to be delivered hereunder Holders as provided in the Registration Statement, constitute legal, valid and legally-binding obligations of Buyer the Company enforceable against Buyer the Company in accordance with their respective terms. Section 3. 02 No Conflicts; Consents. The execution, delivery and performance by Buyer of this Agreement and the documents to be delivered hereunder, and the consummation of the transactions contemplated hereby, do not and will not: (a) violate or conflict with the certificate of incorporation, by-laws or other organizational documents of Buyer; or (b) violate or conflict with any judgment, order, decree, statute, law, ordinance, rule or regulation applicable to Buyer. No consent, approval, waiver or authorization is required to be obtained by Buyer from any person or entity (including any governmental authority) in connection with the execution, delivery and performance by Buyer of this Agreement and the consummation of the transactions contemplated hereby. Section 3. 03 Legal Proceedings. There is no Action of any nature pending or, to Buyer's knowledge, threatened against or by Buyer that challenges or seeks to prevent, enjoin or otherwise delay the transactions contemplated by this Agreement. To Buyer's knowledge, no event has occurred or circumstances exist that may give rise to, or serve as a basis for, any such Action. Section 3. 04 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of Buyer. Section 3. 05 Solvency; Sufficiency of Funds. Immediately after giving effect to the transactions contemplated hereby, Buyer shall be solvent and shall: (a) be able to pay its debts as they become due; (b) own property that has a fair saleable value greater than the amounts required to pay its debts (including a reasonable estimate of the amount of all liabilities); and (c) have adequate capital to carry on its business. No transfer of property is being made and no obligation is being incurred in connection with the transactions contemplated hereby with the intent to hinder, delay or defraud either present or future creditors of Buyer or Seller. In connection with the transactions contemplated hereby, Buyer has not incurred, nor plans to incur, debts beyond its ability to pay as they become absolute and matured. Section 3. 06 Full Disclosure. To the knowledge of Buyer, no representation or warranty by Buyer in this Agreement and no statement contained in the Agreement contains any untrue statement of a material fact, or omits to state a material fact necessary to make the statements contained herein, in light of the circumstances in which they are made, not misleading. Section 3. 07 No Other Representations and Warranties. Except for the representations and warranties contained in this Article III, neither Buyer nor any other person or entity has made or makes any other express or implied representation or warranty, either written or oral, on behalf of Buyer. ARTICLE IV Section 4. 01 Public Announcements. Unless otherwise required by applicable law, rule or regulation, none of the Parties shall make any public announcements regarding this Agreement or the transactions contemplated hereby without the prior written consent of the other Parties (which consent shall not be unreasonably withheld). Notwithstanding the foregoing, no Party will make any public announcement regarding this Agreement or the transactions contemplated hereby without the prior written consent of Telus. Section 4. 02 Non- Competition. Each of Seller and [* * * *], jointly and severally, covenants and agrees that during the period commencing on the Closing Date and expiring ten (10) years from the Closing Date, neither shall, anywhere that Seller or [* * * *], prior to the Closing Date, operated or had active plans to expand to after the Closing Date (the " Restricted Territory "), directly or indirectly, own any interest in, manage, control, participate in (whether as an owner, operator, manager, consultant, officer, director, manager, member, employee, investor, agent, representative or otherwise), consult with, render services for or otherwise engage in any business or entity that competes with the Purchased Assets as conducted on or within five (5) years before the Closing Date, or contemplated to be conducted by the Seller or [* * * *] (the " Restricted Business "). (a) If, at the time of enforcement of any of the provisions of this Section 4. 02, a court determines that the restrictions stated herein are unreasonable under the circumstances then existing, then the Parties agree that the maximum period, scope or geographical area reasonable under the circumstances shall be substituted for the stated period, scope or area. The Parties further agree that such court shall be allowed to revise the restrictions contained herein to cover the maximum period, scope or geographical area permitted by Law. (b) Seller and [* * * *] each acknowledge and agree that money damages would not be an adequate remedy for any breach or threatened breach of the provisions of this Section 5. 02 and that, in such event, Buyer or any of its successors or assigns, shall, in addition to any other rights and remedies existing in their favor, be entitled to specific performance, injunctive and / or other relief in order to enforce or prevent any violations of the provisions of this Section 4. 02. (c) Seller and [* * * *] each acknowledge and agree that (i) they will each receive substantial benefits hereof by virtue of the transactions contemplated by this Agreement, (ii) certain of the goodwill of Seller also inures in Buyer, and all such goodwill is being transferred to Buyer in connection with the transactions contemplated by this Agreement and (iii) each agrees that the restrictions contained in this Section 5. 02 are reasonable and are no greater than necessary to protect the goodwill being received by Buyer in connection with the transactions contemplated by this Agreement. Section 4. 03 Discontinuation of Seller's Activity Relating to the Purchased Assets. Immediately following the Closing, Seller and [* * * *] shall each take all actions necessary to cause Seller and [* * * *] to discontinue and cease, all of its activity, globally of any nature, relating to the Purchased Assets and future development activities that would directly and materially compete with the Purchased Assets acquired by the Buyer in this Agreement other than purchase orders issued by Buyer to Seller or [* * * *] or as otherwise agreed by Buyer. Seller may continue Seller's Business in all aspects other than activities relating to the Purchased Assets and future development activities that would directly and materially

compete with the Purchased Assets. In furtherance of the foregoing and in recognition of the significant value and importance of the confidential list of customers being purchased by Buyer in this transaction, Seller and [* * * *] each agree that, neither shall enter into any business or transactions with any of the customers included in the Purchased Assets or take any action that may, directly or indirectly, be reasonably likely to interfere with Buyer's operation of its business with the customers for the products marketed by Buyer utilizing the Purchased Assets. Notwithstanding anything else to the contrary in this Agreement, Buyer shall issue a Purchase Order to [* * * *] for the same number of [* * * *] and for the same price as the initial purchase order from Telus described in Section 1.05 (a) (i) 1 of this Agreement. Section 4.04 Bulk Sales Laws. The parties hereby waive compliance with the provisions of any bulk sales, bulk transfer or similar laws of any jurisdiction that may otherwise be applicable with respect to the sale of any or all of the Purchased Assets to Buyer; provided, however, that Seller agrees (a) to pay and discharge when due or to contest or litigate all claims of creditors which are asserted against Buyer or the Purchased Assets by reason of such noncompliance; and (b) to indemnify, defend and hold harmless Buyer from and against any and all such claims; and (c) to take promptly all necessary action to remove any lien which is placed on the Purchased Assets by reason of such noncompliance. Section 4.05 Transfer Taxes. All transfer, documentary, sales, use, stamp, registration, value added and other such taxes and fees (including any penalties and interest) incurred in connection with this Agreement and the documents to be delivered hereunder shall be borne and paid by Seller when due. Seller shall, at its own expense, timely file any tax return or other document with respect to such taxes or fees (and Buyer shall cooperate with respect thereto as necessary). Section 4.06 Further Assurances; Assistance of Audit. Following the Closing, each case except of the parties hereto shall execute and deliver such additional documents, instruments, conveyances and assurances and take such further actions as enforceability may be reasonably required to carry out the provisions hereof and give effect to the transactions contemplated by this Agreement and the documents to be delivered hereunder. In addition, if required under the regulations of the U. S. Securities and Exchange Commission (" SEC "), Buyer is required to prepare an audit of the Seller's Business relating to the Purchased Assets for the Seller's most recent fiscal year, Seller will assist Buyer in completing such audit in order to comply with SEC regulations. ARTICLE V Indemnification Section 5.01 Survival. All representations and warranties contained herein and all related rights to indemnification shall survive twenty- four (24) months following the Closing, except for the core representations and warranties contained in Section 3.01 (Seller's Organization and Authority), Section 3.03 (Seller's Title to Purchased Assets), and Section 4.01 (Buyer's Organization and Authority) which shall survive until the seventh anniversary of Closing. The covenants and agreements contained in this Agreement shall survive indefinitely, other than the covenants and agreements in Section 5.02 (Non- Competition) and Section 5.03 (Discontinuation of Seller's Radio Business) which shall survive for the periods provided therein. Notwithstanding the foregoing, any claims asserted in good faith with reasonable specificity (to the extent known at such time) and in writing by notice from the non- breaching party to the breaching party prior to the expiration date of the applicable survival period shall not thereafter be barred by the expiration of such survival period and such claims shall survive until finally resolved. Section 5.02 Indemnification By Seller. Seller and [* * * *], jointly and severally, shall defend, indemnify and hold harmless Buyer, its affiliates and their respective stockholders, members, managers, directors, officers, employees and agents from and against all claims, judgments, damages, liabilities, settlements, losses, costs and expenses, including reasonable attorneys' fees and disbursements (collectively, " Losses "), arising from or relating to: (a) any inaccuracy in or breach of any of the representations or warranties of Seller contained in this Agreement or any document to be delivered hereunder; (b) any breach or non- fulfillment of any covenant, agreement or obligation to be performed by Seller pursuant to this Agreement or any document to be delivered hereunder; or (c) any Excluded Liability. Section 5.03 Indemnification By Buyer. Buyer shall defend, indemnify and hold harmless each of Seller and [* * * *], their affiliates and their respective stockholders, members, managers, directors, officers, employees and agents from and against all Losses, arising from or relating to: (a) any inaccuracy in or breach of any of the representations or warranties of Buyer contained in this Agreement or any document to be delivered hereunder; (b) any breach or non- fulfillment of any covenant, agreement or obligation to be performed by Buyer pursuant to this Agreement or any document to be delivered hereunder; or (c) any Assumed Liability. Section 5.04 Indemnification Procedures. Whenever any claim shall arise for indemnification hereunder, the party entitled to indemnification (the " Indemnified Party ") shall promptly provide written notice of such claim to the other party (the " Indemnifying Party "). In connection with any claim giving rise to indemnity hereunder resulting from or arising out of any Action by a person or entity who is not a party to this Agreement, the Indemnifying Party, at its sole cost and expense and upon written notice to the Indemnified Party, may assume the defense of any such Action with counsel reasonably satisfactory to the Indemnified Party. The Indemnified Party shall be entitled to participate in the defense of any such Action, with its counsel and at its own cost and expense. If the Indemnifying Party does not assume the defense of any such Action, the Indemnified Party may, but shall not be obligated to, defend against such Action in such manner as it may deem appropriate, including, but not limited to, settling such Action, after giving notice of it to the Indemnifying Party, on such terms as the Indemnified Party may deem appropriate and no action taken by bankruptcy, insolvency, reorganization, moratorium the Indemnified Party in accordance with such defense and settlement shall relieve the Indemnifying Party of its indemnification obligations herein provided with respect to any damages resulting therefrom. The Indemnifying Party shall not settle any Action without the Indemnified Party's prior written consent (which consent shall not be unreasonably withheld or delayed). Section 5.05 Certain Limitations. (a) The aggregate amount for which either Seller or Buyer shall be liable pursuant to Section 5.02 or Section 5.03, as applicable, and any other similar laws relating dispute regarding this Agreement or the transactions contemplated hereby, shall not exceed the amount of Purchase Price actually received by Seller. (b) No Party will be entitled to indemnification under Section 5.02 or Section 5.03, as applicable, or for affecting creditors any indemnifiable Losses under this Article VI until the indemnifiable Losses have an aggregated cumulative amount which equals or exceeds \$ 100,000, after which time such indemnifying Party shall be liable in full for the accumulated indemnifiable Losses subject to the provisions of this Article VI. (c) In no event shall any Party be liable to any other Party for any punitive, special, exemplary, or speculative damages, related to the breach, or alleged breach, of this Agreement or in connection with any transaction contemplated hereby, except (i) if paid or payable to a third party, or (ii) in connection with any fraud on the part of Seller in connection with this Agreement. Notwithstanding the foregoing, each Party shall have the right to recover all other indirect damages including, without limitation, lost profits, loss of future revenue or income, diminution in value, loss of business reputation, or incidental damages except the Seller and [* * * *] liability for the lost profit, income or revenue shall not exceed the Purchase Price. (d) Each Party entitled to indemnification hereunder (each, an " Indemnified Party ") shall take, and cause its affiliates to take, all reasonable steps to mitigate any Loss upon becoming aware of any event or circumstance that would be reasonably expected to, or does, give rise thereto, including incurring costs only to the minimum extent necessary to remedy the breach that gives rise to such Loss but not exceeding Ten Thousand U. S. Dollars (US \$ 10,000); provided, however, that (i) no Indemnified Party shall: (1) be required to take any action to mitigate any Losses incurred or suffered to the extent based upon, arising out of, with respect to or by reason of fraud prior to the Closing; (2) be required to bring a legal proceeding against any person; or (3) have any obligation to take any actions that unreasonably interfere with or impact the business of such Indemnified Party; and (ii) the failure of an Indemnified Party to use such efforts to mitigate shall not constitute a defense to the Indemnifying Party's obligations to indemnify the Indemnified Party pursuant to this Agreement. (e) Provided, however that none of the limitations set forth in this Section 5.05 shall apply with respect to any Losses arising from, in connection with or related to, a breach that constitutes fraud or intentional misrepresentation. Section 5.06 Tax Treatment of Indemnification Payments. All indemnification payments made by Seller under this Agreement shall be treated by the parties as an adjustment to the Purchase Price for tax purposes, unless otherwise required by law. Section 5.07 Cumulative Remedies. The rights generally and remedies provided in this Article V are cumulative and are in addition to and not in substitution or for any other rights and remedies available by general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law). (b) As of the date hereof, the authorized capital stock of the Company consists of (i) five hundred million (500,000,000) shares of common stock, of which approximately 9,689,613 shares of Common Stock are issued and outstanding as of February 8, 2024, and 1,366,442 shares of Common Stock are reserved for or issuance upon exercise of the Warrants, and (ii) one million (1,000,000) shares of preferred stock, par value \$ 0.001 per share, of which no shares are issued and outstanding. Except as disclosed in equity the Registration Statement, there are no other outstanding obligations, warrants, options or other rights to subscribe for or otherwise or purchase from the Company any class of capital stock of the Company. ARTICLE VI Miscellaneous (e) The Company covenants and agrees that it will cause to be reserved and kept available out of its authorized and unissued shares of Common Stock or its authorized and issued shares of Common Stock held in its treasury, free from preemptive rights, the number of shares of Common Stock that will be sufficient to permit the exercise in full of all outstanding Warrants. (d) The Warrant Agent will create a special account for the issuance of Common Stock upon the exercise of Warrants. (e) The Company further covenants and agrees that it will pay when due and payable any and all federal and state transfer taxes and charges which may be payable in respect of the original issuance or delivery of the Warrant Certificates or certificates evidencing Common Stock upon exercise of the Warrants. The Company shall not, however, be required to pay any tax or governmental charge which may be payable in respect of any transfer involved in the transfer or delivery of Warrant Certificates or the issuance or delivery of certificates for Common Stock in a name other than that of the Holder of the Warrant Certificate evidencing Warrants surrendered for exercise or to issue or deliver any certificate for shares of Common Stock upon the exercise of any Warrants until any such tax or governmental charge shall have been paid (any such tax or governmental charge being payable by the Holder of such Warrant Certificate at the time of surrender) or until it has been established to the Company's reasonable satisfaction that no such tax or governmental charge is due. Section 10.6. 01 Expenses Common Stock Record Date. Each Person All costs and expenses incurred in connection with this Agreement and whose name any

certificate for shares of Common Stock is issued (or to whose broker's account is credited shares of Common Stock through the **transactions contemplated** DWAC system) upon the exercise of Warrants shall for all purposes be deemed to have become the holder of record for the Common Stock represented thereby **herby** on, and such certificate shall be dated, **paid by the Party incurring** date on which submission of the Notice of Exercise was made, provided that the Warrant Certificate evidencing such **costs** Warrant is duly surrendered (but only if required herein) and **expenses, Section 6.02** payment of the Exercise Price (and any applicable transfer taxes) is received on or prior to the Warrant Share Delivery Date; provided, however, that if the date of submission of the Notice **Notices** of Exercise is a date upon which **All notices, requests, consents, claims, demands, waivers and the other communications hereunder shall be in writing** and Common Stock transfer books of the Company are closed, such Person shall be deemed to have **been given (a) when delivered** become the record holder of such shares on, and such certificate shall be dated, the next succeeding day on which the Common Stock transfer books of the Company are open. Section 11. Adjustment of Exercise Price, Number of Shares of Common Stock or Number of the Company Warrants. The Exercise Price, the number of shares covered by each Warrant and **hand** (the number of Warrants outstanding are subject to adjustment from time to time as provided in Section 3 of the Warrant Certificate. In the event that at any time, as a result of an adjustment made pursuant to Section 3 of the Warrant Certificate, the Holder of any Warrant thereafter exercised shall become entitled to receive any shares of capital stock of the Company other than shares of Common Stock, thereafter the number of such other shares so receivable upon exercise of any Warrant shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with **written confirmation** respect to the shares contained in Section 3 of **receipt** the Warrant Certificate and the provisions of Sections 7, 11 and 12 of this Agreement with respect to the shares of Common Stock shall apply on like terms to any such other shares. All Warrants originally issued by the Company subsequent to any adjustment made to the Exercise Price pursuant to the Warrant Certificate shall evidence the right to purchase, at the adjusted Exercise Price, the number of shares of Common Stock purchasable from time to time hereunder upon exercise of the Warrants, all subject to further adjustment as provided herein. Section 12. Certification of Adjusted Exercise Price or Number of Shares of Common Stock. Whenever the Exercise Price or the number of shares of Common Stock issuable upon the exercise of each Warrant is adjusted as provided in Section 11 or 13, the Company shall (a) promptly prepare a certificate setting forth the Exercise Price of each Warrant as so adjusted, and a brief statement of the facts accounting for such adjustment, (b) **when** promptly file with the Warrant Agent and with each transfer agent for the Common Stock a copy of such certificate and (c) instruct the Warrant Agent to send a brief summary thereof to each Holder of a Warrant Certificate. Section 13. Fractional Shares of Common Stock. (a) The Company shall not issue fractions of Warrants or distribute Warrant Certificates which evidence fractional Warrants. Whenever any fractional Warrant would otherwise be required to be issued or distributed, the actual issuance or distribution shall reflect a rounding of such fraction to the nearest whole Warrant (rounded down). (b) The Company shall not issue fractions of shares of Common Stock upon exercise of Warrants or distribute stock certificates which evidence fractional shares of Common Stock. Whenever any fraction of a share of Common Stock would otherwise be required to be issued or distributed, the actual issuance or distribution in respect thereof shall be made in accordance with Section 2 (d) (v) of the Warrant Certificate. Section 14. Conditions of the Warrant Agent's Obligations. The Warrant Agent accepts its obligations herein set forth upon the terms and conditions hereof, including the following to all of which the Company agrees and to all of which the rights hereunder of the Holders from time to time of the Warrant Certificates shall be subject: (a) Compensation and Indemnification. The Company agrees promptly to pay the Warrant Agent the compensation detailed on Exhibit 4 hereto for all services rendered by the Warrant Agent and to reimburse the Warrant Agent for reasonable out-of-pocket expenses (including reasonable counsel fees) incurred without gross negligence or willful misconduct finally adjudicated to have been directly caused by the Warrant Agent in connection with the services rendered hereunder by the Warrant Agent. The Company also agrees to indemnify the Warrant Agent for, and to hold it harmless against, any loss, liability or expense incurred without gross negligence, or willful misconduct on the part of the Warrant Agent, finally adjudicated to have been directly caused by Warrant Agent hereunder, including the reasonable costs and expenses of defending against any claim of such liability. The Warrant Agent shall be under no obligation to institute or defend any action, suit, or legal proceeding in connection herewith or to take any other action likely to involve the Warrant Agent in expense, unless first indemnified to the Warrant Agent's satisfaction. The indemnities provided by this paragraph shall survive the resignation or discharge of the Warrant Agent or the termination of this Agreement. Anything in this Agreement to the contrary notwithstanding, in no event shall the Warrant Agent be liable under or in connection with the Agreement for indirect, special, incidental, punitive or consequential losses or damages of any kind whatsoever, including but not limited to lost profits, whether or not foreseeable, even if the Warrant Agent has been advised of the possibility thereof and regardless of the form of action in which such damages are sought, and the Warrant Agent's aggregate liability to the Company, or any of the Company's representatives or agents, under this Section 14 (a) or under any other term or provision of this Agreement, whether in contract, tort, or otherwise, is expressly limited to, and shall not exceed in any circumstances, one (1) year's fees received by the **addressee** Warrant Agent as fees and charges under this Agreement, but not including reimbursable expenses previously reimbursed to the Warrant Agent by the Company hereunder. (b) Agent for the Company. In acting under this Warrant Agreement and in connection with the Warrant Certificates, the Warrant Agent is acting solely as agent of the Company and does not assume any obligations or relationship of agency or trust for or with any of the Holders of Warrant Certificates or beneficial owners of Warrants. (c) Counsel. The Warrant Agent may consult with counsel satisfactory to it, which may include counsel for the Company, and the written advice of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in accordance with the advice of such counsel. (d) Documents. The Warrant Agent shall be protected and shall incur no liability for or in respect of any action taken or omitted by it in reliance upon any Warrant Certificate, notice, direction, consent, certificate, affidavit, statement or other paper or document reasonably believed by it to be genuine and to have been presented or signed by the proper parties. (e) Certain Transactions. The Warrant Agent, and its officers, directors and employees, may become the owner of, or acquire any interest in, Warrants, with the same rights that it or they would have if it were not the Warrant Agent hereunder, and, to the extent permitted by applicable law, it or they may engage or be interested in any financial or other transaction with the Company and may act on, or as depository, trustee or agent for, any committee or body of Holders of Warrant Securities or other obligations of the Company as freely as if it were not the Warrant Agent hereunder. Nothing in this Warrant Agreement shall be deemed to prevent the Warrant Agent from acting as trustee under any indenture to which the Company is a party. (f) No Liability for Interest. Unless otherwise agreed with the Company, the Warrant Agent shall have no liability for interest on any monies at any time received by it pursuant to any of the provisions of this Agreement or of the Warrant Certificates. (g) No Liability for Invalidity. The Warrant Agent shall have no liability with respect to any invalidity of this Agreement or the Warrant Certificates (except as to the Warrant Agent's countersignature thereon). (h) No Responsibility for Representations. The Warrant Agent shall not be responsible for any of the recitals or representations herein or in the Warrant Certificate (except as to the Warrant Agent's countersignature thereon), all of which are made solely by the Company. (i) No Implied Obligations. The Warrant Agent shall be obligated to perform only such duties as are herein and in the Warrant Certificates specifically set **sent** forth and no implied duties or obligations shall be read into this Agreement or the Warrant Certificates against the Warrant Agent. The Warrant Agent shall not be under any obligation to take any action hereunder which may tend to involve it in any expense or liability, the payment of which within a reasonable time is not, in its reasonable opinion, assured to it. The Warrant Agent shall not be accountable or under any duty or responsibility for the use by the Company of any of the Warrant Certificates authenticated by the Warrant Agent and delivered by it to the Company pursuant to this Agreement or for the application by the Company of the proceeds of the Warrant Certificate. The Warrant Agent shall have no duty or responsibility in case of any default by the Company in the performance of its covenants or agreements contained herein or in the Warrant Certificates or in the case of the receipt of any written demand from a Holder of a Warrant Certificate with respect to such default, including, without limiting the generality of the foregoing, any duty or responsibility to initiate or attempt to initiate any proceedings at law. Section 15. Purchase or Consolidation or Change of Name of Warrant Agent. Any corporation into which the Warrant Agent or any successor Warrant Agent may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which the Warrant Agent or any successor Warrant Agent shall be party, or any corporation succeeding to the corporate trust business of the Warrant Agent or any successor Warrant Agent, shall be the successor to the Warrant Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto, provided that such corporation would be eligible for appointment as a successor Warrant Agent under the provisions of Section 17. In case at the time such successor Warrant Agent shall succeed to the agency created by this Agreement any of the Warrant Certificates shall have been countersigned but not delivered, any such successor Warrant Agent may adopt the countersignature of the predecessor Warrant Agent and deliver such Warrant Certificates so countersigned; and in case at that time any of the Warrant Certificates shall not have been countersigned, any successor Warrant Agent may countersign such Warrant Certificates either in the name of the predecessor Warrant Agent or in the name of the successor Warrant Agent; and in all such cases such Warrant Certificates shall have the full force provided in the Warrant Certificates and in this Agreement. In case at any time the name of the Warrant Agent shall be changed and at such time any of the Warrant Certificates shall have been countersigned but not delivered, the Warrant Agent may adopt the countersignature under its prior name and deliver such Warrant Certificates so countersigned; and in case at that time any of the Warrant Certificates shall not have been countersigned, the Warrant Agent may countersign such Warrant Certificates either in its prior name or in its changed name; and in all such cases such Warrant Certificates shall have the full force provided in the Warrant Certificates and in this Agreement. Section 16. Duties of Warrant Agent. The Warrant Agent undertakes the duties and obligations imposed by this Agreement upon the following terms and conditions, by all of which the Company, by its acceptance hereof, shall be bound: (a) The Warrant Agent may consult with legal counsel reasonably acceptable to the Company (who may be legal counsel for the Company), and the opinion of such counsel shall be full and complete authorization and protection to the Warrant Agent as to any action taken or omitted by it in good faith and in accordance with such opinion. (b) Whenever in the performance of its duties under this Agreement the Warrant Agent shall deem it necessary or desirable that any fact or matter be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect

thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a **nationally** certificate signed by the Chief Executive Officer, Chief Financial Officer or Vice President of the Company; and such certificate shall be full authentication to the Warrant Agent for any action taken or suffered in good faith by it under the provisions of this Agreement in reliance upon such certificate. (e) Subject to the limitation set forth in Section 14, the Warrant Agent shall be liable hereunder only for its own gross negligence or willful misconduct, or for a breach by it of this Agreement. (d) The Warrant Agent shall not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the Warrant Certificate (except its countersignature thereof) by the Company or be required to verify the same, but all such statements and recitals are and shall be deemed to have been made by the Company only. (e) The Warrant Agent shall not be under any responsibility in respect of the validity of this Agreement or the execution and delivery hereof (except the due execution hereof by the Warrant Agent) or in respect of the validity or execution of any Warrant Certificate (except its countersignature thereof); nor shall it be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Warrant Certificate; nor shall it be responsible for the adjustment of the Exercise Price or the making of any change in the number of shares of Common Stock required under the provisions of Section 11 or 13 or responsible for the manner, method or amount of any such change or the ascertaining of the existence of facts that would require any such adjustment or change (except with respect to the exercise of Warrants evidenced by the Warrant Certificates after actual notice of any adjustment of the Exercise Price); nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock to be issued pursuant to this Agreement or any Warrant Certificate or as to whether any shares of Common Stock will, when issued, be duly authorized, validly issued, fully paid and nonassessable. (f) Each party hereto agrees that it will perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required by the other party hereto for the carrying out or performing by any party of the provisions of this Agreement. (g) The Warrant Agent is hereby authorized to accept instructions with respect to the performance of its duties hereunder from the Chief Executive Officer, Chief Financial Officer or Vice President of the Company, and to apply to such officers for advice or instructions in connection with its duties, and it shall not be liable and shall be indemnified and held harmless for any action taken or suffered to be taken by it in good faith in accordance with instructions of any such officer, provided Warrant Agent carries out such instructions without gross negligence or willful misconduct. (h) The Warrant Agent and any shareholder, director, officer or employee of the Warrant Agent may buy, sell or deal in any of the Warrants or other securities of the Company or become pecuniarily interested in any transaction in which the Company may be interested, or contract with or lend money to the Company or otherwise act as fully and freely as though it were not Warrant Agent under this Agreement. Nothing herein shall preclude the Warrant Agent from acting in any other capacity for the Company or for any other legal entity. (i) The Warrant Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorney or agents, and the Warrant Agent shall not be answerable or accountable for any act, default, neglect or misconduct of any such attorney or agents or for any loss to the Company resulting from any such act, default, neglect or misconduct, provided reasonable care was exercised in the selection and continued employment thereof. Section 17. Change of Warrant Agent. The Warrant Agent may resign and be discharged from its duties under this Agreement upon 30 days' notice in writing sent to the Company and to each transfer agent of the Common Stock, and to the Holders of the Warrant Certificates. The Company may remove the Warrant Agent or any successor Warrant Agent upon 30 days' notice in writing, sent to the Warrant Agent or successor Warrant Agent, as the case may be, and to each transfer agent of the Common Stock, and to the Holders of the Warrant Certificates. If the Warrant Agent shall resign or be removed or shall otherwise become incapable of acting, the Company shall appoint a successor to the Warrant Agent. If the Company shall fail to make such appointment within a period of 30 days after such removal or after it has been notified in writing of such resignation or incapacity by the resigning or incapacitated Warrant Agent or by the Holder of a Warrant Certificate (who shall, with such notice, submit his Warrant Certificate for inspection by the Company), then the Holder of any Warrant Certificate may apply to any court of competent jurisdiction for the appointment of a new Warrant Agent, provided that, for purposes of this Agreement, the Company shall be deemed to be the Warrant Agent until a new warrant agent is appointed. Any successor Warrant Agent, whether appointed by the Company or by such a court, shall be a corporation organized and doing business under the laws of the United States or of a state thereof, in good standing, which is authorized under such laws to exercise corporate trust powers and is subject to supervision or examination by federal or state authority and which has at the time of its appointment as Warrant Agent a combined capital and surplus of at least \$ 50,000,000. After appointment, the successor Warrant Agent shall be vested with the same powers, rights, duties and responsibilities as if it had been originally named as Warrant Agent without further act or deed; but the predecessor Warrant Agent shall deliver and transfer to the successor Warrant Agent any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for the purpose. Not later than the effective date of any such appointment, the Company shall file notice thereof in writing with the predecessor Warrant Agent and each transfer agent of the Common Stock, and mail a notice thereof in writing to the Holders of the Warrant Certificates. However, failure to give any notice provided for in this Section 17, or any defect therein, shall not affect the legality or validity of the resignation or removal of the Warrant Agent or the appointment of the successor Warrant Agent, as the case may be. Section 18. Issuance of New Warrant Certificates. Notwithstanding any of the provisions of this Agreement or of the Warrants to the contrary, the Company may, at its option, issue new Warrant Certificates evidencing Warrants in such form as may be approved by its Board of Directors to reflect any adjustment or change in the Exercise Price per share and the number or kind or class of shares of stock or other securities or property purchasable under the several Warrant Certificates made in accordance with the provisions of this Agreement. Section 19. Notices. Notices or demands authorized by this Agreement to be given or made (i) by the Warrant Agent or by the Holder of any Warrant Certificate to or on the Company, (ii) subject to the provisions of Section 17, by the Company or by the Holder of any Warrant Certificate to or on the Warrant Agent or (iii) by the Company or the Warrant Agent to the Holder of any Warrant Certificate shall be deemed given (a) on the date delivered, if delivered personally, (b) on the first Business Day following the deposit thereof with Federal Express or another recognized overnight courier, **(receipt requested); (c) on the date sent by e-mail (with confirmation of transmission) if sent during normal business hours of the recipient by Federal Express or another recognized overnight courier, and (e) on the fourth next Business Day following day if sent after normal business hours of the mailing thereof with postage prepaid, recipient; or (d) on the day received or rejected if mailed by certified or registered or certified mail (return receipt requested), postage prepaid, and (d) the time of transmission, if such Such notice or communication communications must be sent** is delivered via facsimile or email attachment at or prior to 5:30 p. m. (New York City time) on a Business Day and (e) the **respective** next Business Day after the date of transmission, if such notice or communication is delivered via facsimile or email attachment on a day that is not a Business Day or later than 5:30 p. m. (New York City time) on any Business Day, in each case to the parties at the following addresses (or at such other address for a party as shall be specified by like in a notice given in accordance with this Section 6. 02): (a) If to the Company, to Seller or [* * * *] : Johnson - Titan Crest LLC E. Lookerman Street, Suite 311 Dover, Delaware 19901 Attn: **Email: _____ If to Buyer: AmpliTech Group, Inc. Plant Avenue Bohemia, Hauppauge, NY 11788 Attn 11716 E-mail: _____ Email fmaqbool@amplitechinc.com Attention: Fawad Maqbool, President and Chief Executive Officer Copy to: Sichenzia Ross - Section 6. 03 Headings. The headings in this Agreement are for Ference-reference Carmel LLP Avenue of only and shall not affect the interpretation of this Agreement Americas-New York, New York 10036 e-mail: gsichenzia@srfc. Section 6 law Attention: Gregory Sichenzia, Esq. (b) 04 Severability. If to the Warrant Agent, to VStock Transfer, LLC Lafayette Place Woodmere, New York 11598 For any **term** notice delivered by email to be deemed given or made **provision of this Agreement is invalid, illegal or unenforceable in any jurisdiction**, such notice must be followed by notice sent by overnight courier service **invalidity, illegality or unenforceability shall not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction. Section 6. 05 Entire Agreement. This Agreement and the documents to be delivered on hereunder constitute the next business day following sole and entire agreement of the parties to this Agreement with respect to the subject matter contained herein, and supersede all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter email, unless the recipient of such email has acknowledged via return email receipt of such email. In (e) If to the Holder event of any **inconsistency between Warrant Certificate to the statements in address of such Holder as shown on the body registry books of this Agreement and the documents Company. Any notice required to be delivered by hereunder, the Exhibits and Disclosure Schedules (Company to the Holder of any Warrant may be given by the Warrant Agent on behalf of the Company. Notwithstanding any other provision than an exception expressly set forth as such in the Disclosure Schedules), the statements in the body of this Agreement, where will control. Section 6. 06 Successors and Assigns. this This Agreement provides for notice of any event to a Holder of any Warrant, such notice shall be **binding upon** sufficiently given if given to the Depository (or its designee) pursuant to the procedures of the Depository or its designee. Section 20. Supplements and Amendments. (a) The Company and the Warrant Agent may from time to time supplement or amend - **and shall inure** this Agreement without the approval of any Holders of Global Warrants in order to add to the covenants and agreements of the Company for the benefit of the **parties** Holders of the Global Warrants or to surrender any rights or power reserved to or conferred upon the Company in this Agreement, provided that such addition or surrender shall not adversely affect the interests of the Holders of the Global Warrants or Warrant Certificates in any material respect. (b) In addition to the foregoing, with the consent of Holders of Warrants entitled, upon exercise thereof - **hereto** - to receive not less than a majority of the shares of Common Stock issuable thereunder, the Company and the Warrant Agent may modify this Agreement for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Warrant Agreement or modifying in any manner the rights of the Holders of the Global Warrants; provided, however, that no modification of the terms (including but not limited to the adjustments described in Section 11) upon which the Warrants are exercisable or the rights of Holders of Warrants to receive liquidated damages or other payments in cash from the Company or reducing the percentage required for consent to modification of this Agreement may be made without the consent of the Holder of each outstanding Warrant Certificate affected thereby; provided further,******

however, that no amendment hereunder shall affect any terms of any Warrant Certificate issued in a Warrant Exchange. As a condition precedent to the Warrant Agent's execution of any amendment, the Company shall deliver to the Warrant Agent a certificate from a duly authorized officer of the Company that states that the proposed amendment complies with the terms of this Section 20. Section 21. Successors. All covenants and provisions of this Agreement by or for the benefit of the Company or the Warrant Agent shall bind and inure to the benefit of their respective successors and permitted assigns. Neither party may assign its rights or obligations hereunder without the prior written consent of the other party, which consent shall not be unreasonably withheld or delayed. No assignment shall relieve the assigning party of any of its obligations hereunder. Section 22-6. Benefits of 07 No Third-Party Beneficiaries. Except as provided in Article VI, this Agreement is for the sole benefit of the parties hereto and their respective successors and permitted assigns and Nothing nothing herein, express or implied, is intended to or shall confer upon any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement. Section 6. 08 Amendment and Modification. This Agreement may only be amended, modified or supplemented by an agreement in writing signed by each party hereto. Section 6. 09 Waiver. No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any right, remedy, power or privilege arising from this Agreement shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. Section 6. 10 Governing Law, Dispute Resolution, Venue and Attorneys' Fees. (a) Governing Law. This Agreement, and the rights and obligations of the Parties hereunder, shall be governed by and construed in accordance with the laws of the State of New York, excluding conflicts of law rules which might apply the law of a different jurisdiction. (b) Good Faith Negotiations. The Parties shall use their best efforts to resolve any and all claims and disputes arising under this Agreement first through good faith negotiations and without initially resorting to litigation, or other similar proceedings; provided, however, that either Party shall be entitled to: (i) seek injunctive relief in any forum of competent jurisdiction to avoid irreparable harm, for breach of confidentiality, or for infringement or misappropriation of its intellectual property rights; or to (ii) commence litigation in the venue set forth below to avoid being barred by an applicable statute of limitations; in each case without first attempting to resolve such claim or dispute through good faith negotiations or mediation. (c) Mediation. If the Parties are unable to resolve such claim or dispute via good faith negotiations, the Parties agree, prior to commencement of any legal action or suit, to submit to at least one day of non-binding mediation in Hauppauge, New York with a mediator chosen jointly by the Parties and with costs to be divided equally between the Parties. (d) Litigation and Venue. Any legal action, suit, or proceeding with respect to this Agreement shall be construed brought exclusively in federal court in Suffolk County or state court in, Hauppauge, New York if a federal court is not available) and each Party consents to give any Person other than the Company, the Holders of said court Warrant Certificates and the Warrant Agent any legal or for all matters that arise equitable right, remedy or claim under this Agreement. Each Party waives This Agreement shall be for the sole right to formal service of process and agrees to accept service of process via and hand exclusive benefit of delivery or by U. S. Mail, postage prepaid, certified or registered, return receipt requested, or by such other method as is authorized by applicable law Company, the Warrant Agent and the Holders of the Warrant Certificates. Notwithstanding anything to the contrary contained herein, to the extent (e) Attorneys' Fees. The prevailing Party in any litigation provision of a Warrant Certificate conflicts with any provision of this Agreement, the provisions of the Warrant Certificate shall govern and be controlling. Section 23- Governing Law. This Agreement and each Warrant Certificate and Global Warrant issued hereunder shall be governed entitled to attorneys' fees and costs. The prevailing Party, for purposes of awarding attorneys' fees and costs, shall be: (1) the claiming Party if the judgment is an amount equal to or greater than said Party's final written settlement demand; or (2) the defending Party if the judgment is equal to or lower than said Party's final, written settlement offer. If the Parties do not exchange a final, written settlement demand and a corresponding final, written settlement offer, or if the judgment is less than the final, written settlement demand but greater than the final, written settlement offer, the Parties shall pay their own attorneys' fees and costs. Section 6. 11 Waiver of Jury Trial. Each Party acknowledges and agrees that any controversy which may arise under this Agreement is likely to involve complicated and difficult issues and, therefore, each such party irrevocably and unconditionally waives any right it may have to a trial by jury and construed jury in respect of any legal action arising out of or relating to this Agreement or the transactions contemplated hereby. Section 6. 12 Specific Performance. The Parties agree that irreparable damage would occur if any provision of this Agreement were not performed in accordance with the terms laws of the State of New York, without giving effect to the conflicts of law principles thereof. hereof and that the parties Any action brought by any party hereto shall be brought within entitled to specific performance of the terms hereof, in addition to any other remedy to which the they State of New York, Suffolk County are entitled at law or in equity. Section 24-6. 13 Counterparts. This Agreement may be executed in any number of counterparts and, each of which such counterparts shall for all purposes be deemed to be an original, and but all such counterparts of which together shall together constitute but be deemed to be one and the same instrument agreement. A signed copy Section 25- Captions. The captions of the sections of this Agreement delivered by facsimile, e- mail or other means of electronic transmission shall be deemed to have the same legal been inserted for convenience only and shall not control or affect effect as delivery the meaning or construction of any- an original signed copy of this Agreement the provisions hereof. Section 26- Information. The Company agrees to promptly provide to the Holders of the Warrants any information it provides to the holders of the Common Stock, except to the extent any such information is publicly available on the EDGAR system (or any successor thereof) of the Securities and Exchange Commission. | SIGNATURE PAGE FOLLOWS signature page follows | IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date day and year first written above written by their respective officers thereunto duly authorized. AMPLITECH GROUP TITAN CREST LLC, INC. a Delaware limited liability company By: /s/ Fawad Maqbool Name: Fawad Maqbool Title: Chief Executive Officer [* * * * *] Canadian corporation By: /s/ Louisa Sanfratello Name: Louisa Sanfratello Title: Chief Financial Officer VSTOCK TRANSFER, LLC By: /s/ Name: Title: Exhibit AMPLITECH GROUP, INC., a Nevada corporation By: APPENDIX A [* * * * *] EXHIBIT A Form of Warrant Certificate Exhibit Form Assignment and Assumption Assignment and Assumption Agreement This Assignment and Assumption Agreement (the " Agreement "), effective as of Warrant Certificate Request Notice WARRANT CERTIFICATE REQUEST NOTICE To: VStock Tranfer March 26, 2025 (the " Effective Date "), is by and between Titan Crest LLC, as Warrant Agent for a Delaware limited liability company, with its principal office located at 9 E. Loockerman Street, Suite 311, Dover, Delaware 19901 (" Seller "), and AmpliTech Group, Inc., an Nevada corporation (" Buyer "). WHEREAS, Seller and Buyer have entered into a certain Asset Purchase Agreement, dated as of March 26, 2025 (the " Purchase Agreement "), pursuant to which, among other things, Seller has agreed to assign all of its rights, title and interests in, and Buyer has agreed to assume all of Seller's duties and obligations under the Intellectual Property Assignment And Transfer Agreement, dated March 26, 2025, a copy of which is attached to the Purchase Agreement as Exhibit B (the " [* * * * *] IP Transfer Agreement "). NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows: 1. Definitions. All capitalized terms used in this Agreement but not otherwise defined herein are given the meanings set forth in the Purchase Agreement. 2. Assignment and Assumption. Seller hereby sells, assigns, grants, conveys and transfers to Buyer all of Seller's right, title and interest in and to the [* * * * *] IP Transfer Agreement. Buyer hereby accepts such assignment and assumes all of Seller's duties and obligations under the [* * * * *] IP Transfer Agreement. 3. Terms of the Purchase Agreement. The terms of the Purchase Agreement, including, but not limited to, the representations, warranties, covenants, agreements and indemnities relating to the [* * * * *] IP Transfer Agreement are incorporated herein by this reference. The parties hereto acknowledge and agree that the representations, warranties, covenants, agreements and indemnities contained in the Purchase Agreement shall not be superseded hereby but shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the Purchase Agreement and the terms hereof, the terms of the Purchase Agreement shall govern. 4. Governing Law. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York without giving effect to any choice or conflict of law provision or rule (whether of the State of New York or any other jurisdiction). 5. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, email or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement. 6. Further Assurances. Each of the parties hereto shall execute and deliver, at the reasonable request of the other party hereto, such additional documents, instruments, conveyances and assurances and take such further actions as such other party may reasonably request to carry out the provisions hereof and give effect to the transactions contemplated by this Agreement. | signature page follows | IN WITNESS WHEREOF, the parties have executed this Agreement to be effective as of the date first above written. Titan Crest, LLC, a Delaware limited liability company By Name: Title: AmpliTech Group, Inc., a Nevada corporation By Name: Title: EXHIBIT B [* * * * *] IP Transfer Agreement Exhibit 10. 33 Exhibit 19. 1 INSIDER TRADING COMPLIANCE POLICY AmpliTech Group, Inc., a Nevada corporation (the " Company ") prohibits: • insider trading in the Company's securities (" Securities ") 1; and • the unauthorized disclosure of the Company's confidential information that might enable others to engage in insider trading in the Securities. The Company adopted this Insider Trading Compliance Policy to prevent insider trading. In this Insider Trading Compliance Policy, we will discuss how you must comply with the laws against insider trading to avoid the serious penalties that could accompany a violation. We also seek to fulfill our obligation to educate and reasonably supervise the activities of employees,

