2021

ANNUAL REPORT

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____to

Commission File Number 000-27115

PCTEL, Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**77-0364943**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification Number)*
471 Brighton Drive, Bloomingdale IL	**60108**
(Address of Principal Executive Office)	*(Zip Code)*

(630) 372-6800
(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $.001 Par Value Per Share	PCTI	The Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has 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 the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by checkmark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T ((§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files)). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer”, "accelerated filer", “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.:

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☒
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

As of June 30, 2020, the last business day of the registrant's most recently completed second fiscal quarter, there were 18,640,295 shares of the registrant's common stock outstanding, and the aggregate market value of such shares held by non-affiliates of the registrant (based upon the closing sale price of such shares on the Nasdaq Global Select Market on June 30, 2020) was approximately $125,517,171. Shares of the registrant's common stock held by each executive officer and director and by each entity that owns 5% or more of the registrant's outstanding common stock have been excluded because such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for any other purposes.

18,318,850 shares of common stock were issued and outstanding as of March 12, 2022.

Documents Incorporated by Reference

Certain sections of the registrant's definitive proxy statement relating to its 2022 Annual Stockholders' Meeting to be held on May 25, 2022 are incorporated by reference into Part III of this Annual Report on Form 10-K. The Company intends to file its proxy statement within 120 days after the end of its fiscal year end to which this report relates.

PCTEL, Inc.
Form 10-K
For the Fiscal Year Ended December 31, 2021

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PART I

Item 1: Business

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). In some cases, you can identify these forward-looking statements by words such as "may," "will," "plans," "seeks," "expects," "anticipates," "intends," "believes" and words of similar meaning. Investors in our common stock are cautioned not to place undue reliance on these forward-looking statements. Specifically, these statements include, but are not limited to, statements concerning our future financial performance; growth of our antenna solutions and Industrial Internet of Things ("Industrial IoT") IoT business and our test and measurement business; the impact of the acquisition of Smarteq on the Company's ability to offer additional products and, expand in the European market, and generate revenue; the impact of our transition plan for manufacturing inside and outside China; the impact of the ongoing COVID-19 pandemic and the ensuing supply chain disruptions; and the anticipated demand for certain products, including those related to public safety, Industrial IoT, 5G (e.g., the Gflex scanning receiver) and intelligent transportation. These statements are based on management's current expectations and actual results may differ materially from those projected as a result of certain risks and uncertainties. Important factors that could cause such differences include, but are not limited to competition within the wireless product industry; volatility and delays in customer demand caused by the COVID-19 pandemic, the impact of uncertainty in our supply chain, as well as labor shortages and shipping delays and disruptions, our ability to accurately forecast demand for our products; our failure to successfully integrate Smarteq and any future acquisitions into our existing operations; the impact of uncertainty as a result of doing business in China and Europe; the impact of adverse and uncertain economic and political conditions in the U.S. and international market, the impact of tariffs on certain imports from China; and delays in our sales cycles resulting in the cancellation of purchases of our products; our ability to grow its our business and create, protect and implement new technologies and solutions. These and other risks and uncertainties are detailed in our filings with the Securities and Exchange Commission ("SEC"). These forward-looking statements are made only as of the date hereof. We do not undertake, and expressly disclaim, any obligation to update or revise any forward-looking statements whether because of new information, future events or otherwise, except as may be required by applicable law. Investors should carefully review the information contained in Item 1A Risk Factors.

Overview

PCTEL, Inc. ('PCTEL', the 'Company', 'we', 'ours', and 'us') formerly filed as PC-Tel, Inc. We were incorporated in California in 1994 and reincorporated in Delaware in 1998. PCTEL is a leading global provider of wireless technology, including purpose-built Industrial IoT devices, antenna systems, and test and measurement solutions. We strive to solve complex wireless challenges to help organizations stay connected, transform, and grow. We believe we have a strong brand presence and expertise in radio frequency ("RF"), digital and mechanical engineering. We have two product lines (antennas/Industrial IoT devices and test & measurement). Our antenna products include antennas deployed in small cells, enterprise Wi-Fi access points, fleet management, IoT applications, and transit systems. Our Industrial IoT devices include ruggedized access points, IoT interface cards and IoT sensor platforms for applications such as logistics, remote monitoring and control. Our test & measurement products are designed to improve the performance of wireless networks globally. Mobile operators, private enterprises, and network equipment manufacturers rely on our products to analyze, design, and optimize next generation wireless networks. We seek out product applications that command a premium for product design and performance, and we avoid commodity markets. Our strength is solving complex wireless challenges for our customers through our products and solutions. To this end, we are constantly seeking to innovate and improve antenna and wireless testing products and capabilities to capture the opportunities of the rapidly evolving wireless industry. We focus on engineering, research, and development to maintain and expand our competitiveness.

Antennas and Industrial IoT Devices

PCTEL designs and manufactures precision antennas and Industrial IoT devices, and we offer in-house wireless product development for our customers, including design, testing, radio integration, and manufacturing capabilities. Revenue growth in these markets is driven by the increased use and complexity of wireless communications.

Our antenna portfolio includes Wi-Fi, Bluetooth, Land Mobile Radio ("LMR"), Tetra, Global Navigation Satellite System ("GNSS"), Cellular, Industrial, Scientific, and Medical ("ISM"), Long Range ("LoRa"), and combination antenna solutions. The market applications for our antennas include public safety communications, military communications, utilities & energy, precision agriculture, smart traffic management, Electric Vehicle ("EV") charging stations, embedded vehicles, forestry machinery & off-road vehicles. For smart traffic management, we provide antenna systems for smart roadways and smart rail. Fleet antennas for public safety, including police vehicles, is a key market. We not only manufacture the antennas, but we also provide engineering design services to determine the layout of multi-antenna installations to minimize potential interference between each antenna element. Our customized solutions often result in general purpose products with advance capabilities, such as multi-element antenna systems in a single radome. These systems can include several LTE bands, Wi-Fi bands and GPS navigation elements, all in one housing. An antenna designed for one application can be modified to be used for other applications.

Our Industrial IoT device portfolio includes access points, radio modules, sensor communication modules, and wireless communication sensors. The market applications for our Industrial IoT devices include utilities and smart grid, oil and gas, manufacturing, logistics, industrial automation, smart metering, and asset tracking.

Our strategy is to provide a "toolbox" of hardware solutions to our existing OEMs and distributors for Industrial IoT systems. We provide all of the field hardware required for wireless Industrial IoT systems - antennas, ruggedized Wi-Fi access points, radio modules, and integrated cellular sensors for Industrial IoT. Our go-to-market strategy for this growing sector is to sell more RF hardware components to our customers that traditionally purchase antennas from PCTEL.

Consistent with our mission to solve complex network engineering problems and to compete effectively in the antenna market, PCTEL maintains expertise in the following areas: radio frequency engineering, wireless network engineering, mechanical engineering, mobile antenna design, manufacturing, and product quality and testing. Competition among providers of antennas and Industrial IoT devices is fragmented. Competitors include Airgain, Amphenol, Panorama, Taoglas, and TE Connectivity.

Test & Measurement Products

PCTEL provides RF test & measurement products that improve the performance of wireless networks globally, with a focus on LTE, public safety, and 5G technologies. Revenue growth in this market is driven by the implementation and roll out of new wireless technology standards (i.e., 3G to 4G, 4G to 5G) and new market applications for public safety and government. The market applications for our test & measurement equipment includes cellular testing, public safety and private radio network testing, federal government communications testing, and indoor building network testing. Our portfolio includes scanning receivers, scanning receiver software, public safety solutions, interference location systems, mmwave transmitters, and a cloud-based reporting platform.

Our scanning receivers are software defined radios used to 1) confirm adequate RF coverage during deployment, 2) identify interfering signals which decrease capacity, 3) troubleshoot system performance issues as networks expand, and 4) benchmark competing networks because our scanning receivers can scan all technologies across all frequencies during one test. They are necessary for initial network deployment and throughout the entire life cycle of the mobile network. Most of our 4G scanners can be upgraded to 5G via firmware. Our new Gflex scanning receiver includes advanced features to address 5G and broader critical communication and government applications such as signal intelligence.

We provide test & measurement equipment to test in-building communication capability important for first responders and to certify buildings meet certain in-building wireless communication standards. We provide test & measurement equipment to test public safety networks, including P25, Tetra and digital mobile radio ("DMR").

Our cloud-based reporting platform for public safety is a subscription-based service for test management, storage and analytics that allows stakeholders, including engineering service companies, building owners and government jurisdictions, to easily manage the data collection process and access final reports through an online map-based interface.

Consistent with our mission to solve complex network engineering problems and to compete effectively in the RF test & measurement market, PCTEL maintains expertise in the following areas: radio frequency engineering, digital signal processing ("DSP") engineering, wireless network engineering, mechanical engineering, manufacturing, and product quality and testing. Competitors for PCTEL's test & measurement products include OEMs such as Anritsu, Berkley Varitronics, Digital Receiver Technology, Rohde and Schwarz, and Viavi.