officers, directors and consultants who own or trade in the Company's stock as part of our corporate compliance program. There are severe civil and criminal penalties associated with violations by you, your colleagues or the Company under insider trading laws. It is your obligation to review, understand and comply with this Insider Trading Compliance Policy. Please take the time to become familiar with its content. If you have questions about the Policy or your stock ownership or trading, please speak with Louisa Sanfratello, our Chief Compliance Officer. PART I. OVERVIEW A. To Whom does this Insider Trading Compliance Policy Apply? This Insider Trading Compliance Policy applies to all of us, i. e., the Company's board of directors (the "Board"), officers, employees and consultants, as well as our Affiliates (as defined below), and to multiple methods of trading in the Securities, such as purchases or sales of stock, options or other forms of equity. This Insider Trading Compliance Policy applies not only to you but also to your "Affiliates" (as defined by the securities laws), which include: • your spouse, child, parent, significant other or other family member, in each case, living in the same household; • all trusts, family partnerships and other types of entities formed for your benefit or for the benefit of a member of your family over which you have the ability to influence or direct investment decisions concerning securities; • all persons who execute trades on your behalf, e. g., your stockbroker; and • all investment funds, trusts, retirement plans, partnerships, corporations and other types of entities for which you have the ability to influence or direct investment decisions. The law defines "securities" broadly to include common stock, options to purchase common stock, any other type of securities that the Company may issue (such as preferred stock, convertible debentures, warrants, exchange-traded options or other derivative securities), and any derivative securities that provide the economic equivalent of ownership of any of the Company's securities or an opportunity, direct or indirect, to profit from any change in the value of the Company's securities. concerning securities. Please note that the Insider Trading Procedures (as defined below) do not apply to entities that engage in the investment of securities in the ordinary course of its business (e. g., mutual funds, an investment fund or partnership) if such entity has established its own insider trading controls and procedures in compliance with applicable securities laws and an Insider has hereby represented to the Company that such Insider's affiliated entities: (a) engage in the investment of securities in the ordinary course of their respective businesses; (b) have established insider trading controls and procedures in compliance with applicable securities laws; and (c) are aware such securities laws prohibit any person or entity who has material, nonpublic information concerning the Company from purchasing or selling securities of the Company or from communicating such information to any other person under circumstances in which it is reasonably foreseeable that such person is likely to purchase or sell securities. You are responsible for ensuring compliance with this Insider Trading Compliance Policy, including the Insider Trading Procedures contained herein, by all of your Affiliates. We recommend you obtain advice from your legal and financial advisors regarding trading in Company Securities by your Affiliates. Special Procedures for Persons with Regular Access to Inside Information: Members of our Board and our executive officers are deemed to have access to all "inside information" under insider trading laws. Other officers, employees and consultants may also require regular access to "inside information" in performing their work. For this reason and for their protection, additional trading procedures apply to these directors, officers, employees and consultants. We will notify all members of the Board, officers and designated employees and consultants (collectively, and solely for the purpose of this Insider Trading Compliance Policy, "Insiders") that they are subject to these additional trading procedures (the "Insider Trading Procedures"), which are set forth in Part II of this memorandum. All Insiders must comply with these Insider Trading Procedures. These Insider Trading Procedures establish trading blackout period restrictions, trading window periods, and pre-clearance requirements. Insiders covered by the Insider Trading Procedures will be restricted from trading in the Securities during blackout periods. Additionally, Insiders covered by the Insider Trading Procedures will be required to pre-clear all transactions in the Securities. You will be notified if you are an Insider and required to comply with the Insider Trading Procedures. Post-Termination Responsibilities: In the event that you leave the Company for any reason, this Insider Trading Compliance Policy, including, if applicable, the Insider Trading Procedures, will continue to apply to you and your Affiliates until the completion of one full Trading Day (as defined below) after any material nonpublic information known to you has become public or is no longer material. As used in this Insider Trading Compliance Policy, the term "Trading Day" shall mean a day on which the primary national securities exchange or exchanges and / or over-the-counter market or markets on which Securities of the Company are listed or traded are open for trading. B. What is Prohibited by this Insider Trading Compliance Policy? It is generally illegal for you to trade in the Securities of the Company, whether for your account or for the account of another, while in the possession of material, nonpublic information about the Company or its business activities. It is also generally illegal for you to disclose material, nonpublic information about the Company or its business to others who may trade on the basis of that information. In addition, if we receive material, non-public information from collaborators or from other companies that do business with the Company, then these same prohibitions would apply to trading in the securities of these other companies' securities. These illegal activities are commonly referred to as "insider trading." When you are in possession of material, nonpublic information about the Company, whether positive or negative, you are prohibited from the following activities: • trading (whether for your account or for the account of another) in Securities, except for trades made in compliance with a valid Rule 10b5-1 trading plan; • giving trading advice of any kind about the Company; and • disclosing such material, nonpublic information about the Company, whether positive or negative, to anyone else (commonly known as "tipping"). The Insider Trading Compliance Policy prohibitions on insider trading do not apply to: (1) an exercise of an employee stock option when payment of the exercise price is made solely in cash to the Company; or (2) the withholding by the Company of shares of stock upon vesting of restricted stock or upon settlement of restricted stock units to satisfy applicable tax withholding requirements if (a) such withholding is required by the applicable plan or award agreement or (b) the election to exercise such tax withholding right was made by the Insider in compliance with the Insider Trading Procedures. The Insider Trading Compliance Policy prohibitions on insider trading do apply to: (1) the sale of Securities on or after the exercise of an employee stock option; (2) the use of outstanding Securities to pay part or all of the exercise price of an option; and (3) any sale of stock as part of a broker-assisted cashless exercise of an option or any other market sale for the purpose of generating the cash needed to pay the exercise price of an option. The above discussion is a summary; please read further below for additional details on the precise circumstances under which this Insider Trading Compliance Policy applies. These prohibitions continue whenever and for as long as you know or are in possession of material, nonpublic information. Remember, anyone scrutinizing your transactions will be doing so after the fact, with the benefit of Under Rule 10b5-1 of the Exchange Act, you are permitted to enter a written binding plan with your stock broker to trade in the Securities before you knew or had possession of material, nonpublic information and certain other conditions are satisfied. hindsight, and often with access to stock trading records and your communications regarding the transactions. As a practical matter, before engaging in any transaction, you should carefully consider how enforcement authorities and others might view the transaction in hindsight. C. What is Material, Nonpublic Information? This Insider Trading Compliance Policy prohibits you from trading in the Company's Securities if you are in possession of information about the Company or its business that is both "material" and "nonpublic." If you have a question whether certain information you are aware of is material or has been made public, you are encouraged to consult with the Compliance Officer. "Material" Information about the Company is "material" if it could reasonably be expected to affect the investment or voting decisions of a stockholder or investor. Similarly, information about the Company is "material" if its disclosure could reasonably be expected to significantly alter the total mix of information in the marketplace about the Company and affect investor views. In simple terms, material information is any type of information that could reasonably be expected to affect the price of the Securities. Both positive and negative information may be material. While it is not possible to identify all information that would be deemed "material," the following items are types of information that should be considered carefully to determine whether they are material: • program developments, regulatory or clinical status or updates, including communications with regulatory authorities, prior to issuance of a press release or public update; • significant developments regarding collaborations, products, customers, suppliers, orders, contracts or financing sources (e. g., the acquisition or loss of a contract); • potential collaboration discussions or information about an unannounced new collaboration, financing or other similar deals; • projections of future earnings or losses, or other earnings guidance; • earnings or revenue that are inconsistent with the consensus expectations of the investment community; • potential restatements of the Company's financial statements, changes in auditors or auditor notification that the Company may no longer rely on an auditor's audit report; • pending or proposed corporate mergers, acquisitions, tender offers, joint ventures or dispositions of significant assets; • changes in senior management or the Board; • significant actual or threatened litigation or governmental investigations or major developments in such matters; • a cybersecurity incident; • changes in dividend policy, declarations of stock splits, or public or private sales of additional securities; • potential defaults under the Company's credit agreements or indentures, or the existence of material liquidity deficiencies; and • bankruptcies or receiverships. In some situations, the above events may not be material and in others, consultation with the Compliance Officer may help you determine that it has been publicly disclosed. In each situation, you should carefully consider and seek advice to determine their materiality (although some determinations will be reached more easily than others). For example, some new products or contracts may clearly be material to one company and not to a much larger company with multiple products; yet that does not mean that all product developments or contracts will be material. This demonstrates, in our view, why no "bright-line" standard or list of items can adequately address the range of situations that may arise. Furthermore, the Company cannot create an exclusive list of events and information that have a higher probability of being considered material. You can look to our public press releases and SEC filings to confirm recent disclosures. The SEC has stated that there is no fixed quantitative threshold amount for determining materiality, and that even very small quantitative changes can be qualitatively material if they would result in a movement in the price of the Securities. "Nonpublic" Information Material information is

nonpublic” when it is not generally available to investors. The rationale is to provide all investors with an equal opportunity to access material information when making investment decisions. To claim information is “public,” we have to be able to point to some fact that establishes that the information has become publicly available, such as the filing of a report with the SEC, the distribution of a press release through a widely disseminated news or wire service, or by other means (such as a pre-announced webcast presentation) that are reasonably undersigned— designed Holder to provide broad public access. Information is not considered public at the moment it is disclosed. Before a person who possesses material, nonpublic information can trade, there also must be adequate time for the market as a whole to access and absorb the information that has been disclosed. For the purposes of Common this Insider Trading Compliance Policy, information will be considered public one full Trading Day after the close of the stock market following the Company’s public release of the information. For example, if the Company announces material nonpublic information of which you are aware before trading begins on a Tuesday, the first time you can buy or sell Company Securities is the opening of the market on Wednesday. However, if the Company announces this material information after trading begins on that Tuesday, the first time that you can buy or sell Company Securities is the opening of the market on Thursday. D. What are the Penalties for Insider Trading and Noncompliance with this Insider Trading Compliance Policy? Both the SEC and the national securities exchanges, through the Financial Industry Regulatory Authority (“FINRA”), investigate and are very effective at detecting insider trading. They have direct access to examine all trades and typically request names of employees and Insiders from Companies following a public announcement (positive or negative) that impacts a company’s stock price to determine whether suspect insider trading has occurred. The SEC, together with the U. S. Attorneys, pursue insider trading violations vigorously. For instance, cases have been successfully prosecuted against trading by employees in foreign accounts, trading by family members and friends, and trading involving only a small number of shares. The penalties for violating insider trading or tipping rules can be severe and include: • disgorgement of the profit gained or loss avoided by the trading; • payment of the loss suffered by the persons who purchased or sold, as applicable, securities of the same class at prices impacted by the insider trading; • payment of criminal penalties of up to \$ 5, 000, 000; • payment of civil penalties of up to three times the profit made or loss avoided; and • imprisonment for up to 20 years. The Company and / or the supervisors of the person engaged in insider trading may also be required to pay civil penalties of up to the greater of \$ 1, 525, 000 or three times the profit made or loss avoided, as well as criminal penalties of up to \$ 25, 000, 000, and could under certain circumstances be subject to private lawsuits. Violation of this Insider Trading Compliance Policy or any federal or state insider trading laws may subject the person violating such policy or laws to disciplinary action by the Company up to and including termination. The Company reserves the right to determine, in its own discretion and on the basis of the information available to it, whether this Insider Trading Compliance Policy has been violated. The Company may determine that specific conduct violates this Insider Trading Compliance Policy, whether or not the conduct also violates the law. It is not necessary for the Company to await the filing or conclusion of a civil or criminal action against the alleged violator before taking disciplinary action. E. How Do You Report a Violation of this Insider Trading Compliance Policy? If you have a question about this Insider Trading Compliance Policy, including whether certain information you are aware of is material or has been made public, you are encouraged to consult with the Compliance Officer. In addition, if you violate this Insider Trading Compliance Policy or any federal or state laws governing insider trading, or know of any such violation by any director, officer or employee of the Company, you should report the violation immediately to the Compliance Officer. PART II. INSIDER TRADING PROCEDURES FOR INSIDERS A. Special Trading Restrictions Applicable to Insiders In addition to the restrictions on trading in Company Securities set forth above, Insiders and their Affiliates are subject to the following special trading restrictions: 1. Prohibited Transactions At Any Time. • No Short Sales. No Insider may at any time sell any Securities of the Company that are not owned by such Insider at the time of the sale (a “short sale”). • No Purchases or Sales of Derivative Securities or Hedging Transactions. No Insider may buy or sell puts, calls, other derivative securities of the Company or any derivative securities that provide the economic equivalent of ownership of any of the Company’s Securities or an opportunity, direct or indirect, to profit from any change in the value of the Company’s Securities or engage in any other hedging transaction with respect to the Company’s Securities, at any time, with the exception of the Company’s tradeable warrants. • No Company Securities Subject to Margin Calls. No Insider may use the Company’s Securities as collateral in a margin account. • No Pledges. No Insider may pledge Company Securities as collateral for a loan (or modify an existing pledge). 2. Gifts. No Insider may give or make any other transfer of Company Securities without consideration (e. g., a gift or limited partner distribution, in the case of a fund) during a period when the Insider is not permitted to trade unless the donee agrees not to sell the shares until such time as the Insider can sell. 3. Quarterly Blackout Periods No Insider may trade in any Company’s Securities during the period commencing on close of business on the seventh (7th) calendar day before the end of each fiscal quarter or fiscal year of the Company and ending at the close of trading on the third (3rd) Trading Day following the date the Company’s financial results for such quarter or year are publicly disclosed. If, for example, the Company were to make a public announcement or filing of such results on a Monday, Insiders shall not trade in the Company’s Securities until the following Friday. During these “blackout periods,” Insiders may possess or may be presumed to possess material nonpublic information about the Company’s financial results. 4. No Trading During Retirement Plan Blackout Periods. If the Company adopts a policy to allow ownership of Company stock in any 401 (k) or other retirement plan of the Company, then no Insider may trade in any Company Securities, which were acquired in connection with such Insider’s service or employment with the Company, during a “retirement plan blackout period” except as specifically permitted below. A “retirement plan blackout period” includes any period of more than three (3) consecutive Trading Days during which at least fifty percent (50 %) of all participants and beneficiaries under all of the individual account plans maintained by the Company and members of its controlled group are prohibited from trading in Company Securities through their plan accounts. Insiders will receive advance notice of any such blackout period from the Compliance Officer. 5. Special Blackout Periods There are times when the Company or certain members of its Board or senior management or other team members may be aware of a material, nonpublic development. Although an Insider may not know the specifics of such development, if an Insider engages in a trade before such development is disclosed to the public or resolved, such Insider and the Company might be exposed to a charge of insider trading that could be costly and difficult to refute. In addition, a trade by an Insider during such period could result in adverse publicity for the Company. Therefore, Insiders may not trade in Company Securities if they are notified that the trading window is closed because of the existence of a material, nonpublic development. The Compliance Officer will subsequently notify the Insiders once the material nonpublic development is disclosed to the public or resolved and that, as a result, the trading window is again open. While the Compliance Officer will undertake reasonable efforts to notify the Insiders that material, nonpublic events have developed, or are soon likely to develop, it is each Insider’s individual duty to ensure that they do not make any trade in Company Securities when material, nonpublic information exists, regardless of whether such Insider is aware of such development. B. Pre-Clearance Procedures No Insider may trade in Company Securities unless the trade has been approved by the Compliance Officer in accordance with the procedures set forth below. The Compliance Officer will review and either approve or prohibit all proposed trades by Insiders in accordance with the procedures set forth below. The Compliance Officer may consult with the Company’s other officers and / or outside legal counsel and will receive approval for his / her own trades from each other. 1. Procedures. No Insider may trade in Company Securities until: • The Insider has notified the Compliance Officer of the amount and nature of the proposed trade (s) using the ~~Stock Purchase Warrants Transaction Request form~~ attached to this Insider Trading Compliance Policy. In order to provide adequate time for the preparation of any required reports under Section 16 of the Securities and Exchange Act, as amended (“~~Warrants Exchange Act~~”) in the, a ~~Stock Transaction Request form of Global Warrants issued~~ should, if practicable, be received by the Compliance Officer at least two (2) Trading Days prior to the intended trade date; • The Insider has certified to the Compliance Officer in writing prior to the proposed trade (s) that the Insider is not in possession of material, nonpublic information concerning the Company hereby elects; • The Insider has informed the Compliance Officer, using the ~~Stock Transaction Request form~~ attached hereto, whether, to the Insider’s best knowledge, (a) the Insider has (or is deemed to have) engaged in any opposite way transactions within the previous six months that were not exempt from Section 16 (b) of the Exchange Act and (b) if the transaction involves a sale by an “affiliate” of the Company or of “restricted securities” (as such terms are defined under Rule 144 under the Securities Act of 1933, as amended (“Rule 144”)), whether the transaction meets all of the applicable conditions of Rule 144; and • The Compliance Officer has approved the trade (s) and has certified such approval in writing. Such certification may be made via digitally- signed electronic mail. The Compliance Officer do not assume the responsibility for, and approval from the Compliance Officer does not protect the Insider from, the consequences of prohibited insider trading. 2. Additional Information. Insiders shall provide to the Compliance Officer any documentation reasonably requested by him or her in furtherance of the foregoing procedures. Any failure to provide such requested information will be grounds for denial of approval by the Compliance Officer. 3. No Obligation to Approve Trades. The existence of the foregoing approval procedures does not in any way obligate the Compliance Officer to approve any trade requested by an Insider. The Compliance Officer may reject any trading request at his or her sole discretion. From time to time, an event may occur that is material to the Company and is known by only a few directors or executives. Insiders may not trade in Company Securities if they are notified by the Compliance Officer that a proposed trade has not been cleared because of the existence of a material, nonpublic development. Even if that particular Insider is not aware of the material, nonpublic development involving the Company, if any Insider engages in a trade before a material, nonpublic development is disclosed to the public or resolved, the Insider and the Company might be exposed to a charge of insider trading that could be costly and difficult to refute even if the Insider was unaware of the development. So long as the event remains material and nonpublic, the Compliance Officer may determine not to approve any transactions in

the Company's Securities. The Compliance Officer will subsequently notify the Insider once the material, nonpublic development is disclosed to the public or resolved. If an Insider requests clearance to trade in the Company's Securities during the pendency of such an event, the Compliance may reject the trading request without disclosing the reason. 4. Completion of Trades. After receiving written clearance to engage in a trade signed by the Compliance Officer, an Insider must complete the proposed trade within two (2) Trading Days or make a new trading request. 5. Post-Trade Reporting. Any transactions in the Company's Securities by an Insider (including transactions effected pursuant to a Rule 10b5-1 Plan) must be reported to the Compliance Officer by completing the "Confirmation of Transaction" section of the Stock Transaction Request form attached to this Insider Trading Compliance Policy on the same day in which such a transaction occurs. Each report an Insider makes to the Compliance Officer should include the date of the transaction, quantity of shares, price and broker-dealer through which the transaction was effected. This reporting requirement may be satisfied by sending (or having such Insider's broker send) duplicate confirmations of trades to the Compliance Officer if such information is received by the Compliance Officer on or before the required date. Compliance by directors and executive officers with this provision is imperative given the requirement of Section 16 of the Exchange Act that these persons generally must report changes in ownership of the Securities within two business days. The sanctions for noncompliance with this reporting deadline include mandatory disclosure in the Company's proxy statement for the next annual meeting of stockholders, as well as possible civil or criminal sanctions for chronic or egregious violators. PART IV. EXEMPTIONS FROM INSIDER TRADING RESTRICTIONS (ALL DIRECTORS, OFFICERS, EMPLOYEES AND CONSULTANTS) A. Pre-Approved Rule 10b5-1 Plan. The securities law permits establishment of trading plans under Rule 10b5-1 of the Exchange Act that allow for persons to authorize, at a time when they are not in possession of material, nonpublic information, future trading. Under a compliant 10b5-1 Plan, a trade will not be subject to the Company's trading windows, retirement plan blackout periods or pre-clearance procedures, and Insiders are not required to complete a Stock Transaction Request form for such transactions. If an Insider intends to trade pursuant to a Rule 10b5-1 Plan, such plan, arrangement or instruction must: • satisfy the requirements of Rule 10b5-1; • be documented in writing; • be established during a trading window when such Insider does not possess material, nonpublic information; and • be pre-approved by the Compliance Officer. Any deviation from, or alteration to, the specifications of an approved Rule 10b5-1 Plan (including, without limitation, the amount, price or timing of a purchase or sale) must be reported immediately to the Compliance Officer. Any transaction pursuant to a Rule 10b5-1 Plan must be timely reported following the transaction in accordance with the procedures set forth above. The Compliance Officer may refuse to approve a Rule 10b5-1 Plan as he or she deems appropriate including, without limitation, if he or she determines that such plan does not satisfy the requirements of Rule 10b5-1. Any modification of an Insider's prior Rule 10b5-1 Plan requires pre-approval by the Compliance Officer. A modification must occur during a trading window and while such Insider is not aware of material, nonpublic information. B. Employee Benefit Plans. Exercise of Stock Options. The trading prohibitions and Insider Trading Procedures do not apply to the exercise of a stock option to purchase securities of the Company when payment of the exercise price is solely made in cash and the Securities are held, not sold. The trading prohibitions and Insider Trading Procedures do apply to: • the same day or subsequent sale of the Securities acquired on the exercise of a stock option; • the use of outstanding Securities to pay part or all of the exercise price of an option; • any net option exercise; • any exercise of a stock appreciation right; • share withholding; • any sale of stock as part of a broker-assisted cashless exercise of an option; or • any other market sale for the purpose of generating the cash needed to pay the exercise price of an option. For directors and executive officers subject to the requirements of Section 16 of the Exchange Act, the exercise of an option to purchase securities of the Company (and any subsequent sale) each triggers the obligation to file a Form 4 within two days. For this reason, Insiders must comply with the post-trade reporting requirement described in Section C above for any such transaction. Tax Withholding on Restricted Stock / Units. The trading prohibitions and restrictions set forth in the Insider Trading Procedures do not apply to the withholding by the Company of shares of stock upon vesting of restricted stock or upon settlement of restricted stock units to satisfy applicable tax withholding requirements if (a) such withholding is required by the applicable plan or award agreement or (b) the election to exercise such tax withholding right was made by the director, officer or employee in compliance with the Insider Trading Procedures. Retirement Plan. The trading prohibitions and restrictions set forth in the Insider Trading Procedures do not apply to purchases of Securities in any 401 (k) Plan of the Company (the "Retirement Plan") resulting from periodic contributions by Insiders to the Retirement Plan pursuant to payroll deduction elections. Such prohibitions and restrictions do apply, however, to certain elections Insiders may make under the Retirement Plan, including: (a) an election to increase or decrease the percentage of periodic contributions that will be allocated to the Company stock fund; (b) an election to make an intra-plan transfer of an existing account balance into or out of the Company stock fund; (c) an election to borrow money against or receive a Warrant Certificate evidencing distribution from such Insider's Retirement Plan account if the Warrants held loan or distribution will result in a liquidation of some or all of such Insider's Company stock fund balance; and (d) an election to pre-pay a plan loan if the pre-payment will result in an allocation of loan proceeds to the Company stock fund. PART IV. WAIVERS A waiver of any provision of this Insider Trading Compliance Policy, or the Insider Trading Procedures contained herein, in a specific instance may be authorized in writing by either the Compliance Officer Holder as specified below: 1. Name of Holder of Warrants in form of Global Warrants: _____ 2. Name of Holder in Warrant Certificate (if different from name of Holder of Warrants in form of Global Warrants): _____ 3. Number of Warrants in name of Holder in form of Global Warrants: _____ 4. Number of Warrants for _____ or which Warrant Certificate the Audit Committee of the Board, and any such waiver shall be issued: _____ 5. reported to the such committee or the Board. PART V Number of Warrants in name of Holder in form of Global Warrants after issuance of Warrant Certificate, if any: _____ 6. Warrant Certificate shall **ACKNOWLEDGEMENT This Insider Trading Compliance Policy will be delivered to the all current Insiders and to all directors, officers, and employees and consultants following address its adoption or thereafter at the start of their employment or relationship with the Company. Each individual must acknowledge that he or she has received a copy and agrees to comply with the terms of this Insider Trading Compliance Policy under the Company's electronic training record system, and, if applicable, the Insider Trading Procedures contained herein. Directors and consultants that do not have access to the electronic training system will furnish a written acknowledgement of acceptance. A form of Acknowledgement is attached as Exhibit B. All directors, officers, and employees and consultants will be required upon the Company's request to re-acknowledge and agree to comply with the Insider Trading Compliance Policy (including any amendments or modifications). For such purpose, an individual will be deemed to have acknowledged and agreed to comply with the Insider Trading Compliance Policy, as amended from time to time, when copies of such items have been delivered by regular or electronic mail (or other delivery option used by the Company) by the Compliance Officer. * * * Questions regarding this Insider Trading Compliance Policy are encouraged and may be directed to the Compliance Officer. ADOPTED: The undersigned August 20, 2021 STOCK TRANSACTION REQUEST Pursuant to its Insider Trading Compliance Policy, I hereby notify acknowledges and agrees that, in connection with this Warrant Exchange and the issuance of the Warrant Certificate, the Holder is deemed to have surrendered the number of Warrants in form of Global Warrants in the name of the Holder equal to the number of Warrants evidenced by the Warrant Certificate. [SIGNATURE OF HOLDER] Name of Investing Entity: _____ Signature of Authorized Signatory of Investing Entity: _____ Name of Authorized Signatory: _____ Title of Authorized Signatory: _____ Date: _____ Exhibit Form of Global Warrant Request Notice GLOBAL WARRANT REQUEST NOTICE To: VStock Transfer, LLC, as Warrant Agent for AmpliTech Group, Inc., a Nevada corporation (the "Company"), The undersigned Holder of my intent to trade Common Stock Purchase Warrants ("Warrants") in the form securities of Warrants Certificates issued by the Company hereby elects to receive a Global Warrant evidencing the Warrants held by the Holder as specified indicated below: **REQUESTER INFORMATION Insider's Name: _____ INTENT TO PURCHASE Number of shares: Intended trade date: Means of acquiring Shares: Acquisition through employee benefit plan (please specify): Purchase through a broker on the open market Other (please specify): INTENT TO SELL Number of shares: Intended trade date: Means of selling Shares: Sale through employee benefit plan (please specify): Sale through a broker on the open market Other (please specify): SECTION 16 RULE 144 (Not applicable if transaction requested involves a purchase) I am not subject to Section 16. I am not an "affiliate" of the Company and the transaction requested above does not involve the sale of "restricted securities" (as such terms are defined under Rule 144 under the Securities Act of 1933, as amended). To the best of my knowledge, I have not (and am not deemed to have) engaged in an opposite way transaction within the previous 6 months that was not exempt from Section 16 (b) of the Exchange Act. To the best of my knowledge, the transaction requested above will meet all of the applicable conditions of Rule 144. None of the above. The transaction requested is being made pursuant to an effective registration statement covering such transaction. None of the above. CERTIFICATION I hereby certify that I am not () in possession of any material, nonpublic information concerning the Company, as defined in the Company's Insider Trading Compliance Policy and (2) purchasing any securities of the Company on margin in contravention of the Company's Insider Trading Procedures. I understand that, if I trade while possessing such information or in violation of such trading restrictions, I may be subject to severe civil and / or criminal penalties, and may be subject to discipline by the Company including termination. Insider's Signature Date AUTHORIZED APPROVAL Signature of Compliance Officer (or designee) Date * NOTE: Multiple lots must be listed on separate forms or broken out herein. EXHIBIT B ACKNOWLEDGMENT I hereby acknowledge that I have read, that I understand, and that I agree to comply with, the Insider Trading Compliance Policy of AmpliTech Group, Inc., a****

Nevada corporation (the "Company"). I further acknowledge and agree that I am responsible for ensuring compliance with the Insider Trading Compliance Policy and the Insider Trading Procedures included therein by all of my "Affiliates". I also understand and agree that I will be subject to sanctions, including termination of employment, that may be imposed by the Company, in its sole discretion, for violation of the Insider Trading Compliance Policy, and that the Company may give stop-transfer and other instructions to the Company's transfer agent against the transfer of any Securities in a transaction that the Company considers to be in contravention of the Insider Trading Compliance Policy. Date: Signature: _____ Name of Holder of Warrants in form of Warrant Certificates: _____ Title: _____ 2. Name of Holder in Global Warrant (if different from name of Holder of Warrants in form of Warrant Certificates): _____ 3. Number of Warrants in name of Holder in form of Warrant Certificates: _____ 4. Number of Warrants for which Global Warrant shall be issued: _____ 5. Number of Warrants in name of Holder in form of Warrant Certificates after issuance of Global Warrant, if any: _____ 6. Global Warrant shall be delivered to the following address: _____ The undersigned hereby acknowledges and agrees that, in connection with this Global Warrant Exchange and the issuance of the Global Warrant, the Holder is deemed to have surrendered the number of Warrants in form of Warrant Certificates in the name of the Holder equal to the number of Warrants evidenced by the Global Warrant. Warrant Agent Fee Schedule-EXHIBIT 23. 1 CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM We consent to the incorporation by reference in Registration Statements (No. 333-251332 and No. 333-276902) on Form S- 8, and Registration Statements (No. 333- 255656, No. 333- 254969, No. 333- 251260 and No. 333- 264420 and No. 333-278657) on Form S- 3 of AmpliTech Group, Inc. of our report dated April 1, March 31, 2024-2025, with respect to our audits of the consolidated financial statements of AmpliTech Group Inc. as of and for the years ended December 31, 2023, and 2022-2024, which appears in this Form 10- K. /s/ Sadler, Gibb & Associates, LLC EXHIBIT 31. 1 CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 (a) OF THE SARBANES- OXLEY ACT OF 2002 I, Fawad Maqbool, President and Chief Executive Officer of AmpliTech Group, Inc. (the "Company"), certify that: 1. I have reviewed this annual report on Form 10- K of the Company for the year ended December 31, 2023-2024; 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a- 15 (e) and 15d- 15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a- 15 (f) and 15d- 15 (f)) for the registrant and have: a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions): a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting. By Date: April 1, 2024 By: /s/ Fawad Maqbool Fawad Maqbool President and Chief Executive Officer (Principal Executive Officer) EXHIBIT 31. 2 CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 (a) OF THE SARBANES- OXLEY ACT OF 2002 I, Louisa Sanfratello, Chief Financial Officer and Secretary of AmpliTech Group, Inc. (the "Company"), certify that: a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting. Date April 1, March 31, 2024-2025 /s/ Louisa Sanfratello Louisa Sanfratello, CPA Chief Financial Officer and Secretary (Principal Financial and Accounting Officer) EXHIBIT 32. 1 CERTIFICATION PURSUANT TO 18 U. S. C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES- OXLEY ACT OF 2002 The undersigned, Fawad Maqbool, President and Chief Executive Officer, of AmpliTech Group, Inc. (the "Registrant") certifies, under the standards set forth and solely for the purposes of 18 U. S. C. 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, that the Annual Report on Form 10- K of the Registrant for the year ended December 31, 2023-2024 (the "Report"): (1) fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant. Dated: April 1, March 31, 2024 By: 2025 By: /s/ Fawad Maqbool Fawad Maqbool President and Chief Executive Officer (Principal Executive Officer) A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request. EXHIBIT 32. 2 The undersigned, Louisa Sanfratello, Chief Financial Officer and Secretary of AmpliTech Group, Inc. (the "Registrant") certifies, under the standards set forth and solely for the purposes of 18 U. S. C. 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, that the Annual Report on Form 10- K of the Registrant for the year ended December 31, 2023-2024 (the "Report"): (1) fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant. /s/ Louisa Sanfratello Louisa Sanfratello Exhibit 97- 1 CLAWBACK POLICY EFFECTIVE NOVEMBER 16, CPA Chief Financial 2023.1 Purpose. The purpose of this AmpliTech Group Inc. (the "Company") Clawback Policy (this "Policy") is to enable the Company to recover Erroneously Awarded Compensation from Covered Executive Officers- Officer in the event that the Company is required to prepare an Accounting Restatement. This Policy is designed to comply with, and shall be interpreted to be consistent with, Section 954 of the Dodd- Frank Wall Street Reform and Consumer Protection Act of 2010, as codified in Section 10D of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Rule 10D- 1 promulgated under the Exchange Act ("Rule 10D- 1") and Listing Rule 5608 of the corporate governance rules of The Nasdaq Stock Market ("Nasdaq") (the "Listing Standards"). Unless otherwise defined in this Policy, capitalized terms shall have the meaning ascribed to such terms in Section 2. 2. Definitions. As used in this Policy, the following capitalized terms shall have the meanings set forth below. a. "Accounting Restatement" means an accounting restatement of the Company's financial statements due to the Company's material noncompliance with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements (i. e., a "Big R" restatement), or to correct an error that is not material to the previously issued financial statements, but that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period (i. e., a "little r" restatement). b. "Accounting Restatement Date" means the earlier of (i) the date the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if the Board's action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare an Accounting Restatement and (ii) the date a court, regulator, or other legally authorized body directs the Company to prepare an Accounting Restatement. c. "Applicable Period" means, with respect to any Accounting Restatement, the three completed fiscal years immediately preceding the Accounting Restatement Date, as well as any transition period (that results from a change in the Company's fiscal year) within or immediately following those three completed fiscal years (except that a transition period that comprises a period of at least nine months shall count as a completed fiscal year). d. "Board" means the board of directors of the Company. e. "Code" means the U. S. Internal Revenue Code of 1986, as amended. Any reference to a section of the Code or regulation thereunder includes such section or regulation, any valid regulation or other official guidance promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing, or superseding such section or regulation. f. "Covered Executive Officer" means an individual who is currently or previously served as the Company's principal executive officer, principal financial officer, principal accounting officer (or, if there is no such accounting officer, the controller), vice president of the Company in charge of a principal business unit, division, or function (such as sales, administration, or finance), an officer who performs (or performed) a policy- making function, or

any other person who performs (or performed) similar policy-making functions for the Company or is otherwise determined to be an executive officer of the Company pursuant to Item 401 (b) of Regulation S-K. An executive officer of the Company's parent or subsidiary is deemed a "Covered Executive Officer" if the executive officer performs (or performed) such policy-making functions for the Company. g. "Erroneously Awarded Compensation" means, in the event of an Accounting Restatement, the amount of Incentive-Based Compensation previously received that exceeds the amount of Incentive-Based Compensation that otherwise would have been received had it been determined based on the restated amounts in such Accounting Restatement, and must be computed without regard to any taxes paid by the relevant Covered Executive Officer; provided, however, that for Incentive-Based Compensation based on stock price or total stockholder return, where the amount of Erroneously Awarded Compensation is not subject to mathematical recalculation directly from the information in an Accounting Restatement: (i) the amount of Erroneously Awarded Compensation must be based on a reasonable estimate of the effect of the Accounting Restatement on the stock price or total stockholder return upon which the Incentive-Based Compensation was received and (ii) the Company must maintain documentation of the determination of that reasonable estimate and provide such documentation to Nasdaq. h. "Financial Reporting Measure" means any measure that is determined and presented in accordance with the accounting principles used in preparing the Company's financial statements and any measure that is derived wholly or in part from such measure. A Financial Reporting Measure is not required to be presented within the Company's financial statements or included in a filing with the U. S. Securities and Exchange Commission to qualify as a "Financial Reporting Measure." i. "Incentive-Based Compensation" means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a Financial Reporting Measure. Incentive-Based Compensation is deemed "received" for purposes of this Policy in the Company's fiscal period during which the Financial Reporting Measure specified in the Incentive-Based Compensation award is attained, even if the payment or grant of such Incentive-Based Compensation occurs after the end of that period. 3. Administration. This Policy shall be administered by the Board, the Compensation Committee of the Board (the "Compensation Committee"), the Audit Committee of the Board (the "Audit Committee") or a special committee comprised of members of the Compensation Committee and Audit Committee. For purposes of this Policy, the body charged with administering this Policy shall be referred to herein as the "Administrator." The Administrator is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate or advisable for the administration of this Policy, in each case, to the extent permitted under the Listing Standards and in compliance with (or pursuant to an exemption from the application of) Section 409A of the Code. All determinations and decisions made by the Administrator pursuant to the provisions of this Policy shall be final, conclusive and binding on all persons, including the Company, its affiliates, its stockholders and Covered Executive Officers, and need not be uniform with respect to each person covered by this Policy. In the administration of this Policy, the Administrator is authorized and directed to consult with the full Board or such other committees of the Board as may be necessary or appropriate as to matters within the scope of such other committee's responsibility and authority. Subject to any limitation at applicable law, the Administrator may authorize and empower any officer or employee of the Company to take any and all actions necessary or appropriate to carry out the purpose and intent of this Policy (other than with respect to any recovery under this Policy involving such officer or employee). Any action or inaction by the Administrator with respect to a Covered Executive Officer under this Policy in no way limits the Administrator's decision to act or not to act with respect to any other Covered Executive Officer under this Policy or under any similar policy, agreement or arrangement, nor shall any such action or inaction serve as a waiver of any rights the Company may have against any Covered Executive Officer other than as set forth in this Policy. 4. Application of this Policy. This Policy applies to all Incentive-Based Compensation received by a person: (a) after beginning service as a Covered Executive Officer; (b) who served as a Covered Executive Officer at any time during the performance period for such Incentive-Based Compensation; (c) while the Company had a listed class of securities on a national securities exchange; and (d) during the Applicable Period. For the avoidance of doubt, Incentive-Based Compensation that is subject to both a Financial Reporting Measure vesting condition and a service-based vesting condition shall be considered received when the relevant Financial Reporting Measure is achieved, even if the Incentive-Based Compensation continues to be subject to the service-based vesting condition. 5. Recovery of Erroneously Awarded Compensation. In the event of an Accounting Restatement, the Company must recover Erroneously Awarded Compensation reasonably promptly, in amounts determined pursuant to this Policy. The Company's obligation to recover Erroneously Awarded Compensation is not dependent on the filing of restated financial statements. Recovery under this Policy with respect to a Covered Executive Officer shall not require the finding of any misconduct by such Covered Executive Officer or such Covered Executive Officer being found responsible for the accounting error leading to an Accounting Restatement. In the event of an Accounting Restatement, the method for recouping Erroneously Awarded Compensation shall be determined by the Administrator in its sole and absolute discretion, to the extent permitted under the Listing Standards and in compliance with (or pursuant to an exemption from the application of) Section 409A of the Code. Recovery may include, without limitation: (i) reimbursement of all or a portion of any incentive compensation award, (ii) cancellation of incentive compensation awards and (iii) any other method authorized by applicable law or contract. The Company is authorized and directed pursuant to this Policy to recover Erroneously Awarded Compensation in compliance with this Policy unless the Compensation Committee has determined that recovery would be impracticable solely for the following limited reasons, and subject to the following procedural and disclosure requirements: a. The direct expenses paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered. Before reaching such conclusion, the Administrator must make a reasonable attempt to recover such Erroneously Awarded Compensation, document such reasonable attempt (s) to recover, and provide that documentation to Nasdaq; b. Recovery would violate home country law where that law was adopted prior to November 28, 2022. Before reaching such conclusion, the Administrator must obtain an opinion of home country counsel, acceptable to Nasdaq, that recovery would result in such a violation, and must provide such opinion to Nasdaq; or c. Recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of Section 401 (a) (13) or Section 411 (a) of the Code. 6. Prohibition on Indemnification and Insurance Reimbursement. The Company is prohibited from indemnifying any Covered Executive Officer against the loss of any Erroneously Awarded Compensation. Further, the Company is prohibited from paying or reimbursing a Covered Executive Officer for the cost of purchasing insurance to cover any such loss. The Company is also prohibited from entering into any agreement or arrangement whereby this Policy would not apply or fail to be enforced against a Covered Executive Officer. 7. Required Policy-Related Disclosure and Filings. The Company shall file all disclosures with respect to this Policy in accordance with the requirements of the federal securities laws, including disclosures required by U. S. Securities and Exchange Commission filings. A copy of this Policy and any amendments hereto shall be posted on the Company's website and filed as an exhibit to the Company's annual report on Form 10-K. 8. Acknowledgement. Each Covered Executive Officer shall sign and return to the Company within thirty (30) calendar days following the later of (i) the effective date of this Policy set forth below or (ii) the date such individual becomes a Covered Executive Officer, the Acknowledgement Form attached hereto as Exhibit A, pursuant to which the Covered Executive Officer agrees to be bound by, and to comply with, the terms and conditions of this Policy. 9. Amendment; Termination. The Board may amend this Policy from time to time in its sole and absolute discretion and shall amend this Policy as it deems necessary to reflect the Listing Standards or to comply with (or maintain an exemption from the application of) Section 409A of the Code. The Board may terminate this Policy at any time; provided, that the termination of this Policy would not cause the Company to violate any federal securities laws, or rules promulgated by the U. S. Securities and Exchange Commission or the Listing Standards. 10. Other Recovery Obligations; General Rights. The Board intends that this Policy shall be applied to the fullest extent of the law. To the extent that the application of this Policy would provide for recovery of Incentive-Based Compensation that the Company already recovered pursuant to Section 304 of the Sarbanes-Oxley Act or other recovery obligations, any such amount recovered from a Covered Executive Officer will be credited to any recovery required under this Policy in respect of such Covered Executive Officer. 11. Effective Date. This Policy shall be effective as of November 16, 2023. The terms of this Policy shall apply to any Incentive-Based Compensation that is received by Covered Executive Officers on or after October 2, 2023, even if such Incentive-Based Compensation was approved, awarded or granted to Covered Executive Officers prior to such date. This Policy shall not limit the rights of the Company to take any other actions or pursue other remedies that the Company may deem appropriate under the circumstances and under applicable law, in each case, to the extent permitted under the Listing Standards and in compliance with (or pursuant to an exemption from the application of) Section 409A of the Code. This Policy is binding and enforceable against all Covered Executive Officers and their beneficiaries, heirs, executors, administrators or other legal representatives. EXHIBIT A. AMPLITECH GROUP, INC. CLAWBACK POLICY ACKNOWLEDGEMENT FORM By signing below, the undersigned acknowledges and confirms that the undersigned has received and reviewed a copy of the AmpliTech Group, Inc. (the "Company") Clawback Policy (the "Policy"). By signing this Acknowledgement Form, the undersigned acknowledges and agrees that the undersigned is and will continue to be subject to the Policy and that the Policy will apply both during and after the undersigned's employment or service with the Company. Further, by signing below, the undersigned agrees to abide by the terms of the Policy, including, without limitation, by returning any Erroneously Awarded Compensation (as defined in the Policy) to the Company to the extent required by, and in a manner consistent with, the Policy. EXECUTIVE OFFICER Signature Print Name Date 24. I Cover-USD (\$) 12 Months Ended Dec. 31, 2023 Mar. 27, 2024 Jun. 30, 2023 Document Type 10-K Amendment Flag false Document Annual Report true Document Transition Report false Document Period End Date Dec. 31, 2023 Document Fiscal Period Focus FY Document Fiscal Year Focus Current Fiscal Year End Date --12-31 Entity File Number 001-40069 Entity Registrant Name AmpliTech Group, Inc. Entity Central Index Key Entity Tax Identification Number 27-4566352 Entity Incorporation, State or Country Code NV Entity Address, Address Line One Plant Avenue Entity Address, City or Town Hauppauge Entity Address, State or Province NY Entity Address, Postal Zip Code City Area Code (631) Local Phone Number 521-7831 Entity Well-known Seasoned Issuer No Entity Voluntary Filers No Entity Current Reporting Status Yes Entity Interactive Data Current Yes Entity Filer Category Non-accelerated Filer Entity Small Business true Entity Emerging Growth Company false Entity Shell Company false Entity Public Float \$ 14,756,908 Entity Common Stock, Shares Outstanding 9,717,113 Documents Incorporated by Reference [Text Block] None ICFR Auditor Attestation Flag false Document Financial Statement

Error-Correction [Flag] false Auditor Firm ID Auditor Name Sadler, Gibb & Associates, LLC Auditor Location Draper, UT Common Stock, \$ 0.001 par value per share Title of 12 (b) Security Common Stock, \$ 0.001 par value per share Trading Symbol AMPG Security Exchange Name NASDAQ Warrants to purchase shares of Common Stock, par value \$ 0.001 per share Title of 12 (b) Security Warrants to purchase shares of Common Stock, par value \$ 0.001 per share Trading Symbol AMPGW Security Exchange Name NASDAQ X-Definition Boolean flag that is true when the XBRL content amends previously filed or accepted submission-ReferencesNo definition available. Details Name: dei_AmendmentFlag Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: durationX-Definition PCAOB issued Audit Firm Identifier ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-10-K-Number-249-Section-310Reference-2>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-10-K-Number-249-Section-220-Subsection-fReference-3>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-40-F-Number-249-Section-240-Subsection-fDetails> Name: dei_AuditorFirmId Namespace Prefix: dei_ Data Type: dei:nonemptySequenceNumberItemType Balance Type: na Period Type: durationX-ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-10-K-Number-249-Section-310Reference-2>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-40-F-Number-249-Section-220-Subsection-fReference-3>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-40-F-Number-249-Section-240-Subsection-fDetails> Name: dei_AuditorLocation Namespace Prefix: dei_ Data Type: dei:internationalNameItemType Balance Type: na Period Type: durationX-ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-10-K-Number-249-Section-310Reference-2>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-40-F-Number-249-Section-220-Subsection-fReference-3>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-40-F-Number-249-Section-240-Subsection-fDetails> Name: dei_AuditorName Namespace Prefix: dei_ Data Type: dei:internationalNameItemType Balance Type: na Period Type: durationX-Definition Area code of city ReferencesNo definition available. Details Name: dei_CityAreaCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: durationX-Definition End date of current fiscal year in the format MM-DD. ReferencesNo definition available. Details Name: dei_CurrentFiscalYearEndDate Namespace Prefix: dei_ Data Type: xbrli:gMonthDayItemType Balance Type: na Period Type: durationX-Definition Boolean flag that is true only for a form used as an annual report. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-10-K-Number-249-Section-310Reference-2>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-20-F-Number-249-Section-220-Subsection-fReference-3>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-40-F-Number-249-Section-240-Subsection-fDetails> Name: dei_DocumentAnnualReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: durationX-Definition Indicates whether any of the financial statement period in the filing include a restatement due to error correction. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Regulation-S-K-Number-229-Section-402-Subsection-wReference-2>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-10-K-Number-249-Section-310Reference-3>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-20-F-Number-249-Section-220-Subsection-fReference-4>: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Form-40-F-Number-249-Section-240-Subsection-fDetails> Name: dei_DocumentFinStmntErrorCorrectionFlag Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: durationX-Definition Fiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10-Q or 10-QT statements have value Q1, Q2, and Q3 respectively, with 10-K, 10-KT or other fiscal year statements having FY. ReferencesNo definition available. Details Name: dei_DocumentFiscalPeriodFocus Namespace Prefix: dei_ Data Type: dei:fiscalPeriodItemType Balance Type: na Period Type: durationX-Definition This is focus fiscal year of the document report in YYYY format. For a 2006 annual report, which may also provide financial information from prior periods, fiscal 2006 should be given as the fiscal year focus. Example: 2006. ReferencesNo definition available. Details Name: dei_DocumentFiscalYearFocus Namespace Prefix: dei_ Data Type: xbrli:gYearItemType Balance Type: na Period Type: durationX-Definition For the EDGAR submission types of Form 8-K: the date of the report, the date of the earliest event reported; for the EDGAR submission types of Form N-1A: the filing date; for all other submission types: the end of the reporting or transition period. The format of the date is YYYY-MM-DD. ReferencesNo definition available. Details Name: dei_DocumentPeriodEndDate Namespace Prefix: dei_ Data Type: xbrli:dateItemType Balance Type: na Period Type: durationX-Definition Boolean flag that is true only for a form used as a transition report. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Forms-10-K,10-Q,20-F-Number-240-Section-13-Subsection-a-1Details> Name: dei_DocumentTransitionReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: durationX-Definition The type of document being provided (such as 10-K, 10-Q, 485BPOS, etc). The document type is limited to the same value as the supporting SEC submission type, or the word 'Other'. ReferencesNo definition available. Details Name: dei_DocumentType Namespace Prefix: dei_ Data Type: dei:submissionTypeItemType Balance Type: na Period Type: durationX-Definition Documents incorporated by reference. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Exchange-Act-Number-240-Section-12-Subsection-b-23Details> Name: dei_DocumentsIncorporatedByReferenceTextBlock Namespace Prefix: dei_ Data Type: dei:textBlockItemType Balance Type: na Period Type: durationX-Definition Address Line 1 such as Attn, Building Name, Street Name ReferencesNo definition available. Details Name: dei_EntityAddressAddressLine1 Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: durationX-Definition Name of the City or Town ReferencesNo definition available. Details Name: dei_EntityAddressCityOrTown Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: durationX-Definition Code for the postal or zip code ReferencesNo definition available. Details Name: dei_EntityAddressPostalZipCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: durationX-Definition Name of the state or province. ReferencesNo definition available. Details Name: dei_EntityAddressStateOrProvince Namespace Prefix: dei_ Data Type: dei:stateOrProvinceItemType Balance Type: na Period Type: durationX-Definition A unique 10-digit SEC-issued value to identify entities that have filed disclosures with the SEC. It is commonly abbreviated as CIK. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Exchange-Act-Number-240-Section-12-Subsection-b-2Details> Name: dei_EntityCentralIndexKey Namespace Prefix: dei_ Data Type: dei:centralIndexKeyItemType Balance Type: na Period Type: durationX-Definition Indicate number of shares or other units outstanding of each of registrant's classes of capital or common stock or other ownership interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each class / interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity Listings, Instrument. ReferencesNo definition available. Details Name: dei_EntityCommonStockSharesOutstanding Namespace Prefix: dei_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instantX-Definition Indicate 'Yes' or 'No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant's current or most recent filing containing the related disclosure. ReferencesNo definition available. Details Name: dei_EntityCurrentReportingStatus Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: durationX-Definition Indicate if registrant meets the emerging growth company criteria. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Exchange-Act-Number-240-Section-12-Subsection-b-2Details> Name: dei_EntityEmergingGrowthCompany Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: durationX-Definition Commission file number. The field allows up to 17 characters. The prefix may contain 1-3 digits, the sequence number may contain 1-8 digits, the optional suffix may contain 1-4 characters, and the fields are separated with a hyphen. ReferencesNo definition available. Details Name: dei_EntityFileNumber Namespace Prefix: dei_ Data Type: dei:fileNumberItemType Balance Type: na Period Type: durationX-Definition Indicate whether the registrant is one of the following: Large Accelerated Filer, Accelerated Filer, Non-accelerated Filer. Definitions of these categories are stated in Rule 12b-2 of the Exchange Act. This information should be based on the registrant's current or most recent filing containing the related disclosure. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Exchange-Act-Number-240-Section-12-Subsection-b-2Details> Name: dei_EntityFilerCategory Namespace Prefix: dei_ Data Type: dei:filerCategoryItemType Balance Type: na Period Type: durationX-Definition Two-character EDGAR code representing the state or country of incorporation. ReferencesNo definition available. Details Name: dei_EntityIncorporationStateCountryCode Namespace Prefix: dei_ Data Type: dei:edgeStateCountryItemType Balance Type: na Period Type: durationX-Definition Boolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Regulation-S-T-Number-232-Section-405Details> Name: dei_EntityInteractiveDataCurrent Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: durationX-Definition The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter. ReferencesNo definition available. Details Name: dei_EntityPublicFloat Namespace Prefix: dei_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-Definition The exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Exchange-Act-Number-240-Section-12-Subsection-b-2Details> Name: dei_EntityRegistrantName Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: durationX-Definition Boolean flag that is true when the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act. ReferencesReference 1: <http://www.xbrl.org/2003/role/presentationRef-Publisher-SEC-Name-Exchange-Act-Number-240-Section-12-Subsection-b-2Details>

org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 7-03 (a) (22))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479440/944-210-S99-1Reference 3: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 5-02 (29))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Details Name: us-gaap_CommonStockValue Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-Definition Amount of deferred income and obligation to transfer product and service to customer for which consideration has been received or is receivable, classified as current. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 5-02 (20))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Details Name: us-gaap_DeferredRevenueCurrent Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-Definition The current portion, due within one year or one operating cycle, if longer, of deposits held other than customer deposits. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210. 5-02. 20)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Details Name: us-gaap_DepositLiabilityCurrent Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-Definition Present value of lessee's discounted obligation for lease payments from finance lease, classified as current. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479041/842-20-45-1Details Name: us-gaap_FinanceLeaseLiabilityCurrent Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-Definition Present value of lessee's discounted obligation for lease payments from finance lease, classified as noncurrent. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479041/842-20-45-1Details Name: us-gaap_FinanceLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-Definition Amount after accumulated impairment loss of an asset representing future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/exampleRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 55-Paragraph 24-Publisher FASB-URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 5-02 (15))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147482598/350-20-45-1Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (h)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef-Topic 942-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 9-03 (10) (1))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479853/942-210-S99-1Details Name: us-gaap_Goodwill Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Definition Sum of the carrying amounts of all intangible assets, excluding goodwill, as of the balance sheet date, net of accumulated amortization and impairment charges. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 350-SubTopic 30-Section 50-Paragraph 2-Subparagraph ((a) (1), (b))-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 2: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 350-SubTopic 30-Section 45-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147482686/350-30-45-1Details Name: us-gaap_IntangibleAssetsNetExcludingGoodwill Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Definition Amount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer. ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/exampleRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 5-02 (6))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Details Name: us-gaap_InventoryNet Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Definition Sum of the carrying amounts as of the balance sheet date of all liabilities that are recognized. Liabilities are probable future sacrifices of economic benefits arising from present obligations of an entity to transfer assets or provide services to other entities in the future. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 810-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 810-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 25-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 810-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (bb)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 4-08 (g) (1) (ii))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef-Topic 323-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 7: http://www.xbrl.org/2003/role/exampleRef-Topic 946-SubTopic 820-Name Accounting Standards Codification-Section 55-Paragraph 12-Publisher FASB-URI https://asc.fasb.org/1943274/2147480167/946-820-55-12Reference 8: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 6-04 (14))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479617/946-210-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (i))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 10: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (ii))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 11: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (iii) (A))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (iv))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (5))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 14: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (i))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 15: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (iii) (A))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (iv))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (v))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 18: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (5))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1Reference 19: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 7-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 20: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 7-Subparagraph (b)-Publisher FASB-URI https://

asc.fasb.org//1943274/2147481404/852-10-50-7Reference 21: http://www.xbrl.org/2003/role/exampleRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 30-Subparagraph (d)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482810/280-10-50-30Reference 22: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.19-26)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1-Details Name: us-gaap-Liabilities Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX-Definition Amount of liabilities and equity items, including the portion of equity attributable to noncontrolling interests, if any. References Reference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.7-03 (a) (25))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479440/944-210-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.4-08 (g) (1) (ii))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 323-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482907/825-10-50-28Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 942-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.9-03 (23))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479853/942-210-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (22))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1-Details Name: us-gaap-LiabilitiesAndStockholdersEquity-namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX-Definition Total obligations incurred as part of normal operations that are expected to be paid during the following twelve months or within one business cycle, if longer. References Reference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 810-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481203/810-10-50-3Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 810-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 25-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481231/810-10-45-25Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 810-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (bb)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481203/810-10-50-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.4-08 (g) (1) (ii))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1Reference 5: 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Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210.13-01 (a) (5))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (4) (i))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1BReference 15: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (4) (ii) (A))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (4) (iii) (B))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (4) (iv))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (5))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 7-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481404/852-10-50-7Reference 20: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 7-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481404/852-10-50-7Reference 21: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.21)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1-Details Name: us-gaap-LiabilitiesCurrent Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX-References No definition available. Details Name: us-gaap-LiabilitiesCurrent Abstract Namespace Prefix: us-gaap-Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX-References No definition available. Details Name: us-gaap-LiabilitiesNoncurrent Abstract Namespace Prefix: us-gaap-Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX-Definition The total amount of investments that are intended to be held for an extended period of time (longer than one operating cycle). References Reference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (12))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1-Details Name: us-gaap-LongTermInvestments Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX-Definition Carrying value as of the balance sheet date of notes payable (with maturities initially due after one year or beyond the operating cycle if longer), excluding current portion. References Reference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.22)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1-Details Name: us-gaap-LongTermNotesPayable Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX-Definition Amount of investment in marketable security, classified as current. References Reference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (2))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1-Details Name: us-gaap-MarketableSecuritiesCurrent Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX-Definition Sum of the carrying values as of the balance sheet date of the portions of long-term notes payable due within one year or the operating cycle if longer. References Reference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.19, 20)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1-Details Name: us-gaap-NotesPayableCurrent Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX-Definition Present value of lessee's discounted obligation for lease payments from operating lease, classified as current. References Reference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479041/842-20-45-1-Details Name: us-gaap-OperatingLeaseLiabilityCurrent Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX-Definition Present value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent. References Reference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479041/842-20-45-1-Details Name: us-gaap-OperatingLeaseLiabilityNoncurrent Namespace Prefix: us-gaap-Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX-Definition Amount of lessee's right to use underlying asset under operating lease. References Reference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph

1-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479041/842-20-45-1-Details Name: us-gaap-OperatingLeaseRightOfUseAsset Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Definition Amount of asset related to consideration paid in advance for costs that provide economic benefits within a future period of one year or the normal operating cycle, if longer. ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph (g)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483467/210-10-45-1-Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(7))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 340-SubTopic 10-Name Accounting Standards Codification-Section 05-Paragraph 5-Publisher FASB-URI https://asc.fasb.org//1943274/2147482955/340-10-05-5-Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 340-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1-Publisher FASB-URI https://asc.fasb.org//1943274/2147483032/340-10-45-1-Details Name: us-gaap-PrepaidExpenseCurrent Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Definition Amount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-SubTopic 10-Topic 360-Publisher FASB-URI https://asc.fasb.org//1943274/2147482099/360-10-50-1-Reference 2: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147481372/852-10-55-10-Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.7-03(a)(8))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479440/944-210-599-1-Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 942-SubTopic 360-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org//1943274/2147480842/942-360-50-1-Details Name: us-gaap-PropertyPlantAndEquipmentNet Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Definition Amount of accumulated undistributed earnings (deficit). ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147481372/852-10-55-10-Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 40-Name Accounting Standards Codification-Section 65-Paragraph 2-Subparagraph (g)(2)(i)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480016/944-40-65-2-Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 40-Name Accounting Standards Codification-Section 65-Paragraph 2-Subparagraph (h)(2)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480016/944-40-65-2-Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 11-Publisher FASB-URI https://asc.fasb.org//1943274/2147480990/946-20-50-11-Reference 5: http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.7-03(a)(23)(a)(4))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479440/944-210-599-1-Reference 6: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.6-04(17))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479617/946-210-599-1-Reference 7: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.3-04)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480008/505-10-599-1-Reference 8: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(30)(a)(3))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Details Name: us-gaap-RetainedEarningsAccumulatedDeficit Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-Definition The amount of an asset, typically cash, provided to a counterparty to provide certain assurance of performance by the entity pursuant to the terms of a written or oral agreement, such as a lease. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(17))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Details Name: us-gaap-SecurityDeposit Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Definition Amount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147481372/852-10-55-10-Reference 2: http://www.xbrl.org/2003/role/exampleRef-Topic 946-SubTopic 830-Name Accounting Standards Codification-Section 55-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147480167/946-830-55-12-Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.6-04(19))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479617/946-210-599-1-Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph (SX 210.6-05(4))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479617/946-210-599-2-Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph (SX 210.6-09(4)(b))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-599-3-Reference 6: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph (SX 210.6-09(6))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-599-3-Reference 7: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph (SX 210.6-09(7))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-599-3-Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.4-08(g)(1)(ii))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-599-1-Reference 9: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 323-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481687/323-10-50-3-Reference 10: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482907/825-10-50-28-Reference 11: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(29))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Reference 12: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(31))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Reference 13: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(30))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Reference 14: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 310-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph (SAB Topic 4.E)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480418/310-10-599-2-Details Name: us-gaap-StockholdersEquity Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-References No definition available. Details Name: us-gaap-StockholdersEquityAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationConsolidated Balance Sheets (Parenthetical) \$ / shares Dec. 31, 2023 Dec. 31, 2022 Statement of Financial Position [Abstract] Common stock, shares par value \$ 0.001 \$ 0.001 Common stock, shares authorized 500,000,000 500,000,000 Common stock, shares issued 9,714,613 9,634,613 Common stock, shares outstanding 9,714,613 9,634,613X-Definition Face amount or stated value per share of common stock. ReferencesReference 1: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(29))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Details Name: us-gaap-CommonStockParOrStatedValuePerShare Namespace Prefix: us-gaap-Data Type: dt:types:perShareItemType Balance Type: na Period Type: instantX-Definition The maximum number of common shares permitted to be issued by an entity's charter and bylaws. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.6-04(16)(a))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479617/946-210-599-1-Reference 2: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(29))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Details Name: us-gaap-CommonStockSharesAuthorized Namespace Prefix: us-gaap-Data Type: xbrli:sharesItemType Balance Type: na Period Type: instantX-Definition Total number of common shares of an entity that have been sold or granted to shareholders (includes common shares that were issued, repurchased and remain in the treasury). These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury. ReferencesReference 1: http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(29))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-599-1-Details Name: us-gaap-CommonStockSharesIssued Namespace Prefix: us-gaap-Data Type: xbrli:sharesItemType Balance Type: na Period Type: instantX-Definition Number of shares of common stock outstanding. Common stock represent the ownership interest in a corporation. ReferencesReference 1: http://www.xbrl.org/us-gaap/role/ref/

legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI <https://asc.fasb.org/1943274/2147481112/505-10-50-2>Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph \(SX 210.6-05\(4\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph (SX 210.6-05(4))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147479617/946-210-599-2>Reference 3: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph \(SX 210.6-09\(4\)\(b\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph (SX 210.6-09(4)(b))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147483575/946-220-599-3>Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph \(SX 210.6-04\(16\)\(a\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.6-04(16)(a))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147479617/946-210-599-1>Reference 5: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph \(SX 210.6-09\(7\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph (SX 210.6-09(7))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147483575/946-220-599-3>Reference 6: [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph \(SX 210.5-02\(29\)\)](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(29))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-599-1> Details Name: us-gaap_CommonStockSharesOutstanding Namespace Prefix: us-gaap_Data Type: xbrli:sharesItem Type Balance Type: na:Period Type: instant X-References No definition available. Details Name: us-gaap_StatementOfFinancialPositionAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItem Type Balance Type: na:Period Type: duration Consolidated Statements of Operations-USD (\$) 12 Months Ended Dec. 31, 2023-Dec. 31, 2022 Income Statement [Abstract] Revenues \$ 15,584,577 \$ 19,394,492 Cost of Goods Sold 8,308,949 10,469,628 Gross Profit 7,275,628 8,924,864 Operating Expenses Selling, general and administrative 7,511,319 7,629,644 Goodwill impairment 120,136 Research and development 2,341,845 1,024,127 Total Operating Expenses 9,853,164 8,773,907 Income (Loss) From Operations (2,577,536) 150,957 Other Income (Expenses) Loss on contingent revenue earnout (815,788) Loss on disposal of property and equipment (16,402) (1,606) Unrealized gain on investments 1,697 2,342 Realized gain on investments 131,522 Interest income (expense), net 19,281 (13,013) Total Other Income (Expenses) 136,097 (828,064) Net Loss Before Income Taxes (2,441,439) (677,107) Provision For Income Taxes 24,000 Net Loss \$ (2,465,439) \$ (677,107) Net Loss Per Share-Basic \$ (0.26) \$ (0.07) Net Loss Per Share-Diluted \$ (0.26) \$ (0.07) Weighted Average Common Shares Outstanding-Basic 9,659,421 9,609,208 Weighted Average Common Shares Outstanding-Diluted 9,659,421 9,609,208 X-Definition Loss on contingent revenue earnout References No definition available. Details Name: AMPG_LossOnContingentRevenueEarnout Namespace Prefix: AMPG_Data Type: xbrli:monetaryItem Type Balance Type: credit Period Type: duration X-Definition Realized gain on investment-References No definition available. Details Name: AMPG_RealizedGainOnInvestment Namespace Prefix: AMPG_Data Type: xbrli:monetaryItem Type Balance Type: credit Period Type: duration X-Definition The aggregate cost of goods produced and sold and services rendered during the reporting period. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph \(SX 210.4-08\(g\)\(1\)\(iii\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.4-08(g)(1)(iii))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480678/235-10-599-1>Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 323-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph \(e\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 323-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (e)) Publisher FASB-URI <https://asc.fasb.org/1943274/2147481687/323-10-50-3>Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph \(f\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph (f)) Publisher FASB-URI <https://asc.fasb.org/1943274/2147482907/825-10-50-28>Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph \(SX 210.13-01\(a\)\(4\)\(i\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph (SX 210.13-01(a)(4)(i))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1A>Reference 5: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph \(SX 210.13-01\(a\)\(4\)\(ii\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph (SX 210.13-01(a)(4)(ii))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1A>Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph \(SX 210.13-01\(a\)\(4\)\(iii\)\(A\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph (SX 210.13-01(a)(4)(iii)(A))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1A>Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph \(SX 210.13-01\(a\)\(4\)\(iv\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph (SX 210.13-01(a)(4)(iv))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1A>Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph \(SX 210.13-01\(a\)\(5\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1A-Subparagraph (SX 210.13-01(a)(5))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1A>Reference 9: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph \(SX 210.13-02\(a\)\(4\)\(i\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph (SX 210.13-02(a)(4)(i))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1B>Reference 10: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph \(SX 210.13-02\(a\)\(4\)\(iii\)\(A\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph (SX 210.13-02(a)(4)(iii)(A))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1B>Reference 11: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph \(SX 210.13-02\(a\)\(4\)\(iii\)\(B\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph (SX 210.13-02(a)(4)(iii)(B))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1B>Reference 12: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph \(SX 210.13-02\(a\)\(4\)\(iv\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph (SX 210.13-02(a)(4)(iv))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1B>Reference 13: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph \(SX 210.13-02\(a\)\(5\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1B-Subparagraph (SX 210.13-02(a)(5))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480097/470-10-599-1B>Reference 14: [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph \(SX 210.5-03.2\)](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph (SX 210.5-03.2)) Publisher FASB-URI <https://asc.fasb.org/1943274/2147483621/220-10-599-2> Details Name: us-gaap_CostOfRevenue Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItem Type Balance Type: debit Period Type: duration X-Definition The amount of net income (loss) for the period per each share of common stock or unit outstanding during the reporting period. 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Standards Codification-Section 65-Paragraph 1-Subparagraph \(f\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480175/815-40-65-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 40-Name Accounting Standards Codification-Section 65-Paragraph 1-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480175/815-40-65-1)Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 11-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-11](http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 11-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-11)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 11-Subparagraph \(b\)-Publisher FASB-URI 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1-Subparagraph (SX 210.9-04(27))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147483589/942-220-599-1>Reference 15: [http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph \(SX 210.7-04\(23\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 220-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.7-04(23))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147483586/944-220-599-1>Reference 16: <http://www.xbrl.org/2003/role/exampleRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 52-Publisher FASB-URI https://asc.fasb.org/1943274/2147482635/260-10-55-52>Reference 17: <http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 7-Publisher FASB-URI https://asc.fasb.org/1943274/2147482689/260-10-45-7> Details Name: us-gaap_EarningsPerShareBasic Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItem Type Balance Type: na:Period Type: duration X-Definition The amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 3: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 5: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 6: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 7: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 8: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 9: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 10: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 11: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 12: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 13: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 14: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 15: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 16: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 17: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 18: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147483443/250-10-50-3>Reference 19:

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References Reference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (b)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-28-Details Name: us-gaap_GainLossOnSaleOfPropertyPlantEquipment Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Amount of loss from the write-down of an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. 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http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210.13-01 (a) (5))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 10: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (4) (i))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 11: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (4) (ii) (B))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 12: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210.13-02 (a) (4) (iii) (A))-Publisher FASB-URI 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https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 17: http://www.xbrl.org/2003/role/exampleRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 31-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 18: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 19: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (SX 210.5-03.1, 2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2-Details Name: us-gaap_GrossProfit Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Amount of income (loss) from continuing operations, including income (loss) from equity method investments, before deduction of income tax expense (benefit), and income (loss) attributable to noncontrolling interest. 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Details Name: us-gaap_IncomeStatementAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionAmount of current income tax expense (benefit) and deferred income tax expense (benefit) pertaining to continuing operations. 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Codification-Section 50-Paragraph 30-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-30](http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 30-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-30)Reference 30: [http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph \(f\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32](http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32)Reference 31: [http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 60B-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-50-45-60B](http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 60B-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-50-45-60B)

asc.fasb.org//1943274/2147482689/260-10-45-60Reference 32:

Paragraph 41-Subparagraph (a)-Publisher FASB-URI <https://asc.fasb.org//1943274/2147482810/280-10-50-41>Reference 22: [http://www.xbrl.org/2003/role/disclosureRef-Topic 942-SubTopic 235-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-9-05 \(b\) \(2\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 942-SubTopic 235-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-9-05 (b) (2)))-Publisher FASB-URI <https://asc.fasb.org//1943274/2147479557/942-235-S99-1> Details Name: us-gaap-Revenues-namespace Prefix: us-gaap-Data Type: xbrli:monetaryItem-Type Balance Type: credit-Period Type: durationX-Definition The aggregate total costs related to selling a firm's product and services, as well as all other general and administrative expenses. Direct selling expenses (for example, credit, warranty, and advertising) are expenses that can be directly linked to the sale of specific products. Indirect selling expenses are expenses that cannot be directly linked to the sale of specific products, for example telephone expenses, Internet, and postal charges. General and administrative expenses include salaries of non-sales personnel, rent, utilities, communication, etc. ReferencesReference 1: [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph \(SX 210-5-03-4\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483621/220-10-S99-2](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (SX 210-5-03-4)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483621/220-10-S99-2) Details Name: us-gaap-SellingGeneralAndAdministrativeExpense-namespace Prefix: us-gaap-Data Type: xbrli:monetaryItem-Type Balance Type: debit-Period Type: durationX-Definition Amount of unrealized gain (loss) on investment. ReferencesReference 1: [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph \(b\)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (b)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28) Details Name: us-gaap-UnrealizedGainLossOnInvestments-namespace Prefix: us-gaap-Data Type: xbrli:monetaryItem-Type Balance Type: credit-Period Type: durationX-Definition The average number of shares or units issued and outstanding that are used in calculating diluted EPS or earnings per unit (EPU), determined based on the timing of issuance of shares or units in the period. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482662/260-10-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482662/260-10-50-1)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 16-Publisher FASB-URI https://asc.fasb.org//1943274/2147482689/260-10-45-16> Details Name: us-gaap-WeightedAverageNumberofDilutedSharesOutstanding-namespace Prefix: us-gaap-Data Type: xbrli:sharesItem-Type Balance Type: na-Period Type: durationX-Definition Number of [basic] shares or units, after adjustment for contingently issuable shares or units and other shares or units not deemed outstanding, determined by relating the portion of time within a reporting period that common shares or units have been outstanding to the total time in that period. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482662/260-10-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482662/260-10-50-1)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147482689/260-10-45-10> Details Name: us-gaap-WeightedAverageNumberofSharesOutstandingBasic-namespace Prefix: us-gaap-Data Type: xbrli:sharesItem-Type Balance Type: na-Period Type: durationX-Definition Consolidated Statements of Stockholders' Equity-USD (\$) Common Stock [Member] Additional Paid-in Capital [Member] Retained Earnings [Member] Total Balance at Dec. 31, 2021 \$ 9,582 \$ 35,651,088 \$ (6,627,177) \$ 29,033,493 Balance, shares at Dec. 31, 2021 9,582,113 Stock-based compensation 399,126 399,126 Common stock issued for vesting of RSUs \$ 53 (53) Common stock issued for vesting of RSUs, shares 52,500 Net loss (677,107) (677,107) Balance at Dec. 31, 2022 \$ 9,635 36,050,161 (7,304,284) 28,755,512 Balance, shares at Dec. 31, 2022 9,634,613 Stock-based compensation 389,658 389,658 Common stock issued for vesting of RSUs \$ 80 (80) Common stock issued for vesting of RSUs, shares 80,000 Net loss (2,465,439) (2,465,439) Balance at Dec. 31, 2023 \$ 9,715 \$ 36,439,739 \$ (9,769,723) \$ 26,679,731 Balance, shares at Dec. 31, 2023 9,714,613 X-Definition Amount of increase to additional paid-in capital (APIC) for recognition of cost for award under share-based payment arrangement. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 35-Paragraph 2-Publisher FASB-URI https://asc.fasb.org//1943274/2147480483/718-10-35-2>Reference 2: <http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 718-SubTopic 20-Section 55-Paragraph 13-Publisher FASB-URI https://asc.fasb.org//1943274/2147481089/718-20-55-13>Reference 3: <http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 718-SubTopic 20-Section 55-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147481089/718-20-55-12> Details Name: us-gaap-AdjustmentsToAdditionalPaidInCapitalSharebasedCompensationRequisiteServicePeriodRecognitionValue-namespace Prefix: us-gaap-Data Type: xbrli:monetaryItem-Type Balance Type: credit-Period Type: durationX-Definition The portion of profit or loss for the period, net of income taxes, which is attributable to the parent. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-4-08 \(g\) \(1\) \(ii\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-4-08 (g) (1) (ii))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1)Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 323-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph \(c\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481687/323-10-50-3](http://www.xbrl.org/2003/role/disclosureRef-Topic 323-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481687/323-10-50-3)Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph \(f\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482907/825-10-50-28](http://www.xbrl.org/2003/role/disclosureRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482907/825-10-50-28)Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 6-Publisher FASB-URI https://asc.fasb.org//1943274/2147482765/220-10-50-6>Reference 5: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-3>Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(b\) \(2\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (b) (2)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-1)Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 40-Name Accounting Standards Codification-Section 65-Paragraph 1-Subparagraph \(f\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480175/815-40-65-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 40-Name Accounting Standards Codification-Section 65-Paragraph 1-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480175/815-40-65-1)Reference 8: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 8-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-8>Reference 9: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 9-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-9>Reference 10: [http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 11-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-11](http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 11-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-11)Reference 11: [http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 11-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-11](http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 11-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-11)Reference 12: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-4>Reference 13: <http://www.xbrl.org/2003/role/exampleRef-Topic 946-SubTopic 830-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147480167/946-830-55-10>Reference 14: <http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 45-Paragraph 7-Publisher FASB-URI https://asc.fasb.org//1943274/2147483581/946-220-45-7>Reference 15: [http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-7-04 \(18\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483586/944-220-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-7-04 (18))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483586/944-220-S99-1)Reference 16: <http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 22-Publisher FASB-URI https://asc.fasb.org//1943274/2147482810/280-10-50-22>Reference 17: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-6-07 \(9\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-6-07 (9))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-S99-1)Reference 18: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph \(SX 210-6-09 \(1\) \(d\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-S99-3](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph (SX 210-6-09 (1) (d))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-S99-3)Reference 19: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph \(SX 210-13-01 \(a\) \(4\) \(i\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210-13-01 (a) (4) (i))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A)Reference 20: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph \(SX 210-13-01 \(a\) \(4\) \(ii\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210-13-01 (a) (4) (ii))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A)Reference 21: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph \(SX 210-13-01 \(a\) \(4\) \(iii\) \(A\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210-13-01 (a) (4) (iii) (A))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A)Reference 22: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph \(SX 210-13-01 \(a\) \(4\) \(iii\) \(B\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210-13-01 (a) (4) (iii) (B))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A)Reference 23: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph \(SX 210-13-01 \(a\) \(5\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210-13-01 (a) (5))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1A)Reference 24: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph \(SX 210-13-02 \(a\) \(4\) \(i\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1B](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210-13-02 (a) (4) (i))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1B)Reference 25: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph \(SX 210-13-02 \(a\) \(4\) \(iii\) \(A\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1B](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210-13-02 (a) (4) (iii) (A))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1B)Reference 26: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph \(SX 210-13-02 \(a\) \(4\) \(iii\) \(B\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1B](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210-13-02 (a) (4) (iii) (B))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480097/470-10-S99-1B)