Vision and Strategy

As a global leader for RF hardware that enables wireless connectivity, we are focused on four key strategies:

Launch products: We respond rapidly to market trends and demand. Our vision is to provide the most robust and capable RF hardware products for our OEMs, distributors, and direct customers. We work with world class customers that are experts in their market segments. Our commitment to our customers is to provide the RF hardware that enables the most reliable wireless connectivity for their systems, whether it is for monitoring factory equipment, electricity distribution through smart grids, or other industrial applications. Our products include antennas, IoT radio devices, IoT sensor and modem platforms and our 4G/5G test & measurement equipment.

Expand Distribution Channels: Our strategy is to leverage the reach and vertical market knowledge of our OEMs and distributors. We focus on key distributors who align with our targeted market segments, including Industrial IoT, intelligent transportation and enterprise wireless. In addition to making the most of our research and development investments to develop new products, we believe we can increase shareholder value by adding key distribution partners that have broader reach and specific expertise such as providing Industrial IoT solutions or have regional strength.

Increase Market Share: We leverage our existing customer relationships to provide access points, sensors and other Industrial IoT RF products. We have made significant investments in developing new products that we can market and sell to our existing customer base using our same go-to-market strategy. Many of our customers who purchase antennas for Industrial IoT applications also need other products we offer, such as sensors, interface cards and access points.

Drive Operational and Financial Efficiency: We have a disciplined management team, and we will continuously improve processes and productivity including a focus on design for manufacturability.

Markets and Market Opportunity

There are two key market drivers for our long-term growth: Industrial IoT and 5G. We believe that Industrial IoT has the greatest long-term potential for our antennas and ruggedized radio devices to support smart utilities and automation for manufacturing and commercial applications. Industrial IoT will likely continue to be a growing market to address remote control and data analysis. The critical link for many of these systems is the wireless connection between the device and the core system, which is where PCTEL seeks to adds value with our antennas, radio devices and sensors. Enabling reliable and robust wireless connections is critical for wireless Industrial IoT.

5G is still in the early phases of deployment to address capacity in dense user areas. It has better reliability, security, and lower latency than Wi-Fi. Future releases and the availability of new shared spectrum will likely drive further investment in 5G to support private networks and neutral host services in valuable mid-range spectrum. Private networks provide a lower cost solution than cellular operators to support low latency applications for enterprises and remote operations for rural areas.

Customers

Our strategy is to leverage leading global OEMs and distributors to expand the reach of our products across multiple market segments and industries.

Our antennas and Industrial IoT devices are sold to OEMs where they are designed into their customers' solutions. We also sell through distribution channels that promote and sell our products into specialized markets. We support our major stocking distributors, and we sell our antennas directly to customers where integration into larger systems is not required.

Our test & measurement equipment for the cellular market is sold directly to wireless carriers or to OEMs who integrate our products into their solutions which are then sold to wireless carriers. Our test & measurement equipment for public safety markets is sold to distributors and other engineering service providers.

We do not view customer concentration as a significant issue.

Research and Development- Intellectual Property

Given that our mission is to solve complex RF problems for our customers, research and development is essential to our long-term success. We work closely with our customers, consultants, and market research organizations to monitor and predict changes in the wireless industry, including emerging industry standards. We continue to make substantial investments in engineering, talent, and research and development and we devote substantial resources to product development, innovation, and patent submissions.

We have approximately 105 patents and over 60 patents pending in the U.S. and other countries worldwide. The patent submissions are primarily for defensive purposes rather than for potential license revenue generation.

Sales, Marketing and Support

Our marketing strategy is focused on building market awareness and acceptance of new products. Our Global Marketing group is responsible for promotion and lead generation through optimizing our website, managing trade shows, social media, webinars and general marcom material generation. Our sales function is managed under the Chief Sales Officer who has primary responsibility for revenue generation and oversight of the worldwide sales force. PCTEL's direct sales force is technologically sophisticated and sales executives having strong industry domain knowledge. We supply our products to OEMs, wireless equipment distributors, public and private carriers, wireless infrastructure providers, and value-added resellers ("VARs"). Our direct sales force supports the sales efforts of our distributors and OEM resellers.

Manufacturing

We have historically done final assembly of most of our antennas in-house at our facilities in Tianjin, China, and Bloomingdale, Illinois. To optimize the cost structure of our antennas and reduce our fixed costs in China, over the past two years we transitioned most of the manufacturing activities from our Tianjin facility to contract manufacturers in China and elsewhere. This transition was completed during the first quarter 2022. The antennas related to the Smarteq acquisition are manufactured at contract manufacturers in Europe and Asia. We do final assembly of all our test & measurement products in-house at our facility in Clarksburg, Maryland.

By transitioning some of our manufacturing to multiple contract manufacturers with a variety of expertise, we avoid becoming dependent on any specific contract manufacturer. If any contract manufacturer is unable to provide timely or satisfactory services for us, our other contract manufacturers will be available, provided, however, that transitioning production to a different contract manufacturer could cause delays, disruption and additional costs that could negatively impact timely delivery of our products and our earnings therefrom. We have no material guaranteed supply contracts or long-term agreements with any of our suppliers, but we do have open purchase orders with several of our suppliers.

Human Capital

Our employees are among our most valuable assets and are critical to our ability to deliver on our strategic plans. Our success in delivering high quality and innovative products and solutions for our customers and driving operational excellence is only achievable through the talent, expertise, and dedication of our global team.

We recognize that attracting, developing, and retaining skilled talent and promoting a diverse and inclusive culture are essential to maintaining our leadership positions in the markets we serve. We offer employees competitive compensation and benefits, and resources to continuously improve their skills and performance with the goal of further cultivating the diversity and expertise in our global businesses to fill key positions. We seek to hire people who share our values. We value technology and innovation and the achievement of customer-driven success. From our employees, we expect leadership at every level and to act with integrity, fairness, and respect. We invest in talent development and recognize that the growth and development of our employees is essential for our continued success.

The full-time equivalent employees by geography and functional area as of December 31, 2021 were as follows:

	December 31, 2021
Operations:	
U.S.	80
Rest of World	86
	166
Engineering:	
U.S.	46
Rest of World	4
	50
Sales & Marketing:	
U.S.	38
Rest of World	15
	53
Administration:	
U.S.	29
Rest of World	6
	35
Total:	
U.S.	193
Rest of World	111
	304

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to such reports, are available free of charge through our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC). Our website is located at the following address: *www.pctel.com*. The information within, or that can be accessed through our website, is not part of this Annual Report on Form 10-K. Further, the SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding our filings at *www.sec.gov*.

Item 1A: Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, before making a decision to invest in our common stock. Our business, financial condition, results of operations, or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material. If any of the risks actually occur, our business, financial condition, results of operations, and prospects could be adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

Factors That May Affect Our Business, Financial Condition and Future Operations

Risks Related to Our Business

Our business model depends upon our ability to recognize significant emerging technologies in a timely manner and to innovate to solve the engineering problems presented by such emerging technologies.

In order to provide solutions to complex engineering problems, we must anticipate which technologies are promising and will be adopted by our customers and potential customers, and we need to be engaged early in the development of these new technologies and products. If we expend resources on the wrong technologies or are not included in the development phase of new technologies that are widely adopted in our industry, we may miss the opportunity for meaningful participation or revenue generation. Missed opportunities like these could have a negative impact on our long-term competitiveness.

We must attract and retain specific types of engineers and other skilled professionals who are capable of innovating and solving complex network engineering problems in order to be successful. In addition, we must create intellectual property or license or otherwise obtain it from third parties when necessary. We also must maintain our intellectual property. Failure to accomplish these tasks and manage the costs thereof will result in difficulty in distinguishing us from our competitors and may result in a significant loss of business or diminishing margin on our products.

Competition within the wireless product industry is intense and could result in decreased margins on our products or loss of key customers. Failure to compete successfully could materially harm our prospects and financial results.

Competition in our industry can result from the following:

- competitors, including foreign government-funded competitors, significantly reducing prices on their products causing disruption to our customer relationships,
- customers demanding lower prices and requiring suppliers like us to engage in auctions and other forms of competitive bidding for purchase orders,
- entrance of a significant competitor in the markets for our products, either from new participants, such as emerging low-cost international competitors, or because of a merger of existing competitors, and
- competitors with substantially greater financial, marketing, technical and other resources with which to pursue engineering, manufacturing, marketing, and distribution of their products and delivery of their services. These competitors may succeed in establishing technology standards or strategic alliances in the connectivity products markets, obtain more rapid market acceptance for their products, or otherwise gain a competitive advantage.

The COVID-19 pandemic has adversely impacted, and poses risks to, our business, the nature and extent of which are highly uncertain and unpredictable.

The COVID-19 pandemic resulted in a global health crisis that has adversely affected global economies, financial markets, and businesses. During 2020 and 2021, the COVID-19 pandemic caused disruption in both supply and demand for our products. Many components were difficult to obtain or were discontinued by the manufacturers resulting in manufacturing delays and necessitating a redesign of several of our products. We also experienced higher freight and logistics costs and our business has been impacted by increased costs in materials, as well as component part shortages. These cost increases and logistics constraints may continue in 2022, and ultimately may have an adverse impact on our results of operations and financial condition.