1943274/2147480097/470-10-S99-1BReference 27: [http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph \(SX 210-13-02 \(a\) \(4\) \(iv\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210-13-02 (a) (4) (iv))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28): [http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 30-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 30](http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210-13-02 (a) (5))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29): [http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 60B-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 32](http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 31): [http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph \(c\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 34](http://www.xbrl.org/2003/role/exampleRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 31-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 33): <http://www.xbrl.org/2003/role/disclosureRef-Topic 205-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 7-Publisher FASB-URI https://asc.fasb.org/1943274/2147482409/205-20-50-7Reference 35>: [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1A-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 37](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 28-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 36): [http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1A-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 37](http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1B-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 38): [http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph \(SX 210-5-03 \(20\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 39](http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (SX 210-5-03 (20))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 39): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 942-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-9-04 \(22\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483589/942-220-S99-1Details Name: us-gaap-NetIncomeLoss Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Number of shares issued which are neither cancelled nor held in the treasury. ReferencesNo definition available. Details Name: us-gaap-SharesOutstanding Namespace Prefix: us-gaap-Data Type: xbrli:sharesItemType Balance Type: na Period Type: instantX-Definition Number of shares issued during the period related to Restricted Stock Awards, net of any shares forfeited. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 942-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-9-04 (22))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483589/942-220-S99-1Details Name: us-gaap-NetIncomeLoss Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Number of shares issued which are neither cancelled nor held in the treasury. ReferencesNo definition available. Details Name: us-gaap-SharesOutstanding Namespace Prefix: us-gaap-Data Type: xbrli:sharesItemType Balance Type: na Period Type: instantX-Definition Number of shares issued during the period related to Restricted Stock Awards, net of any shares forfeited. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(28\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (28))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-3-04\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 4](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-3-04)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 4): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(29\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Details Name: us-gaap-StockIssuedDuringPeriodSharesRestrictedStockAwardNetOffForfeitures Namespace Prefix: us-gaap-Data Type: xbrli:sharesItemType Balance Type: na Period Type: durationX-Definition Value of stock related to Restricted Stock Awards issued during the period, net of the stock value of such awards forfeited. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (29))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Details Name: us-gaap-StockIssuedDuringPeriodSharesRestrictedStockAwardNetOffForfeitures Namespace Prefix: us-gaap-Data Type: xbrli:sharesItemType Balance Type: na Period Type: durationX-Definition Value of stock related to Restricted Stock Awards issued during the period, net of the stock value of such awards forfeited. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-3-04\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Details Name: us-gaap-StockIssuedDuringPeriodValueRestrictedStockAwardNetOffForfeitures Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Amount of equity \(deficit\) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-3-04)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Details Name: us-gaap-StockIssuedDuringPeriodValueRestrictedStockAwardNetOffForfeitures Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Amount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2): <http://www.xbrl.org/2003/role/exampleRef-Topic 946-SubTopic 830-Name Accounting Standards Codification-Section 55-Paragraph 12-Publisher FASB-URI https://asc.fasb.org/1943274/2147480167/946-830-55-12Reference 3>: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph \(SX 210-6-05 \(4\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479617/946-210-S99-2Reference 5](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-6-04 (19))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479617/946-210-S99-1Reference 4): [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph \(SX 210-6-09 \(4\) \(b\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483575/946-220-S99-3Reference 6](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph (SX 210-6-09 (4) (b))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483575/946-220-S99-3Reference 6): [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph \(SX 210-6-09 \(6\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483575/946-220-S99-3Reference 7](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph (SX 210-6-09 (6))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483575/946-220-S99-3Reference 7): [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph \(SX 210-6-09 \(7\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483575/946-220-S99-3Reference 8](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph (SX 210-6-09 (7))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483575/946-220-S99-3Reference 8): [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-4-08 \(g\) \(1\) \(ii\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 9](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-4-08 (g) (1) (ii))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 9): [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 223-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph \(c\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 10](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 223-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 10): [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph \(f\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 11](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 11): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(29\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 12](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (29))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 12): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(31\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 13](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (31))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 13): [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(30\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 14](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (30))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 14):

definition available. Details Name: AMPG_GainLossOnDeferredTaxLiability Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition Increase decrease in customer deposit References No definition available. Details Name: AMPG_IncreaseDecreaseInCustomerDeposit Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX Definition Loss on contingent revenue earned adjustment. References No definition available. Details Name: AMPG_LossOnContingentRevenueEarnoutAdjustment Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition Payment of revenue earned. References No definition available. Details Name: AMPG_PaymentOfRevenueEarnout Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition Payments for proceeds from marketable securities. References No definition available. Details Name: AMPG_PaymentsForProceedsFromMarketableSecurities Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX References No definition available. Details Name: us-gaap_AdjustmentsToReconcileNetIncomeLossToCashProvidedByUsedInOperatingActivities Abstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX Definition Amount of increase in lease obligation from new lease. References Reference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Section 50-Paragraph 4-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-4> Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-3> Details Name: us-gaap_CapitalLeaseObligationsIncurred Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition Amount of cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage. Excludes amount for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 8-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-8> Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 24-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-24> Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 45-Paragraph 4-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-4> Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalents Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX Definition Amount of increase (decrease) in cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; excluding effect from exchange rate change. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. References Reference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 24-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-24> Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 1-SubTopic 230-Topic 830-Publisher FASB-URI https://asc.fasb.org//1943274/2147481877/830-230-45-1> Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseExcludingExchangeRateEffect Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX References No definition available. Details Name: us-gaap_CashFlowOperatingActivitiesLesseeAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX Definition The current period expense charged against earnings on long-lived, physical assets not used in production, and which are not intended for resale, to allocate or recognize the cost of such assets over their useful lives; or to record the reduction in book value of an intangible asset over the benefit period of such asset; or to reflect consumption during the period of an asset that is not used in production. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph \(b\)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (b)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28) Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 360-SubTopic 10-Section 50-Paragraph 1-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482099/360-10-50-1](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 360-SubTopic 10-Section 50-Paragraph 1-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482099/360-10-50-1) Details Name: us-gaap_DepreciationAndAmortization Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX Definition The fair value of assets acquired in noncash investing or financing activities. References Reference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 4-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-4> Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-3> Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 5-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-5> Details Name: us-gaap_FairValueOfAssetsAcquired Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX Definition Amount of cash outflow for principal payment on finance lease. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \(g\)\(1\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147478964/842-20-4](http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph (g)(1)-Publisher FASB-URI https://asc.fasb.org//1943274/2147478964/842-20-4) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 5-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479041/842-20-45-5](http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 5-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479041/842-20-45-5) Details Name: us-gaap_FinanceLeasePrincipalPayments Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition Amount of gain (loss) on sale or disposal of property, plant and equipment assets, including oil and gas property and timber property. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph \(b\)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (b)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28) Details Name: us-gaap_GainLossOnSaleOfPropertyPlantEquipment Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition Amount of gain (loss) on termination of lease before expiration of lease term. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 40-Paragraph 1-Publisher FASB-URI https://asc.fasb.org//1943274/2147479092/842-20-40-1> Details Name: us-gaap_GainLossOnTerminationOfLease Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition Amount of loss from the write-down of an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph \(b\)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (b)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28) Reference 2: <http://www.xbrl.org/2003/role/exampleRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 55-Paragraph 24-Publisher FASB-URI https://asc.fasb.org//1943274/2147482548/350-20-55-24> Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(c\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482573/350-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482573/350-20-50-1) Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482573/350-20-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482573/350-20-50-2) Reference 5: <http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 2-Publisher FASB-URI https://asc.fasb.org//1943274/2147482573/350-20-45-2> Details Name: us-gaap_GoodwillImpairmentLoss Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX Definition The amount of cash paid during the current period to foreign, federal, state, and local authorities as taxes on income, net of any cash received during the current period as refunds for the overpayment of taxes. References Reference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 2-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-2> Details Name: us-gaap_IncomeTaxesPaidNet Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition The increase (decrease) during the reporting period in the amount due from customers for the credit sale of goods and services; includes accounts receivable and other types of receivables. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph \(a\)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (a)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28) Details Name: us-gaap_IncreaseDecreaseInAccountsAndOtherReceivables Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX Definition The increase (decrease) during the reporting period in the amounts payable to vendors for goods and services received and the amount of obligations and expenses incurred but not paid. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph \(a\)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (a)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org//1943274/2147482740/230-10-45-28) Details Name: us-gaap_IncreaseDecreaseInAccountsPayableAndAccruedLiabilities Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX Definition The increase (decrease) during the reporting period in amount due within one year (or one business year) from customers for the

credit sale of goods and services. 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Details Name: us-gaap_NoncashInvestingAndFinancingItemsAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionAmount of loss from impairment of right-of-use asset from operating lease. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 25-Paragraph 6-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479365/842-20-25-6Details Name: us-gaap_OperatingLeaseImpairmentLoss Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX-DefinitionAmount of periodic reduction over lease term of carrying amount of right-of-use asset from operating lease. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Details Name: us-gaap_OperatingLeaseRightOfUseAssetAmortizationExpense Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX-DefinitionThe cash outflow associated with the purchase of all investments (debt, security, other) during the period. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 13-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-13Details Name: us-gaap_PaymentsToAcquireInvestments Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-DefinitionThe cash outflow associated with the acquisition of long-lived, physical assets that are used in the normal conduct of business to produce goods and services and not intended for resale; includes cash outflows to pay for construction of self-constructed assets. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 13-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-13Details Name: us-gaap_PaymentsToAcquirePropertyPlantAndEquipment Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-DefinitionThe cash inflow from a borrowing supported by a written promise to pay an obligation. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 45-Paragraph 14-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-14Details Name: us-gaap_ProceedsFromNotesPayable Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX-DefinitionThe cash outflow for a borrowing supported by a written promise to pay an obligation. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 45-Paragraph 15-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-15Details Name: us-gaap_RepaymentsOfNotesPayable Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-DefinitionAmount of asset retirement obligations settled through noncash transactions. An asset retirement obligation is a legal obligation associated with the disposal or retirement from service of a tangible long-lived asset. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 4-Publisher FASB-URI https://asc.fasb.org/1943274/2147482913/230-10-50-4Reference 2: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147482913/230-10-50-3Reference 3: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 5-Publisher FASB-URI https://asc.fasb.org/1943274/2147482913/230-10-50-5Details Name: us-gaap_SettlementOfAssetRetirementObligationsThroughNoncashPaymentsAmount Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX-DefinitionAmount of noncash expense for share-based payment arrangement. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 45-Paragraph 28-Subparagraph (a)-SubTopic 10-Topic 230-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Details Name: us-gaap_ShareBasedCompensation Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX-DefinitionThe fair value of stock issued in noncash financing activities. ReferencesReference 1: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 4-Publisher FASB-URI https://asc.fasb.org/1943274/2147482913/230-10-50-4Reference 2: http://asc.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 5-Publisher FASB-URI https://asc.fasb.org/1943274/2147482913/230-10-50-5Details Name: us-gaap_StockIssuedIn Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap_SupplementalCashFlowInformationAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationOrganization and Business Description 12 Months Ended Dec. 31, 2023 Accounting Policies [Abstract] Organization and Business Description (1) Organization and Business Description Amplitech Group, Inc. ("Amplitech" or the "Company") was incorporated under the laws of the State of Nevada on December 30, 2010. On August 13,

2012, the Company acquired AmpliTech, Inc., by issuing 833,750 shares of the Company's common stock to the shareholders of AmpliTech, Inc. in exchange for 100% of the outstanding shares of AmpliTech Inc. (the "Share Exchange"). After the Share Exchange, the selling shareholders owned 60,000 shares of the outstanding 889,250 shares of Company common stock, resulting in a change in control. Accordingly, the transaction was accounted for as a reverse acquisition in which AmpliTech, Inc. was deemed to be the accounting acquirer, and the operations of the Company were consolidated for accounting purposes. The capital balances have been retroactively adjusted to reflect the reverse acquisition. AmpliTech designs, engineers and assembles microwave component-based low noise amplifiers ("LNA") that meet individual customer specifications. Application of the Company's proprietary technology results in maximum frequency gain with minimal background noise distortion as required by each customer. The Company has both domestic and international customers in such industries as aerospace, governmental, defense and commercial satellite. On September 12, 2019, AmpliTech Group, Inc. acquired the assets of Specialty Microwave Corporation ("Specialty"), a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty. Specialty designs and manufactures passive microwave components and related subsystems that meet individual customer specifications for both domestic and international customers for use in satellite communication ground networks. On February 17, 2021, AmpliTech Group, Inc., common stock and warrants under the symbols "AMPG" and "AMPGW", respectively, commenced trading on NASDAQ. A reverse split of the outstanding common stock at a 1-for-20 ratio became effective February 17, 2021 as of 12:01 a. m., Eastern Time. In connection with the public offering, 1,371,428 units at an offering price of \$ 7.00 per unit were sold. Each unit issued in the offering consisted of one share of common stock and one warrant. In 2021, the Company opened AGMDC, a monolithic microwave integrated circuits ("MMIC") chip design center in Texas and has started to implement several of its proprietary amplifier designs into MMIC components. MMICs are semiconductor chips used in high-frequency communications applications. MMICs are widely desired for power amplification solutions to service emerging technologies, such as phased array antennas and quantum computing. MMICs carry a smaller footprint enabling them to be incorporated into a broader array of systems while reducing costs. AGMDC designs, develops and manufactures state-of-the-art signal processing components for satellite and 5G communications networks, defense, space and other commercial AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 applications, allowing the Company to market its products to a wider base of customers requiring high technology in smaller packages. On November 19, 2021, AmpliTech Group, Inc. entered into an Asset Purchase Agreement (the "Purchase Agreement") with Spectrum Semiconductor Materials Inc. (the "Seller" or "SSM"), pursuant to which AmpliTech would acquire substantially all the assets of the Company (the "Acquisition"). The Acquisition was completed on December 15, 2021. Spectrum Semiconductor Materials ("SSM"), located in Silicon Valley (San Jose, CA), is a global authorized distributor of integrated circuit ("IC") packaging and lids for semiconductor device assembly, prototyping, testing, and production requirements. In August 2022, AmpliTech Group's True-G Speed Services (AGTGSS) division was founded to serve and provide complete system integration and ORAN compliant O-RU's (Radio Units) for telcos, enabling the industry to access "True 5G Speeds". AGTGSS provides Managed Services, Cyber Security, Cloud Services, Data Sciences and Telco Cloud Services. AGTGSS will also be providing full installation of Private 5G Networks (P5G) which includes the deployment of AmpliTech Group developed radio units. AGTGSS will implement AmpliTech's low noise amplifier devices in these systems to promote greater coverage, longer range and faster speeds. X-References No definition available. Details Name: us-gaap-AccountingPoliciesAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItem Type Balance Type: na Period Type: duration X-Definition The entire disclosure for the business description and basis of presentation concepts. Business description describes the nature and type of organization including but not limited to organizational structure as may be applicable to holding companies, parent and subsidiary relationships, business divisions, business units, business segments, affiliates and information about significant ownership of the reporting entity. Basis of presentation describes the underlying basis used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS). References Reference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic-235-Name-Accounting-Standards-Codification-Publisher-FASB-URI-https://asc.fasb.org//235/tableOfContentReference> Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic-275-Name-Accounting-Standards-Codification-Publisher-FASB-URI-https://asc.fasb.org//275/tableOfContentReference> Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic-205-Name-Accounting-Standards-Codification-Publisher-FASB-URI-https://asc.fasb.org//205/tableOfContentDetails> Name: us-gaap-BusinessDescriptionAndBasisOfPresentationTextBlock Namespace Prefix: us-gaap-Data Type: dtr-types:textBlock Item Type Balance Type: na Period Type: duration Summary of Significant Accounting Policies 12 Months Ended Dec. 31, 2023 Accounting Policies [Abstract] Summary of Significant Accounting Policies (2) Summary of Significant Accounting Policies Basis of Accounting The accompanying consolidated financial statements have been prepared using the accrual basis of accounting. Principles of Consolidation The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. Use of Estimates The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. Actual results could differ from those estimates. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Reclassifications Certain reclassifications have been made to the prior years' financial statements to conform to the current year's presentation. These reclassifications have no effect on previously reported results of operations. Cash and Cash Equivalents The Company considers deposits that can be redeemed on demand and investments and marketable securities that have original maturities of less than three months, when purchased, to be cash equivalents. As of December 31, 2023, the Company's cash and cash equivalents were deposited in five financial institutions. The Company's policy is to place its cash and cash equivalents with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. Accounts at each financial institution are insured by the Federal Deposit Insurance Corporation ("FDIC") up to \$250,000. Additionally, cash and cash equivalents maintained with investment institutions are insured by the Securities Investor Protection Corporation ("SIPC") up to \$500,000, which includes a \$250,000 limit for cash. In addition, the investment institution provides additional "excess of SIPC" coverage, which insures up to \$600 million. The Company has not experienced any losses to date resulting from this policy. At December 31, 2023 and 2022, the Company had \$3,170,500 and \$12,040,022 in excess of FDIC, SIPC, and excess SIPC insured limits, respectively. The Company has not experienced any losses in such accounts. Accounts Receivable Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with ASC Topic 326, "Financial Instruments—Credit Losses," the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of our customers, prevailing economic conditions, and reasonable and supportable forward-looking information. An allowance of \$0 has been recorded at December 31, 2023 and 2022, respectively. Marketable Securities The Company's investments in marketable securities are classified based on the nature of the securities and their availability for use in current operations. The Company's marketable securities are stated at fair value with all realized and unrealized gains and losses on investments in marketable equity securities recognized in other income, net. The realized and unrealized gains and losses on marketable securities are determined using specific identification method. Inventories Inventories, which consists primarily of raw materials, work in progress and finished goods, are stated at the lower of cost (first-in, first-out basis) or market (net realizable value). Inventory quantities and related values are analyzed at the end of each fiscal quarter to determine those items that are slow moving and obsolete. An inventory reserve is recorded for those items determined to be slow moving with a corresponding charge to cost of goods sold. Inventory items that are determined obsolete are written off currently with a corresponding charge to cost of goods sold. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 As of December 31, 2023 and 2022, the reserve for inventory obsolescence was \$1,146,000 and \$1,128,000, respectively. Property and Equipment Property and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements. Property and equipment are depreciated as follows: Schedule of property and equipment depreciated Description Useful Life Method Office equipment 3 to 7 years Straight-line Machinery/shop equipment 7 to 15 years Straight-line Computer equipment/software 1 to 7 years Straight-line Vehicles 5 years Straight-line Leasehold improvements 7 years Straight-line Intangible Assets Definite-lived intangible assets including customer relationships and intellectual property are subject to amortization. Intangible assets are amortized over their estimated useful life on a straight-line basis. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows. Indefinite-lived intangible assets are not subject to amortization. Intangible assets are amortized as follows: Schedule of Intangible Assets Description Useful Life Method Trade names Indefinite N/A Customer relationships to 20 years Straight-line Intellectual property years Straight-line Long-Lived Assets The Company reviews the carrying value of long-lived assets such property and equipment, right-of-use ("ROU") assets, and definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Circumstances which could trigger a review include, but are not limited to: significant decrease in the market price of the asset; significant adverse changes in the business climate or legal factors; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount of fair value less

costs to sell and would no longer be depreciated. The depreciable basis of assets that are impaired and continue in use is their respective fair values. During the years ended December 31, 2023 and 2022, there were no impairments of long-lived assets. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Goodwill and Indefinite-Lived Intangible Assets We follow the acquisition method of accounting to record the assets and liabilities of acquired businesses at their estimated fair value at the date of acquisition. We initially record goodwill for the amount the consideration transferred exceeds the acquisition-date fair value of net tangible and identifiable intangible assets acquired. Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are tested for impairment annually on December 31, or more frequently when events or circumstances indicate an impairment may have occurred. When assessing the recoverability of goodwill and indefinite-lived intangible assets, the Company may first assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit, including goodwill, or an indefinite-lived intangible asset is less than its carrying amount. The qualitative assessment is based on several factors, including the current operating environment, industry and market conditions, and overall financial performance. The Company may elect to bypass this qualitative assessment for some or all of its reporting units or other indefinite-lived intangible assets and perform a quantitative assessment, based on management's judgment. If we quantitatively test goodwill and indefinite-lived intangible assets for possible impairment, we calculate the fair value for the reporting unit and indefinite-lived assets and compare the amount to their carrying amount. If the fair value of a reporting unit and indefinite-lived asset exceeds their carrying amount, the reporting unit and indefinite-lived assets are not considered impaired. If the carrying amount of the reporting unit and indefinite-lived assets exceeds their fair value, the reporting unit and indefinite-lived assets are considered to be impaired, and an impairment charge is recognized for the difference. We estimate the fair value of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our indefinite-lived intangible assets. During the years ended December 31, 2023 and 2022, we recorded goodwill impairments of \$ 0 and \$ 120, 136, respectively. During the years ended December 31, 2023 and 2022, there were no impairments of indefinite-lived intangible assets. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Investment Policy-Cost Method Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Company's share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held \$ 348, 250 of investments without readily determinable fair values at December 31, 2023 and 2022, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the years ended December 31, 2023 and 2022. Leases We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Revenue Recognition We sell our products through a combination of a direct sales force in the United States and independent sales representatives in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each party's rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred. Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period. Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds. We do not have significant returns. We do not typically offer extended warranty or service plans. Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we evaluate if collectability is reasonably assured. None of our contracts as of December 31, 2023 contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues. Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customer's control at contractually stated pricing. Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Cost of Sales We include product costs such as material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales. Shipping and Handling Shipping and handling charges are generally incurred at the customer's expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in cost of sales. Research and Development Research and development expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies. Research and development costs for the years ended December 31, 2023 and 2022 were \$ 2, 341, 845 and \$ 1, 024, 127, respectively. Income Taxes The Company's deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At December 31, 2023 and 2022, the Company had no material unrecognized tax benefits. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Earnings Per Share Basic earnings per share ("EPS") are determined by dividing the net earnings by the weighted-average number of shares of common shares outstanding during the period. Diluted EPS is determined by dividing net earnings by the weighted-average number of common shares used in the basic EPS calculation plus the number of common shares that would be issued assuming conversion of all potentially dilutive securities outstanding under the treasury stock method. As of December 31, 2023 and 2022, there were 4, 545, 442 and 4, 235, 442, respectively, potentially dilutive shares that need to be considered as common share equivalents. As a result of the net loss, the potentially dilutive shares that need to be considered as common share equivalents, for the years ended December 31, 2023 and 2022, are anti-dilutive. Fair Value Measurements The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date. Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly. Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment. Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest. Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when

the derived fair value is below carrying value in the consolidated balance sheets. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Stock-Based Compensation The Company records stock-based compensation in accordance with ASC 718, Compensation—Stock Compensation. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period. Concentration of Credit Risk Financial instruments that potentially subject the Company to credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable. The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. Sales to the Company's largest customer represented approximately 8.45% of total sales for the year ended December 31, 2023. As of December 31, 2022, there were two customers that each accounted for 25.98% and 10.60% of total revenue. As of December 31, 2023 and 2022, there were two vendors that accounted for 33.14% and 17.18% and 44.15% and 29.29%, respectively, of total component parts purchased. Recent Accounting Pronouncements In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The amendments in this update, among other things, require the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. Financial institutions and other organizations will now use forward-looking information to better inform their credit loss estimates. As a smaller reporting company, the guidance was effective for our fiscal years beginning after December 15, 2022. The adoption of this guidance did not have an impact on our consolidated financial statements. In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the transparency and decision usefulness of income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segment's profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. These amendments are to be applied retrospectively. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 In August 2023, the FASB issued ASU 2023-05, Business Combinations—Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement, which requires a newly formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. X-ReferencesNo definition available. Details Name: us-gaap-AccountingPoliciesAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-Definition The entire disclosure for all significant accounting policies of the reporting entity. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147483426/235-10-50-1>Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 9-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-9](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 235-Name Accounting Standards Codification-Publisher FASB-URI https://asc.fasb.org/235-tableOfContent-Details Name: us-gaap-SignificantAccountingPoliciesTextBlock Namespace Prefix: us-gaap-Data Type: dt:types:textBlockItemType Balance Type: na Period Type: durationRevenues 12 Months Ended Dec. 31, 2023 Revenue from Contract with Customer [Abstract] Revenues (3) Revenues The following table presents sales disaggregated based on geographic regions and for the years ended: Schedule of disaggregated revenue December 31, 2023 December 31, 2022 AmpliTech Inc. and Specialty Microwave Domestic sales $ 5,120,694 $ 4,922,237 International sales 1,267,459 947,515 Total sales $ 6,388,153 $ 5,869,752 Spectrum Domestic sales $ 6,234,934 $ 6,798,173 International sales 2,961,490 6,726,027 Total sales $ 9,196,424 $ 13,524,740 Total sales for the year ended December 31, 2023 and 2022, were $ 15,584,577 and $ 19,394,492, respectively. X-ReferencesNo definition available. Details Name: us-gaap-RevenueFromContractWithCustomerAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-Definition The entire disclosure of revenue from contract with customer to transfer good or service and to transfer nonfinancial asset. Includes, but is not limited to, disaggregation of revenue, credit loss recognized from contract with customer, judgment and change in judgment related to contract with customer, and asset recognized from cost incurred to obtain or fulfill contract with customer. Excludes insurance and lease contracts. ReferencesReference 1: <a href=)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-10>Reference 3: <http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 15-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-15>Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12](http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12)Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12](http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph \(c\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12](http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12)Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph \(d\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12](http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph (d)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12)Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph \(e\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12](http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-12)Reference 9: [http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph \(b\)\(2\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-13](http://www.xbrl.org/2003/role/disclosureRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph (b)(2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479806/606-10-50-13)Reference 10:

149, 976-2026 149, 976-2027 149, 976 Thereafter 1, 649, 736 Total \$ 2, 399, 616 AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 X-ReferencesNo definition available. Details Name: us-gaap-GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionThe entire disclosure for goodwill and intangible assets. ReferencesReference 1: http://www.fasb.org/us-gaap/role/ref/legacyRef-Topic 350-Name Accounting Standards Codification-Publisher FASB-URI https://ase.fasb.org/350/tableOfContent-Details Name: us-gaap-GoodwillAndIntangibleAssetsDisclosureTextBlock Namespace Prefix: us-gaap-Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: durationCost Method Investment 12 Months Ended Dec. 31, 2023 Investments, All Other Investments [Abstract] Cost Method Investment (9) Cost Method Investment On June 10, 2021, the Company entered into a membership interest purchase agreement with SN2N, LLC for an aggregate purchase price of \$ 350, 000, to be paid in four tranches. Each tranche represents a 5 % membership interest, and in aggregate a 20 % membership interest. On June 15, 2022, an amendment to the membership interest purchase agreement was made to reflect a 19.9 % membership interest. In light of this amendment, the Company overpaid \$ 1, 750 for the membership interest and was subsequently reimbursed. As of December 31, 2023 and 2022, the Company has made an investment of \$ 348, 250 for a 19.9 % membership interest. X-DefinitionThe entire disclosure for investment. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 320-Name Accounting Standards Codification-Publisher FASB-URI https://ase.fasb.org/320/tableOfContentReference 2: http://www.xbrl.org/2009/role/commonPracticeRef-Name Accounting Standards Codification-Topic 321-Publisher FASB-URI https://ase.fasb.org/321/tableOfContentReference 3: http://www.xbrl.org/2009/role/commonPracticeRef-Name Accounting Standards Codification-Topic 325-Publisher FASB-URI https://ase.fasb.org/325/tableOfContent-Details Name: us-gaap-InvestmentTextBlock Namespace Prefix: us-gaap-Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap-InvestmentsAllOtherInvestmentsAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationLeases 12 Months Ended Dec. 31, 2023 Leases Leases (10) Leases The following was included in our balance sheet as of December 31, 2023 and 2022: Schedule of Lease Assets and Liabilities December 31, 2023 December 31, 2022 Operating leases Assets ROU operating lease assets \$ 3, 538, 798 \$ 4, 197, 324 Liabilities Current portion of operating lease \$ 541, 324 \$ 586, 379 Operating lease, net of current portion \$ 3, 171, 979 \$ 3, 768, 932 Total operating lease liabilities \$ 3, 713, 303 \$ 4, 355, 311 Financing leases Assets Property and equipment, gross \$ 234, 036 \$ 234, 036 Accumulated depreciation (151, 919) (113, 621) Property and equipment, net \$ 82, 117 \$ 120, 415 Liabilities Current portion of financing lease \$ 16, 799 \$ 33, 480 Financing lease, net of current portion \$ 32, 537 \$ 49, 336 Total financing lease liabilities \$ 49, 336 \$ 82, 816 AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 The weighted average remaining lease term and weighted average discount rate at December 31, 2023 and 2022 were as follows: Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate Weighted average remaining lease term (years) December 31, 2023 December 31, 2022 Operating leases 9.36 9.40 Financing leases 2.97 2.80 Weighted average discount rate Operating leases 4.45 % 4.49 % Financing leases 4.72 % 4.70 % Financing Lease The Company entered into several 60-month lease agreements to finance certain laboratory and office equipment. As such, the Company has accounted for these transactions as a financing lease. The following table reconciles future minimum financing lease payments to the discounted lease liability as of December 31, 2023: Schedule of Future Minimum Lease Payments For Finance Lease 2024 18, 751 2025 18, 186 2026 11, 976 2027 3, 992 Total lease payments 52, 905 Less imputed interest (3, 569) Total lease obligations 49, 336 Less current obligations (16, 799) Long-term lease obligations \$ 32, 537 AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Operating Leases On December 4, 2015, the Company entered into a new operating lease agreement to rent office space in Bohemia, NY. This five-year agreement commenced February 1, 2016 with an annual rent of \$ 50, 000 and 3.75 % increases in each successive lease year. On January 13, 2021, a lease rider was annexed to the original lease whereby the lease term will be extended on a month-by-month basis, commencing on February 1, 2021. The lease was terminated in April 2022. On September 12, 2019, the Company entered into a new operating lease agreement to rent office space in Ronkonkoma, NY. This five-year agreement commenced on September 12, 2019 with an annual rent of \$ 90, 000 and 3 % increase in each successive lease year beginning in 2021. The Company has an option to buy the property during the first two years of the lease for \$ 1, 200, 000 and then at fair market value for the remainder of the lease term. This option has expired and was not exercised as of December 31, 2022. On April 13, 2023, this lease was terminated subject to the terms of a Surrender Agreement between the Company and landlord. As a result, a gain on termination of right-of-use operating lease was recognized of \$ 8, 461. On November 27, 2019, the Company entered a 39-month agreement to lease an automobile with a monthly payment of \$ 420. This lease was paid in full as of March 31, 2023. On December 15, 2021, the Company assumed the SSM lease agreement for office and warehouse space in San Jose, CA, with the same terms and conditions. Effective February 1, 2020, the lease term will expire on January 31, 2025 with a base rent of \$ 24, 234 for the first 12 months and increase by approximately 3 % every year. On October 15, 2021, the Company entered a new lease for a 20, 000-square foot facility at 155 Plant Avenue, Hauppauge, New York, for a term of seven years and two months. The yearly base rent of \$ 346, 242 shall increase at a rate of 2.75 % per year to begin on the first anniversary lease commencement date and each year thereafter. The first two months of basic rent shall be abated following the commencement lease date. In the event the landlord decides to sell the property, the Company shall have the right of first offer to purchase subject property. Upon lease execution, the Company paid two months of base rent as a security deposit and one month's rent totaling \$ 86, 560. The Company moved into the new manufacturing and headquarters facility April 1, 2022. On August 9, 2023, the Company entered a 39-month agreement for \$ 20, 880 to lease an automobile with a monthly payment of \$ 605. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 The following table reconciles future minimum operating lease payments to the discounted lease liability as of December 31, 2023: Schedule of Future Minimum Operating Lease Payments 2024 696, 362 2025 407, 580 2026 389, 397 2027 393, 899 2028 404, 721 Thereafter 2, 313, 460 Total lease payments 4, 605, 419 Less imputed interest (892, 116) Total lease obligations 3, 713, 303 Less current obligations (541, 324) Long-term lease obligations \$ 3, 171, 979 X-ReferencesNo definition available. Details Name: AMPG-DisclosureLeasesAbstract Namespace Prefix: AMPG-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionThe entire disclosure for operating leases of lessee. Includes, but is not limited to, description of operating lease and maturity analysis of operating lease liability. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Publisher FASB-URI https://ase.fasb.org/842-20/tableOfContent-Details Name: us-gaap-LesseeOperatingLeasesTextBlock Namespace Prefix: us-gaap-Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: durationNotes Payable 12 Months Ended Dec. 31, 2023 Debt Disclosure [Abstract] Notes Payable (11) Notes Payable Promissory Note: On September 12, 2019, AmpliTech Group, Inc. acquired Specialty, a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty. The total consideration paid was \$ 1, 143, 633, consisting of \$ 668, 633 in cash and a \$ 475, 000 promissory note with an interest rate of 6 %. Beginning November 1, 2019, payment of principal and interest shall be due payable in fifty-nine (59) monthly payments of \$ 9, 213 with a final payment due October 1, 2024 of \$ 9, 202. As of December 31, 2023 and 2022, the balance of this promissory note was \$ 80, 841 and \$ 183, 014, respectively. Principal payments of \$ 102, 171 and \$ 96, 105 along with interest expense of \$ 8, 391 and \$ 14, 460 was paid during the years ended December 31, 2023 and 2022, respectively. Loan Payable: On September 12, 2019, the Company was approved for a \$ 250, 000 equipment leasing facility which was subsequently increased to \$ 500, 000. The Company has borrowed against the leasing facility as follows: ● On December 20, 2019, the Company borrowed \$ 58, 192 to be paid over a three-year term with monthly payments of \$ 1, 736 at an interest rate of 5.26 %. The balance as of December 31, 2023 and 2022 was \$ 0, respectively. Principal payments of \$ 0 and \$ 18, 630 were made for the years ended December 31, 2023 and 2022, respectively. Total interest expense paid for the years ended December 31, 2023 and 2022 was \$ 0 and \$ 466, respectively. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 ● On May 14, 2020, the Company borrowed \$ 27, 494 to be paid over a three-year term with monthly payments of \$ 815 at an interest rate of 4.27 %. The balance as of December 31, 2023 and 2022 was \$ 0 and \$ 3, 230, respectively. Principal payments of \$ 3, 230 and \$ 9, 402, were made for the years ended December 31, 2023 and 2022, respectively. Total interest expense paid for the years ended December 31, 2023 and 2022 was \$ 30 and \$ 378, respectively. This loan was paid in full in April 2022. ● On June 10, 2020, the Company borrowed \$ 41, 015 to be paid over a three-year term with monthly payments of \$ 1, 216 at an interest rate of 4.28 %. The balance as of December 31, 2023 and 2022 was \$ 0 and \$ 6, 012, respectively. Principal payments of \$ 6, 012 and \$ 13, 975 were made for the years ended December 31, 2023 and 2022, respectively. Total interest expense paid for the years ended December 31, 2023 and 2022 was \$ 68 and \$ 617, respectively. This loan was paid in full in May 2023. ● On May 6, 2022, the Company borrowed \$ 441, 139 to be paid over a three-year term with monthly payments of \$ 13, 341 at an interest rate of 5.6 %. On June 15, 2022, this equipment order was cancelled resulting in a full refund of \$ 441, 139 less interest paid of \$ 6, 317. The loan was repaid in August 2022. As of March 14, 2023, the Company closed the equipment line of credit of \$ 500, 000, which had \$ 0 balance. All UCC filings on the Company assets have been released as well as the President's personal guarantee. In January 2022, the Company purchased machinery for \$ 91, 795, applying a deposit of \$ 9, 180 and financing the balance of \$ 82, 616 over 24 payments at an interest rate of 1.90 %. The balance as of December 31, 2023 and 2022 was \$ 0 and \$ 41, 700, respectively. Principal payments of \$ 41, 700 and 40, 916 and interest expense of \$ 430 and \$ 1, 215 was paid for the years ended December 31, 2023 and 2022, respectively. Future principal payments over the term of the loans as of December 31, 2023 are as follows: Schedule of Future Principal and Interest Payments Payments 2024 \$ 80, 841 Total remaining payments \$ 80, 841 X-ReferencesNo definition available. Details Name: us-gaap-DebtDisclosureAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionThe entire disclosure for information about short-term and long-term debt arrangements, which includes amounts of borrowings under each line of credit, note payable, commercial paper issue, bonds indenture, debenture issue, own-share lending arrangements and any other contractual agreement to repay funds, and about the underlying arrangements, rationale for a classification as long-

Company's 2020 Plan to directors of the Company for an aggregate of 45,000 shares of common stock (15,000 each) valued at \$ 82,800. These restricted stock awards vested immediately. On December 20, 2023, the Company granted 25,000 restricted stock units at an exercise price of \$ 1.73 under the Company's 2020 Plan to a consultant. This restricted stock award vested immediately and the stock compensation was recorded under research and development. On May 20, 2022, 30,000 restricted stock units at an exercise price of \$ 1.96 were issued to a board advisor. Vesting will occur in equal quarterly installments of 2,500 shares beginning on May 20, 2022. As of December 30, 2023 and 2022, 10,000 and 7,500 shares of common stock were issued, respectively. On June 17, 2022, the Company granted restricted stock awards under the Company's 2020 Plan to directors of the Company for an aggregate of 45,000 shares of common stock (15,000 each) valued at \$ 88,650. These restricted stock awards vested immediately. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Equity Incentive Plan: In October 2020, the Board of Directors and shareholders adopted the Company's 2020 Equity Incentive Plan (the "2020 Plan"), effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1,250,000 shares of common stock to grant shares of the Company's common stock to employees and individuals who perform services for the Company. The purpose of the 2020 Plan is to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for the Company, and to promote the success of the Company's business. The 2020 Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares, and other stock or cash awards as the Board of Directors may determine. In 2023, the Board and the shareholders adopted the Company's Amended and Restated 2020 Equity Incentive Plan (the "Amended and Restated Plan"), effective as of December 11, 2023. The Amended and Restated Plan is substantially similar to the 2020 Plan except that it increases the shares of our common stock available for issuance thereunder to 2,250,000 shares of common stock. Stock Options: On February 27, 2023, the Company granted one employee ten-year stock options to purchase 2,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on May 27, 2023, with an exercise price of \$ 2.59 per share. The Company has calculated these options estimated fair market value at \$ 4,800 using the Black-Scholes model, with the following assumptions: expected term of 7.46 years, stock price of \$ 2.59, exercise price of \$ 2.59, volatility of 126.8%, risk-free rate of 4.08%, and no forfeiture rate. On May 1, 2023, the Company granted one employee ten-year stock options to purchase 5,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on August 1, 2023, with an exercise price of \$ 3.19 per share. The Company has calculated these options estimated fair market value at \$ 14,800 using the Black-Scholes model, with the following assumptions: expected term of 7.51 years, stock price of \$ 3.19, exercise price of \$ 3.19, volatility of 126.0%, risk-free rate of 3.62%, and no forfeiture rate. On June 5, 2023, the Company granted one employee ten-year stock options to purchase 2,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over three years commencing on September 5, 2023, with an exercise price of \$ 2.40 per share. The Company has calculated these options estimated fair market value at \$ 4,200 using the Black-Scholes model, with the following assumptions: expected term of 5.50 years, stock price of \$ 2.40, exercise price of \$ 2.40, volatility of 127.3%, risk-free rate of 3.82%, and no forfeiture rate. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 On June 12, 2023, the Company granted one employee ten-year stock options to purchase 3,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over three years commencing on September 12, 2023, with an exercise price of \$ 2.49 per share. The Company has calculated these options estimated fair market value at \$ 6,600 using the Black-Scholes model, with the following assumptions: expected term of 5.50 years, stock price of \$ 2.49, exercise price of \$ 2.49, volatility of 127.0%, risk-free rate of 3.89%, and no forfeiture rate. On August 18, 2023, the Company granted one employee ten-year stock options to purchase 5,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on November 18, 2023, with an exercise price of \$ 1.84 per share. The Company has calculated these options estimated fair market value at \$ 8,500 using the Black-Scholes model, with the following assumptions: expected term of 7.51 years, stock price of \$ 1.84, exercise price of \$ 1.84, volatility of 122.5%, risk-free rate of 4.34%, and no forfeiture rate. On September 25, 2023, the Company granted one employee ten-year stock options to purchase 3,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on December 25, 2023, with an exercise price of \$ 1.85 per share. The Company has calculated these options estimated fair market value at \$ 5,100 using the Black-Scholes model, with the following assumptions: expected term of 7.51 years, stock price of \$ 1.85, exercise price of \$ 1.85, volatility of 122.5%, risk-free rate of 4.61%, and no forfeiture rate. On October 2, 2023, the Company granted one employee ten-year stock options to purchase 5,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on January 2, 2024, with an exercise price of \$ 2.01 per share. The Company has calculated these options estimated fair market value at \$ 9,300 using the Black-Scholes model, with the following assumptions: expected term of 7.51 years, stock price of \$ 1.85, exercise price of \$ 2.01, volatility of 122.4%, risk-free rate of 4.73%, and no forfeiture rate. On December 20, 2023, the Company granted Mr. Maqbool ten-year stock options to purchase 100,000 shares of common stock according to the Company's 2020 Plan. In addition, Ms. Sanfratello and Mr. Flores were each granted stock options to purchase 50,000 shares of common stock. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.73 per share. The Company has calculated these options estimated fair market value at \$ 315,593 using the Black-Scholes model, with the following assumptions: expected term of 7.36 years, stock price of \$ 1.73, exercise price of \$ 1.73, volatility of 120.7%, risk-free rate of 3.88%, and no forfeiture rate. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 On December 20, 2023, the Company granted two employees and one consultant ten-year stock options to purchase 95,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.73 per share. The Company has calculated these options estimated fair market value at \$ 149,907 using the Black-Scholes model, with the following assumptions: expected term of 7.36 years, stock price of \$ 1.73, exercise price of \$ 1.73, volatility of 120.7%, risk-free rate of 3.88%, and no forfeiture rate. On May 20, 2022, the Company granted four employees five-year stock options to purchase shares of common stock (totaling 45,000) according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on the grant date, with an exercise price of \$ 1.96 per share. The Company also granted two employees five-year stock options to purchase shares of common stock (totaling 2,000) according to the Company's 2020 Plan. The stock options vest one year from date of grant at an exercise price of \$ 1.96. In addition, the Company granted two advisors to the Board, ten-year stock options to purchase shares of common stock (totaling 35,000) according to the Company's 2020 Plan. Twenty-five thousand (25,000) stock options vest immediately on date of grant at an exercise price of \$ 1.96, and the balance of ten thousand (10,000) stock options vest in equal quarterly installments over one year commencing on the grant date. The Company has calculated these options estimated fair market value at \$ 129,325 using the Black-Scholes model, with the following assumptions: expected term ranging from 2.5 to 4.9 years, stock price \$ 1.96, exercise price \$ 1.96, volatility ranging from 136.2% to 141.3%, risk-free rate ranging from 2.67% to 2.80%, and no forfeiture rate. On June 14, 2022, the Company granted Mr. Maqbool five-year stock options to purchase 100,000 shares of common stock according to the Company's 2020 Plan. In addition, Ms. Sanfratello and Mr. Flores were each granted five-year stock options to purchase 50,000 shares of common stock. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.72 per share. The Company has calculated these options estimated fair market value at \$ 304,148 using the Black-Scholes model, with the following assumptions: expected term of 4.9 years, stock price of \$ 1.72, exercise price of \$ 1.72, volatility of 138.3%, risk-free rate of 3.61%, and no forfeiture rate. On August 22, 2022, the Company granted Daniel Mazziotta five-year stock options to purchase 25,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 2.23 per share. The Company has calculated these options estimated fair market value at \$ 47,787 using the Black-Scholes model, with the following assumptions: expected term of 4.5 years, stock price of \$ 2.23, exercise price of \$ 2.23, volatility of 134.5%, risk-free rate of 3.17%, and no forfeiture rate. On December 19, 2022, the Company granted one employee ten-year stock options to purchase 3,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over three years commencing on March 31, 2023 with an exercise price of \$ 1.97 per share. The Company has calculated these options estimated fair market value at \$ 5,275 using the Black-Scholes model, with the following assumptions: expected term of 5.5 years, stock price of \$ 1.97, exercise price of \$ 1.97, volatility of 132.2%, risk-free rate of 3.99%, and no forfeiture rate. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 On December 20, 2022, the Company granted Mr. Maqbool ten-year stock options to purchase 100,000 shares of common stock according to the Company's 2020 Plan. In addition, Ms. Sanfratello and Mr. Flores were each granted stock options to purchase 50,000 shares of common stock. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.92 per share. The Company has calculated these options estimated fair market value at \$ 357,425 using the Black-Scholes model, with the following assumptions: expected term of 7.5 years, stock price of \$ 1.92, exercise price of \$ 1.92, volatility of 127.5%, risk-free rate of 3.79%, and no forfeiture rate. On December 20, 2022, the Company granted Matthew Kappers, Andrew Lee and Daniel Mazziotta ten-year stock options to purchase 5,000, 5,000 and 7,500 shares of common stock respectively according to the Company's 2020 Plan. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.92 per share. The Company has calculated these options estimated fair market value at \$ 31,275 using the Black-Scholes model, with the following assumptions: expected term of 7.5 years, stock price of \$ 1.92, exercise price of \$ 1.92, volatility of 127.5%, risk-free rate of 3.79%, and no forfeiture rate. On December 20, 2022, the Company granted eleven employees and one Board Advisor ten-year stock options to purchase 85,500 shares of common stock according to the Company's 2020 Plan. The stock options vest in quarterly installments over a 5-year period with an exercise price of \$ 1.92 per share. The Company has calculated these options estimated fair market value at \$ 152,800 using the Black-Scholes model, with the following assumptions: expected term of 7.5 years, stock price of \$ 1.92, exercise price of \$ 1.92, volatility of 127.5%, risk-free rate of 3.79%

%, and no forfeiture rate. Below is a table summarizing the changes in stock options outstanding for the year ended December 31, 2023:

| Schedule of Stock Options | Outstanding Number of Weighted Average Options | Exercise Price (\$) | Outstanding at December 31, 2022 | Granted | Expired | Exercised |
|---------------------------|--|---------------------|----------------------------------|---------|---------|--|
| Options | 916,000 | \$ 2.49 | 320,000 | 1.78 | 78 | Exercised—Expired—Outstanding at December 31, 2023 |
| Warrants | 483,344 | \$ 2.95 | 296,942 | 7.83 | 80 | Exercised—Expired—Outstanding at December 31, 2023 |

As of December 31, 2023, all outstanding stock options were issued according to the Company's 2020 Plan, and there remains 869,000 shares of common stock available for future issuance under the 2020 Plan. Stock-based compensation expense related to stock options of \$ 248,996 and \$ 244,631 was recorded for the years ended December 31, 2023 and 2022, respectively. As of December 31, 2023, the remaining unrecognized compensation cost related to non-vested stock options is \$ 1,255,294 and is expected to be recognized over 4.76 years. The outstanding stock options have a weighted average remaining contractual life of 5.26 years and a total intrinsic value of \$ 76,540. Warrants: Effective February 19, 2021, AmpliTech Group Inc., common stock and warrants under the symbols "AMPG" and "AMPGW," respectively, commenced trading on NASDAQ. In connection with the public offering, 1,371,428 units sold at an offering price of \$ 7.00 per unit. Each unit issued in the offering consisted of one share of common stock and one warrant. Maxim Group LLC acted as sole book-running manager for the offering. The warrants expire ten years from the date of issuance. Maxim Group LLC acted as sole book-running manager for the offering and partially exercised its overallotment option to purchase 205,714 warrants at the public offering price. The warrants expire ten years from the date of issuance. Effective April 16, 2021, the Company entered into definitive agreements with certain institutional investors to sell 2,715,000 shares of common stock in a registered direct offering priced at the market under NASDAQ rules. Concurrently, the Company agreed to issue to the investors, in a private placement, warrants to purchase an aggregate of 1,900,500 shares of common stock at an exercise price of \$ 8.48 per share with a five-year term. On July 20, 2021, in connection with a product development agreement with an unrelated party, the Company issued warrants to purchase 30,000 shares of common stock. The warrants vest in one year from issuance, with an exercise price of \$ 5.00 per share. The Company has calculated these warrants estimated fair market value at \$ 88,803 using the Black-Scholes model, with the following assumptions: expected term 3.0 years, stock price \$ 3.80, exercise price \$ 5.00, volatility 149.8%, risk-free rate 0.37%, and no forfeiture rate. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Below is a table summarizing the changes in warrants outstanding for the year ended December 31, 2023:

| Schedule of Warrants | Outstanding Number of Weighted Average Warrants | Exercise Price (\$) | Outstanding at December 31, 2022 | Granted | Expired | Exercised |
|----------------------|---|---------------------|----------------------------------|---------|---------|--|
| Warrants | 296,942 | \$ 7.83 | 296,942 | 7.83 | 80 | Exercised—Expired—Outstanding at December 31, 2023 |

As of December 31, 2023, the remaining unrecognized compensation cost related to non-vested warrants is \$ 0. The outstanding warrants have a weighted average remaining contractual life of 2.23 years and a total intrinsic value of \$ 0. Restricted Stock Units: On August 18, 2023, the Company granted restricted stock awards under the Company's 2020 Plan to directors of the Company for an aggregate of 45,000 shares of common stock (15,000 each) valued at \$ 82,800. These restricted stock awards vested immediately. On December 20, 2023, 25,000 restricted stock units at an exercise price of \$ 1.73 were issued to a consultant. This restricted stock award vested immediately. On May 20, 2022, 30,000 restricted stock units at an exercise price of \$ 1.96 were issued to a board advisor. Vesting will occur in equal quarterly installments of 2,500 shares beginning on May 20, 2022. As of December 31, 2023 and 2022, 10,000 and 7,500 shares of common stock were issued, respectively. On June 17, 2022, the Company granted restricted stock awards under the Company's 2020 Plan to directors of the Company for an aggregate of 45,000 shares of common stock (15,000 each) valued at \$ 88,650. These restricted stock awards vested immediately. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Below is a table summarizing the changes in restricted stock units outstanding for the year ended December 31, 2023:

| Schedule of Changes in Restricted Stock Units | Outstanding Number of Weighted Average RSU's | Exercise Price (\$) | Outstanding at December 31, 2022 | Granted | Expired | Exercised |
|---|--|---------------------|----------------------------------|---------|---------|-----------|
| RSU's | 70,000 | \$ 1.80 | 80,000 | 1.82 | 12,500 | 1.96 |

As of December 31, 2023, the remaining unrecognized compensation cost related to non-vested restricted stock units is \$ 27,245. The outstanding restricted stock units have a weighted average remaining contractual life of 1.14 years and a total intrinsic value of \$ 0. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 X-References No definition available. Details Name: us-gaap_EquityAbstract Namespace Prefix: us-gaap_Data Type: xbrl:stringItemType Balance Type: na Period Type: durationX-Definition The entire disclosure for equity. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-13](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-13) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph \(h\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-13](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph (h)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-13) Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 14-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-14](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 14-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-14) Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481062/946-235-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481062/946-235-50-2) Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(d\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481062/946-235-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 235-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (d)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481062/946-235-50-2) Reference 6: <http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 505-Name Accounting Standards Codification-Section 50-Paragraph 6-Publisher FASB-URI https://asc.fasb.org/1943274/2147481004/946-505-50-6> Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 40-Name Accounting Standards Codification-Section 50-Paragraph 6-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480237/815-40-50-6](http://www.xbrl.org/2003/role/disclosureRef-Topic 815-SubTopic 40-Name Accounting Standards Codification-Section 50-Paragraph 6-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480237/815-40-50-6) Reference 8: 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https://asc.fasb.org/1943274/2147481112/505-10-50-13) Reference 13: [http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph \(j\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-13](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph (j)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-13) Reference 14: [http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 14-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-14](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 14-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-14) Reference 15: 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Standards Codification-Section 50-Paragraph 18-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-18](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 18-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-18) Reference 18: [http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 18-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-18](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 18-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-18) Reference 19: [http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 18-Subparagraph \(d\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-18](http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 18-Subparagraph (d)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-18) Details Name: us-gaap_StockholdersEquityNoteDisclosureTextBlock Namespace Prefix: us-gaap_Data Type: dt-types:textBlockItemType Balance Type: na Period Type: duration Commitments and Contingencies 12 Months Ended Dec. 31, 2023 Commitments and Contingencies Disclosure [Abstract] Commitments and Contingencies (14) Commitments and Contingencies (14) On November 19, 2021, AmpliTech Group, Inc. entered into an Asset Purchase Agreement (the "Purchase Agreement") with Spectrum Semiconductor Materials Inc. (the "Seller" or "SSM"), pursuant to which AmpliTech would acquire substantially all of the assets of the Company (the "Acquisition"). The Acquisition was completed on December 15, 2021. The purchase agreement contained a revenue earnout adjustment. Within forty (40) days after December 31, 2022, AmpliTech prepared and delivered to Seller a statement setting forth its calculation of Two Years Net Revenues of the business, or the "Revenue Statement". The revenue earnout adjustment was determined to be an amount equal to 25% of two years' net revenues minus \$ 20,000,000. If the revenue adjustment is a positive number, Buyer shall pay to Seller an amount equal to the revenue adjustment. If the revenue adjustment is a negative number, Seller shall pay to Buyer an amount equal to the revenue adjustment. As of December 31, 2022, the fair value of the revenue adjustment was determined to be \$ 2,180,826, an increase of \$ 815,788 as previously recorded as of December 31, 2021. This amount was owed to Seller and was recorded as a contingent liability as of December 31, 2022, and subsequently paid on March 20, 2023. X-References No definition available. Details Name: us-gaap_CommitmentsAndContingenciesDisclosureAbstract Namespace Prefix: us-gaap_Data Type: xbrl:stringItemType Balance Type: na Period Type: durationX-Definition The entire disclosure for commitments and contingencies. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 440-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org/1943274/](http://www.xbrl.org/2003/role/disclosureRef-Topic 440-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/)

2147482648 / 440-10-50-4Reference 2:

of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our indefinite-lived intangible assets. During the years ended December 31, 2023 and 2022, we recorded goodwill impairments of \$ 0 and \$ 120, 136, respectively. During the years ended December 31, 2023 and 2022, there were no impairments of indefinite-lived intangible assets. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Investment Policy—Cost Method Investment Policy—Cost Method Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Company's share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held \$ 348, 250 of investments without readily determinable fair values at December 31, 2023 and 2022, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the years ended December 31, 2023 and 2022. Leases Leases We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Revenue Recognition Revenue Recognition We sell our products through a combination of a direct sales force in the United States and independent sales representatives in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each party's rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred. Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period. Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds. We do not have significant returns. We do not typically offer extended warranty or service plans. Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we evaluate if collectability is reasonably assured. None of our contracts as of December 31, 2023 contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues. Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customer's control at contractually stated pricing. Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Cost of Sales Cost of Sales We include product costs such as material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales. Shipping and Handling Shipping and Handling Shipping and handling charges are generally incurred at the customer's expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in cost of sales. Research and Development Research and Development Research and development expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies. Research and development costs for the years ended December 31, 2023 and 2022 were \$ 2, 341, 845 and \$ 1, 024, 127, respectively. Income Taxes Income Taxes The Company's deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At December 31, 2023 and 2022, the Company had no material unrecognized tax benefits. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Earnings Per Share Earnings Per Share Basic earnings per share ("EPS") are determined by dividing the net earnings by the weighted average number of shares of common shares outstanding during the period. Diluted EPS is determined by dividing net earnings by the weighted average number of common shares used in the basic EPS calculation plus the number of common shares that would be issued assuming conversion of all potentially dilutive securities outstanding under the treasury stock method. As of December 31, 2023 and 2022, there were 4, 545, 442 and 4, 235, 442, respectively, potentially dilutive shares that need to be considered as common share equivalents. As a result of the net loss, the potentially dilutive shares that need to be considered as common share equivalents, for the years ended December 31, 2023 and 2022, are anti-dilutive. Fair Value Measurements Fair Value Measurements The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date. Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly. Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment. Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest. Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when the derived fair value is below carrying value in the consolidated balance sheets. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 Stock-Based Compensation Stock-Based Compensation The Company records stock-based compensation in accordance with ASC 718, Compensation—Stock Compensation. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period. Concentration of Credit Risk Concentration of Credit Risk Financial instruments that potentially subject the Company to credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable. The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. Sales to the Company's largest customer represented approximately 8.45% of total sales for the year ended December 31, 2023. As of December 31, 2022, there were two customers that each accounted for 25.98% and 10.60% of total revenue. As of December 31, 2023 and 2022, there were two vendors that accounted for 33.14% and 17.18% and 44.15% and 29.29%, respectively, of total component parts purchased. Recent Accounting Pronouncements In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement

of Credit Losses on Financial Instruments. The amendments in this update, among other things, require the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. Financial institutions and other organizations will now use forward-looking information to better inform their credit loss estimates. As a smaller reporting company, the guidance was effective for our fiscal years beginning after December 15, 2022. The adoption of this guidance did not have an impact on our consolidated financial statements. In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the transparency and decision usefulness of income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segment's profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. These amendments are to be applied retrospectively. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. AmpliTech Group, Inc. Notes To Consolidated Financial Statements For the Years Ended December 31, 2023 and 2022 In August 2023, the FASB issued ASU 2023-05, Business Combinations — Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement, which requires a newly formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. X-DefinitionShipping And Handling [Policy Text Block] ReferencesNo definition available. Details Name: AMPG_ShippingAndHandlingPolicyTextBlock Namespace Prefix: AMPG_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap_AccountingPoliciesAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for basis of accounting, or basis of presentation, used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS).-ReferencesNo definition available. Details Name: us-gaap_BasisOfAccountingPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for cash and cash equivalents, including the policy for determining which items are treated as cash equivalents. Other information that may be disclosed includes (1) the nature of any restrictions on the entity's use of its cash and cash equivalents, (2) whether the entity's cash and cash equivalents are insured or expose the entity to credit risk, (3) the classification of any negative balance accounts (overdrafts), and (4) the carrying basis of cash equivalents (for example, at cost) and whether the carrying amount of cash equivalents approximates fair value. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org//1943274/2147482913/230-10-50-1> Details Name: us-gaap_CashAndCashEquivalentsPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for salaries, bonuses, incentive awards, postretirement and postemployment benefits granted to employees, including equity-based arrangements; discloses methodology for measurement, and the bases for recognizing related assets and liabilities and recognizing and reporting compensation expense. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 718-SubTopic 10-Section 50-Paragraph 2-Subparagraph \(b\)-\(f\)\(1\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 718-SubTopic 10-Section 50-Paragraph 2-Subparagraph (b)-(f)(1)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_CompensationRelatedCostsPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for credit risk. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 942-SubTopic 825-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org//1943274/2147480981/942-825-50-1> Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(d\)-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-1](http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (d)-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-1) Details Name: us-gaap_ConcentrationRiskCreditRisk Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy regarding (1) the principles it follows in consolidating or combining the separate financial statements, including the principles followed in determining the inclusion or exclusion of subsidiaries or other entities in the consolidated or combined financial statements and (2) its treatment of interests (for example, common stock, a partnership interest or other means of exerting influence) in other entities, for example consolidation or use of the equity or cost methods of accounting. The accounting policy may also address the accounting treatment for intercompany accounts and transactions, noncontrolling interest, and the income statement treatment in consolidation for issuances of stock by a subsidiary. ReferencesReference 1: [http://www.xbrl.org/2003/role/exampleRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483426/235-10-50-4](http://www.xbrl.org/2003/role/exampleRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483426/235-10-50-4) Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 810-SubTopic 10-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org//1943274/2147481203/810-10-50-1> Details Name: us-gaap_ConsolidationPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for cost of product sold and service rendered. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Name Accounting Standards Codification-Topic 705-Publisher FASB-URI https://asc.fasb.org//705/tableOfContent> Details Name: us-gaap_CostOfSalesPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for computing basic and diluted earnings or loss per share for each class of common stock and participating security. Addresses all significant policy factors, including any antidilutive items that have been excluded from the computation and takes into account stock dividends, splits and reverse splits that occur after the balance sheet date of the latest reporting period but before the issuance of the financial statements. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 260-SubTopic 10-Section 50-Paragraph 1-Subparagraph \(e\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482662/260-10-50-1](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 260-SubTopic 10-Section 50-Paragraph 1-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482662/260-10-50-1) Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 260-SubTopic 10-Section 50-Paragraph 2-Publisher FASB-URI https://asc.fasb.org//1943274/2147482662/260-10-50-2> Details Name: us-gaap_EarningsPerSharePolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for fair value measurements of financial and non-financial assets, liabilities and instruments classified in shareholders' equity. Disclosures include, but are not limited to, how an entity that manages a group of financial assets and liabilities on the basis of its net exposure measures the fair value of those assets and liabilities. ReferencesNo definition available. Details Name: us-gaap_FairValueMeasurementPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for indefinite-lived intangible assets (that is, those intangible assets not subject to amortization). This accounting policy also may address how the entity assesses whether events and circumstances continue to support an indefinite useful life and how the entity assesses and measures impairment of such assets. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_GoodwillAndIntangibleAssetsIntangibleAssetsIndefiniteLivedPolicy Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for recognizing and measuring the impairment of long-lived assets. An entity also may disclose its accounting policy for long-lived assets to be sold. This policy excludes goodwill and intangible assets. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 360-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph \(SAB Topic 5-CC\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480091/360-10-599-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 360-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 2-Subparagraph (SAB Topic 5-CC)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480091/360-10-599-2) Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 05-Paragraph 4-SubTopic 10-Topic 360-Publisher FASB-URI https://asc.fasb.org//1943274/2147482338/360-10-05-4> Details Name: us-gaap_ImpairmentOrDisposalOfLongLivedAssetsPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for income taxes, which may include its accounting policies for recognizing and measuring deferred tax assets and liabilities and related valuation allowances, recognizing investment tax credits, operating loss carryforwards, tax credit carryforwards, and other carryforwards, methodologies for determining its effective income tax rate and the characterization of interest and penalties in the financial statements. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph \(SX 210-6-03\(h\)\(1\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479886/946-10-599-3](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph (SX 210-6-03(h)(1))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479886/946-10-599-3) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 17-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-17](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 17-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-17) Reference 3: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 9-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-9>

9Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic-740-SubTopic-10-Name-Accounting-Standards-Codification-Section-45-Paragraph-25-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482525/740-10-45-25>Reference 5: <http://www.xbrl.org/2003/role/disclosureRef-Topic-740-SubTopic-10-Name-Accounting-Standards-Codification-Section-45-Paragraph-28-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482525/740-10-45-28>Reference 6: <http://www.xbrl.org/2003/role/disclosureRef-Topic-740-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-19-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482685/740-10-50-19>Reference 7: <http://www.xbrl.org/2003/role/disclosureRef-Topic-220-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482765/220-10-50-1>Reference 8: <http://www.xbrl.org/2003/role/disclosureRef-Topic-740-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-20-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482685/740-10-50-20>Details Name: us-gaap-IncomeTaxPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for finite-lived intangible assets. This accounting policy also might address: (1) the amortization method used; (2) the useful lives of such assets; and (3) how the entity assesses and measures impairment of such assets. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic-926-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-5-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483154/926-20-50-5>Reference 2: [http://www.xbrl.org/2003/role/exampleRef-Topic-235-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-\(c\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483426/235-10-50-4](http://www.xbrl.org/2003/role/exampleRef-Topic-235-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-(c)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483426/235-10-50-4)Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic-920-SubTopic-350-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483256/920-350-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-920-SubTopic-350-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483256/920-350-50-1)Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic-920-SubTopic-350-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483256/920-350-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-920-SubTopic-350-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483256/920-350-50-1)Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic-920-SubTopic-350-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483256/920-350-50-4](http://www.xbrl.org/2003/role/disclosureRef-Topic-920-SubTopic-350-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483256/920-350-50-4)Reference 6: [http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-350-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-350-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2)Details Name: us-gaap-IntangibleAssetsFiniteLivedPolicy Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of inventory accounting policy for inventory classes, including, but not limited to, basis for determining inventory amounts, methods by which amounts are added and removed from inventory classes, loss recognition on impairment of inventories, and situations in which inventories are stated above cost. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483489/210-10-50-1>Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(SX-210-5-02-\(6\)-\(b\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(SX-210-5-02-(6)-(b))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-50-1)Reference 3: [http://www.xbrl.org/2003/role/exampleRef-Topic-235-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-\(d\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483426/235-10-50-4](http://www.xbrl.org/2003/role/exampleRef-Topic-235-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-(d)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483426/235-10-50-4)Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic-912-SubTopic-330-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482105/912-330-50-1>Reference 5: <http://www.xbrl.org/2003/role/disclosureRef-Topic-330-Name-Accounting-Standards-Codification-Publisher-FASB-URI-https://asc.fasb.org//330/tableOfContent>Reference 6: <http://www.xbrl.org/2003/role/disclosureRef-Topic-330-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483080/330-10-50-1>Reference 7: <http://www.xbrl.org/2003/role/disclosureRef-Topic-330-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483080/330-10-50-4>Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-6-Subparagraph-\(a\)-SubTopic-10-Topic-270-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482989/270-10-45-6](http://www.xbrl.org/2003/role/disclosureRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-6-Subparagraph-(a)-SubTopic-10-Topic-270-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482989/270-10-45-6)Details Name: us-gaap-InventoryPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for investment in financial asset. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic-944-SubTopic-220-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(SX-210-7-04-\(3\)-\(b\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483586/944-220-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-944-SubTopic-220-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(SX-210-7-04-(3)-(b))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483586/944-220-50-1)Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-\(SX-210-6-03-\(d\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3](http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-(SX-210-6-03-(d))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3)Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-\(SX-210-6-03-\(f\)-\(1\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3](http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-(SX-210-6-03-(f)-(1))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3)Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-\(SX-210-6-03-\(f\)-\(2\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3](http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-(SX-210-6-03-(f)-(2))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3)Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-\(SX-210-6-03-\(f\)-\(3\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3](http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-(SX-210-6-03-(f)-(3))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479886/946-10-50-3)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-320-Name-Accounting-Standards-Codification-Section-50-Paragraph-12-Subparagraph-\(i\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480032/946-320-50-12](http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-320-Name-Accounting-Standards-Codification-Section-50-Paragraph-12-Subparagraph-(i)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480032/946-320-50-12)Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-320-Name-Accounting-Standards-Codification-Section-50-Paragraph-19-Subparagraph-\(2\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480032/946-320-50-19](http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-320-Name-Accounting-Standards-Codification-Section-50-Paragraph-19-Subparagraph-(2)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480032/946-320-50-19)Details Name: us-gaap-InvestmentPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for leasing arrangement entered into by lessee. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic-842-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147478964/842-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-842-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147478964/842-20-50-1)Details Name: us-gaap-LesseeLeasesPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for investment classified as marketable security. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-942-SubTopic-320-Section-50-Paragraph-5-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480832/942-320-50-5>Details Name: us-gaap-MarketableSecuritiesPolicy Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy pertaining to new accounting pronouncements that may impact the entity's financial reporting. Includes, but is not limited to, quantification of the expected or actual impact. ReferencesNo definition available. Details Name: us-gaap-NewAccountingPronouncementsPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for reclassification affecting comparability of financial statement. Excludes amendment to accounting standards, other change in accounting principle, and correction of error. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic-205-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483504/205-10-50-1>Details Name: us-gaap-PriorPeriodReclassificationAdjustmentDescription Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for long-lived, physical asset used in normal conduct of business and not intended for resale. Includes, but is not limited to, work of art, historical treasure, and similar asset classified as collections. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-SubTopic-10-Topic-360-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482099/360-10-50-1>Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic-944-SubTopic-210-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(SX-210-7-03-\(a\)-\(8\)-\(a\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479440/944-210-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-944-SubTopic-210-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(SX-210-7-03-(a)-(8)-(a))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479440/944-210-50-1)Reference 3: <http://www.xbrl.org/2003/role/disclosureRef-Name-Accounting-Standards-Codification-Section-50-Paragraph-6-SubTopic-360-Topic-958-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480321/958-360-50-6>Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(d\)-SubTopic-360-Topic-958-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480321/958-360-50-1](http://www.xbrl.org/2003/role/disclosureRef-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(d)-SubTopic-360-Topic-958-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480321/958-360-50-1)Details Name: us-gaap-PropertyPlantAndEquipmentPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for receivable. Includes, but is not limited to, accounts receivable and financing receivable. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic-310-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147481569/310-20-50-4>Reference 2: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic-310-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147481569/310-20-50-1>Reference 3: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic-310-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147481569/310-10-50-2>Reference 4: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic-310-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147481569/310-20-50-2>Details Name: us-gaap-ReceivablesPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types:textBlockItem Type Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for costs it has incurred (1) in a planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product or service, a new process or

technique, or in bringing about a significant improvement to an existing product or process; or (2) to translate research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 730-SubTopic 10-Name Accounting Standards Codification-Section 05-Paragraph 1-Subparagraph \(e\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483044/730-10-05-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 730-SubTopic 10-Name Accounting Standards Codification-Section 05-Paragraph 1-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483044/730-10-05-1) Details Name: us-gaap_ResearchAndDevelopmentExpensePolicy Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for revenue. Includes revenue from contract with customer and from other sources. ReferencesReference 1: [http://www.xbrl.org/2003/role/exampleRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \(f\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483426/235-10-50-4](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-6-07 (1))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-S99-1) Reference 2: [http://www.xbrl.org/2003/role/exampleRef-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \(c\)-SubTopic 10-Topic 235-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-4](http://www.xbrl.org/2003/role/exampleRef-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph (c)-SubTopic 10-Topic 235-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-4) Details Name: us-gaap_RevenueRecognitionPolicyTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-DefinitionDisclosure of accounting policy for the use of estimates in the preparation of financial statements in conformity with generally accepted accounting principles. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 275-SubTopic 10-Section 50-Paragraph 9-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-9> Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 275-SubTopic 10-Section 50-Paragraph 4-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-4> Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(b\)-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-1](http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (b)-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-1) Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(c\)-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-1](http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (c)-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-1) Reference 5: <http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 11-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-11> Reference 6: <http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 50-Paragraph 12-SubTopic 10-Topic 275-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-12> Reference 7: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 275-SubTopic 10-Section 50-Paragraph 8-Publisher FASB-URI https://asc.fasb.org//1943274/2147482861/275-10-50-8> Details Name: us-gaap_UseOfEstimates Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationSummary of Significant Accounting Policies (Tables) 12 Months Ended Dec. 31, 2023 Accounting Policies [Abstract] Schedule of property and equipment depreciated Property and equipment are depreciated as follows: Schedule of property and equipment depreciated Description Useful Life Method Office equipment 3 to 7 years Straight-line Machinery/shop equipment 7 to 15 years Straight-line Computer equipment/software 1 to 7 years Straight-line Vehicles 5 years Straight-line Leasehold improvements 7 years Straight-line Schedule of Intangible Assets Schedule of Intangible Assets Description Useful Life Method Trade names Indefinite N/A Customer relationships to 20 years Straight-line Intellectual property rights Straight-line X-DefinitionProperty Plant and Equipment Depreciated [Table Text Block] ReferencesNo definition available. Details Name: AMPG_PropertyPlantAndEquipmentDepreciatedTableTextBlock Namespace Prefix: AMPG_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap_AccountingPoliciesAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionTabular disclosure of amortization expense of assets, excluding financial assets, that lack physical substance, having a limited useful life. ReferencesNo definition available. Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseTableTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationRevenues (Tables) 12 Months Ended Dec. 31, 2023 Revenue from Contract with Customer [Abstract] Schedule of disaggregated revenue The following table presents sales disaggregated based on geographic regions and for the years ended: Schedule of disaggregated revenue December 31, 2023 December 31, 2022 AmpliTech Inc. and Specialty Microwave Domestic sales \$ 5, 120, 694 \$ 4, 922, 237 International sales 1, 267, 459 947, 515 Total sales \$ 6, 388, 153 \$ 5, 869, 752 Spectrum Domestic sales \$ 6, 234, 934 \$ 6, 798, 713 International sales 2, 961, 490 6, 726, 027 Total sales \$ 9, 196, 424 \$ 13, 524, 740 X-DefinitionTabular disclosure of disaggregation of revenue into categories depicting how nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factor. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 606-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 5-Publisher FASB-URI https://asc.fasb.org//1943274/2147479806/606-10-50-5> Details Name: us-gaap_DisaggregationOfRevenueTableTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap_RevenueFromContractWithCustomerAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationSegment Reporting (Tables) 12 Months Ended Dec. 31, 2023 Segment Reporting [Abstract] Schedule of Segment Reporting The following table presents summary information by segment for the year ended December 31, 2023: Schedule of Segment Reporting AmpliTech Inc. and Specialty Spectrum Corporate Total Revenue \$ 6, 388, 153 \$ 9, 196, 424 \$ 15, 584, 577 Cost of Goods Sold 3, 565, 467 4, 743, 882 8, 308, 949 Net Income (Loss) (3, 619, 842) 2, 060, 234 (905, 831) (2, 465, 439) Total Assets 11, 461, 268 16, 540, 789 3, 405, 572 31, 407, 629 Depreciation and Amortization 362, 663 168, 497 531, 160 Interest Income, net 26, 901 (7, 620) 19, 281 The following table presents summary information by segment for the year December 31, 2022: AmpliTech Inc. and Specialty Spectrum Corporate Total Revenue \$ 5, 869, 752 \$ 13, 524, 740 \$ 19, 394, 492 Cost of Goods Sold 3, 257, 367 7, 212, 261 10, 469, 628 Net Income (Loss) (2, 478, 429) 2, 878, 476 (1, 077, 154) (677, 107) Total Assets 17, 682, 013 16, 979, 383 2, 018, 238 36, 679, 634 Depreciation and Amortization 279, 470 132, 536 412, 006 Interest Expense, net (159) 1, 289 11, 883 13, 013 X-DefinitionTabular disclosure of the profit or loss and total assets for each reportable segment. An entity discloses certain information on each reportable segment if the amounts (a) are included in the measure of segment profit or loss reviewed by the chief operating decision maker or (b) are otherwise regularly provided to the chief operating decision maker, even if not included in that measure of segment profit or loss. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 350-SubTopic 20-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org//1943274/2147482573/350-20-50-1> Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 280-SubTopic 10-Section 50-Paragraph 25-Publisher FASB-URI https://asc.fasb.org//1943274/2147482810/280-10-50-25> Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 280-SubTopic 10-Section 50-Paragraph 22-Publisher FASB-URI https://asc.fasb.org//1943274/2147482810/280-10-50-22> Reference 4: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 280-SubTopic 10-Section 50-Paragraph 30-Publisher FASB-URI https://asc.fasb.org//1943274/2147482810/280-10-50-30> Details Name: us-gaap_ScheduleOfSegmentReportingInformationBySegmentTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationMarketable Securities (Tables) 12 Months Ended Dec. 31, 2023 Investments, Debt and Equity Securities [Abstract] Schedule of Marketable Securities The following table is a summary of marketable securities at December 31, 2023: Schedule of Marketable Securities Adjusted Cost Unrealized Gains Unrealized Losses Fair Value Level 1 (1) Money Market Fund \$ 12, 079-- \$ 12, 079 US Treasury Bills 2, 625, 260 1, 697-2, 626, 957 Total \$ 2, 637, 339 1, 697-\$ 2, 639, 036 The following table is a summary of marketable securities at December 31, 2022: Adjusted Cost Unrealized Gains Unrealized Losses Fair Value Level 1 (1) Money Market Fund \$ 1, 759, 299-- \$ 1, 759, 299 US Treasury Bills 245, 172 2, 278-247, 450 Total \$ 2, 004, 471 2, 278 \$ 2, 006, 749 (1) Level 1 fair value estimates are based on quoted prices in active markets for identical assets or liabilities. X-ReferencesNo definition available. Details Name: us-gaap_InvestmentsDebtAndEquitySecuritiesAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionTabular disclosure of marketable securities. This may consist of investments in certain debt and equity securities, short-term investments and other assets. ReferencesNo definition available. Details Name: us-gaap_MarketableSecuritiesTextBlock Namespace Prefix: us-gaap_Data Type: dtr-types: textBlockItemType Balance Type: na Period Type: durationInventories (Tables) 12 Months Ended Dec. 31, 2023 Inventory Disclosure [Abstract] Schedule of Inventory The inventory consists of the following at December 31, 2023 and 2022: Schedule of Inventory December 31, December 31, 2022 Raw Materials \$ 959, 645 \$ 872, 184 Work-in-Progress 51, 140 229, 771 Finished Goods 6, 672, 793 6, 658, 166 Subtotal \$ 7, 683, 578 \$ 7, 760, 121 Less: Reserve for Obsolescence (1, 146, 000) (1, 128, 000) Less: Reserve for Obsolescence (1, 146, 000) (1, 128, 000) Total \$ 6, 537, 578 \$ 6, 632, 121 X-ReferencesNo definition available. Details Name: us-gaap_InventoryDisclosureAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionTabular disclosure of the carrying amount as of the balance sheet date of merchandise, goods, commodities, or supplies held for future sale or to be used in manufacturing, servicing or production process. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(6\) \(a\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (6) (a))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1) Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(6\) \(b\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (6) (b))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1) Reference 3: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210-5-02 \(6\) \(c\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210-5-02 (6) (c))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1) Reference 4: <http://fasb.org/us-gaap/role/ref/legacyRef-Name>