Shutdowns of companies and facilities as well as economic and budgetary uncertainties negatively impacted demand. We took steps to mitigate risks related to the pandemic by working with our employees, customers, suppliers, and other stakeholders. While spread of the pandemic has slowed and certain of the challenges have abated, we may continue to experience volatility and delays in customer demand as a result of the impact of the pandemic on their businesses. The extent to which our operations may be impacted by COVID-19 will depend on future developments that are highly uncertain, including the pandemic's duration, the emergence of different COVID-19 variants, the efficacy and adoption rates of vaccines, and actions by governments and private enterprises to contain the outbreak or mitigate the impact of the pandemic.

If the pandemic continues, we may experience additional adverse impacts on our operational and commercial activities, including rising costs, volatility in customer orders and purchases and inability to procure components and deliver finished products on time, which may be material. Furthermore, the pandemic has impacted, and may further impact, the broader economies of affected countries, including negatively impacting economic growth, the proper functioning of financial and capital markets, foreign currency exchange rates and interest rates. Due to the continuing uncertainties surrounding the pandemic, we are unable to predict the ultimate impact that it will have on our financial position, operating results and cash flows in future periods.

Our business in foreign countries, in particular China, involves additional financial, operating, and regulatory risks.

A portion of our manufacturing, procurement, research and development, product management, and sales are conducted outside the United States. There are a number of risks inherent in doing business in foreign countries, including: (i) fluctuations in the value of the U.S. dollar relative to other currencies, and in particular the impact of a re-valuation of the Chinese Yuan; (ii) impact of tariffs or trade wars among the countries in which we do business; (iii) difficulties in repatriation of earnings; (iv) disruption to our supply chain, whether as a result of the spread of COVID-19 or other factors which limit our ability to import materials and export products; (v) nationalist sentiment creating advantages for our competitors in their home countries; (vi) impact of labor unrest (vii) unexpected legal or regulatory changes, particularly changes to environmental, labor or manufacturing regulations; (viii) lack of sufficient protection for intellectual property rights and the risk of theft and forced transfer of intellectual property; (ix) difficulties in recruiting and retaining personnel and managing international operations;(x) under-developed infrastructure; and (xi) other unfavorable political or economic factors which could include nationalization of the wireless communications or related industries. If we are unable to successfully manage these and other risks pertaining to our international activities, our operating results, cash flows and financial position could be materially and adversely affected.

All of our imports from mainland China are subject to U.S. tariffs ranging from 7.5% to 25.0%. The tariffs apply to the antennas sent from our China-based contract manufacturers to our U.S.-based customers and components and materials sent from our China-based contract manufacturers to our Bloomingdale, Illinois facility for final assembly. Tariffs impact the gross margin that we earn on sales of our products because we have not been able to adjust all our prices on the affected products to cover the entire cost of the imposed tariffs. We will continue to monitor and adjust prices as market conditions permit. The impact of the tariffs on our future revenue and profitability is uncertain. However, we do not believe these tariffs resulted in a significant loss of revenue in 2021.

Disruptions in the worldwide economy may adversely affect our business, results of operations and financial condition.

The global economy can be negatively impacted by a variety of factors such as the spread or fear of spread of contagious diseases (such as COVID-19) in locations in which we operate, man-made or natural disasters, severe weather, actual or threatened hostilities or war, terrorist activity, political unrest, civil strife and other geopolitical uncertainty. Furthermore, in connection with increasing tensions related to the ongoing conflict between Russia and Ukraine, governments in the U.S., U.K. and the EU have each imposed export controls on certain products and financial and economic sanctions on certain industry sectors and parties in Russia, Belarus, and certain parts of Ukraine. The current sanction as well as any further escalation of geopolitical tensions, including potential destabilizing effects that the war in Ukraine may pose for the European continent or the global oil and natural gas markets, could have material adverse impacts on the markets where we do business, which could, in turn, adversely affect our business and/or our supply chain.

Any delays in our sales cycles could result in customers canceling purchases of our products.

Sales cycles for our products with major customers can be lengthy, often lasting nine months or longer. In addition, it can take an additional nine months or more before a customer requires volume production of our products. Sales cycles with our major customers are lengthy for several reasons, including:

- our OEM customers and carriers usually complete a lengthy technical evaluation of our products, over which we have no control, before placing a purchase order, and
- the development of new technologies and commercialization of products incorporating new technologies frequently are delayed.

A significant portion of our operating expenses is relatively fixed and is largely based on our forecasts of volume and timing of orders. The lengthy sales cycles make forecasting the volume and timing of product orders difficult. In addition, the delays inherent in lengthy sales cycles raise additional uncertainty that customers may decide to cancel or change product phases. If customer cancellations or product changes were to occur, this could result in the loss of anticipated sales without enough time for us to reduce our operating expenses.

Disruptions in our manufacturing and supply chains could adversely impact our sales and reputation.

We have limited in-house manufacturing capability. We assemble antennas in our facility in Bloomingdale, Illinois and a significant portion of our antennas are manufactured by contract manufacturers in China and elsewhere. We do final assembly of our test & measurement products at our Clarksburg, Maryland facility. We add our proprietary software to the completed hardware platforms we design and have manufactured to our specifications. We may experience delays, disruptions, or capacity constraints or quality control problems at our assembly facilities, which could result in lower yields or delays of product shipments to our customers. Any disruption of our own or contract manufacturers' operations could cause delayed product delivery, which could negatively impact our sales, competitive reputation, and position. Moreover, if we do not accurately forecast demand for our products, we will have excess or insufficient parts to build our products, either of which could materially affect our operating results and may lead to obsolete inventory.

The spread of COVID-19 has impacted supply chains worldwide and may impact our ability to produce and sell products. Given the dynamic and prolonged nature of the COVID-19 pandemic, our operations, including our manufacturing facilities and those of our contract manufacturers, may slow again depending on whether there are future resurgences in infection rates and the imposition of additional containment measures. During 2021, our operations were impacted by global shortages of key components for our products, including resins, adhesives, plastics, and electronics, and we have experienced long-lead times due to freight congestion and delays. We have increased inventory levels to limit the negative impact of component shortages and long-lead times. However, he cost increases and logistics constraints may continue in 2022, and ultimately may have an adverse impact on our results of operations, financial condition and stock price.

In addition, if for any reason our suppliers discontinue manufacturing materials used in our products, we would be forced to incur the time and expense of finding a new supplier or to modify our products in such a way that such materials were not necessary. Either of these alternatives could result in increased manufacturing costs and increased prices of our products.

In summary, in order to be successful, we must manage our operations to limit the cost of product production, accurately forecast demand for our products, avoid excess production and inventory that results in waste or obsolescence, dual source critical materials to avoid shortages and delays in shipping, build for manufacturability and avoid excessive quality issues.

Future acquisitions and investments may not yield their intended benefits. Our failure to successfully integrate acquisitions into our existing operations could adversely affect our business.

On April 30, 2021, the Company acquired all the outstanding stock of Smarteq Wireless Aktiebolag ("Smarteq"), a Swedish company based in Kista, Sweden that designs antennas for specialized industrial IoT and vehicular applications. Smarteq owns all the outstanding stock of SAS Smarteq France ("Smarteq France"), which engages in sales of Smarteq products.

In the future, we may make acquisitions of, or large investments in, businesses that offer products and technologies that we believe would complement our products, including wireless products and technology. We may also make acquisitions of or investments in businesses that we believe could expand our distribution channels. Even if we were to announce an acquisition, we may not be able to complete it. Additionally, any future acquisition or substantial investment would present numerous risks, including:

- difficulty in integrating the technology, operations, internal accounting controls or work force of the acquired business with our existing business,
- disruption of our on-going business,

- difficulty in realizing the potential financial or strategic benefits of the transaction,
- difficulty in maintaining uniform standards, controls, procedures, and policies,
- tax, employment, logistics, and other related issues unique to international organizations and assets we acquire,
- possible impairment of relationships with employees and customers as a result of integration of new businesses and management personnel, and
- impairment of assets related to resulting goodwill, and reductions in our future operating results from amortization of intangible assets.

We expect that future acquisitions may be paid in cash, shares of our common stock, or a combination of cash and our common stock. If consideration for a transaction is paid in common stock, this would further dilute our existing stockholders. We may also incur debt to pay for an acquisition which could impose restrictive covenants on how we conduct our business.

A failure in our information technology systems could negatively impact our business.

We rely on information technology to record and process transactions, manage our business, and maintain the financial accuracy of our records. Our computer systems are subject to damage or interruption from various sources, including power outages, computer and telecommunications failures, computer viruses, security breaches, vandalism, catastrophic events, and human error. If a cyber-incident, such as a phishing or ransomware attack, virus, malware installation, server malfunction, software or hardware failure, impairment of data integrity, loss of data or other computer assets, adware or other similar issue, impairs or shuts down one or more of our computing systems or our information technology network, or the systems or networks of our third-party services providers, we may be subject to negative treatment and lawsuits. In addition, attention to remediating cyber incidents may distract our technical or management personnel from their normal responsibilities. Public announcements of such cyber incidents could occur, and negative perception of such cyber incidents could adversely affect the price of our common stock, and we could lose sales and customers. Interruptions of our computer systems could disrupt our business and could result in the loss of business and cause us to incur additional expense.