Accounting Standards Codification-Topic 210-SubTopic 10-Section 50-Paragraph 1-Publisher FASB-URI <https://asc.fasb.org//1943274/2147483489/210-10-50-1-Details>Name: us-gaap-ScheduleOfInventoryCurrentTableTextBlock-Namespace-Prefix: us-gaap-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationProperty and Equipment (Tables) 12 Months Ended Dec. 31, 2023 Property, Plant and Equipment [Abstract] Schedule of Property and Equipment Property and Equipment consisted of the following at December 31, 2023 and 2022: Schedule of Property and Equipment December 31, 2023 December 31, 2022 Lab Equipment \$ 3, 400, 207 \$ 2, 455, 045 Manufacturing Equipment 129, 745 129, 745 Automobiles 7, 335 7, 335 Computer Equipment and Software 194, 238 210, 240 Leaschold Improvements 84, 172 78, 042 Furniture and Fixtures 170, 643 148, 987 Subtotal 3, 986, 340 3, 029, 394 Less: Accumulated Depreciation (1, 386, 892) (1, 005, 707) Total \$ 2, 599, 448 \$ 2, 023, 687 X-ReferencesNo definition available. Details-Name: us-gaap-PropertyPlantAndEquipmentAbstract-Namespace-Prefix: us-gaap-Data-Type: xbrli:stringItemType-Balance-Type: na-Period-Type: durationX-DefinitionTabular disclosure of physical assets used in the normal conduct of business and not intended for resale. Includes, but is not limited to, balances by class of assets, depreciation and depletion expense and method used, including composite depreciation, and accumulated depreciation. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name> Accounting Standards Codification-Section 50-Paragraph 1-SubTopic 10-Topic 360-Publisher FASB-URI <https://asc.fasb.org//1943274/2147482099/360-10-50-1-Details>Name: us-gaap-PropertyPlantAndEquipmentTextBlock-Namespace-Prefix: us-gaap-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationGoodwill and Intangible Assets (Tables) 12 Months Ended Dec. 31, 2023 Goodwill and Intangible Assets Disclosure [Abstract] Schedule of Intangible Assets Intangible assets with an estimated useful life of fifteen and twenty years consisted of the following at December 31, 2023: Schedule of Intangible Assets Gross Carrying Accumulated Weighted Amount Amortization Net Average Life Trade name \$ 584, 517 \$- 584, 517 Indefinite Customer relationships 2, 591, 491 336, 330 2, 255, 161 16. 81 Intellectual Property 202, 771 58, 316 144, 455 10. 71 Total \$ 3, 378, 779 \$ 394, 646 \$ 2, 984, 133 Schedule of Amortization of Assets Annual amortization of intangible assets are as follows: Schedule of Amortization of Assets 2023 149, 976 2024 149, 976 2025 149, 976 2026 149, 976 2027 149, 976 Thereafter 1, 649, 736 Total \$ 2, 399, 616 X-ReferencesNo definition available. Details-Name: us-gaap-GoodwillAndIntangibleAssetsDisclosureAbstract-Namespace-Prefix: us-gaap-Data-Type: xbrli:stringItemType-Balance-Type: na-Period-Type: durationX-DefinitionTabular disclosure of assets, excluding financial assets and goodwill, lacking physical substance with a finite life, by either major class or business segment. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name> Accounting Standards Codification-Topic 350-SubTopic 30-Section 50-Paragraph 1-Subparagraph (a)-Publisher FASB-URI <https://asc.fasb.org//1943274/2147482665/350-30-50-1-Reference> 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name> Accounting Standards Codification-Topic 350-SubTopic 30-Section 50-Paragraph 2-Subparagraph (a)-Publisher FASB-URI <https://asc.fasb.org//1943274/2147482665/350-30-50-2-Details>Name: us-gaap-ScheduleOfFiniteLivedIntangibleAssetsTableTextBlock-Namespace-Prefix: us-gaap-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationX-DefinitionTabular disclosure of the amount of amortization expense expected to be recorded in succeeding fiscal years for finite-lived intangible assets. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name> Accounting Standards Codification-Topic 350-SubTopic 30-Section 50-Paragraph 2-Subparagraph (a)-Publisher FASB-URI <https://asc.fasb.org//1943274/2147482665/350-30-50-2-Details>Name: us-gaap-ScheduleOfFiniteLivedIntangibleAssetsFutureAmortizationExpenseTableTextBlock-Namespace-Prefix: us-gaap-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationLeases (Tables) 12 Months Ended Dec. 31, 2023 Leases Schedule of Lease Assets and Liabilities The following was included in our balance sheet as of December 31, 2023 and 2022: Schedule of Lease Assets and Liabilities December 31, 2023 December 31, 2022 Operating leases Assets ROU operating lease assets \$ 3, 538, 798 \$ 4, 197, 324 Liabilities Current portion of operating lease \$ 541, 324 \$ 586, 379 Operating lease, net of current portion \$ 3, 171, 979 \$ 3, 768, 922 Total operating lease liabilities \$ 3, 713, 303 \$ 4, 355, 311 Financing leases Assets Property and equipment, gross \$ 234, 036 \$ 234, 036 Accumulated depreciation (151, 919) (113, 621) Property and equipment, net \$ 82, 117 \$ 120, 415 Liabilities Current portion of financing lease \$ 16, 799 \$ 33, 480 Financing lease, net of current portion \$ 32, 537 \$ 49, 336 Total financing lease liabilities \$ 49, 336 \$ 82, 816 Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate The weighted average remaining lease term and weighted average discount rate at December 31, 2023 and 2022 were as follows: Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate Weighted average remaining lease term (years) December 31, 2023 December 31, 2022 Operating leases 9. 36 9. 40 Financing leases 2. 97 2. 80 Weighted average discount rate Operating leases 4. 45 % 4. 49 % Financing leases 4. 72 % 4. 70 % Schedule of Future Minimum Lease Payments For Finance Lease The following table reconciles future minimum financing lease payments to the discounted lease liability as of December 31, 2023: Schedule of Future Minimum Lease Payments For Finance Lease 2024 18, 751 2025 18, 186 2026 11, 976 2027 3, 992 Total lease payments 52, 905 Less imputed interest (3, 569) Total lease obligations 49, 336 Less current obligations (16, 799) Long-term lease obligations \$ 32, 537 Schedule of Future Minimum Operating Lease Payments The following table reconciles future minimum operating lease payments to the discounted lease liability as of December 31, 2023: Schedule of Future Minimum Operating Lease Payments 2024 696, 362 2025 407, 580 2026 389, 397 2027 393, 899 2028 404, 721 Thereafter 2, 313, 460 Total lease payments 4, 605, 419 Less imputed interest (892, 116) Total lease obligations 3, 713, 303 Less current obligations (541, 324) Long-term lease obligations \$ 3, 171, 979 X-ReferencesNo definition available. Details-Name: AMPG-DisclosureLeasesAbstract-Namespace-Prefix: AMPG-Data-Type: xbrli:stringItemType-Balance-Type: na-Period-Type: durationX-DefinitionSchedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate [Table Text Block] ReferencesNo definition available. Details-Name: AMPG-ScheduleOfWeightedAverageRemainingLeaseTermAndWeightedAverageDiscountRateTableTextBlock-Namespace-Prefix: AMPG-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationX-DefinitionTabular disclosure of contractual obligation by timing of payment due. Includes, but is not limited to, long-term debt obligation, lease obligation, and purchase obligation. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic> 235-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 3-Subparagraph (S-X 210-12-04)-Publisher FASB-URI <https://asc.fasb.org//1943274/2147480678/235-10-599-3-Details>Name: srt-ContractualObligationFiscalYearMaturityScheduleTableTextBlock-Namespace-Prefix: srt-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationX-DefinitionTabular disclosure of undiscounted cash flows of lessee's operating lease liability. Includes, but is not limited to, reconciliation of undiscounted cash flows to operating lease liability recognized in statement of financial position. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic> 842-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 6-Publisher FASB-URI <https://asc.fasb.org//1943274/2147478964/842-20-50-6-Details>Name: us-gaap-LesseeOperatingLeaseLiabilityMaturityTableTextBlock-Namespace-Prefix: us-gaap-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationX-DefinitionTabular disclosure of the components of the investment in leveraged leases. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/otherTransitionRef-Topic> 840-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 5-Publisher FASB-URI <https://asc.fasb.org//1943274/2147481161/840-30-50-5-Reference> 2: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic> 842-SubTopic 50-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI <https://asc.fasb.org//1943274/2147479711/842-50-50-1-Details>Name: us-gaap-ScheduleOfComponentsOfLeveragedLeaseInvestmentsTableTextBlock-Namespace-Prefix: us-gaap-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationNotes Payable (Tables) 12 Months Ended Dec. 31, 2023 Debt Disclosure [Abstract] Schedule of Future Principal and Interest Payments Schedule of Future Principal and Interest Payments Payments 2024 \$ 80, 841 Total remaining payments \$ 80, 841 X-DefinitionSchedule of Future Principal and Interest Payments [Table Text Block] ReferencesNo definition available. Details-Name: AMPG-ScheduleOfFuturePrincipalAndInterestPaymentsTableTextBlock-Namespace-Prefix: AMPG-Data-Type: dtr-types:textBlockItemType-Balance-Type: na-Period-Type: durationX-ReferencesNo definition available. Details-Name: us-gaap-DebtDisclosureAbstract-Namespace-Prefix: us-gaap-Data-Type: xbrli:stringItemType-Balance-Type: na-Period-Type: durationIncome Taxes (Tables) 12 Months Ended Dec. 31, 2023 Income Tax Disclosure [Abstract] Schedule of Components for the Provision of Income Taxes The components for the provision of income taxes include the following: Schedule of Components for the Provision of Income Taxes December 31, 2023 December 31, 2022 Current federal and state \$ - Deferred federal and state 24, 000 Total provision for income taxes \$ 24, 000 \$ Schedule of Effective Income Tax Rate A reconciliation of the statutory US federal income tax rate to the Company's effective income tax rate is as follows: Schedule of Effective Income Tax Rate December 31, 2023 December 31, 2022 Federal tax 21. 0 % 21. 0 % State tax 0. 8 % - % Permanent items (0. 4 %) (1. 2 %) Change in rate 2. 5 % - % Valuation Allowance (24. 9 %) (19. 8 %) Effective income tax rate (1. 0 %) - % Schedule of Components of Deferred Tax Assets and Liabilities Schedule of Components of Deferred Tax Assets and Liabilities December 31, 2023 December 31, 2022 Deferred tax assets Inventory obsolescence \$ 250, 000 \$ 248, 000 Allowance for bad debt 19, 000 ROU Assets 31, 000 Stock-based compensation 27, 000 Research and development 426, 000 Loss carryforward 1, 723, 000 1, 198, 000 Valuation Allowance (2, 150, 000) (1, 323, 000) Total deferred tax assets \$ 307, 000 \$ 142, 000 Deferred tax liabilities Fixed assets \$ (149, 000) \$ (123, 000) Cost method investment (28, 000) Intangible assets (154, 000) (19, 000) Total deferred tax liabilities \$ (331, 000) \$ (142, 000) Total net deferred income tax liabilities \$ (24, 000) \$ - X-ReferencesNo definition available. Details-Name: us-gaap-IncomeTaxDisclosureAbstract-Namespace-Prefix: us-gaap-Data-Type: xbrli:stringItemType-Balance-Type: na-Period-Type: durationX-DefinitionTabular disclosure of the components of income tax expense attributable to continuing operations for each year presented including, but not limited to: current tax expense (benefit), deferred tax expense (benefit), investment tax credits, government grants, the benefits of operating loss carryforwards, tax expense that results from allocating certain tax benefits either directly to contributed capital or to reduce goodwill or other noncurrent intangible assets of an acquired entity, adjustments of a deferred tax liability or asset for enacted changes in tax laws or rates or a change in the tax status of the entity, and adjustments of the beginning-of-the-year balances of a valuation allowance because of a change in circumstances that causes a change in judgment about the realizability of the related deferred tax asset in future years. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Topic> 740-SubTopic 10-Name

date but before the release of financial statements. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 4-Subparagraph \(SAB Topic 4. C\)-Publisher FASB-URI https://asc.fasb.org/1943274/214748008/505-10-599-4](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 4-Subparagraph (SAB Topic 4. C)-Publisher FASB-URI https://asc.fasb.org/1943274/214748008/505-10-599-4) Details Name: us-gaap_StockholdersEquityReverseStockSplit Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType-Balance Type: na-Period Type: durationX-Details Name: us-gaap_SubsiarySaleOfStockAxis-us-gaap_IPOMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: dei_LegalEntityAxis-AMPG_AmplitechIncMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap_BusinessAcquisitionAxis-AMPG_AmplitechIncMember Namespace Prefix: Data Type: na-Balance Type: Period Type: Schedule of property and equipment depreciated (Details) 12 Months Ended Dec. 31, 2023 Office Equipment [Member]||Minimum [Member] Property, Plant and Equipment [Line Items] Estimated useful life 7 years Depreciation Method Straight-lineMachinery and Equipment [Member]||Minimum [Member] Property, Plant and Equipment [Line Items] Estimated useful life 7 yearsMachinery and Equipment [Member]||Maximum [Member] Property, Plant and Equipment [Line Items] Estimated useful life 15 yearsDepreciation Method Straight-lineComputer Equipment Software [Member]||Minimum [Member] Property, Plant and Equipment [Line Items] Estimated useful life 1 yearComputer Equipment Software [Member]||Maximum [Member] Property, Plant and Equipment [Line Items] Estimated useful life 7 yearsDepreciation Method Straight-lineVehicles [Member] Property, Plant and Equipment [Line Items] Estimated useful life 5 yearsDepreciation Method Straight-lineLeasehold Improvements [Member] Property, Plant and Equipment [Line Items] Estimated useful life 7 yearsDepreciation Method Straight-lineX-DefinitionProperty plant and equipments depreciation methods: ReferencesNo definition available. Details Name: AMPG_PropertyPlantAndEquipmentsDepreciationMethods-namespace Prefix: AMPG_Data Type: xbrli:stringItemType-Balance Type: na-Period Type: durationX-DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesNo definition available. Details Name: us-gaap_PropertyPlantAndEquipmentLineItems-namespace Prefix: us-gaap_Data Type: xbrli:stringItemType-Balance Type: na-Period Type: durationX-DefinitionUseful life of long lived, physical assets used in the normal conduct of business and not intended for resale, in 'PnYnMnDtnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. Examples include, but not limited to, land, buildings, machinery and equipment, office equipment, furniture and fixtures, and computer equipment. ReferencesNo definition available. Details Name: us-gaap_PropertyPlantAndEquipmentUsefulLife Namespace Prefix: us-gaap_Data Type: xbrli:durationItemType-Balance Type: na-Period Type: instantX-Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis-us-gaap_OfficeEquipmentMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: srt_RangeAxis-srt_MinimumMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: srt_RangeAxis-srt_MaximumMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis-us-gaap_MachineryAndEquipmentMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis-AMPG_ComputerEquipmentSoftwareMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis-us-gaap_VehiclesMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis-us-gaap_LeaseholdImprovementsMember Namespace Prefix: Data Type: na-Balance Type: Period Type: Schedule of Intangible Assets (Details) USD (\$) 12 Months Ended Dec. 31, 2023 Property, Plant and Equipment [Line Items] Net \$ 2,399,616 Gross Carrying Amount 3,378,779 Accumulated Amortization 394,646 Net 2,984,133 \$ 3,134,108Trade Names [Member] Property, Plant and Equipment [Line Items] Gross Carrying Amount 584,517 Net \$ 584,517 Customer Relationships [Member] Property, Plant and Equipment [Line Items] Depreciation Method Straight-lineGross Carrying Amount \$ 2,591,491 Accumulated Amortization 336,330 Net \$ 2,255,161 Weighted Average Life 16 years 9 months 21 days Customer Relationships [Member]||Minimum [Member] Property, Plant and Equipment [Line Items] Useful Life 15 years Customer Relationships [Member]||Maximum [Member] Property, Plant and Equipment [Line Items] Useful Life 20 years Intellectual Property [Member] Property, Plant and Equipment [Line Items] Useful Life 15 years Depreciation Method Straight-lineGross Carrying Amount \$ 202,771 Accumulated Amortization 58,316 Net \$ 144,455 Weighted Average Life 10 years 8 months 15 days X-DefinitionIndefinite lived intangible assets gross ReferencesNo definition available. Details Name: AMPG_IndefiniteLivedIntangibleAssetsGross Namespace Prefix: AMPG_Data Type: xbrli:monetaryItemType-Balance Type: debit Period Type: instantX-DefinitionIntangible assets accumulated amortization: ReferencesNo definition available. Details Name: AMPG_IntangibleAssetsAccumulatedAmortization Namespace Prefix: AMPG_Data Type: xbrli:monetaryItemType-Balance Type: credit Period Type: instantX-DefinitionWeighted average amortization period of finite-lived intangible assets acquired either individually or as part of a group of assets, in 'PnYnMnDtnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(a\) \(3\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (a) (3)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-1) Details Name: us-gaap_AcquiredFiniteLivedIntangibleAssetsWeightedAverageUsefulLife Namespace Prefix: us-gaap_Data Type: xbrli:durationItemType-Balance Type: na-Period Type: durationX-DefinitionUseful life of finite-lived intangible assets, in 'PnYnMnDtnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. ReferencesNo definition available. Details Name: us-gaap_FiniteLivedIntangibleAssetUsefulLife Namespace Prefix: us-gaap_Data Type: xbrli:durationItemType-Balance Type: na-Period Type: instantX-DefinitionAccumulated amount of amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph \(SX 210.5-02 \(16\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02 (16))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\) \(1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsAccumulatedAmortization Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: credit Period Type: instantX-DefinitionThe amortization method of a major finite-lived intangible asset class. A major class is composed of intangible assets that can be grouped together because they are similar either by their nature or by their use in the operations of a company. The straight-line method is the preferred amortization method, unless another method better reflects the pattern in which the asset is consumed. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 350-SubTopic 30-Section 35-Paragraph 6-Publisher FASB-URI https://asc.fasb.org/1943274/2147482710/350-30-35-6> Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationMethod Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType-Balance Type: na-Period Type: durationX-DefinitionAmount before amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 928-SubTopic 340-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147483147/928-340-50-1> Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\) \(1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsGross Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit Period Type: instantX-DefinitionAmount after amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 926-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 5-Publisher FASB-URI https://asc.fasb.org/1943274/2147483154/926-20-50-5> Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\) \(1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsNet Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit Period Type: instantX-DefinitionAmount of assets, excluding financial assets and goodwill, lacking physical substance and having a projected indefinite period of benefit. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 350-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2) Details Name: us-gaap_IndefiniteLivedIntangibleAssetsExcludingGoodwill Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit Period Type: instantX-DefinitionAmount before accumulated amortization of intangible assets, excluding goodwill. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph \(SX 210.5-02 \(15\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02 (15))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1) Details Name: us-gaap_IntangibleAssetsGrossExcludingGoodwill Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit Period Type: instantX-DefinitionSum of the carrying amounts of all intangible assets, excluding goodwill, as of the balance sheet date, net of accumulated amortization and impairment charges. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 350-SubTopic 30-Section 50-Paragraph 2-Subparagraph \(\(a\) \(1\), \(b\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 350-SubTopic 30-Section 50-Paragraph 2-Subparagraph ((a) (1), (b))-Publisher FASB-URI https://asc.fasb.org/1943274/2147482665/350-30-50-2) Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 350-SubTopic 30-Section 45-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147482686/350-30-45-1> Details Name: us-gaap_IntangibleAssetsNetExcludingGoodwill Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit Period Type: instantX-DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesNo definition available. Details Name: us-gaap_PropertyPlantAndEquipmentLineItems Namespace Prefix: us-

gaap_Data Type: xbrli:stringItemType-Balance Type: na-Period Type: durationX-Details Name: us-gaap-IndefiniteLivedIntangibleAssetsByMajorClassAxis-us-gaap-TradeNamesMember-namespace-Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap-FiniteLivedIntangibleAssetsByMajorClassAxis-us-gaap-CustomerRelationshipsMember-namespace-Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: srt-RangeAxis-srt-MinimumMember-namespace-Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: srt-RangeAxis-srt-MaximumMember-namespace-Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap-FiniteLivedIntangibleAssetsByMajorClassAxis-us-gaap-IntellectualPropertyMember-namespace-Prefix: Data Type: na-Balance Type: Period Type: Summary of Significant Accounting Policies (Details Narrative)-USD (\$) 12 Months Ended Dec. 31, 2023 Dec. 31, 2022 Product Information [Line Items] FDIC Maximum amount \$ 3,170,500 \$ 12,040,022 Cash 250,000 Additional coverage 600,000 Allowance for doubtful accounts receivable Inventory obsolescence reserve 1,146,000 1,128,000 Goodwill impairment 120,136 Cost method investment 348,250 348,250 Research and development \$ 2,341,845 \$ 1,024,127 Potentially dilutive shares 4,545,442 4,235,442 Supplier Concentration Risk [Member] Cost of Goods and Service Benchmark [Member] Vendor One [Member] Product Information [Line Items] Concentration risk, percentage 33.14% 44.15% Supplier Concentration Risk [Member] Cost of Goods and Service Benchmark [Member] Vendor Two [Member] Product Information [Line Items] Concentration risk, percentage 17.18% 29.29% Customer [Member] Customer Concentration Risk [Member] Revenue Benchmark [Member] Product Information [Line Items] Concentration risk, percentage 8.45% Customer One [Member] Customer Concentration Risk [Member] Revenue Benchmark [Member] Product Information [Line Items] Concentration risk, percentage 25.98% Customer Two [Member] Customer Concentration Risk [Member] Revenue Benchmark [Member] Product Information [Line Items] Concentration risk, percentage 10.60% Securities Investor [Member] Product Information [Line Items] FDIC Maximum amount \$ 500,000 Maximum [Member] Product Information [Line Items] FDIC Maximum amount \$ 250,000 X-Definition Additional coverage. References No definition available. Details Name: AMPG-Additional Coverage Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType-Balance Type: debit-Period Type: instantX-Definition Amount of allowance for credit loss on accounts receivable. References Reference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic-944-SubTopic-210-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-7-03-\(a\)-\(5\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479440/944-210-S99-1Reference-2:](http://www.xbrl.org/2009/role/commonPracticeRef-Topic-944-SubTopic-210-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-7-03-(a)-(5))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479440/944-210-S99-1Reference-2:) [http://www.xbrl.org/2003/role/disclosureRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-5-02-\(4\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1Reference-3:](http://www.xbrl.org/2003/role/disclosureRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-5-02-(4))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1Reference-3:) <http://www.xbrl.org/2003/role/disclosureRef-Topic-326-SubTopic-20-Name-Accounting-Standards-Codification-Section-45-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479344/326-20-45-1Reference-4:> <http://www.xbrl.org/2003/role/disclosureRef-Topic-310-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147481962/310-10-50-4Reference-5:> [http://www.xbrl.org/2003/role/disclosureRef-Topic-326-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-13-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479319/326-20-50-13Reference-6:](http://www.xbrl.org/2003/role/disclosureRef-Topic-326-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-13-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479319/326-20-50-13Reference-6:) [http://www.xbrl.org/2003/role/disclosureRef-Topic-326-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-13-Subparagraph-\(f\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479319/326-20-50-13-Details-Name:](http://www.xbrl.org/2003/role/disclosureRef-Topic-326-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-13-Subparagraph-(f)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479319/326-20-50-13-Details-Name:) us-gaap-AllowanceForDoubtfulAccountsReceivable-namespace-Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: credit-Period Type: instantX-Definition Securities (including those issuable pursuant to contingent stock agreements) that could potentially dilute basic earnings per share (EPS) or earnings per unit (EPU) in the future that were not included in the computation of diluted EPS or EPU because to do so would increase EPS or EPU amounts or decrease loss per share or unit amounts for the period presented. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic-260-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(e\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482662/260-10-50-1-Details-Name:](http://www.xbrl.org/2003/role/disclosureRef-Topic-260-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(e)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482662/260-10-50-1-Details-Name:) us-gaap-AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount-namespace-Prefix: us-gaap_Data Type: xbrli:sharesItemType-Balance Type: na-Period Type: durationX-Definition Amount of currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Excludes cash and cash equivalents within disposal group and discontinued operation. References Reference 1: <http://www.xbrl.org/2003/role/exampleRef-Topic-852-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-10-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147481372/852-10-55-10Reference-2:> <http://www.xbrl.org/2003/role/exampleRef-Topic-946-SubTopic-830-Name-Accounting-Standards-Codification-Section-55-Paragraph-12-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480167/946-830-55-12Reference-3:> [http://www.xbrl.org/2003/role/disclosureRef-Topic-944-SubTopic-210-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-7-03-\(a\)-\(2\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479440/944-210-S99-1Reference-4:](http://www.xbrl.org/2003/role/disclosureRef-Topic-944-SubTopic-210-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-7-03-(a)-(2))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479440/944-210-S99-1Reference-4:) [http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-210-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-6-04-\(4\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479617/946-210-S99-1Reference-5:](http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-210-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-6-04-(4))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479617/946-210-S99-1Reference-5:) <http://www.xbrl.org/2003/role/disclosureRef-Topic-946-SubTopic-210-Name-Accounting-Standards-Codification-Section-45-Paragraph-21-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480555/946-210-45-21Reference-6:> [http://www.xbrl.org/2009/role/commonPracticeRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-5-02-\(1\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1Reference-7:](http://www.xbrl.org/2009/role/commonPracticeRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-5-02-(1))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1Reference-7:) <http://www.xbrl.org/2003/role/disclosureRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-20-Topic-946-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480555/946-210-45-20-Details-Name:> us-gaap-Cash-namespace-Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit-Period Type: instantX-Definition The amount of cash deposited in financial institutions as of the balance sheet date that is insured by the Federal Deposit Insurance Corporation. References No definition available. Details Name: us-gaap-CashFDICInsuredAmount-namespace-Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit-Period Type: instantX-Definition For an entity that discloses a concentration risk in relation to quantitative amount, which serves as the "benchmark" (or denominator) in the equation, this concept represents the concentration percentage derived from the division. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-42-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482810/280-10-50-42Reference-2:> <http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-825-SubTopic-10-Section-50-Paragraph-21-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482907/825-10-50-21Reference-3:> <http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-825-SubTopic-10-Section-50-Paragraph-20-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482907/825-10-50-20Reference-4:> <http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-275-SubTopic-10-Section-50-Paragraph-18-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482861/275-10-50-18Reference-5:> <http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-275-SubTopic-10-Section-50-Paragraph-20-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482861/275-10-50-20-Details-Name:> us-gaap-ConcentrationRiskPercentage-namespace-Prefix: us-gaap_Data Type: dtr-types:percentItemType-Balance Type: na-Period Type: durationX-Definition Amount of investment in equity security without readily determinable fair value. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic-321-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479536/321-10-50-3-Details-Name:](http://www.xbrl.org/2003/role/disclosureRef-Topic-321-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-3-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479536/321-10-50-3-Details-Name:) us-gaap-EquitySecuritiesWithoutReadilyDeterminableFairValueAmount-namespace-Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit-Period Type: instantX-Definition Amount of loss from the write-down of an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-28-Subparagraph-\(b\)-SubTopic-10-Topic-230-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482740/230-10-45-28Reference-2:](http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-28-Subparagraph-(b)-SubTopic-10-Topic-230-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482740/230-10-45-28Reference-2:) <http://www.xbrl.org/2003/role/exampleRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-55-Paragraph-24-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482548/350-20-55-24Reference-3:> [http://www.xbrl.org/2003/role/disclosureRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482573/350-20-50-2Reference-4:](http://www.xbrl.org/2003/role/disclosureRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482573/350-20-50-2Reference-4:) <http://www.xbrl.org/2003/role/disclosureRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-45-Paragraph-2-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482598/350-20-45-2-Details-Name:> us-gaap-GoodwillImpairmentLoss-namespace-Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: debit-Period Type: durationX-Definition Amount of valuation reserve for inventory. References Reference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-5-02-\(6\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1Reference-2:](http://www.xbrl.org/2009/role/commonPracticeRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-5-02-(6))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1Reference-2:) [http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-330-SubTopic-10-Section-S99-Paragraph-2-Subparagraph-\(SAB-TOPI-5-BB\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480581/330-10-50-S99-2-Details-Name:](http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-330-SubTopic-10-Section-S99-Paragraph-2-Subparagraph-(SAB-TOPI-5-BB)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480581/330-10-50-S99-2-Details-Name:) us-gaap-InventoryValuationReserves-namespace-Prefix: us-gaap_Data Type: xbrli:monetaryItemType-Balance Type: credit-Period Type: instantX-Definition Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. References No definition available. Details Name: us-gaap-ProductInformationLineItems-namespace-Prefix: us-gaap_Data Type: xbrli:stringItemType-Balance Type: na-Period Type: durationX-Definition The aggregate costs incurred (1) in a planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a

new product or service, a new process or technique, or in bringing about a significant improvement to an existing product or process; or (2) to translate research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process whether intended for sale or the entity's use, during the reporting period charged to research and development projects, including the costs of developing computer software up to the point in time of achieving technological feasibility, and costs allocated in accounting for a business combination to in-process projects deemed to have no alternative future use.

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Amplitech Inc and Specialty Microwave [Member] Domestic Sales [Member] Disaggregation of Revenue [Line Items] Total sales \$ 5, 120, 694 \$ 4, 922, 237

Amplitech Inc and Specialty Microwave [Member] International Sales [Member] Disaggregation of Revenue [Line Items] Total sales 1, 267, 459 947, 515

Amplitech Inc [Member] Disaggregation of Revenue [Line Items] Total sales 6, 388, 153 5, 869, 752

Spectrum [Member] Disaggregation of Revenue [Line Items] Total sales 9, 196, 424 13, 524, 740

Spectrum [Member] Domestic Sales [Member] Disaggregation of Revenue [Line Items] Total sales 6, 234, 934 6, 798, 713

Spectrum [Member] International Sales [Member] Disaggregation of Revenue [Line Items] Total sales \$ 2, 961, 490 \$ 6, 726, 027X-Definition Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table.

ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-5-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479806/606-10-50-5>Reference 2: [http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 3: [http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 4: [http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-\(c\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-(c)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 5: [http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-\(d\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-(d)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 6: [http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-\(e\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-(e)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 7: [http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-\(f\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-(f)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91)Reference 8: [http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-\(g\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91](http://www.xbrl.org/2003/role/exampleRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-91-Subparagraph-(g)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479777/606-10-55-91)Details Name: us-gaap_DisaggregationOfRevenueLineItems Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-Definition Amount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise.

ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic-924-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SAB-Topic-11-L\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479941/924-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-924-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SAB-Topic-11-L)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479941/924-10-S99-1)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-5-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479806/606-10-50-5>Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-30-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-30](http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-30-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-30)Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-42-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-42>Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-22-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-22](http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-22-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-22)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-32-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-32](http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-32-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-32)Reference 7: <http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-40-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-40>Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-22-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-22](http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-22-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-22)Reference 9: [http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-32-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-32](http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-32-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-32)Reference 10: [http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-41-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-41](http://www.xbrl.org/2003/role/disclosureRef-Topic-280-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-41-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147482810/280-10-50-41)Reference 11: [http://www.xbrl.org/2003/role/disclosureRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479806/606-10-50-4](http://www.xbrl.org/2003/role/disclosureRef-Topic-606-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-4-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org/1943274/2147479806/606-10-50-4)Details Name: us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Details Name: dei_LegalEntityAxis=AMPG_AmplitechIncandSpecialtyMicrowaveMember Namespace Prefix: Data Type: na Balance Type: Period Type: X-Details Name: srt_StatementGeographicalAxis=AMPG_DomesticSalesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X-Details Name: srt_StatementGeographicalAxis=AMPG_InternationalSalesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X-Details Name: dei_LegalEntityAxis=AMPG_SpectrumMember Namespace Prefix: Data Type: na Balance Type: Period Type: Revenues (Details Narrative) USD (\$) 12 Months Ended Dec. 31, 2023 Dec. 31, 2022

Revenue from Contract with Customer [Abstract] Revenue \$ 15, 584, 577 \$ 19, 394, 492X-ReferencesNo definition available. Details Name: us-gaap_RevenueFromContractWithCustomerAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-Definition Amount of revenue recognized from goods sold, services rendered, insurance premiums, or other activities that constitute an earning process. Includes, but is not limited to, investment and interest income before deduction of interest expense when recognized as a component of revenue, and sales and trading gain (loss).

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SubTopic 10- Name Accounting Standards Codification- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB- URI <https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference-8>: [http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1A-Subparagraph-\(SX-210-13-01-\(a\)-\(4\)-\(iv\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1A-Subparagraph-(SX-210-13-01-(a)-(4)-(iv))) Publisher FASB- URI <https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference-9>: [http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1A-Subparagraph-\(SX-210-13-01-\(a\)-\(5\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1A-Subparagraph-(SX-210-13-01-(a)-(5))) Publisher FASB- URI <https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference-10>: [http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-\(SX-210-13-02-\(a\)-\(4\)-\(ii\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-(SX-210-13-02-(a)-(4)-(ii))) Publisher FASB- URI <https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference-11>: [http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-\(SX-210-13-02-\(a\)-\(4\)-\(iii\)-\(A\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-(SX-210-13-02-(a)-(4)-(iii)-(A))) Publisher FASB- URI <https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference-12>: [http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-\(SX-210-13-02-\(a\)-\(4\)-\(iii\)-\(B\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-(SX-210-13-02-(a)-(4)-(iii)-(B))) Publisher FASB- URI <https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference-13>: [http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-\(SX-210-13-02-\(a\)-\(4\)-\(iv\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic-470-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1B-Subparagraph-(SX-210-13-02-(a)-(4)-(iv))) Publisher FASB- URI <https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference-14>: 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153 5, 869, 752 Cost of Goods Sold 3, 565, 467 3, 257, 367 Net Income (Loss) (3, 619, 842) (2, 478, 429) Total Assets 11, 461, 268 17, 682, 013 Depreciation and Amortization 362, 663 279, 470 Interest Income, net 26, 901 Interest Income, net (159) Spectrum [Member] Segment Reporting Information [Line Items] Revenue 9, 196, 424 13, 524, 740 Cost of Goods Sold 4, 743, 482 7, 212, 261 Net Income (Loss) 2, 060, 234 2, 878, 476 Total Assets 16, 540, 789 16, 979, 383 Depreciation and Amortization 168, 497 132, 536 Interest Income, net Interest Income, net 1, 289 Corporates [Member] Segment Reporting Information [Line Items] Revenue Cost of Goods Sold Net Income (Loss) (905, 831) (1, 077, 154) Total Assets 3, 405, 572 2, 018, 238 Depreciation and Amortization Interest Income, net \$ (7, 620) Interest Income, net \$ 11, 883 X- Definition Sum of the carrying amounts as of the balance sheet date of all assets that are recognized. 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FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 30: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 31: http://www.xbrl.org/2003/role/disclosureRef-Topic 260-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 60B-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 32: http://www.xbrl.org/2003/role/exampleRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 31-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 33: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 34: http://www.xbrl.org/2003/role/disclosureRef-Topic 205-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 7-Publisher FASB-URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 35: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 28-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 36: http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1A-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 37: http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1B-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 38: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (SX 210. 5-03 (20))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 39: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 942-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 9-04 (22))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483589/942-220-S99-1Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Amount of revenue recognized from goods sold, services rendered, insurance premiums, or other activities that constitute an earning process. Includes, but is not limited to, investment and interest income before deduction of interest expense when recognized as a component of revenue, and sales and trading gain (loss). References Reference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 225-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 4-08 (g) (1) (ii))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480678/225-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 322-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481687/322-10-50-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 825-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 28-Subparagraph (f)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (SX 210. 5-03 (1))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (ii))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 6: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (ii))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 7: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (iii) (A))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 8: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (4) (iv))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 9: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1A-Subparagraph (SX 210. 13-01 (a) (5))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 10: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (i))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 11: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (iii) (A))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 12: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (iii) (B))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 13: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (4) (iv))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 14: http://www.xbrl.org/2003/role/disclosureRef-Topic 470-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1B-Subparagraph (SX 210. 13-02 (a) (5))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 15: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 30-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 16: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 42-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 17: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 22-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 18: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 19: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 40-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 20: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 22-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 21: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 32-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 22: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 41-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 23: http://www.xbrl.org/2003/role/disclosureRef-Topic 942-SubTopic 225-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 9-05 (b) (2))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479557/942-225-S99-1Details Name: us-gaap_Revenues Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-Definition Line items represent financial concepts included in a table. These concepts are used to disclose nonrecurring information associated with domain members defined in one or many axes to the table. References No definition

1943274/2147480032/946-320-S99-6Reference 61: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 6-Subparagraph \(SX 210.12-14 \(Column F\) \(Footnote 7\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 6-Subparagraph (SX 210.12-14 (Column F) (Footnote 7))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480032/946-320-S99-6Reference 62>: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 6-Subparagraph \(SX 210.12-14 \(Column F\) \(Footnote 8\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 6-Subparagraph (SX 210.12-14 (Column F) (Footnote 8))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480032/946-320-S99-6Reference 63>: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 6-Subparagraph \(SX 210.12-14 \(Column F\) \(Footnote 9\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 6-Subparagraph (SX 210.12-14 (Column F) (Footnote 9))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480032/946-320-S99-6Reference 64>: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 19-Subparagraph \(1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480032/946-320-S99-19Reference 65](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 19-Subparagraph (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480032/946-320-S99-19Reference 65): [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 19-Subparagraph \(3\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480032/946-320-S99-19](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 320-Name Accounting Standards Codification-Section S99-Paragraph 19-Subparagraph (3)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480032/946-320-S99-19) Details Name: us-gaap-ScheduleOfInvestmentsLineItems Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na-Period Type: durationX-Details Name: us-gaap-InvestmentTypeAxis-us-gaap-CashAndCashEquivalentsMember Namespace Prefix: Data Type: na-Balance Type: Period Type: Schedule of Inventory (Details)-USD (\$) Dec. 31, 2023-Dec. 31, 2022Inventory Disclosure [Abstract] Raw Materials \$ 959,645 \$ 872,184Work-in-Progress 51,140 229,771Finished Goods 6,672,793 6,658,166Subtotal 7,683,578 7,760,121Less: Reserve for Obsolescence (1,146,000) (1,128,000) Total \$ 6,537,578 \$ 6,632,121X-Definition Amount of inventory reserves for last-in-first-out (LIFO) and other inventory valuation methods. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(6\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (6))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2>: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(6\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (6))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147483080/330-10-50-1> Details Name: us-gaap-InventoryAdjustments Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit-Period Type: instantX-ReferencesNo definition available. Details Name: us-gaap-InventoryDisclosureAbstract Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na-Period Type: durationX-Definition Amount before valuation and LIFO reserves of completed merchandise or goods expected to be sold within one year or operating cycle, if longer. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(6\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (6))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1> Details Name: us-gaap-InventoryFinishedGoods Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: instantX-DefinitionGross amount, as of the balance sheet date, of merchandise, goods, commodities, or supplies held for future sale or to be used in manufacturing, servicing or production process. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(6\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (6))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1> Details Name: us-gaap-InventoryGross Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: instantX-Definition Amount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer. ReferencesReference 1: <http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147481372/852-10-55-10> Reference 2: [http://www.xbrl.org/2003/role/exampleRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483467/210-10-45-1](http://www.xbrl.org/2003/role/exampleRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 1-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483467/210-10-45-1) Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(6\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (6))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1> Details Name: us-gaap-InventoryNet Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: instantX-Definition Amount before valuation and LIFO reserves of raw materials expected to be sold, or consumed within one year or operating cycle, if longer. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(6\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (6))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1> Details Name: us-gaap-InventoryRawMaterials Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: instantX-Definition Amount before valuation and LIFO reserves of merchandise or goods in the production process expected to be completed within one year or operating cycle, if longer. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(6\)\)](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (6))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1> Details Name: us-gaap-InventoryWorkInProcess Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: instantSchedule of Property and Equipment (Details)-USD (\$) Dec. 31, 2023Dec. 31, 2022Property, Plant and Equipment [Line Items] Subtotal \$ 3,986,340 \$ 3,029,394Less: Accumulated Depreciation (1,386,892) (1,005,707) Total 2,599,448 2,023,687Lab Equipment [Member] Property, Plant and Equipment [Line Items] Subtotal 3,400,207 2,455,045Manufacturing Equipment [Member] Property, Plant and Equipment [Line Items] Subtotal 129,745 129,745Automobiles [Member] Property, Plant and Equipment [Line Items] Subtotal 7,335 7,335Computer Equipment [Member] Property, Plant and Equipment [Line Items] Subtotal 194,238 210,240Leasehold Improvements [Member] Property, Plant and Equipment [Line Items] Subtotal 84,172 78,042Furniture and Fixtures [Member] Property, Plant and Equipment [Line Items] Subtotal \$ 170,643 \$ 148,987X-Definition Amount of accumulated depreciation, depletion and amortization for physical assets used in the normal conduct of business to produce goods and services. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.7-03 \(a\) \(8\) \(b\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.7-03 (a) (8) (b))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147479440/944-210-S99-1> Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(14\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (14))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1> Reference 3: [http://www.xbrl.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 360-SubTopic 10-Section 50-Paragraph 1-Subparagraph \(e\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482099/360-10-50-1](http://www.xbrl.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 360-SubTopic 10-Section 50-Paragraph 1-Subparagraph (e)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482099/360-10-50-1) Details Name: us-gaap-AccumulatedDepreciationDepletionAndAmortizationPropertyPlantAndEquipment Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit-Period Type: instantX-Definition Amount before accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.7-03 \(a\) \(8\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.7-03 (a) (8))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147479440/944-210-S99-1> Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(13\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (13))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147480566/210-10-S99-1> Reference 3: [http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 360-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph \(b\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482099/360-10-50-1](http://www.xbrl.org/us-gaap/role/ref/legacyRef-Topic 360-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482099/360-10-50-1) Details Name: us-gaap-PropertyPlantAndEquipmentGross Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: instantX-Definition Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesNo definition available. Details Name: us-gaap-PropertyPlantAndEquipmentLineItems Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na-Period Type: durationX-Definition Amount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.7-03 \(a\) \(8\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.7-03 (a) (8))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147479440/944-210-S99-1> Reference 2: <http://www.xbrl.org/2003/role/exampleRef-Topic 852-SubTopic 10-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147481372/852-10-55-10> Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.7-03 \(a\) \(8\)\)](http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.7-03 (a) (8))) Publisher FASB-URI <https://asc.fasb.org/1943274/2147479440/944-210-S99-1> Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic 942-SubTopic 360-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147480842/942-360-50-1> Details Name: us-gaap-PropertyPlantAndEquipmentNet Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: instantX-Details Name: us-gaap-PropertyPlantAndEquipmentByTypeAxis-AMPG-LabEquipmentMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap-PropertyPlantAndEquipmentByTypeAxis-AMPG-ManufacturingEquipmentMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap-PropertyPlantAndEquipmentByTypeAxis-us-gaap-AutomobilesMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap-ComputerEquipmentMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap-PropertyPlantAndEquipmentByTypeAxis-us-gaap-LeaseholdImprovementsMember Namespace Prefix: Data Type: na-Balance Type: Period Type: X-Details Name: us-gaap-PropertyPlantAndEquipmentByTypeAxis-us-gaap-FurnitureAndFixturesMember Namespace Prefix: Data Type: na-Balance Type: Period Type:

Property and Equipment (Details Narrative) USD (\$) 12 Months Ended Dec. 31, 2023 Dec. 31, 2022 Property, Plant and Equipment [Abstract] Depreciation expense \$ 381, 185 \$ 262, 032 Cost of goods sold 256, 248 194, 456 Amount paid to purchase Property and equipment under finance lease 234, 036 234, 036 Financing leases outstanding balance \$ 49, 336 \$ 82, 816 X- Definition The aggregate costs related to goods produced and sold and services rendered by an entity during the reporting period. This excludes costs incurred during the reporting period related to financial services rendered and other revenue generating activities. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic-924-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SAB-Topic-11-L\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479941/924-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-924-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SAB-Topic-11-L)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479941/924-10-S99-1) Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic-220-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-2-Subparagraph-\(SX-210-5-03-2\(a\),\(d\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483621/220-10-S99-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic-220-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-2-Subparagraph-(SX-210-5-03-2(a),(d))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483621/220-10-S99-2) Details Name: us-gaap_CostOfGoodsAndServicesSold Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X- Definition The amount of expense recognized in the current period that reflects the allocation of the cost of tangible assets over the assets' useful lives. Includes production and non-production related depreciation. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-28-Subparagraph-\(b\)-SubTopic-10-Topic-230-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-28-Subparagraph-(b)-SubTopic-10-Topic-230-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482740/230-10-45-28) Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-360-SubTopic-10-Section-50-Paragraph-1-Subparagraph-\(a\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482099/360-10-50-1](http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-360-SubTopic-10-Section-50-Paragraph-1-Subparagraph-(a)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482099/360-10-50-1) Details Name: us-gaap_Depreciation Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X- Definition Present value of lessee's discounted obligation for lease payments from finance lease. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic-842-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-6-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147478964/842-20-50-6> Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic-842-SubTopic-20-Name-Accounting-Standards-Codification-Section-45-Paragraph-1-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-842-SubTopic-20-Name-Accounting-Standards-Codification-Section-45-Paragraph-1-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479041/842-20-45-1) Details Name: us-gaap_FinanceLeaseLiability Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X- References No definition available. Details Name: us-gaap_PropertyPlantAndEquipment Abstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X- Definition Amount, before accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. References Reference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic-360-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(b\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482099/360-10-50-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic-360-SubTopic-10-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(b)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482099/360-10-50-1) Reference 2: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-5-02\(18\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-5-02(18))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1) Reference 3: [http://www.xbrl.org/2009/role/commonPracticeRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-1-Subparagraph-\(a\)-SubTopic-20-Topic-842-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479041/842-20-45-1](http://www.xbrl.org/2009/role/commonPracticeRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-1-Subparagraph-(a)-SubTopic-20-Topic-842-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147479041/842-20-45-1) Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAsset Before Accumulated Depreciation And Amortization Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant Schedule of Amortization of Assets (Details) Dec. 31, 2023 USD (\$) Goodwill and Intangible Assets Disclosure [Abstract] \$ 149, 976 149, 976 149, 976 2027 149, 976 Thereafter 1, 649, 736 Net \$ 2, 399, 616 X- Definition Amount of amortization for asset, excluding financial asset and goodwill, lacking physical substance with finite life expected to be recognized after fifth fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). References No definition available. Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseAfterYearFive Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X- Definition Amount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(a\)-\(3\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(a)-(3)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseNextTwelveMonths Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X- Definition Amount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in fifth fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(a\)-\(3\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(a)-(3)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearFive Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X- Definition Amount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in fourth fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(a\)-\(3\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(a)-(3)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearFour Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X- Definition Amount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in third fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(a\)-\(3\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(a)-(3)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearThree Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X- Definition Amount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in second fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(a\)-\(3\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(a)-(3)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearTwo Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X- Definition Amount after amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic-926-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-5-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147483154/926-20-50-5> Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-\(a\)-\(1\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic-350-SubTopic-30-Name-Accounting-Standards-Codification-Section-50-Paragraph-2-Subparagraph-(a)-(1)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_FiniteLivedIntangibleAssetsNet Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X- References No definition available. Details Name: us-gaap_GoodwillAndIntangibleAssets Disclosure Abstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: duration Goodwill and Intangible Assets (Details Narrative) USD (\$) 12 Months Ended Dec. 31, 2023 Dec. 31, 2022 Goodwill and Intangible Assets Disclosure [Abstract] Goodwill impairments \$ 120, 136 Goodwill 4, 696, 883 4, 696, 883 Amortization expenses \$ 149, 975 \$ 149, 974 X- Definition The aggregate expense charged against earnings to allocate the cost of intangible assets (nonphysical assets not used in production) in a systematic and rational manner to the periods expected to benefit from such assets. As a noncash expense, this element is added back to net income when calculating cash provided by or used in operations using the indirect method. References Reference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-28-Subparagraph-\(b\)-SubTopic-10-Topic-230-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Section-45-Paragraph-28-Subparagraph-(b)-SubTopic-10-Topic-230-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482740/230-10-45-28) Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-350-SubTopic-30-Section-45-Paragraph-2-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482686/350-30-45-2> Reference 3: [http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-350-SubTopic-30-Section-50-Paragraph-2-Subparagraph-\(a\)-\(2\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name-Accounting-Standards-Codification-Topic-350-SubTopic-30-Section-50-Paragraph-2-Subparagraph-(a)-(2)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482665/350-30-50-2) Details Name: us-gaap_AmortizationOfIntangibleAssets Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X- Definition Amount after accumulated impairment loss of an asset representing future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. References Reference 1: <http://www.xbrl.org/2003/role/exampleRef-Topic-852-SubTopic-10-Name-Accounting-Standards-Codification-Section-55-Paragraph-10-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147481372/852-10-55-10> Reference 2: <http://www.xbrl.org/2003/role/exampleRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-55-Paragraph-24-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482548/350-20-55-24> Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-\(SX-210-5-02\(15\)\)-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic-210-SubTopic-10-Name-Accounting-Standards-Codification-Section-S99-Paragraph-1-Subparagraph-(SX-210-5-02(15))-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147480566/210-10-S99-1) Reference 4: <http://www.xbrl.org/2003/role/disclosureRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-45-Paragraph-1-Publisher-FASB-URI-https://asc.fasb.org//1943274/2147482598/350-20-45-1> Reference 5: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-\(a\)-](http://www.xbrl.org/2009/role/commonPracticeRef-Topic-350-SubTopic-20-Name-Accounting-Standards-Codification-Section-50-Paragraph-1-Subparagraph-(a)-)

Publisher FASB - URI <https://asc.fasb.org/1943274/2147482573/350-20-50-1> Reference 6: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic350-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph\(h\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482573/350-20-50-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic350-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph(h)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482573/350-20-50-1) Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic942-SubTopic210-NameAccountingStandardsCodification-Section599-Paragraph1-Subparagraph\(SX210-9-03\(10\)\(1\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479853/942-210-599-1](http://www.xbrl.org/2003/role/disclosureRef-Topic942-SubTopic210-NameAccountingStandardsCodification-Section599-Paragraph1-Subparagraph(SX210-9-03(10)(1))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479853/942-210-599-1) Details Name: us-gaap-GoodwillNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-ReferencesNo definition available. Details Name: us-gaap-GoodwillAndIntangibleAssetsDisclosureAbstractNamespacePrefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionAmount of loss from the write-down of an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section45-Paragraph28-Subparagraph\(b\)-SubTopic10-Topic230-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482740/230-10-45-28](http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section45-Paragraph28-Subparagraph(b)-SubTopic10-Topic230-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482740/230-10-45-28) Reference 2: <http://www.xbrl.org/2003/role/exampleRef-Topic350-SubTopic20-NameAccountingStandardsCodification-Section55-Paragraph24-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482548/350-20-55-24> Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic350-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph\(c\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482573/350-20-50-1](http://www.xbrl.org/2003/role/disclosureRef-Topic350-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph(c)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482573/350-20-50-1) Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic350-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph2-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482598/350-20-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic350-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph2-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482598/350-20-50-2) Details Name: us-gaap-GoodwillImpairmentLossNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationCost Method Investment (Details Narrative) - SN2NLLC [Member] - USD (\$) Jun. 10, 2021 Dec. 31, 2023 Dec. 31, 2022 Jun. 15, 2022 Defined-Benefit Plan Disclosure [Line Items] [custom: AggregatePurchasePriceForMembershipInterest - 0] \$ 350,000 Equity method investment additional information Each tranche represents a 5% membership interest, and in aggregate a 20% membership interest Cost method investment membership interest percentage 19.90% Overpaid for the membership interest \$ 1,750 Investments \$ 348,250 \$ 348,250 Cost method investment membership interest percentage 19.90% 19.90% X-DefinitionAggregate purchase price for membership interest ReferencesNo definition available. Details Name: AMPG-AggregatePurchasePriceForMembershipInterestNamespacePrefix: AMPG-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-DefinitionAggregate purchase price for membership interest percentage. ReferencesNo definition available. Details Name: AMPG-AggregatePurchasePriceForMembershipInterestPercentageNamespacePrefix: AMPG-Data Type: dtr-types:percentItemType Balance Type: na Period Type: instantX-DefinitionCost method investment membership interest percentage ReferencesNo definition available. Details Name: AMPG-CostMethodInvestmentMembershipInterestPercentageNamespacePrefix: AMPG-Data Type: dtr-types:percentItemType Balance Type: na Period Type: instantX-DefinitionOverpaid for the membership interest ReferencesNo definition available. Details Name: AMPG-OverpaidForTheMembershipInterestNamespacePrefix: AMPG-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesNo definition available. Details Name: us-gaap-DefinedBenefitPlanDisclosureLineItemsNamespacePrefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionThis serves as a place to record data that is not required by accounting literature but is useful for readers of the financial statements as it relates to the details of an equity method investment in common stock. Such information may include the amount of change for a change in ownership (equity) percentage in a given period and the amount and type of the consideration given or received in relation to the change in ownership. ReferencesNo definition available. Details Name: us-gaap-EquityMethodInvestmentAdditionalInformationNamespacePrefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionSum of the carrying amounts as of the balance sheet date of all investments. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic944-SubTopic210-NameAccountingStandardsCodification-Section599-Paragraph1-Subparagraph\(SX210-7-03\(a\)\(1\)\(h\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479440/944-210-599-1](http://www.xbrl.org/2003/role/disclosureRef-Topic944-SubTopic210-NameAccountingStandardsCodification-Section599-Paragraph1-Subparagraph(SX210-7-03(a)(1)(h))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479440/944-210-599-1) Details Name: us-gaap-InvestmentsNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Details Name: us-gaap-RelatedPartyTransactionsByRelatedPartyAxis - AMPG - SN2NLLC Member NamespacePrefix: Data Type: na Balance Type: Period Type: Schedule of Lease Assets and Liabilities (Details) - USD (\$) Dec. 31, 2023 Dec. 31, 2022 Leases ROU operating lease assets \$ 3,538,798 \$ 4,197,324 Current portion of operating lease 541,324 586,379 Operating lease, net of current portion 3,171,979 3,768,922 Total operating lease liabilities 3,713,303 4,355,311 Property and equipment, gross 234,036 234,036 Accumulated depreciation (151,919) (113,621) Property and equipment, net 82,117 120,415 Current portion of financing lease 16,799 33,480 Financing lease, net of current portion 32,537 49,336 Total financing lease liabilities \$ 49,336 \$ 82,816 X-ReferencesNo definition available. Details Name: AMPG-DisclosureLeasesAbstractNamespacePrefix: AMPG-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147478964/842-20-50-6> Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1) Details Name: us-gaap-FinanceLeaseLiabilityNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as current. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1) Details Name: us-gaap-FinanceLeaseLiabilityCurrentNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as noncurrent. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1) Details Name: us-gaap-FinanceLeaseLiabilityNoncurrentNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1) Details Name: us-gaap-OperatingLeaseLiabilityNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as current. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1) Details Name: us-gaap-OperatingLeaseLiabilityCurrentNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1) Details Name: us-gaap-OperatingLeaseLiabilityNoncurrentNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionAmount of lessee's right to use underlying asset under operating lease. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(a\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(a)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-1) Details Name: us-gaap-OperatingLeaseRightOfUseAssetNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-DefinitionAmount of accumulated depreciation and amortization from plant, property, and equipment and right-of-use asset from finance lease. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic360-SubTopic10-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph\(c\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482099/360-10-50-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic360-SubTopic10-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph(c)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482099/360-10-50-1) Reference 2: [http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section45-Paragraph4-Subparagraph\(a\)-SubTopic20-Topic842-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-4](http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section45-Paragraph4-Subparagraph(a)-SubTopic20-Topic842-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-45-4) Reference 3: [http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph\(a\)-SubTopic20-Topic842-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-50-4](http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph(a)-SubTopic20-Topic842-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-50-4) Details Name: us-gaap-PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAccumulatedDepreciationAndAmortizationNamespacePrefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionAmount, after accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic360-SubTopic10-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph\(c\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482099/360-10-50-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic360-SubTopic10-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph(c)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482099/360-10-50-1) Reference 2: [http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph\(a\)-SubTopic20-Topic842-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-50-4](http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph(a)-SubTopic20-Topic842-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479041/842-20-50-4) Details Name: us-gaap-PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAfterAccumulatedDepreciationAndAmortizationNamespacePrefix: us-gaap-Data Type: xbrli:

monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount, before accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic360-SubTopic10-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph\(b\)-PublisherFASB-URI](http://www.xbrl.org/2009/role/commonPracticeRef-Topic360-SubTopic10-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph(b)-PublisherFASB-URI) https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic210-SubTopic10-NameAccountingStandardsCodification-Section599-Paragraph1-Subparagraph\(SX210-5-02\(18\)\)-PublisherFASB-URI](http://www.xbrl.org/2009/role/commonPracticeRef-Topic210-SubTopic10-NameAccountingStandardsCodification-Section599-Paragraph1-Subparagraph(SX210-5-02(18))-PublisherFASB-URI) https://asc.fasb.org/1943274/2147480566/210-10-599-1Reference 3: [http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(a\)-SubTopic20-Topic842-PublisherFASB-URI](http://www.xbrl.org/2009/role/commonPracticeRef-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(a)-SubTopic20-Topic842-PublisherFASB-URI) https://asc.fasb.org/1943274/2147479041/842-20-45-1Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetBeforeAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantSchedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate (Details) Dec. 31, 2023-Dec. 31, 2022Leases Operating leases 9 years 4 months 9 days 9 years 4 months 24 daysFinancing leases 2 years 11 months 19 days 2 years 9 months 18 daysOperating leases 4.45% 4.49% Financing leases 4.72% 4.70% X-ReferencesNo definition available. Details Name: AMPG_DisclosureLeasesAbstract Namespace Prefix: AMPG_Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionWeighted average discount rate for finance lease calculated at point in time. ReferencesReference 1: <http://www.xbrl.org/2003/role/exampleRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section55-Paragraph53-PublisherFASB-URI> https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph\(g\)\(4\)-PublisherFASB-URI](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph(g)(4)-PublisherFASB-URI) https://asc.fasb.org/1943274/2147478964/842-20-50-4Details Name: us-gaap_FinanceLeaseWeightedAverageDiscountRatePercent Namespace Prefix: us-gaap_Data Type: dtr-types: percentItemType Balance Type: na Period Type: instantX- DefinitionWeighted average remaining lease term for finance lease, in 'PnYmMnDtHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. ReferencesReference 1: <http://www.xbrl.org/2003/role/exampleRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section55-Paragraph53-PublisherFASB-URI> https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph\(g\)\(3\)-PublisherFASB-URI](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph(g)(3)-PublisherFASB-URI) https://asc.fasb.org/1943274/2147478964/842-20-50-4Details Name: us-gaap_FinanceLeaseWeightedAverageRemainingLeaseTerm1 Namespace Prefix: us-gaap_Data Type: xbrli: durationItemType Balance Type: na Period Type: instantX- DefinitionWeighted average discount rate for operating lease calculated at point in time. ReferencesReference 1: <http://www.xbrl.org/2003/role/exampleRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section55-Paragraph53-PublisherFASB-URI> https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph\(g\)\(4\)-PublisherFASB-URI](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph(g)(4)-PublisherFASB-URI) https://asc.fasb.org/1943274/2147478964/842-20-50-4Details Name: us-gaap_OperatingLeaseWeightedAverageDiscountRatePercent Namespace Prefix: us-gaap_Data Type: dtr-types: percentItemType Balance Type: na Period Type: instantX- DefinitionWeighted average remaining lease term for operating lease, in 'PnYmMnDtHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. ReferencesReference 1: <http://www.xbrl.org/2003/role/exampleRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section55-Paragraph53-PublisherFASB-URI> https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph\(g\)\(3\)-PublisherFASB-URI](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph(g)(3)-PublisherFASB-URI) https://asc.fasb.org/1943274/2147478964/842-20-50-4Details Name: us-gaap_OperatingLeaseWeightedAverageRemainingLeaseTerm1 Namespace Prefix: us-gaap_Data Type: xbrli: durationItemType Balance Type: na Period Type: instantSchedule Of Future Minimum Lease Payments For Finance Lease (Details)-USD (\$) Dec. 31, 2023-Dec. 31, 2022Leases \$ 18,751.18, 186.11, 976.3, 992. Total lease payments 52,905 Less imputed interest (3,569) Total lease obligations 49,336 \$ 82,816 Less current obligations (16,799) Long-term lease obligations \$ 32,537 X-ReferencesNo definition available. Details Name: AMPG_DislosureLeasesAbstract Namespace Prefix: AMPG_Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionFinance lease obligations financing ReferencesNo definition available. Details Name: AMPG_FinanceLeaseObligationsfinancing Namespace Prefix: AMPG_Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionLong term lease obligations ReferencesNo definition available. Details Name: AMPG_LongTermLeaseObligations Namespace Prefix: AMPG_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph\(b\)-PublisherFASB-URI](http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section45-Paragraph1-Subparagraph(b)-PublisherFASB-URI) https://asc.fasb.org/1943274/2147479041/842-20-45-1Details Name: us-gaap_FinanceLeaseLiability Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payments from finance lease. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDue Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDueNextTwelveMonths Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in fourth fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDueYearFour Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in third fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDueYearThree Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in second fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDueYearTwo Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payments in excess of discounted obligation for lease payments from finance lease. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_FinanceLeaseLiabilityUndiscountedExcessAmount Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantSchedule of Future Minimum Operating Lease Payments (Details)-USD (\$) Dec. 31, 2023-Dec. 31, 2022Leases \$ 696,362,407,580,389,397,393,899,404,721 Thereafter 2,313,460 Total lease payments 4,605,419 Less imputed interest (892,116) Total operating lease liabilities 3,713,303 \$ 4,355,311 Less current obligations (541,324) (586,379) Long-term lease obligations \$ 3,171,979 \$ 3,768,932 X-ReferencesNo definition available. Details Name: AMPG_DislosureLeasesAbstract Namespace Prefix: AMPG_Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDue Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease due after fifth fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic842-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph6-PublisherFASB-URI> https://asc.fasb.org/1943274/2147478964/842-20-50-6Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDueAfterYearFive Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease to be paid in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from

Name: us-gaap-OperatingLeasePayments Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-DefinitionCash payments to lessor's for use of assets under operating leases. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section45-Paragraph25-Subparagraph\(g\)-SubTopic10-Topic230-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482740/230-10-45-25](http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section45-Paragraph25-Subparagraph(g)-SubTopic10-Topic230-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147482740/230-10-45-25) Details Name: us-gaap-PaymentsForRent Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-DefinitionThe amount of an asset, typically cash, provided to a counterparty to provide certain assurance of performance by the entity pursuant to the terms of a written or oral agreement, such as a lease. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic210-SubTopic10-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph\(SX210-5-02\(17\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic210-SubTopic10-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph(SX210-5-02(17))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1) Details Name: us-gaap-SecurityDeposit Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-Details Name: us-gaap-TypeOfArrangementAxis-AMPG-LeaseAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: Schedule of Future Principal and Interest Payments (Details) Dec. 31, 2023 USD (\$) Debt Disclosure [Abstract] \$ 80, 841 Total remaining payments \$ 80, 841X-ReferencesNo definition available. Details Name: us-gaap-DebtDisclosureAbstract Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt. Excludes lease obligation. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph\(SX210-5-02\(22\)\)-SubTopic10-Topic210-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph(SX210-5-02(22))-SubTopic10-Topic210-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1) Reference 2: <http://www.xbrl.org/2003/role/exampleRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section55-Paragraph69B-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481568/470-20-55-69B> Reference 3: <http://www.xbrl.org/2003/role/exampleRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section55-Paragraph69C-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481568/470-20-55-69C> Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1D-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-1D](http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1D-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-1D) Reference 5: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic944-SubTopic210-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph\(SX210-7-03\(a\)\(16\)\(a\)\(2\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479440/944-210-S99-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic944-SubTopic210-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph(SX210-7-03(a)(16)(a)(2))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479440/944-210-S99-1) Reference 6: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic942-SubTopic210-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph\(SX210-9-03\(16\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479853/942-210-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic942-SubTopic210-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph(SX210-9-03(16))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479853/942-210-S99-1) Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph\(b\)\(3\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-4](http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph4-Subparagraph(b)(3)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-4) Details Name: us-gaap-LongTermDebt Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionAmount of long-term debt payable, sinking fund requirement, and other securities issued that are redeemable by holder at fixed or determinable price and date, maturing in second fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic235-SubTopic10-NameAccountingStandardsCodification-SectionS99-Paragraph3-Subparagraph\(SX210-12-04\(a\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480678/235-10-S99-3](http://www.xbrl.org/2003/role/disclosureRef-Topic235-SubTopic10-NameAccountingStandardsCodification-SectionS99-Paragraph3-Subparagraph(SX210-12-04(a))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480678/235-10-S99-3) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1E-Subparagraph\(d\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-1E](http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1E-Subparagraph(d)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-1E) Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section50-Paragraph1-SubTopic10-Topic470-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481544/470-10-50-1> Details Name: us-gaap-LongTermDebtMaturitiesRepaymentsOfPrincipalInYearTwo Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantNotes Payable (Details Narrative) USD (\$) 1 Months Ended 12 Months Ended Jun. 15, 2022 May 06, 2022 Jun. 10, 2020 May 14, 2020 Dec. 20, 2019 Sep. 12, 2019 Sep. 12, 2019 Jan. 31, 2022 Dec. 31, 2022 Mar. 14, 2023 Short-Term Debt [Line Items] Consideration paid in promissory note \$ 441, 139 Interest Expense 13, 013 Line of credit facility, periodic payment \$ 250, 000 Line of credit facility, maximum borrowing capacity \$ 500, 000 Line of credit, closure of equipment \$ 500, 000 Line of credit equipments \$ 0 June Ten Twenty [Member] Short-Term Debt [Line Items] Principal payment 6, 012 13, 975 Interest Expense Repayments of debt 6, 012 January Two Thousand Twenty Two [Member] Short-Term Debt [Line Items] Interest rate percentage 1. 90 % Principal payment 41, 700 40, 916 Interest Expense 1, 215 Repayments of debt 41, 700 Payments of stock issuance costs \$ 91, 795 Payments for deposits 9, 180 Machinery financed, balance \$ 82, 616 Number of payments payments Loans Payable [Member] Short-Term Debt [Line Items] Interest rate percentage 5. 26 % Principal payment 18, 630 Interest Expense Proceeds from loans \$ 58, 192 Debt instrument periodic payments interest \$ 1, 736 Repayments of debt Loans Payable [Member] May Fourteen Two Thousand And Twenty [Member] Short-Term Debt [Line Items] Interest rate percentage 4. 27 % Principal payment 3, 230 9, 402 Interest Expense Proceeds from loans \$ 27, 494 Debt instrument periodic payments interest \$ 815 Repayments of debt 3, 230 Loans Payable [Member] June Ten Twenty [Member] Short-Term Debt [Line Items] Interest rate percentage 4. 28 % Proceeds from loans \$ 41, 015 Debt instrument periodic payments interest \$ 1, 216 Loans Payable [Member] May Six Two Thousand Twenty Two [Member] Short-Term Debt [Line Items] Interest rate percentage 5. 60 % Interest Expense \$ 6, 317 Proceeds from loans \$ 441, 139 Debt instrument periodic payments interest \$ 13, 241 Refund of equipments againsts cancellation order \$ 441, 139 Promissory Note [Member] Short-Term Debt [Line Items] Consideration paid in promissory note \$ 475, 000 Interest rate percentage 6. 00 % 6. 00 % Notes payable 80, 841 183, 014 Promissory Note [Member] Short-Term Debt [Line Items] Total consideration paid \$ 1, 143, 633 Cash paid in acquisition, net of cash acquired \$ 668, 633 Debt instrument, description Beginning November 1, 2019, payment of principal and interest shall be due payable in fifty-nine (59) monthly payments of \$ 9, 213 with a final payment due October 1, 2024 of \$ 9, 203 Convertible Notes Payable [Member] Short-Term Debt [Line Items] Principal payment 102, 171 96, 105 Interest Expense \$ 8, 391 \$ 14, 460 X-DefinitionLine of credit closure of equipment. ReferencesNo definition available. Details Name: AMPG-LineOfCreditClosureOfEquipment Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionLine of credit equipments. ReferencesNo definition available. Details Name: AMPG-LineOfCreditEquipments Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionNumber of payments. ReferencesNo definition available. Details Name: AMPG-NumberOfPayments Namespace Prefix: AMPG Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionRefund of equipments againsts cancellation order. ReferencesNo definition available. Details Name: AMPG-RefundOfEquipments Againsts Cancellation Order Namespace Prefix: AMPG Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instantX-DefinitionAmount of consideration transferred, consisting of acquisition-date fair value of assets transferred by the acquirer, liabilities incurred by the acquirer, and equity interest issued by the acquirer. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section30-Paragraph8-SubTopic30-Topic805-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479637/805-30-30-8> Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph\(b\)-SubTopic30-Topic805-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479581/805-30-50-1](http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section50-Paragraph1-Subparagraph(b)-SubTopic30-Topic805-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479581/805-30-50-1) Reference 3: <http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-Section30-Paragraph7-SubTopic30-Topic805-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479637/805-30-30-7> Details Name: us-gaap-BusinessCombinationConsiderationTransferred Namespace Prefix: us-gaap Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX-DefinitionIdentification of the lender and information about a contractual promise to repay a short-term or long-term obligation, which includes borrowings under lines of credit, notes payable, commercial paper, bonds payable, debentures, and other contractual obligations for payment. This may include rationale for entering into the arrangement, significant terms of the arrangement, which may include amount, repayment terms, priority, collateral required, debt covenants, borrowing capacity, call features, participation rights, conversion provisions, sinking-fund requirements, voting rights, basis for conversion if convertible and remarketing provisions. The description may be provided for individual debt instruments, rational groupings of debt instruments, or by debt in total. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph\(SX210-5-02\(22\)\)-SubTopic10-Topic210-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph(SX210-5-02(22))-SubTopic10-Topic210-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1) Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic210-SubTopic10-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph\(SX210-5-02\(19\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic210-SubTopic10-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph(SX210-5-02(19))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480566/210-10-S99-1) Reference 3: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic942-SubTopic210-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph\(SX210-9-03\(13\)\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479853/942-210-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic942-SubTopic210-NameAccountingStandardsCodification-SectionS99-Paragraph1-Subparagraph(SX210-9-03(13))-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147479853/942-210-S99-1) Reference 4: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic942-SubTopic210-NameAccountingStandardsCodification-Section50-Paragraph3-Subparagraph\(a\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480848/942-470-50-3](http://fasb.org/us-gaap/role/ref/legacyRef-Topic942-SubTopic210-NameAccountingStandardsCodification-Section50-Paragraph3-Subparagraph(a)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147480848/942-470-50-3) Details Name: us-gaap-DebtInstrumentDescription Namespace Prefix: us-gaap Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionContractual interest rate for funds borrowed, under the debt agreement. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1B-Subparagraph\(b\)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-1B](http://www.xbrl.org/2003/role/disclosureRef-Topic470-SubTopic20-NameAccountingStandardsCodification-Section50-Paragraph1B-Subparagraph(b)-PublisherFASB-URIhttps://asc.fasb.org/1943274/2147481139/470-20-50-1B) Reference 2: <http://fasb.org/us-gaap/role/ref/legacyRef-NameAccountingStandards>

Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.22(a)(1))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1-Details-Name: us-gaap-DebtInstrumentInterestRateStatedPercentage-namespace Prefix: us-gaap-Data-Type: dtr-types: percentItem Type: Balance Type: na-Period Type: instantX-Definition Amount of the required periodic payments applied to interest. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.22)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1-Details-Name: us-gaap-DebtInstrumentPeriodicPaymentInterest-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition Amount of the required periodic payments applied to principal. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.22)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1-Details-Name: us-gaap-DebtInstrumentPeriodicPaymentPrincipal-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition This element represents interest incurred for borrowed money which was used to produce goods or render services. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (SX 210.5-03.2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2-Details-Name: us-gaap-FinancingInterestExpense-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition Amount of the cost of borrowed funds accounted for as interest expense. ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef-Topic 946-SubTopic 830-Name Accounting Standards Codification-Section 55-Paragraph 10-Publisher FASB-URI https://asc.fasb.org/1943274/2147480167/946-830-55-10Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section 45-Paragraph 3-Subparagraph (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483581/946-220-45-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.6-07(3))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483575/946-220-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 22-Subparagraph (d)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 835-SubTopic 30-Section 45-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147482925/835-30-45-3Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 942-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.9-04.9)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483589/942-220-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 2-Subparagraph (210.5-03(11))-Publisher FASB-URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef-Topic 835-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 1-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147483013/835-20-50-1-Details-Name: us-gaap-InterestExpense-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition Maximum borrowing capacity under the credit facility without consideration of any current restrictions on the amount that could be borrowed or the amounts currently outstanding under the facility. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.19(b), 22(b))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1-Details-Name: us-gaap-LineOfCreditFacilityMaximumBorrowingCapacity-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: credit-Period Type: instantX-Definition Amount of the required periodic payments of both interest and principal. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.19(b), 22(b))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1-Details-Name: us-gaap-LineOfCreditFacilityPeriodicPayment-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition Including the current and noncurrent portions, aggregate carrying amount of all types of notes payable, as of the balance sheet date, with initial maturities beyond one year or beyond the normal operating cycle, if longer. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02(22))-SubTopic 10-Topic 210-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 944-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.7-03(a)(16)(a)(2))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479440/944-210-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 942-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.9-03(16))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479853/942-210-S99-1-Details-Name: us-gaap-NotesPayable-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: credit-Period Type: instantX-Definition The amount of cash paid for deposits on goods and services during the period; excludes time deposits and deposits with other institutions, which pertain to financial service entities. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 17-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-17Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 17-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-17-Details-Name: us-gaap-PaymentsForDeposits-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: credit-Period Type: durationX-Definition The cash outflow for cost incurred directly with the issuance of an equity security. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 45-Paragraph 15-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-15-Details-Name: us-gaap-PaymentsOfStockIssuanceCosts-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: credit-Period Type: durationX-Definition The cash outflow associated with the acquisition of a business, net of the cash acquired from the purchase. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 45-Paragraph 13-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-13-Details-Name: us-gaap-PaymentsToAcquireBusinessesNetOfCashAcquired-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: credit-Period Type: durationX-Definition Cash received from principal payments made on loans related to operating activities. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 45-Paragraph 25-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-25-Details-Name: us-gaap-ProceedsFromLoans-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition The cash inflow from a borrowing supported by a written promise to pay an obligation. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 230-SubTopic 10-Section 45-Paragraph 14-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-14-Details-Name: us-gaap-ProceedsFromNotesPayable-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition Amount of cash outflow for short-term and long-term debt. Excludes payment of lease obligation. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 230-SubTopic 10-Name Accounting Standards Codification-Section 45-Paragraph 15-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147482740/230-10-45-15-Details-Name: us-gaap-RepaymentsOfDebt-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: credit-Period Type: durationX-Definition Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesNo definition available. Details-Name: us-gaap-ShortTermDebtLineItems-namespace Prefix: us-gaap-Data-Type: xbrli: stringItem Type: Balance Type: na-Period Type: X-Details-Name: us-gaap-AwardDateAxis = AMPG_JuneTenTwentyTwentyMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: X-Details-Name: us-gaap-AwardDateAxis = AMPG_JanuaryTwoThousandTwentyTwoMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: X-Details-Name: us-gaap-LongtermDebtTypeAxis = us-gaap-LoansPayableMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: X-Details-Name: us-gaap-AwardDateAxis = AMPG_MayFourteenTwoThousandAndTwentyMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: X-Details-Name: us-gaap-AwardDateAxis = AMPG_MaySixTwoThousandTwentyTwoMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: X-Details-Name: us-gaap-DebtInstrumentAxis = AMPG_PromissoryNoteMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: X-Details-Name: us-gaap-ShortTermDebtTypeAxis = AMPG_PromissoryNoteMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: X-Details-Name: us-gaap-ShortTermDebtTypeAxis = us-gaap-ConvertibleNotesPayableMember-namespace Prefix: Data-Type: na-Balance Type: Period Type: Schedule of Components for the Provision of Income Taxes (Details)-USD (\$) 12-Months Ended Dec. 31, 2023-Dec. 31, 2022Income Tax Disclosure [Abstract] Current federal and state Deferred federal and state 24,000 Total provision for income taxes \$ 24,000 X-Definition Amount of current federal, state, and local tax expense (benefit) attributable to income (loss) from continuing operations. Includes, but is not limited to, current national, regional, territorial, and provincial tax expense (benefit) for non-US (United States of America) jurisdiction. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Name Accounting Standards Codification-Section 50-Paragraph 9-Subparagraph (a)-SubTopic 10-Topic 740-Publisher FASB-URI https://asc.fasb.org/1943274/2147482685/740-10-50-9-Details-Name: us-gaap-CurrentFederalStateAndLocalTaxExpenseBenefit-namespace Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type: Balance Type: debit-Period Type: durationX-Definition Amount of deferred federal, state, and local tax expense (benefit) attributable to income