We, our customers and our third-party service providers face an evolving threat landscape in which cybercriminals, among others, employ a complex array of cyber-attack techniques designed to access sensitive information or disrupt our operations, including, for example, the use of fraudulent or stolen access credentials, malware, ransomware, phishing, denial of service and other types of attacks. While we have engaged experts in cybersecurity to advise us and we have taken protective measures, our information technology security threats are increasing in frequency and sophistication. Our information technology systems or those of our third-party service providers could be breached by unauthorized outside parties or misused by employees or other insiders' intent on extracting sensitive information, corrupting information, or disrupting business processes. Such unauthorized access or misuse could compromise confidential information, disrupt our business, harm our reputation, result in the loss of assets, customer confidence and business and have a negative impact on our financial results.

Additional income tax expense or exposure to additional income tax liabilities could have a negative impact on our financial results.

We are subject to income tax laws and regulations in the United States, China, Sweden and various other foreign jurisdictions. Significant judgment is required in evaluating and estimating our provision and accruals for these taxes. Our income tax liabilities are dependent upon the location of earnings among these different jurisdictions. Our income tax provision and income tax liabilities could be adversely affected by the jurisdictional mix of earnings, changes in valuation of deferred tax assets and liabilities and changes in tax laws and regulations. In the ordinary course of our business, we are also subject to continuous examinations of our income tax returns by tax authorities. Although we believe our tax estimates are reasonable, the results of any tax examination or related litigation could be materially different from our related historical income tax provisions and accruals. Adverse developments in an audit, examination, litigation related to previously filed tax returns, or in the relevant jurisdiction's tax laws, regulations, administrative practices, principles, and interpretations could have a material effect on our results of operations and cash flows in the period or periods for which that development occurs, as well as for prior and subsequent periods.

Legislative or regulatory initiatives related to climate change concerns may negatively affect our business.

Concern over climate change may result in new or additional legal, legislative, and regulatory requirements to reduce or mitigate the effects of climate change on the environment, which could result in future tax, transportation, and utility increases, which could adversely affect our business. There is also increased focus, including by investors, customers, and other stakeholders on these and other sustainability matters, including the use of plastic, energy, waste, and worker safety. Our reputation could be damaged if we do not (or are perceived not to) act responsibly with respect to sustainability matters, which could adversely affect our business, results of operations, financial position and cash flows.

Risks Related to our Common Stock.

The trading price of our stock fluctuates, sometimes significantly, based upon a variety of factors, many of which are not under our control.

Over time, our stock experiences significant changes in price on a percentage basis. The closing price of our common stock on the Nasdaq Global Select Market fluctuated between a high of $9.03 and a low of $5.40 during 2021. A variety of factors, many of which are not under of our control influence our stock price, including:

- adverse changes in domestic or global economic conditions, including COVID-19, international conflicts and conditions and recessions,
- new products offered by us or our competitors,
- actual or anticipated variations in quarterly operating results,
- changes in financial estimates by securities analysts,
- announcements of technological innovations,
- our announcement of significant acquisitions, strategic partnerships, joint ventures, or capital commitments,
- conditions or trends in our industry,
- additions or departures of key personnel,
- mergers and acquisitions,
- sales of common stock by our stockholders or the Company, and
- repurchases of our common stock by the Company.

Provisions in our charter documents may inhibit a change of control or a change of management, which may cause the market price for our common stock to decline and may inhibit a takeover or change in our control that a stockholder may consider favorable.

Provisions in our charter documents could discourage potential acquisition proposals and could delay or prevent a change in control transaction that our stockholders may favor. Specifically, our charter documents do not permit stockholders to act by written consent, do not permit stockholders to call a stockholders meeting, and provide for a classified board of directors, which means stockholders can only elect, or remove, a limited number of our directors in any given year. These provisions could have the effect of discouraging others from making tender offers for our shares, and as a result, these provisions may prevent the market price of our common stock from reflecting the effects of actual or rumored takeover attempts and may prevent stockholders from reselling their shares at or above the price at which they purchased their shares. These provisions may also prevent changes in our management that our stockholders may favor.

Our board of directors has the authority to issue up to 5,000,000 shares of preferred stock in one or more series. The board of directors can fix the price, rights, preferences, privileges, and restrictions of this preferred stock without any further vote or action by our stockholders. The rights of the holders of our common stock will be affected by, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. Further, the issuance of shares of preferred stock may delay or prevent a change in control transaction without further action by our stockholders. As a result, the market price of our common stock may decline.

Item 1B: Unresolved Staff Comments

None.

Item 2: Properties

The following table lists our main ongoing facilities:

Location	Square feet	Owned/Leased	Lease Expiration (Yr)
Bloomingdale, Illinois	75,517	Owned	N/A
Clarksburg, Maryland	21,030	Leased	2031
Akron, Ohio	5,977	Leased	2025
Kista, Sweden	4,080	Leased	2023
Tianjin, China	1,694	Leased	2023

Facility Overview and Changes

The Bloomingdale, Illinois facility is used for our corporate headquarters and for antenna manufacturing, engineering, and product management. The Clarksburg facility is used for assembly, engineering, and product management for test & measurement products. Our Akron, Ohio office is used for product development for antennas and Industrial IoT devices.

Until January 2022, we manufactured antennas at a leased facility in Tianjin, China. The Company initiated a restructuring plan in 2019 to transition manufacturing from its Tianjin, China facility to contract manufacturers in China and to the Company's Bloomingdale, Illinois facility due to uncertainties with its Tianjin facility lease and also to optimize the cost structure of the antenna product line and create flexibility in antenna manufacturing. The lease for this facility expired on October 8, 2020 without extension. On October 16, 2020, the Wang Zhuang Village Committee issued a notice informing PCTEL Tianjin that the Chinese Party Central Committee and the State Council were accelerating the layout optimization and transformation of the industrial park in which the leased premises is located, and accordingly leases and lease extensions for all premises in the industrial park were suspended. Although the lease was not renewed, we were able to continue to occupy the Tianjin manufacturing facility. However, due to the uncertainty regarding the Tianjin lease renewal, we accelerated our plan to transition all manufacturing in Tianjin to contract manufacturers. We completed the manufacturing transition in the first quarter 2022 and intend to vacate this facility during the first half of 2022. We will retain a small group of employees in Tianjin, China at a smaller facility for quality, sourcing, and local customer support. In November 2021, we entered into a two-year lease ending December 31, 2023 for 1,694 square feet of office space in Tianjin, China for these functions.

In June 2021, we signed a one-year lease renewal for 5,393 square feet of office space for its engineering design center in Beijing, China The lease period ends on June 14, 2022 with a total lease obligation of approximately $0.1 million. To reduce expenses, we terminated all 14 employees in Beijing in November 2021. We intend to close this Beijing office during the second quarter 2022. Four former employees of Beijing were rehired through a third-party employment agency and will provide sales and engineering support.

As part of the acquisition of Smarteq on April 30, 2021, we assumed a lease related to office space in Kista, Sweden. The office has 4,080 square feet used for engineering, sales, and administration with a lease term ending July 31, 2023.

All properties are in good condition and are suitable for the purposes for which they are used. We believe that we have adequate space for our current needs.

Item 3: Legal Proceedings

We may, from time to time, be the subject of various pending or threatened legal actions in the ordinary course of our business. All such matters are subject to many uncertainties and outcomes that are not predictable with assurance. To our knowledge, as of December 31, 2021, there were no claims or litigation pending against the Company that would be reasonably likely to have a material adverse effect on our consolidated financial position, results of operations or liquidity.

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

PCTEL's common stock has been traded on the Nasdaq Global Select Market under the symbol PCTI since our initial public offering on October 19, 1999. As of February 8, 2022, there were 32 holders of record of our common stock. A substantially greater number of holders of our common stock are in "street name" or beneficial holders, whose shares are held of record by banks, brokers, and other financial institutions.

We historically have paid a quarterly cash dividend on our common stock. We currently expect that comparable cash dividends will continue to be paid in the future. However, no assurances can be given that any dividends will be declared or paid on our common stock in the future, or, if declared and paid, the amount or frequency of those dividends. Our ability to pay dividends is restricted by certain laws and regulations, and the payment of dividends is within the discretion of our board of directors.

Sales of Unregistered Equity Securities

None.

Issuer Purchases of Equity Securities

All share repurchase programs are authorized by our Board of Directors and are publicly announced. Such purchases may be made from time to time at predetermined prices in the open market, by block purchases, in private transactions or otherwise. Repurchases are funded from cash on hand.

On November 4, 2020, the Board of Directors approved a share repurchase program for share repurchases up to $5.0 million of common stock through the end of 2021 ("2020 Repurchase Plan"). The 2020 Repurchase Plan became effective November 10, 2020 and was completed in September 2021. We did not repurchase any shares of common stock during the quarter ended December 31, 2021.

Item 6: Reserved

Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations

The following commentary presents a discussion and analysis of the Company's financial condition and results of operations by its management. This review highlights the principal factors affecting earnings and the significant changes in balance sheet items for the years 2021 and 2020. Financial information for 2020 is presented in the Company's Form 10-K for the fiscal year ended December 31, 2020, which the Company filed with the SEC on March 12, 2021. The objective of this financial review is to enhance investor understanding of the accompanying tables and charts, the consolidated financial statements, notes to financial statements, and financial statistics appearing elsewhere in this Annual Report on Form 10-K. Where applicable, this discussion also reflects management's insights with respect to known events and trends that have or may reasonably be expected to have a material effect on the Company's operations and financial condition.

You should read this discussion of the Company's financial condition and results of operations in conjunction with, and we qualify our discussion in its entirety by, the consolidated financial statements and notes thereto included elsewhere within this annual report, the material contained under Part 1, Item 1. "Description of Business" and Part I, Item 1A. "Risk Factors" of this annual report, and the cautionary disclosure about forward-looking statements at the front of Part I of this annual report.

Introduction

PCTEL is a leading global provider of wireless technology, including purpose-built Industrial IoT devices, antenna systems, and test & measurement solutions. We strive to solve complex wireless challenges to help organizations stay connected, transform, and grow. We have two businesses (antennas/Industrial IoT devices and test & measurement products). Our antennas and Industrial IoT devices include antennas deployed in small cells, enterprise Wi-Fi access points, fleet management and transit systems, and in network equipment and devices for the Industrial IoT. We believe that our test & measurement products improve the performance of wireless networks globally. Mobile operators, neutral hosts, and network equipment manufacturers rely on our products to analyze, design, and optimize next generation wireless networks.

COVID-19

The COVID-19 pandemic and associated counter-acting measures implemented by governments and businesses around the world, as well as subsequent recoveries in global business activity, have increased uncertainty in the global business environment and led to supply chain disruptions and shortages in global markets for commodities, logistics and labor, and increased inflation.

Our foremost focus as we respond to the pandemic has been on the health and safety of our employees. We continue to maintain our enhanced health and safety protocols at our facilities and are encouraging our employees to obtain vaccinations. We will continue to closely monitor the risks posed by COVID-19 and the guidance from relevant authorities. We will adjust our practices accordingly, as we have throughout the pandemic.

Activity in many of the end markets we serve improved throughout 2021, although we still were subject to pandemic related slowdowns for spectrum auctions and 5G rollouts in Europe and parts of Southeast Asia. The recovery in demand has had business impacts, including material cost inflation, labor availability issues and logistics costs increases. Some of our businesses have also been impacted by supplier component shortages. Currently our expectation is that the impact of material cost inflation, labor constraints and logistics challenges and to some extent supplier component shortages will continue in 2022.

The public health situation, as well as global measures and corresponding impacts on various markets remain fluid and uncertain and may lead to sudden changes in trajectory and outlook. We will continue to proactively respond to the situation and may take further actions that alter our business activity as may be required by governmental authorities or that we determine are in the best interests of our employees and operations.

Smarteq Acquisition

On April 30, 2021, we acquired all the outstanding stock of Smarteq Wireless Aktiebolag, a Swedish company based in Kista, Sweden, that designs antennas for specialized Industrial IoT and vehicular applications ("Smarteq"), pursuant to a SPA between PCTEL and Allgon Aktiebolag, a Swedish company and holder of the outstanding stock of Smarteq (the "Agreement"). Smarteq owns all the outstanding stock of SAS Smarteq France, which engages in sales of Smarteq products. PCTEL paid cash consideration of SEK 56.8 million ($6.8 million) at the close of the transaction, all of which was provided from PCTEL's existing cash. We believe the acquisition of Smarteq provides a strong European presence, expertise, and channel partners that we expect will accelerate our growth in Europe, as well as a complementary portfolio of products for our Industrial IoT and intelligent transportation customers worldwide. The results for Smarteq are combined with the Company's antenna and Industrial IoT device product line.

Financial Summary

Revenues were $87.8 million for the year ended December 31, 2021, an increase of 13.4% from the prior year. By product line, revenues increased by $12.5 million (24.7%) to $63.0 million for antennas & Industrial IoT devices and decreased by $1.9 million (6.8%) to $25.7 million for test & measurement products. Gross profits of $40.5 million were higher by $2.5 million due to the impact of higher revenues, but the gross profit percentage decreased by 2.9% in 2021 due to a higher mix of antenna & Industrial IoT devices products which have a lower gross profit than test & measurement products. Operating expenses were $40.2 million in 2021 and increased by $5.6 million because of $1.7 million for costs associated with the newly acquired Smarteq operation, $0.8 million for higher restructuring expenses, and higher expenses for salaries, incentive compensation, and acquisition related expenses. Other income declined by $0.2 million because interest income declined by $0.3 million offset by lower net foreign exchange losses. The net impact of these changes resulted in income before tax of $0.2 million in 2021 compared to income before tax of $3.4 million in 2020.

REVENUES BY PRODUCT LINE

			2021 compared to 2020		
	2021	$ Change	% Change	2020
Antennas and Industrial IoT Devices	$ 63,025	$ 12,485	24.7%	$ 50,540
Test & Measurement Products	25,704	(1,861)	-6.8%	27,565
Corporate	(922)	(273)	not meaningful	(649)
Total	$ 87,807	$ 10,351	13.4%	$ 77,456

Revenues for antennas and Industrial IoT devices of $63.0 million increased $12.5 million (24.7%) in 2021 compared to 2020 due to both revenues from the business acquired from Smarteq in April 2021 and higher organic revenues for fleet, public safety, and enterprise wireless antenna applications.

Revenues for test & measurement products of $25.7 million decreased by $1.9 million (6.8%) in 2021 compared to 2020 as revenues for products with 5G technologies were partially offset by revenues for products for public safety applications.

GROSS PROFIT BY PRODUCT LINE

	2021	% of Revenues	2020	% of Revenues
Antennas and Industrial IoT Devices	$ 21,031	33.4%	$ 17,665	35.0%
Test & Measurement Products	19,592	76.2%	20,244	73.4%
Corporate	(145)	not meaningful	18	not meaningful
Total	$ 40,478	46.1%	$ 37,927	49.0%

The gross profit percentage was 46.1% for the year ended December 31, 2021, a decrease of 2.9% compared to 2020. A decrease of approximately 2.8% in the gross profit percentage is attributable to a lower mix of test & measurement products in 2021 compared to 2020. The proportion of revenues from test & measurement products as a percentage of total revenues decreased from 36% in 2020 to 29% in 2021. The gross profit percentage for antennas and Industrial IoT devices was lower by 1.6% in 2021 compared to 2020 due to an increase in amortization expense for intangible assets and the fair value step-up of inventory related to the Smarteq acquisition, as well as higher freight and logistics costs offset the favorable impact from operating leverage due to higher revenues. The gross profit percentage increased by 2.8% in 2021 compared to 2020 for test & measurement products due to customer and product mix.

CONSOLIDATED OPERATING EXPENSES

				% of Revenues	
	2021	Change	2020	2021	2020
Research and development	$ 13,358	$ 839	$ 12,519	15.2%	16.2%
Sales and marketing	13,327	2,223	11,104	15.2%	14.3%
General and administrative	12,444	1,636	10,808	14.2%	14.0%
Amortization of intangible assets	210	178	32	0.2%	0.0%
Restructuring expenses	900	776	124	1.0%	0.2%
	$ 40,239	$ 5,652	$ 34,587	45.8%	44.7%

Research and development expenses increased by $0.8 million from 2020 to 2021 due to the inclusion of the expenses related to the Smarteq acquisition as well as higher expenses for payroll, incentive compensation, and depreciation offset lower expense for professional fees. Expenses related to Smarteq were $0.5 million in 2021 from the date of acquisition in April 2021. Payroll expense, including permanent and temporary employees was higher by $0.3 million for the year ended December 31, 2021 compared to the prior year due to salary increases and higher average headcount for both product lines to support new product development. Depreciation expense increased by $0.1 million in 2021 because of capital expenditures in 2020 and 2021 for 5G test equipment for the Clarksburg, Maryland office. Expenses for incentive compensation were higher by $0.1 million offsetting lower expenses for professional services for the year ended December 31, 2021 compared to the prior year. We had 58 and 56 full-time equivalent employees in research and development at December 31, 2021 and 2020, respectively.

Sales and marketing expenses include costs associated with the sales and marketing employees, sales representatives, product line management, and other direct marketing expenses. Sales and marketing expenses increased by approximately $2.2 million from 2020 to 2021 due to the inclusion of the expenses related to the Smarteq acquisition, as well as higher employee sales commissions, employee payroll and related costs, and higher travel expenses. Expenses related to Smarteq were $0.7 million in 2021 from the date of acquisition in April 2021. Excluding Smarteq, employee sales commissions were higher by $0.8 million due to higher achievement of sales quotas in 2021 compared to 2020. Salaries and related benefits were higher by $0.6 million primarily due to salary increases but also due to higher average headcount in the sales organization. Higher spending on travel and marketing expenses offset decreases in other spending areas. We had 54 and 50 full-time equivalent employees in sales and marketing at December 31, 2021 and 2020, respectively.

General and administrative expenses include costs associated with the general management, finance, human resources, information technology, legal, public company costs, and other operating expenses to the extent not otherwise allocated to other functions. General and administrative expenses increased by $1.6 million from 2020 to 2021 due to the inclusion of the expenses related to the Smarteq acquisition as well as higher employee and payroll costs, acquisition related expenses, incentive compensation expenses, and stock compensation expenses. Expenses related to Smarteq were $0.3 million in 2021 from the date of acquisition in April 2021. For the year ended December 31, 2021, incentive compensation expenses were higher by $0.5 million, payroll expense was higher by $0.2 million, and stock compensation expenses were higher by $0.1 million compared to the prior year. Acquisition related expenses, primarily for legal services, were $0.6 million for the year ended December 31, 2021. We had 36 and 34 full-time equivalent employees in general and administrative functions at December 31, 2021 and 2020, respectively.

Amortization of intangible assets within operating expenses was approximately $0.2 million and $32 for the years ended December 31, 2021 and 2020, respectively. The increase in amortization expense in 2021 compared to 2020 was due to intangible assets recorded as part of the acquisition of Smarteq in April 2021.

Restructuring expenses of $0.9 million in 2021 consisted of $0.8 million for employee severance and payroll related costs associated with the termination of 14 employees in Beijing and $0.1 million for employee severance and payroll related costs associated with the termination of 16 employees as a result of transitioning manufacturing from our Tianjin, China facility to contract manufacturers.

The restructuring expense of $0.1 million for the year ended December 31, 2020 consisted of employee severance and related costs associated with the termination of 12 employees as a result of transitioning manufacturing from our Tianjin, China facility to contract manufacturers.

See Note 5 to the financial statements for additional information related to Tianjin restructuring.

OPERATING PROFIT

	2021	% of Revenues	2020	% of Revenues
Total	$ 239	0.3%	$ 3,340	4.3%

Total operating profit decreased $3.1 million for the year ended December 31, 2021 compared to 2020 as higher operating expenses, restructuring expenses, and intangible amortization offset the favorable impact of higher gross margins from higher revenues.

OTHER (EXPENSE) INCOME, NET

	2021	2020
Interest income	$ 75	$ 410
Foreign exchange losses	(107)	(294)
Other, net	(15)	(10)
	$ (47)	$ 106
Percentage of revenues	-0.1%	0.1%

Other (expense) income, net consists of interest income, foreign exchange losses, and interest expense. For the year ended December 31, 2021, interest income decreased by $0.3 million due to lower average interest rates and lower investment balances. Foreign exchange losses during the year ended December 31, 2021 were related to fluctuation in the Chinese yuan and Swedish krona compared

to the U.S. dollar. The foreign exchange losses during the year ended December 31, 2020 were related to the fluctuations in the Chinese Yuan compared to the U.S. dollar.

EXPENSE FOR INCOME TAXES

	2021	2020
Expense for income taxes	$ 39	$ 29
Effective tax rate	20.3%	0.8%

The effective tax rate for the year ended December 31, 2021 was lower than the statutory rate of 21.0% by approximately 0.7% primarily because we have a full valuation allowance on our deferred tax assets.

In accordance with ASC 740 “Accounting for Income Taxes” (“ASC 740”), we evaluate our deferred income tax assets quarterly to determine if valuation allowances are required or should be adjusted. ASC 740 requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a “more likely than not” standard of whether the deferred tax assets will be realized. Our net deferred tax assets consist of assets related to net operating losses and credits as well as assets related to timing differences.

While we recorded pretax book income for both 2021 and 2020 and we believe our financial outlook remains positive, our earnings declined in 2021 and we did not meet our expectations during two of the past three years. Because of difficulties with forecasting financial results historically, and due to the uncertainties associated with the COVID-19 pandemic, we maintained a full valuation allowance on our deferred tax assets at December 31, 2021. Our performance versus our 2020 and 2021 projections is considered significant negative evidence that is difficult to overcome on a “more likely than not” standard through objectively verifiable data. While we believe our financial outlook remains positive, under the accounting standards, objective verifiable evidence will have greater weight than subjective evidence such as our projections for future growth. Based on an evaluation in accordance with the accounting standards, as of December 31, 2021, we maintained a full valuation allowance on our deferred tax assets in each of our tax jurisdictions to measure the deferred tax assets that are more likely than not to be realized based on the weight of all the available evidence. We have a valuation allowance of $11.9 million recorded for our net U.S. deferred tax assets, a valuation allowance of $1.2 million recorded for our net China deferred tax assets, and a valuation allowance of $2.2 million recorded for our net Sweden deferred tax assets. The net deferred tax assets and corresponding valuation allowance related to Sweden were recorded as part of the acquisition of Smarteq in April 2021.

Until an appropriate level of profitability is attained, we expect to maintain a full valuation allowance on our net deferred tax assets. Any U.S., China, or Sweden tax benefits or tax expense recorded on our Consolidated Statement of Income will be offset with a corresponding valuation allowance until such time that we change our determination related to the realization of deferred tax assets. If we change our determination as to the amount of deferred tax assets that can be realized, we will adjust the valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

The analysis that we prepared to determine the valuation allowance required significant judgment and assumptions regarding future market conditions as well as forecasts for profits, taxable income, and taxable income by jurisdiction. Due to the sensitivity of the analysis, changes to the assumptions in subsequent periods could have a material effect on the valuation allowance.

See Note 6 of the consolidated financial statements for more information on income taxes.

LIQUIDITY AND CAPITAL RESOURCES

On December 31, 2021, our cash, cash equivalents, and short-term investments were approximately $30.8 million, and we had working capital of approximately $48.6 million. On December 31, 2021 we had $2.8 million of cash held in China bank accounts. These funds are currently considered permanently reinvested, but we will incur a local withholding tax rate of 10% if the funds are repatriated. At December 31, 2021, we also had $1.0 million held in Swedish bank accounts. Our primary source of liquidity is cash provided by operations and a significant balance of cash, with short term swings in liquidity supported by short-term investments. The balance has fluctuated with cash from operations, acquisitions and divestitures, payment of dividends and the repurchase of our common shares.

Within operating activities, we are historically a net generator of operating funds from our income statement activities. In periods of expansion, we expect to use cash from our balance sheet.

Within investing activities, capital spending historically ranges between 2.0% and 4.0% of our revenues and the primary use of capital is for manufacturing and engineering development requirements. Our capital expenditures during the year ended December 31, 2021 were approximately 2.7% of revenues.

We historically have significant transfers between investments and cash as we rotate large cash balances and short-term investment balances between money market funds, which are accounted for as cash equivalents, and other investments. We have a history of supplementing our organic revenue growth with acquisitions of product lines or companies, resulting in significant uses of our cash and short-term investment balances from time to time. We expect the historical trend for capital spending and the variability caused by moving money between cash and investments and periodic acquisition activity to continue in the future.

Within financing activities, we are a net user of funds. We have historically used funds for quarterly dividends and generated funds from the proceeds from the issuance of common stock through our Employee Stock Purchase Plan ("ESPP"). We also periodically repurchase shares of our common stock through share repurchase programs. We used $3.2 million of cash during 2021 for the repurchase of 495,144 shares.

We believe that cash generated by operating activities, our short-term investment balances, and cash on our balance sheet will be sufficient to support our operations for the next 12 months, including dividend payments and capital expenditures.

The following table is a summary of cash flow activity for the years ended December 31, 2021 and 2020:

	Years Ended December 31,			
		2021		2020
Net cash flow provided by (used in):				
Operating activities	$	5,673	$	13,420
Investing activities	$	4,053	$	(6,759)
Financing activities	$	(7,246)	$	(8,262)
Net increase (decrease) in cash and cash equivalents	$	2,480	$	(1,601)

Operating Activities:

We generated $5.7 million of funds from operating activities during the year ended December 31, 2021. The cash from operating activities includes net income of $153, an add-back of $6.6 million for non-cash expenses, and negative net changes in operating assets and liabilities of $1.1 million. The balance sheet used cash because of increased working capital due to higher inventories and accounts receivable balances offsetting higher accrued liabilities. Inventories increased by $2.5 million due to support higher revenues for antennas and to ease supply chain constraints for both product lines. Accounts receivable increased by $0.9 million because revenues were higher in the fourth quarter 2021 compared to the fourth quarter 2020. Accrued liabilities increased primarily due to the timing of inventory purchases and by increased by $1.4 million with higher accruals for restructuring expenses and higher incentive compensation in the fourth quarter 2021 compared to the fourth quarter 2020.
We generated $13.4 million of funds from operating activities during the year ended December 31, 2020. The cash from operating activities includes net income of $3.4 million, an add-back of $5.5 million for non-cash expenses, and positive net changes in operating assets and liabilities of $4.5 million. The balance sheet provided cash due to lower inventories of $2.1 million, higher accounts payable of $1.1 million and lower accounts receivables of $1.0 million. The decrease in inventories was primarily within the antenna product line due to lower revenues in the fourth quarter of 2020, and due to the transition of manufacturing to contract manufacturers. Accounts payable were higher due to timing of purchases in the fourth quarter 2020 and by extending the payment cycle for certain vendors. Accounts receivable declined because revenues were lower in the fourth quarter 2020.

Investing Activities:
Our investing activities generated $4.1 million of cash during the year ended December 31, 2021. Redemptions and maturities of our short-term investments during the year provided $38.6 million in cash and we rotated $25.9 million of cash into new short-term and long-term investments. We used $6.3 million, net of cash acquired, for the purchase of Smarteq in April 2021 and we used $3.2 million of cash for capital expenditures during the year ended December 31, 2021.

Our investing activities used $6.8 million of cash during the year ended December 31, 2020. Redemptions and maturities of our short-term investments during the year provided $47.0 million in cash and we rotated $49.7 million of cash into new short-term and long-term investments. We used $4.1 million of cash for capital expenditures during the year ended December 31, 2020. The capital expenditures during 2020 included $2.1 million for leasehold improvements and furniture and equipment for the new Clarksburg, Maryland office.

Financing Activities:

We used $7.2 million of cash for financing activities during the year ended December 31, 2021. We completed our share repurchase programs in September 2021, and we used $3.2 million for such repurchases during 2021. During 2021, we used $4.0 million for cash dividends paid quarterly and $0.8 million for payroll taxes related to stock-based compensation, the latter of which, related to common stock issued in connection with the vesting of restricted stock awards under our short-term incentive plan. We received $0.8 million in proceeds from the purchase of shares through our ESPP in 2021.

We used $8.2 million of cash for financing activities during the year ended December 31, 2020. We used $2.0 million for the common stock repurchases during the first quarter and $1.8 million for common stock repurchases during the fourth quarter. We used $4.1 million for cash dividends paid quarterly during 2020 and $1.1 million for payroll taxes related to stock-based compensation, the latter of which related to common stock issued in connection with the vesting of restricted stock awards under our short-term incentive plan. We received $0.9 million in proceeds from the purchase of shares through our ESPP. On April 16, 2020, we received a $3.5 million paycheck protection program ("PPP") loan from the Small Business Administration. Based upon subsequent guidance regarding PPP loan eligibility, we returned the funds on April 30, 2020.

Material Cash Requirements

Our material cash requirements from known contractual and other obligations primarily relate to non-cancelable purchase obligations. Expected timing of those payments are as follows:

	Payments Due by Period				
	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Purchase obligations	$ 22,394	$ 22,064	$ 330	$ 0	$ 0

Critical Accounting Estimates

The preparation of our consolidated financial statements in accordance with generally accepted accounting principles requires us to make estimates and judgments 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 revenue and expenses during the period reported. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. Management bases its estimates and judgments on historical experience, market trends, and other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Valuation Allowances for Deferred Tax Assets - We establish an income tax valuation allowance when available evidence indicates that it is more likely than not that all or a portion of a deferred tax asset will not be realized. In assessing the need for a valuation allowance, we consider the amounts and timing of expected future deductions or carryforwards and sources of taxable income that may enable utilization. We maintain an existing valuation allowance until enough positive evidence exists to support its reversal. Changes in the amount or timing of expected future deductions or taxable income may have a material impact on the level of income tax valuation allowances. Our assessment of the realizability of the deferred tax assets requires judgment about our future results. Inherent in this estimation is the requirement for us to estimate future book and taxable income and possible tax planning strategies. These estimates require us to exercise judgment about our future results, the prudence and feasibility of possible tax planning strategies, and the economic environment in which we do business. It is possible that the actual results will differ from the assumptions and require adjustments to the allowance. Adjustments to the allowance would affect future net income.

Impairment Reviews of Goodwill – We perform an annual impairment test of goodwill as of the end of the first month of the fiscal fourth quarter (October 31st), or at an interim date if an event occurs or if circumstances change that would indicate that an impairment loss may have been incurred. In performing our annual impairment test, we may consider qualitative factors that would indicate possible impairment. A quantitative fair value assessment is performed at the reporting unit level. If the carrying value exceeds the fair value, the implied fair value of goodwill is then compared against the carrying value of goodwill to determine the amount of impairment.

The process of evaluating the potential impairment of goodwill is subjective because it requires the use of estimates and assumptions in determining a reporting unit's fair value. We calculate the fair value of each reporting unit by using the income approach based on the present value of future discounted cash flows. The discounted cash flow method requires us to use estimates and judgments about the future cash flows of the reporting units. Although we base cash flow forecasts on assumptions that are consistent with plans and estimates we use to manage the underlying reporting units, there is significant judgment in determining the cash flows attributable to these reporting units, including markets and market share, sales volumes and mix, research and development expenses, tax rates, capital spending, discount rate and working capital changes. Cash flow forecasts are based on reporting unit operating plans for the early years and business projections in later years. We believe the accounting estimate related to the valuation of goodwill is a critical accounting estimate because it requires us to make assumptions that are highly uncertain about the future cash flows of our reporting units.

Recent Accounting Pronouncements

See Note 1 to the condensed consolidated financial statements for a discussion of recent accounting pronouncements.

Item 7A: Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk from changes in interest rates, foreign exchange rates, credit risk, and investment risk as follows:

Interest Rate Risk

We manage the sensitivity of our results of operations to interest rate risk on cash equivalents by maintaining a conservative investment portfolio. The primary objective of our investment activities is to preserve principal without significantly increasing risk. To achieve this objective, we maintain our portfolio of cash equivalents and investments in U.S. government agency bonds, certificates of deposits, or A- or higher rated corporate bonds.

Due to changes in interest rates, our future investment income may fall short of expectations. A hypothetical increase or decrease of 10% in market interest rates would not result in a material change in interest income earned through maturity on investments held at December 31, 2021. We do not hold or issue derivatives, derivative commodity instruments or other financial instruments for trading purposes.

Foreign Currency Risk

Cross-border transactions, both with external parties and with our intercompany relationships, result in increased exposure to foreign exchange effects. We are exposed to currency risk with the Chinese yuan due to our operations and contract manufacturers in China and with the Swedish krona due to our acquisition of Smarteq. Fluctuations with these foreign currencies against the U.S. dollar could have an adverse effect on our results of operations and cash flows. We manage certain operating activities at the local level with revenues, costs, assets, and liabilities generally being denominated in local currencies. However, our results of operations and assets and liabilities are reported in U.S. dollars and thus will fluctuate with changes in exchange rates between such local currencies and the U.S. dollar. For the year ended December 31, 2021, approximately 9% of revenue and 21% of expenses were transacted in foreign currencies as compared to 3% and 17%, respectively for the year ended December 31, 2020. The percentage increase in both revenues and expenses during 2021 was due to the Smarteq acquisition. Smarteq revenues and expenses are primarily transacted in Swedish krona but are also transacted in euros and U.S. dollars.

We had $3.9 million of cash in foreign bank accounts on December 31, 2021. As of December 31, 2021, we had no intention of repatriating cash in our foreign bank accounts. If we decide to repatriate the cash in these foreign bank accounts, the process may be time-consuming and expensive. We may also be exposed to foreign currency fluctuations and taxes if we repatriate these funds.

Credit Risk

The financial instruments that potentially subject us to credit risk consist primarily of trade receivables. For trade receivables, credit risk is the potential for a loss due to a customer not meeting its payment obligations. Our customers are primarily concentrated in the wireless communications industry. Estimates are used in determining an allowance for amounts which we may not be able to collect, based on current trends, the length of time receivables are past due and historical collection experience. Provisions for and recovery of credit losses are recorded as sales and marketing expense in the consolidated statements of income. We perform ongoing evaluations of customers' credit limits and financial condition. We do not require collateral from customers, but for some customers we do require partial or full prepayments. See Note 1 to the consolidated financial statements for additional information on credit losses.

The following tables represents customers that accounted for 10% or more of total trade accounts receivable on December 31, 2021 and 2020.

	As of December 31,	
Trade Accounts Receivable	**2021**	**2020**
Customer A	5%	31%
Customer B	4%	10%

Item 8: Financial Statements and Supplementary Data

PCTEL, INC.
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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
PCTEL, Inc.

Opinion on the financial statements
We have audited the accompanying consolidated balance sheets of PCTEL Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years then ended, and the related notes and financial statement schedules included under Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years then ended, in conformity with accounting principles generally accepted in the United States of America.
We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated March 15, 2022 expressed an unqualified opinion.

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 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. 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 matter
The critical audit matter communicated below is a matter 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) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of 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 audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Deferred Tax Asset Valuation Allowance- United States
As described further in Note 6, the Company's deferred tax asset valuation allowance for all tax jurisdictions was $15.3 million as of December 31, 2021. The Company's deferred tax asset valuation allowance for the United States tax jurisdiction was $12.0 million as of December 31, 2021. The Company's deferred tax assets consists of federal and state net operating losses, credits, and timing differences. On a regular basis, the Company evaluates the recoverability of deferred tax assets and the need for a valuation allowance. This evaluation requires significant judgment and assumptions. We identified the deferred tax asset valuation allowance for the United States tax jurisdiction as a critical audit matter.

The principal considerations for our determination that the deferred tax asset valuation allowance for the United States tax jurisdiction is a critical audit matter are that the Company's evaluation of the recoverability of deferred tax assets and the need for a valuation allowance involved a high degree of auditor judgment due to the significant estimates made by management. In particular, the evaluation of the recoverability of deferred tax assets and the need for a valuation allowance was sensitive to assumptions regarding forecasts for profits and taxable income.

Our audit procedures related to the deferred tax asset valuation allowance for the United States tax jurisdiction included the following, among others. We evaluated the design and operating effectiveness of certain internal controls related to the deferred tax asset valuation allowance for the United States tax jurisdiction, including management's review of the valuation model and assumptions used. We tested the source information used in the forecast for completeness and accuracy. We tested the assumptions regarding forecasts for profits and taxable income by assessing the reasonableness of those forecasts compared to forecasted industry trends and the Company's historical results for the United States tax jurisdiction, including those results against their respective historical forecasts. We also performed a sensitivity analysis on the Company's assumptions regarding forecasts for profits and taxable income and evaluated the impact of those changes on the evaluation of the recoverability of deferred tax assets and the need for a valuation allowance. With the assistance of our

tax specialists, we evaluated the reasonableness of maintaining a full valuation allowance on the Company's United States deferred tax assets with respect to the recoverability and utilization of net operating losses, tax credits and assets related to timing differences.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2006.

Chicago, Illinois
March 15, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
PCTEL, Inc.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of PCTEL, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2021, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2021, and our report dated March 15, 2022 expressed an unqualified opinion on those financial statements.

Basis for opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financing Reporting ("Management's Report"). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Our audit of, and opinion on, the Company's internal control over financial reporting does not include the internal control over financial reporting of Smarteq Wireless Aktiebolag, a wholly-owned subsidiary, whose financial statements reflect total assets and revenues constituting 11% and 7%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2021. As indicated in Management's Report, Smarteq Wireless Aktiebolag was acquired during 2021. Management's assertion on the effectiveness of the Company's internal control over financial reporting excluded internal control over financial reporting of Smarteq Wireless Aktiebolag.

Definition and limitations of internal control over financial reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ GRANT THORNTON LLP

Chicago, Illinois
March 15, 2022

PCTEL, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	December 31, 2021	December 31, 2020
ASSETS		
Cash and cash equivalents	$ 8,192	$ 5,761
Short-term investment securities	22,562	30,582
Accounts receivable, net of allowances of $64 and $113 at December 31, 2021 and December 31, 2020, respectively	18,905	16,601
Inventories, net	13,691	9,984
Prepaid expenses and other assets	1,747	1,685
Total current assets	65,097	64,613
Property and equipment, net	11,949	12,505
Long-term investment securities	0	4,640
Goodwill	6,334	3,332
Intangible assets, net	1,579	0
Other noncurrent assets	2,438	2,441
TOTAL ASSETS	**$ 87,397**	**$ 87,531**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Accounts payable	$ 5,360	$ 4,430
Accrued liabilities	11,117	7,316
Total current liabilities	16,477	11,746
Long-term liabilities	3,999	4,387
Total liabilities	20,476	16,133
Stockholders' equity:		
Common stock, $0.001 par value, 50,000,000 shares authorized at December 31, 2021 and December 31, 2020, respectively, and 18,238,030 and 18,429,350 shares issued and outstanding at December 31, 2021 and December 31, 2020, respectively	18	18
Additional paid-in capital	123,998	128,250
Accumulated deficit	(56,735)	(56,888)
Accumulated other comprehensive (loss) income	(360)	18
Total stockholders' equity	66,921	71,398
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	**$ 87,397**	**$ 87,531**

The accompanying notes are an integral part of these consolidated financial statements.

PCTEL, INC.
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share data)

	Years Ended December 31, 2021	Years Ended December 31, 2020
REVENUES	$ 87,807	$ 77,456
COST OF REVENUES	47,329	39,529
GROSS PROFIT	40,478	37,927
OPERATING EXPENSES:		
Research and development	13,358	12,519
Sales and marketing	13,327	11,104
General and administrative	12,444	10,808
Amortization of intangible assets	210	32
Restructuring expenses	900	124
Total operating expenses	40,239	34,587
OPERATING INCOME	239	3,340
Other income, net	(47)	106
INCOME BEFORE INCOME TAXES	192	3,446
Expense for income taxes	39	29
NET INCOME	**$ 153**	**$ 3,417**
Net Income per Share:		
Basic	$ 0.01	$ 0.19
Diluted	$ 0.01	$ 0.19
Weighted Average Shares:		
Basic	18,017	18,207
Diluted	18,122	18,399
Cash dividend per share	$ 0.22	$ 0.22

The accompanying notes are an integral part of these consolidated financial statements.

PCTEL, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(in thousands, except per share data)

	Years Ended December 31, 2021	Years Ended December 31, 2020
NET INCOME	$ 153	$ 3,417
OTHER COMPREHENSIVE (LOSS) INCOME		
Foreign currency translation adjustments	(378)	336
COMPREHENSIVE (LOSS) INCOME	**$ (225)**	**$ 3,753**

The accompanying notes are an integral part of these consolidated financial statements.

PCTEL, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock	Additional Paid-In Capital	Retained Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity of PCTEL, Inc.
BALANCE at JANUARY 1, 2020	$ 19	$ 133,954	$ (60,305)	$ (318)	$ 73,350
Stock-based compensation expense	0	2,479	0	0	2,479
Issuance of shares for stock purchase and option plans	0	869	0	0	869
Cancellation of shares for payment of withholding tax	0	(1,137)	0	0	(1,137)
Repurchase of common stock	(1)	(3,807)	0	0	(3,808)
Dividends paid ($0.22 per share)	0	(4,108)	0	0	(4,108)
Net income	0	0	3,417	0	3,417
Change in cumulative translation adjustment, net	0	0	0	336	336
BALANCE at DECEMBER 31, 2020	$ 18	$ 128,250	$ (56,888)	$ 18	$ 71,398
Stock-based compensation expense	1	2,920	0	0	2,921
Issuance of shares for stock purchase and option plans	0	840	0	0	840
Cancellation of shares for payment of withholding tax	0	(786)	0	0	(786)
Repurchase of common stock	(1)	(3,192)	0	0	(3,193)
Dividends paid ($0.22 per share)	0	(4,034)	0	0	(4,034)
Net income	0	0	153	0	153
Change in cumulative translation adjustment, net	0	0	0	(378)	(378)
BALANCE at DECEMBER 31, 2021	$ 18	$ 123,998	$ (56,735)	$ (360)	$ 66,921

The accompanying notes are an integral part of these consolidated financial statements.

PCTEL, INC.
CONSOLIDATED STATEMENT OF CASH FLOWS
(in thousands)

	Years Ended December 31,	
	2021	**2020**
Operating Activities:		
Net income from continuing operations	$ 153	$ 3,417
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	3,027	3,019
Intangible asset amortization	267	144
Stock-based compensation	2,921	2,479
Loss on disposal/sale of property and equipment	113	21
Restructuring costs	353	(29)
Bad debt provision	(44)	(151)
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(896)	960
Inventories	(2,481)	2,076
Prepaid expenses and other assets	531	638
Accounts payable	14	1,086
Income taxes payable	3	(10)
Other accrued liabilities	1,417	(231)
Deferred revenue	295	1
Net cash provided by operating activities	5,673	13,420
Investing Activities:		
Capital expenditures	(2,330)	(4,093)
Purchase of investments	(25,928)	(49,701)
Redemptions/maturities of short-term investments	38,588	47,035
Cash paid for acquisition, net of cash acquired	(6,277)	0
Net cash provided by (used in) investing activities	4,053	(6,759)
Financing Activities:		
Proceeds from issuance of common stock	840	869
Proceeds from Paycheck Protection Program Loan	0	3,500
Repayment of Paycheck Protection Program Loan	0	(3,500)
Payment of withholding tax on stock-based compensation	(786)	(1,137)
Principle payments on finance leases	(73)	(78)
Purchase of common stock from repurchase program	(3,193)	(3,808)
Cash dividends	(4,034)	(4,108)
Net cash used in financing activities	(7,246)	(8,262)
Net increase (decrease) in cash and cash equivalents	2,480	(1,601)
Effect of exchange rate changes on cash	(49)	268
Cash and cash equivalents, beginning of year	5,761	7,094
Cash and Cash Equivalents, End of Year	$ 8,192	$ 5,761
Other information:		
Cash paid for income taxes	$ 30	$ 29
Cash paid for interest	$ 7	$ 8
Non-cash investing and financing information:		
Increases (Decreases) to additional paid-in capital related to restricted stock	$ 88	$ (188)
Issuance of restricted common stock, net of cancellations	$ 575	$ 28
Recognition of ROU assets under operating leases	$ 245	$ 2
Recognition of ROU assets under finance leases	$ 63	$ 0

The accompanying notes are an integral part of these consolidated financial statements.

PCTEL, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
For the Year Ended: December 31, 2021
(in thousands, except share data and numbers disclosed in millions)

1. Organization and Summary of Significant Accounting Policies

Nature of Operations

PCTEL, Inc. (the "Company") was incorporated in California in 1994 and reincorporated in Delaware in 1998. The Company is a leading global provider of wireless technology, including purpose-built Industrial IoT devices, antenna systems, and test and measurement solutions. We solve complex wireless challenges to help organizations stay connected, transform, and grow and we have expertise in RF, digital and mechanical engineering. We have two businesses (antennas & Industrial IoT devices and test & measurement products).

Our principal executive offices are located at 471 Brighton Drive, Bloomingdale, Illinois 60108. Our telephone number at that address is (630) 372-6800 and our website is www.pctel.com. Additional information about our Company can be obtained on our website; however, the information within, or that can be accessed through, our website, is not part of this report.

Basis of Consolidation

These consolidated financial statements include the accounts of the Company and its subsidiaries. The financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP"). All intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods reported. Actual results could differ from those estimates.

Foreign Operations

The Company is exposed to foreign currency fluctuations due to its foreign operations and because products are sold internationally. The functional currency for the Company's foreign operations is predominantly the applicable local currency. Accounts of foreign operations are translated into U.S. dollars using the year-end exchange rate for assets and liabilities and average monthly rates for revenue and expense accounts. Adjustments resulting from translation are included in accumulated other comprehensive income (loss), a separate component of stockholders' equity. Gains