(loss) from continuing operations. Includes, but is not limited to, deferred national, regional, territorial, and provincial tax expense (benefit) for non-US (United States of America) jurisdiction. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-10> Details Name: us-gaap_DeferredFederalStateAndLocalTaxExpenseBenefit Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap_IncomeTaxDisclosureAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX-DefinitionAmount of current income tax expense (benefit) and deferred income tax expense (benefit) pertaining to continuing operations. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 8-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-8>Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 250-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 9-Publisher FASB-URI https://asc.fasb.org//1943274/2147483443/250-10-50-9>Reference 3: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 10-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-10>Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SAB TOPIC 6. I. 7\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB TOPIC 6. I. 7)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1)Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 22-Subparagraph \(h\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482810/280-10-50-22](http://www.xbrl.org/2003/role/disclosureRef-Topic 280-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 22-Subparagraph (h)-Publisher FASB-URI https://asc.fasb.org//1943274/2147482810/280-10-50-22)Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210. 7-04 \(9\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483586/944-220-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 944-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 7-04 (9))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483586/944-220-S99-1)Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 45-Paragraph 2-Subparagraph \(a\)-SubTopic 20-Topic 740-Publisher FASB-URI https://asc.fasb.org//1943274/2147482659/740-20-45-2](http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section 45-Paragraph 2-Subparagraph (a)-SubTopic 20-Topic 740-Publisher FASB-URI https://asc.fasb.org//1943274/2147482659/740-20-45-2)Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210. 4-08 \(h\)\)-SubTopic 10-Topic 235-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 4-08 (h))-SubTopic 10-Topic 235-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1) Details Name: us-gaap_IncomeTaxExpenseBenefit Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationSchedule of Effective Income Tax Rate (Details) 12 Months Ended Dec. 31, 2023 Dec. 31, 2022 Income Tax Disclosure [Abstract] Federal tax 21.00% 21.00% State tax 0.80% Permanent items (0.40%) (1.20%) Change in rate 2.50% Valuation Allowance (24.90%) (19.80%) Effective income tax rate (1.00%) X-DefinitionPercentage of current income tax expense (benefit) and deferred income tax expense (benefit) pertaining to continuing operations. ReferencesReference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-12> Details Name: us-gaap_EffectiveIncomeTaxRateContinuingOperations Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na Period Type: durationX-DefinitionPercentage of domestic federal statutory tax rate applicable to pretax income (loss). ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210. 4-08 \(h\) \(2\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 235-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210. 4-08 (h) (2))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480678/235-10-S99-1)Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-12>Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SAB Topic 6. I. Fact. 4\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB Topic 6. I. Fact. 4)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1) Details Name: us-gaap_EffectiveIncomeTaxRateReconciliationAtFederalStatutoryIncomeTaxRate Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na Period Type: durationX-DefinitionPercentage of the difference between reported income tax expense (benefit) and expected income tax expense (benefit) computed by applying the domestic federal statutory income tax rates to pretax income (loss) from continuing operations attributable to changes in the valuation allowance for deferred tax assets. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-12>Reference 2: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SAB Topic 6. I. Fact. 4\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB Topic 6. I. Fact. 4)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1) Details Name: us-gaap_EffectiveIncomeTaxRateReconciliationChangeInDeferredTaxAssetsValuationAllowance Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na Period Type: durationX-DefinitionPercentage of the difference between reported income tax expense (benefit) and expected income tax expense (benefit) computed by applying the domestic federal statutory income tax rates to pretax income (loss) from continuing operations attributable to changes in the income tax rates. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-12>Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SAB Topic 6. I. Fact. 4\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1](http://www.xbrl.org/2003/role/disclosureRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB Topic 6. I. Fact. 4)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1) Details Name: us-gaap_EffectiveIncomeTaxRateReconciliationChangeInEnactedTaxRate Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na Period Type: durationX-DefinitionPercentage of the difference between reported income tax expense (benefit) and expected income tax expense (benefit) computed by applying the domestic federal statutory income tax rates to pretax income (loss) from continuing operations attributable to other adjustments. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-12>Reference 2: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SAB Topic 6. I. Fact. 4\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB Topic 6. I. Fact. 4)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1) Details Name: us-gaap_EffectiveIncomeTaxRateReconciliationOtherAdjustments Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na Period Type: durationX-DefinitionPercentage of the difference between reported income tax expense (benefit) and expected income tax expense (benefit) computed by applying the domestic federal statutory income tax rates to pretax income (loss) from continuing operations applicable to state and local income tax expense (benefit), net of federal tax expense (benefit). ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 12-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-12>Reference 2: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SAB Topic 6. I. Fact. 4\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB Topic 6. I. Fact. 4)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479360/740-10-S99-1) Details Name: us-gaap_EffectiveIncomeTaxRateReconciliationStateAndLocalIncomeTaxes Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na Period Type: durationX-ReferencesNo definition available. Details Name: us-gaap_IncomeTaxDisclosureAbstract Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na Period Type: durationSchedule of Components of Deferred Tax Assets and Liabilities (Details) -USD (\$) Dec. 31, 2023 Dec. 31, 2022 Deferred tax assets Inventory obsolescence \$ 250,000 \$ 248,000 Allowance for bad debt 19,000 ROU Assets 31,000 Stock-based compensation 27,000 Research and development 426,000 Loss carryforward 1,723,000 1,198,000 Valuation Allowance (2,150,000) (1,323,000) Total deferred tax assets 307,000 142,000 Deferred tax liabilities Fixed assets (149,000) (123,000) Cost method investment (28,000) Intangible assets (154,000) (19,000) Total deferred tax liabilities (331,000) (142,000) Total net deferred income tax liabilities \$ (24,000) X-DefinitionAllowance for bad debt. ReferencesNo definition available. Details Name: AMPG_DeferredTaxAssetsAllowanceForBadDebt Namespace Prefix: AMPG_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-DefinitionROU Assets. ReferencesNo definition available. Details Name: AMPG_DeferredTaxAssetsRightOfUseAssets Namespace Prefix: AMPG_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-DefinitionAmount before allocation of valuation allowances of deferred tax asset attributable to deductible temporary differences from in-process research and development costs expensed in connection with a business combination. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 6-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-6>Reference 2: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 8-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-8> Details Name: us-gaap_DeferredTaxAssetsInProcessResearchAndDevelopment Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instantX-DefinitionAmount before allocation of valuation allowances of deferred tax asset attributable to deductible temporary differences from inventory. ReferencesReference 1: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 6-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-6>Reference 2: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 8-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-8>Reference 3: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 6-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-6>Reference 4: <http://www.xbrl.org/2009/role/commonPracticeRef-Topic 740-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 8-Publisher FASB-URI https://asc.fasb.org//1943274/2147482685/740-10-50-8>

www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (2) (iii) (02)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 19: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (2) (iii) (03)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 20: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (d) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 21: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (d) (2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 22: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 25: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 26: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 27: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (iv)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 28: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (v)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems Namespace Prefix: us-gaap_Data Type: xbrli:stringItemType Balance Type: na-Period Type: durationX-Definition The number of shares into which fully or partially vested stock options outstanding as of the balance sheet date can be currently converted under the option plan. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableNumber Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: instantX-Definition The weighted average price as of the balance sheet date at which grantees can acquire the shares reserved for issuance on vested portions of options outstanding and currently exercisable under the stock option plan. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableWeightedAverageExercisePrice Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: instantX-Definition Number of options or other stock instruments for which the right to exercise has lapsed under the terms of the plan agreements. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iv) (04)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExpirationsInPeriod Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-Definition Gross number of share options (or share units) granted during the period. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iv) (01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-Definition Number of options outstanding, including both vested and non-vested options. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingWeightedAverageExercisePrice Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: instantX-Definition Weighted average price at which grantees can acquire the shares reserved for issuance under the stock option plan. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingWeightedAverageExercisePrice Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: instantX-Definition Weighted average price at which option holders acquired shares when converting their stock options into shares. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iv) (02)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsExercisesInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: durationX-Definition Weighted average price at which grantees could have acquired the underlying shares with respect to stock options of the plan that expired. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iv) (04)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsExpirationsInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: durationX-Definition Weighted average per share amount at which grantees can acquire shares of common stock by exercise of options. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iv) (01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsGrantsInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: durationX-Definition Number of share options (or share units) exercised during the current period. ReferencesReference 1: http://www.fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iv) (02)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 3: http://www.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02 (28))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.3-04)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 5: http://www.fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02 (29))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Details Name: us-gaap_StockIssuedDuringPeriodSharesStockOptionsExercised Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-Details Name: us-gaap_AwardTypeAxis = us-gaap_EmployeeStockOptionMember Namespace Prefix: Data Type: na-Balance Type: Period Type: Schedule of Warrants Outstanding (Details) - Warrant [Member] 12 Months Ended Dec. 31, 2023 \$ / shares sharesShare-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Number of Options Outstanding, beginning | shares 3, 296, 942 Weighted Average Exercise Price Outstanding, Beginning | \$ / shares \$ 7. 83 Number of Options Outstanding, Granted | shares Weighted Average Exercise Price Outstanding, Granted | \$ / shares Number of Options Outstanding, Exercised | shares Weighted Average Exercise Price Outstanding, Exercised | \$ / shares Number of Options Outstanding, Expired | shares Weighted Average Exercise Price Outstanding, Expired | \$ / shares Number of Options Outstanding, Ending | shares 3, 296, 942 Weighted Average Exercise Price Outstanding, Ending | \$ / shares \$ 7. 83 Number of Options exercisable | shares 3, 296, 942 Weighted Average Exercise Price Exercisable | \$ / shares \$ 7. 83X-Definition Share based compensation arrangement by share based payment award non option equity instruments exercisable number. ReferencesNo definition available. Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercisableNumber Namespace Prefix: AMPG_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: instantX-Definition Share based compensation arrangement by share based payment award non option exercisable

weighted average exercise price. ReferencesNo definition available. Details Name:
AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionExercisableWeightedAverageExercisePrice-namespace Prefix: AMPG_Data
Type: dtr- types: perShareItem Type- Balance Type: na- Period Type: instantX- DefinitionShare based compensation arrangement by share based payment award non
option outstanding weighted average exercise price. ReferencesNo definition available. Details Name:
AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionOutstandingWeightedAverageExercisePrice-namespace Prefix: AMPG_Data
Type: dtr- types: perShareItem Type- Balance Type: na- Period Type: instantX- DefinitionShare based compensation arrangements by share based payment award non
option exercises in period weighted average exercise price. ReferencesNo definition available. Details Name:
AMPG_ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionExercisesInPeriodWeightedAverageExercisePrice-namespace Prefix:
AMPG_Data Type: dtr- types: perShareItem Type- Balance Type: na- Period Type: durationX- DefinitionShare based compensation arrangements by share based
payment award non option expirations in period weighted average exercise price. ReferencesNo definition available. Details Name:
AMPG_ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionExpirationsInPeriodWeightedAverageExercisePrice-namespace Prefix:
AMPG_Data Type: dtr- types: perShareItem Type- Balance Type: na- Period Type: durationX- DefinitionShare based compensation arrangements by share based
payment award non option grants in period weighted average exercise price. ReferencesNo definition available. Details Name:
AMPG_ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionGrantsInPeriodWeightedAverageExercisePrice-namespace Prefix: AMPG_
Data Type: dtr- types: perShareItem Type- Balance Type: na- Period Type: durationX- DefinitionLine items represent financial concepts included in a table. These
concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iv\) \(2\)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 35-Paragraph 1D-Publisher FASB-URI https://asc.fasb.org/1943274/2147480483/718-10-35-1DReference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 35-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147480483/718-10-35-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (3)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 11: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (02)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (03)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (04)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 14: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 15: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 16: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 17: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (02)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 19: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (03)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 20: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (d) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 21: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (d) (2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 22: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (2)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 25: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 26: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 27: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (iv)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 28: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (v)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2
Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems-namespace Prefix: us-gaap_Data Type: xbrli:stringItemType
Balance Type: na- Period Type: durationX- DefinitionNumber of non-option equity instruments exercised by participants. ReferencesReference 1: <a href=) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercised-namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType
Balance Type: na- Period Type: durationX- DefinitionNumber of shares under non-option equity instrument agreements for which rights to exercise
lapsed. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(e\) \(1\) \(iv\) \(4\)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (iv) (4)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExpirations-namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType
Balance Type: na- Period Type: durationX- DefinitionNet number of non-option equity instruments granted to participants. ReferencesReference 1:
[http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iv\) \(1\)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (1)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsGranted-namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType
Balance Type: na- Period Type: durationX- DefinitionNumber of equity instruments other than options outstanding, including both vested and non-vested
instruments. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(e\) \(1\) \(i\)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (i)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) Reference 2: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(e\) \(1\) \(ii\)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e) (1) (ii)-SubTopic 10-Topic 718-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsOutstandingNumber-namespace Prefix: us-gaap_Data Type:
xbrli:sharesItemType Balance Type: na- Period Type: instantX- Details Name: us-gaap_AwardTypeAxis- us-gaap_WarrantMember-namespace Prefix: us-gaap_Data Type:

na Balance Type: Period Type: Schedule of Changes in Restricted Stock Units Outstanding (Details)- Restricted Stock Units (RSUs) [Member] 12 Months Ended Dec-31, 2023 \$ / shares shares Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Number of RSU's, Outstanding | shares 22,500 Weighted Average Exercise Price, Outstanding | \$ / shares \$ 1.96 Number of RSU's, Granted | shares 70,000 Weighted Average Exercise Price, Granted | \$ / shares \$ 1.80 Number of RSU's, Exercised | shares (80,000) Weighted Average Exercise Price, Exercised | \$ / shares \$ 1.82 Number of RSU's, Expired | shares Weighted Average Exercise Price, Expired | \$ / shares Number of RSU's, Outstanding | shares 12,500 Weighted Average Exercise Price, Outstanding | \$ / shares \$ 1.96 Number of RSU's, Exercisable | shares Weighted Average Exercise Price, Exercisable | \$ / shares X- Definition Share based compensation arrangement by share based payment award equity instruments other than options exercisable number. References No definition available. Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsExercisableNumber Namespace Prefix: AMPG_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instant X- Definition Share based compensation arrangement by share based payment award equity instruments other than options exercisable weighted average grant date fair value. References No definition available. Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsExercisableWeightedAverageGrantDateFairValue Namespace Prefix: AMPG_Data Type: dtr-types: perShareItem Type Balance Type: na Period Type: instant X- Definition Share based compensation arrangement by share based payment award equity instruments other than options exercised in period. References No definition available. Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsExercisedInPeriodWeightedAverageExercisedFairValue Namespace Prefix: AMPG_Data Type: dtr-types: perShareItem Type Balance Type: na Period Type: duration X- Definition Share based compensation arrangement by share based payment award equity instruments other than options vested in period weighted average exercised fair value. References No definition available. Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageExercisedFairValue Namespace Prefix: AMPG_Data Type: dtr-types: perShareItem Type Balance Type: na Period Type: duration X- Definition The number of equity-based payment instruments, excluding stock (or unit) options, that were forfeited during the reporting period. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(03\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (03)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeitedInPeriod Namespace Prefix: us-gaap_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: duration X- Definition Weighted average fair value as of the grant date of equity-based award plans other than stock (unit) option plans that were not exercised or put into effect as a result of the occurrence of a terminating event. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(03\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (03)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeituresWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_Data Type: dtr-types: perShareItem Type Balance Type: na Period Type: duration X- Definition The number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(01\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (01)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: duration X- Definition The weighted average fair value at grant date for nonvested equity-based awards issued during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(01\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (01)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_Data Type: dtr-types: perShareItem Type Balance Type: na Period Type: duration X- Definition The number of non-vested equity-based payment instruments, excluding stock (or unit) options, that validly exist and are outstanding as of the balance sheet date. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(i\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (i)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(ii\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (ii)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvested Namespace Prefix: us-gaap_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instant X- Definition Per share or unit weighted average fair value of nonvested award under share-based payment arrangement. Excludes share and unit options. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(i\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (i)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(ii\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (ii)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_Data Type: dtr-types: perShareItem Type Balance Type: na Period Type: instant X- Definition Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 35-Paragraph 1D-Publisher FASB-URI https://asc.fasb.org//1943274/2147480483/718-10-35-1D> Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 35-Paragraph 3-Publisher FASB-URI https://asc.fasb.org//1943274/2147480483/718-10-35-3> Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\) \(1\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (1)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\) \(2\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (2)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 5: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\) \(3\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a) (3)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 6: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(i\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (i)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 7: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(ii\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (ii)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 8: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iii\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iii)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 9: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iv\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 10: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iv\) \(01\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (01)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 11: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iv\) \(02\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (02)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 12: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iv\) \(03\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (03)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 13: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(1\) \(iv\) \(04\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (1) (iv) (04)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 14: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(i\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (i)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 15: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(ii\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (ii)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 16: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 17: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(01\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (01)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 18: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(02\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (02)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Reference 19: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(03\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (03)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2)

Accumulated Other Comprehensive Income (Loss) [Line Items] Common stock shares, authorized 500,000,000 Series A Convertible Preferred Stock [Member]
Accumulated Other Comprehensive Income (Loss) [Line Items] Preferred stock designated as convertible preferred stock, shares 401,000 Warrant [Member]
Accumulated Other Comprehensive Income (Loss) [Line Items] Share price \$ 7.00 X - Definition Corporation authorised shares issued. ReferencesNo definition available. Details Name: AMPG_CorporationAuthorisedSharesIssued Namespace Prefix: AMPG_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instantX - Definition Description equity incentive plan. ReferencesNo definition available. Details Name: AMPG_DescriptionEquityIncentivePlan Namespace Prefix: AMPG_Data Type: xbrli: stringItem Type Balance Type: na Period Type: durationX - Definition Equal quarterly installments. ReferencesNo definition available. Details Name: AMPG_EqualQuarterlyInstallments Namespace Prefix: AMPG_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: durationX - Definition Estimated fair market value. ReferencesNo definition available. Details Name: AMPG_EstimatedFairMarketValue Namespace Prefix: AMPG_Data Type: xbrli: monetaryItem Type Balance Type: credit Period Type: instantX - Definition Exercise price. ReferencesNo definition available. Details Name: AMPG_ExercisePrice Namespace Prefix: AMPG_Data Type: dtr - types: perShareItem Type Balance Type: na Period Type: durationX - Definition Intrinsic value. ReferencesNo definition available. Details Name: AMPG_IntrinsicValue Namespace Prefix: AMPG_Data Type: xbrli: monetaryItem Type Balance Type: debit Period Type: instantX - Definition Originally common stock shares authorized. ReferencesNo definition available. Details Name: AMPG_OriginallyCommonStockSharesAuthorized Namespace Prefix: AMPG_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instantX - Definition Preferred stock designated as convertible preferred stock shares. ReferencesNo definition available. Details Name: AMPG_PreferedStockDesignatedAsConvertiblePreferredStockShares Namespace Prefix: AMPG_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instantX - Definition Share-based compensation arrangement by sharebased payment award equity instruments non options aggregate intrinsic value outstanding. ReferencesNo definition available. Details Name: AMPG_SharebasedCompensationArrangementBySharebasedPaymentAwardEquityInstrumentsNonOptionsAggregateIntrinsicValueOutstanding Namespace Prefix: AMPG_Data Type: xbrli: monetaryItem Type Balance Type: debit Period Type: instantX - Definition Share-based compensation arrangement by share-based payment award fair value assumptions expected term 1 maximum. ReferencesNo definition available. Details Name: AMPG_SharebasedCompensationArrangementBySharebasedPaymentAwardFairValueAssumptionsExpectedTerm1Maximum Namespace Prefix: AMPG_Data Type: xbrli: durationItem Type Balance Type: na Period Type: durationX - Definition Share-based compensation arrangement by share-based payment award fair value assumptions expected term 1 minimum. ReferencesNo definition available. Details Name: AMPG_SharebasedCompensationArrangementBySharebasedPaymentAwardFairValueAssumptionsExpectedTerm1Minimum Namespace Prefix: AMPG_Data Type: xbrli: durationItem Type Balance Type: na Period Type: durationX - Definition Share-based compensation arrangement by share-based payment award non options outstanding weighted average remaining contractual term 2. ReferencesNo definition available. Details Name: AMPG_SharebasedCompensationArrangementBySharebasedPaymentAwardNonOptionsOutstandingWeightedAverageRemainingContractualTerm2 Namespace Prefix: AMPG_Data Type: xbrli: durationItem Type Balance Type: na Period Type: durationX - Definition Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 4-Publisher FASB-URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 220-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 5-Publisher FASB-URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef-Topic 830-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 1-Publisher FASB-URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef-Topic 830-SubTopic 30-Name Accounting Standards Codification-Section 45-Paragraph 17-Publisher FASB-URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef-Topic 830-SubTopic 30-Name Accounting Standards Codification-Section 45-Paragraph 20-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 6: http://www.xbrl.org/2003/role/disclosureRef-Topic 830-SubTopic 30-Name Accounting Standards Codification-Section 45-Paragraph 17-Subparagraph (b)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 7: http://www.xbrl.org/2003/role/disclosureRef-Topic 830-SubTopic 30-Name Accounting Standards Codification-Section 45-Paragraph 20-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 8: http://www.xbrl.org/2003/role/disclosureRef-Topic 830-SubTopic 30-Name Accounting Standards Codification-Section 45-Paragraph 20-Subparagraph (d)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481694/830-30-45-20 Details Name: us-gaap-AccumulatedOtherComprehensiveIncomeLossLineItems Namespace Prefix: us-gaap_Data Type: xbrli: stringItem Type Balance Type: na Period Type: durationX - Definition Amount of expense for award under share-based payment arrangement. Excludes amount capitalized. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SAB Topic 14.F)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479830/718-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (h) (1) (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 Details Name: us-gaap-AllocatedShareBasedCompensationExpense Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItem Type Balance Type: debit Period Type: durationX - Definition Exercise price per share or per unit of warrants or rights outstanding. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 3-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-3 Details Name: us-gaap-ClassOfWarrantOrRightExercisePriceOfWarrantsOrRights1 Namespace Prefix: us-gaap_Data Type: dtr - types: perShareItem Type Balance Type: na Period Type: instantX - Definition Number of securities into which each warrant or right may be converted. For example, but not limited to, each warrant may be converted into two shares. ReferencesNo definition available. Details Name: us-gaap-ClassOfWarrantOrRightNumberOfSecuritiesCalledByEachWarrantOrRight Namespace Prefix: us-gaap_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instantX - Definition Aggregate number of common shares reserved for future issuance. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 210-SubTopic 10-Section S99-Paragraph 1-Subparagraph (SX 210.5-02.29)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 Details Name: us-gaap-CommonStockCapitalSharesReservedForFutureIssuance Namespace Prefix: us-gaap_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instantX - Definition Face amount or stated value per share of common stock. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (29)) -Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 Details Name: us-gaap-CommonStockParOrStatedValuePerShare Namespace Prefix: us-gaap_Data Type: dtr - types: perShareItem Type Balance Type: na Period Type: instantX - Definition The maximum number of common shares permitted to be issued by an entity's charter and bylaws. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.6-04 (16) (a))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479617/946-210-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (29)) -Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 Details Name: us-gaap-CommonStockSharesAuthorized Namespace Prefix: us-gaap_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instantX - Definition Total number of common shares of an entity that have been sold or granted to shareholders (includes common shares that were issued, repurchased and remain in the treasury). These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (29)) -Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 Details Name: us-gaap-CommonStockSharesIssued Namespace Prefix: us-gaap_Data Type: xbrli: sharesItem Type Balance Type: na Period Type: instantX - Definition Weighted-average period over which cost not yet recognized is expected to be recognized for award under share-based payment arrangement. in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 Details Name: us-gaap-EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedPeriodForRecognition1 Namespace Prefix: us-gaap_Data Type: xbrli: durationItem Type Balance Type: na Period Type: durationX - Definition Amount of cost to be recognized for nonvested award under share-based payment arrangement. Excludes share and unit options. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (i)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 Details Name: us-gaap-EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedShareBasedAwardsOtherThanOptions Namespace Prefix: us-gaap_Data Type: xbrli: monetaryItem Type Balance Type: debit Period Type: instantX - Definition The number of units sold in a public offering of each class of partners' capital account. Units represent shares of ownership of the general, limited, and preferred partners. ReferencesReference 1: http://fasb.org/us-gaap/role

/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 509-Paragraph 1-Subparagraph (SX 210.3-04)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480008/505-10-509-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 509-Paragraph 5-Subparagraph (SAB Topic 4.F)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480008/505-10-509-5Details Name: us-gaap_PartnersCapitalAccountUnitsSoldInPublicOffering Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-DefinitionFace amount or stated value per share of preferred stock nonredeemable or redeemable solely at the option of the issuer. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 13-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(28))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1Details Name: us-gaap_PREFERREDStockParOrStatedValuePerShare Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: instantX-DefinitionThe maximum number of nonredeemable preferred shares (or preferred stock redeemable solely at the option of the issuer) permitted to be issued by an entity's charter and bylaws. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 210-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.6-04(16)(a))-Publisher FASB-URI https://asc.fasb.org/1943274/2147479617/946-210-599-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210.5-02(28))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1Details Name: us-gaap_PREFERREDStockSharesAuthorized Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: instantX-DefinitionThe number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c)(2)(iii)(01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-DefinitionThe number of equity-based payment instruments, excluding stock (or unit) options, that vested during the reporting period. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c)(2)(iii)(02)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriod Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-DefinitionAgreed-upon price for the exchange of the underlying asset relating to the share-based payment award. ReferencesNo definition available. Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExercisePrice Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: instantX-DefinitionThe estimated amount of dividends to be paid to holders of the underlying shares (expected dividends) over the option's term. Dividends are taken into account because payment of dividends to shareholders reduces the fair value of the underlying shares, and option holders generally do not receive dividends. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f)(2)(iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedDividendPayments Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: durationX-DefinitionThe estimated measure of the percentage by which a share price is expected to fluctuate during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f)(2)(ii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na-Period Type: durationX-DefinitionThe estimated measure of the maximum percentage by which a share price is expected to fluctuate during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period. ReferencesNo definition available. Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRateMaximum Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na-Period Type: durationX-DefinitionThe estimated measure of the minimum percentage by which a share price is expected to fluctuate during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period. ReferencesNo definition available. Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRateMinimum Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na-Period Type: durationX-DefinitionThe risk-free interest rate assumption that is used in valuing an option on its own shares. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f)(2)(iv)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na-Period Type: durationX-DefinitionThe maximum risk-free interest rate assumption that is used in valuing an option on its own shares. ReferencesNo definition available. Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRateMaximum Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na-Period Type: durationX-DefinitionThe minimum risk-free interest rate assumption that is used in valuing an option on its own shares. ReferencesNo definition available. Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRateMinimum Namespace Prefix: us-gaap_Data Type: dtr-types:percentItemType Balance Type: na-Period Type: durationX-DefinitionThe highest quantity of shares an employee can purchase under the plan per period. ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 718-SubTopic 10-Section 50-Paragraph 2-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardMaximumNumberOfSharesPerEmployee Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-DefinitionNet number of share options (or share units) granted during the period. ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c)(1)(iv)(01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriod Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-DefinitionGross number of share options (or share units) granted during the period. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e)(1)(iv)(01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross Namespace Prefix: us-gaap_Data Type: xbrli:sharesItemType Balance Type: na-Period Type: durationX-DefinitionChange in the weighted average exercise price of options outstanding. ReferencesNo definition available. Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingPeriodIncreaseDecreaseWeightedAverageExercisePrice Namespace Prefix: us-gaap_Data Type: dtr-types:perShareItemType Balance Type: na-Period Type: durationX-DefinitionAn excess of the fair value of the modified award over the fair value of the award immediately before the modification. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (h)(2)(iii)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardPlanModificationIncrementalCompensationCost Namespace Prefix: us-gaap_Data Type: xbrli:monetaryItemType Balance Type: debit-Period Type: durationX-DefinitionWeighted average per share amount at which grantees can acquire shares of common stock by exercise of options. ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (e)(1)(iv)(01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Details Name: us-

gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsGrantsInPeriodWeightedAverageExercisePrice-namespace-Prefix: us-gaap-Data-Type: dtr-types: perShareItem Type-Balance-Type: na-Period-Type: durationX-DefinitionPrice of a single share of a number of saleable stocks of a company. ReferencesNo definition available. Details Name: us-gaap_SharePrice-namespace-Prefix: us-gaap-Data-Type: dtr-types: perShareItem Type-Balance-Type: na-Period-Type: instantX-DefinitionIntrinsic value of nonvested award under share-based payment arrangement. Excludes share and unit options. ReferencesNo definition available. Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardEquityInstrumentsOtherThanOptionsAggregateIntrinsicValueNonvested-namespace-Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type-Balance-Type: debit-Period-Type: instantX-DefinitionIntrinsic value of outstanding award under share-based payment arrangement. Excludes share and unit options. ReferencesNo definition available. Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardEquityInstrumentsOtherThanOptionsAggregateIntrinsicValueOutstanding-namespace-Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type-Balance-Type: debit-Period-Type: instantX-DefinitionIntrinsic value of vested award under share-based payment arrangement. Excludes share and unit options. ReferencesNo definition available. Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardEquityInstrumentsOtherThanOptionsAggregateIntrinsicValueVested-namespace-Prefix: us-gaap-Data-Type: xbrli: monetaryItem Type-Balance-Type: debit-Period-Type: durationX-DefinitionExpected term of award under share-based payment arrangement, in 'PnYnMnDnTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. ReferencesReference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(f\) \(2\) \(i\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (f) (2) (i)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardFairValueAssumptionsExpectedTerm1-namespace-Prefix: us-gaap-Data-Type: xbrli: durationItem Type-Balance-Type: na-Period-Type: durationX-DefinitionWeighted average remaining contractual term for option awards outstanding, in 'PnYnMnDnTnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 718-SubTopic 10-Subparagraph \(e\) \(1\)-Name Accounting Standards Codification-Paragraph 2-Section 50-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 718-SubTopic 10-Subparagraph (e) (1)-Name Accounting Standards Codification-Paragraph 2-Section 50-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardOptionsOutstandingWeightedAverageRemainingContractualTerm2-namespace-Prefix: us-gaap-Data-Type: xbrli: durationItem Type-Balance-Type: na-Period-Type: durationX-DefinitionNumber of options vested. ReferencesNo definition available. Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardOptionsVestedNumberOfShares-namespace-Prefix: us-gaap-Data-Type: xbrli: sharesItem Type-Balance-Type: na-Period-Type: durationX-DefinitionThe weighted average price as of the balance sheet date at which grantees could acquire the underlying shares with respect to all outstanding stock options which are in the customized range of exercise prices. ReferencesReference 1: [http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 718-SubTopic 10-Section 50-Paragraph 2-Subparagraph \(e\) \(1\) \(i\) \(ii\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2](http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Topic 718-SubTopic 10-Section 50-Paragraph 2-Subparagraph (e) (1) (i) (ii)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480429/718-10-50-2) Details Name: us-gaap_SharebasedCompensationSharesAuthorizedUnderStockOptionPlansExercisePriceRangeOutstandingOptionsWeightedAverageExercisePriceBeginningBalance1-namespace-Prefix: us-gaap-Data-Type: dtr-types: perShareItem Type-Balance-Type: na-Period-Type: instantX-DefinitionNumber of new stock issued during the period. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI https://asc.fasb.org//1943274/2147481112/505-10-50-2> Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 505-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(a\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481004/946-505-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 505-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (a)-Publisher FASB-URI https://asc.fasb.org//1943274/2147481004/946-505-50-2) Reference 3: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph \(SX 210.6-09 \(4\) \(b\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-S99-3](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 220-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph (SX 210.6-09 (4) (b))-Publisher FASB-URI https://asc.fasb.org//1943274/2147483575/946-220-S99-3) Reference 4: [http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph \(SX 210.6-03 \(i\) \(1\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147479886/946-10-S99-3](http://www.xbrl.org/2003/role/disclosureRef-Topic 946-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 3-Subparagraph (SX 210.6-03 (i) (1))-Publisher FASB-URI https://asc.fasb.org//1943274/2147479886/946-10-S99-3) Reference 5: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(28\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (28))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1) Reference 6: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.3-04\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480008/505-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.3-04)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480008/505-10-S99-1) Reference 7: [http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.5-02 \(29\)\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1](http://fasb.org/us-gaap/role/ref/legacyRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.5-02 (29))-Publisher FASB-URI https://asc.fasb.org//1943274/2147480566/210-10-S99-1) Details Name: us-gaap_StockIssuedDuringPeriodSharesNewIssues-namespace-Prefix: us-gaap-Data-Type: xbrli: sharesItem Type-Balance-Type: na-Period-Type: durationX-DefinitionTotal number of shares issued during the period, including shares forfeited, as a result of Restricted Stock Awards. ReferencesReference 1: <http://fasb.org/us-gaap/role/ref/legacyRef-Name Accounting Standards Codification-Section 50-Paragraph 2-SubTopic 10-Topic 505-Publisher FASB-URI https://asc.fasb.org//1943274/2147481112/505-10-50-2> Reference 2: [http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph \(SX 210.3-04\)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480008/505-10-S99-1](http://asc.fasb.org/us-gaap/role/ref/legacyRef-Topic 505-SubTopic 10-Name Accounting Standards Codification-Section S99-Paragraph 1-Subparagraph (SX 210.3-04)-Publisher FASB-URI https://asc.fasb.org//1943274/2147480008/505-10-S99-1) Details Name: us-gaap_StockIssuedDuringPeriodSharesRestrictedStockAwardGross-namespace-Prefix: us-gaap-Data-Type: xbrli: sharesItem Type-Balance-Type: na-Period-Type: durationX-Details Name: srt-ConsolidatedEntitiesAxis = AMPG-AmpliTechGroupIncMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_PlanNameAxis = AMPG-TwoThousandAndTwentyEquityIncentivePlanMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_RelatedPartyTransactionsByRelatedPartyAxis = AMPG-BoardAdvisorMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_StatementEquityComponentsAxis = us-gaap_CommonStockMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_AwardTypeAxis = us-gaap_RestrictedStockUnitsRSUMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_AwardTypeAxis = us-gaap_EmployeeStockOptionMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-TitleOfIndividualAxis = AMPG-OneEmployeesMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-TitleOfIndividualAxis = AMPG-FawadMaqboolMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-TitleOfIndividualAxis = AMPG-SanfratelloAndFloresMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-TitleOfIndividualAxis = AMPG-DanielMazzottaMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_ConversionOfStockByUniqueDescriptionAxis = AMPG-OneEmployeesMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_ConversionOfStockByUniqueDescriptionAxis = AMPG-TwoEmployeesAndOneConsultantMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_ConversionOfStockByUniqueDescriptionAxis = AMPG-FourEmployeesMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_ConversionOfStockByUniqueDescriptionAxis = AMPG-TwoEmployeesMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_ConversionOfStockByUniqueDescriptionAxis = AMPG-TwoAdvisorMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_ConversionOfStockByUniqueDescriptionAxis = AMPG-EqualQuarterlyInstallmentsMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_ConversionOfStockByUniqueDescriptionAxis = AMPG-ElevenEmployeesAndOneBoardAdvisorMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_AwardTypeAxis = AMPG_StockOptionsMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-TitleOfIndividualAxis = AMPG-MatthewKappersMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-TitleOfIndividualAxis = AMPG-AndrewLeeMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-TitleOfIndividualAxis = AMPG-DanielMazzottaMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_AwardTypeAxis = us-gaap_WarrantMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_AwardTypeAxis = AMPG-WarrantsMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: srt-RangeAxis = srt-MinimumMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_DebtInstrumentAxis = AMPG-SeriesACconvertiblePreferredStockMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: X-Details Name: us-gaap_DebtInstrumentAxis = us-gaap_WarrantMember-namespace-Prefix: Data-Type: na-Balance-Type: Period-Type: Commitments and Contingencies (Details Narrative)-USD (\$)-12 Months Ended Dec. 31, 2023-Dec. 31, 2022-Dec. 31, 2021-Commitments and Contingencies Disclosure [Abstract] Revenues adjustment description The revenue earned adjustment was determined to be an amount equal to 25 % of two years' net revenues minus \$ 20, 000, 000 Fair value of the revenue adjustment \$ 2, 180, 826 \$ 815, 788X-DefinitionRevenues adjustment description. ReferencesNo definition available. Details Name: AMPG_RevenuesAdjustmentDescription-namespace-Prefix: AMPG-Data-Type: xbrli: stringItem Type-Balance-Type: na-Period-Type: durationX-ReferencesNo definition available. Details Name: us-gaap-CommitmentsAndContingenciesDisclosureAbstract-namespace-Prefix: us-gaap-Data-Type: xbrli: stringItem Type-Balance-Type: na-Period-Type: durationX-DefinitionAmount of deferred income and obligation to transfer product and service to customer for which consideration has

been received or is receivable. ReferencesReference 1: [http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph \(SX 210-5-02 \(26\) \(c\)\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1](http://www.xbrl.org/2009/role/commonPracticeRef-Topic 210-SubTopic 10-Name Accounting Standards Codification-Section 599-Paragraph 1-Subparagraph (SX 210-5-02 (26) (c))-Publisher FASB-URI https://asc.fasb.org/1943274/2147480566/210-10-599-1) Details Name: us-gaap-DeferredRevenue Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant Subsequent events (Details Narrative) 12 Months Ended Jan. 20, 2024 shares Jan. 15, 2024 USD (\$) ft² Aug. 09, 2023 USD (\$) Oct. 15, 2021 Sep. 12, 2019 USD (\$) Dec. 04, 2015 USD (\$) Dec. 31, 2023 shares Subsequent Event [Line Items] Lessee operating lease description On August 9, 2023, the Company entered a 39-month agreement for \$ 20,880 to lease an automobile with a monthly payment of \$ 605 Annual rent \$ 20,880 \$ 90,000 \$ 50,000 Operating lease payments increase percentage 2.75% 3.00% 3.75% Restricted Stock Units (RSUs) [Member] Subsequent Event [Line Items] Number of units issued | shares 70,000 Subsequent Event [Member] Restricted Stock Units (RSUs) [Member] Subsequent Event [Line Items] Number of units issued | shares 15,000 Subsequent Event [Member] Triple Net Lease Agreement [Member] Subsequent Event [Line Items] Lessee operating lease description Company entered a triple net lease agreement for a 1,900 square foot facility in Allen, Texas for a term of five years and one month New lease for facility | ft² 1,900 Annual rent \$ 53,675 Operating lease payments increase percentage 2.50% Base rent \$ 17,999 X- Definition Operating lease payments increase percentage References No definition available. Details Name: AMPG_OperatingLeasePaymentsIncreasePercentage Namespace Prefix: AMPG-Data Type: dtr-types:percentItemType Balance Type: na Period Type: durationX- Definition Area of land held. References No definition available. Details Name: us-gaap-AreaOfLand Namespace Prefix: us-gaap-Data Type: dtr-types:areaItemType Balance Type: na Period Type: instantX- Definition Amount of rent expense incurred for leased assets, including but not limited to, furniture and equipment, that is not directly or indirectly associated with the manufacture, sale or creation of a product or product line. References No definition available. Details Name: us-gaap-LeaseAndRentalExpense Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: durationX- Definition Description of lessee's operating lease. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph \(a\) \(1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147478964/842-20-50-3](http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 3-Subparagraph (a) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147478964/842-20-50-3) Details Name: us-gaap-LesseeOperatingLeaseDescription Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX- Definition Amount of cash outflow from operating lease, excluding payments to bring another asset to condition and location necessary for its intended use. References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 5-Subparagraph \(c\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479041/842-20-45-5](http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 45-Paragraph 5-Subparagraph (c)-Publisher FASB-URI https://asc.fasb.org/1943274/2147479041/842-20-45-5) Reference 2: [http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph \(g\) \(1\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147478964/842-20-50-4](http://www.xbrl.org/2003/role/disclosureRef-Topic 842-SubTopic 20-Name Accounting Standards Codification-Section 50-Paragraph 4-Subparagraph (g) (1)-Publisher FASB-URI https://asc.fasb.org/1943274/2147478964/842-20-50-4) Details Name: us-gaap-OperatingLeasePayments Namespace Prefix: us-gaap-Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: durationX- Definition The number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). References Reference 1: [http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph \(c\) \(2\) \(iii\) \(01\)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2](http://www.xbrl.org/2003/role/disclosureRef-Topic 718-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Subparagraph (c) (2) (iii) (01)-Publisher FASB-URI https://asc.fasb.org/1943274/2147480429/718-10-50-2) Details Name: us-gaap-ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap-Data Type: xbrli:sharesItemType Balance Type: na Period Type: durationX- Definition Detail information of subsequent event by type. User is expected to use existing line items from elsewhere in the taxonomy as the primary line items for this disclosure, which is further associated with dimension and member elements pertaining to a subsequent event. References Reference 1: <http://www.xbrl.org/2003/role/disclosureRef-Topic 830-SubTopic 30-Name Accounting Standards Codification-Section 50-Paragraph 2-Publisher FASB-URI https://asc.fasb.org/1943274/2147481674/830-30-50-2> Reference 2: <http://www.xbrl.org/2003/role/disclosureRef-Topic 855-SubTopic 10-Name Accounting Standards Codification-Section 50-Paragraph 2-Publisher FASB-URI https://asc.fasb.org/1943274/2147483399/855-10-50-2> Details Name: us-gaap-SubsequentEventLineItems Namespace Prefix: us-gaap-Data Type: xbrli:stringItemType Balance Type: na Period Type: durationX- Details Name: us-gaap-AwardType Axis = us-gaap-RestrictedStockUnitsRSUMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us-gaap-SubsequentEventType Axis = us-gaap-SubsequentEventMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us-gaap-TypeOfArrangement Axis = AMPG_TripleNetLeaseAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: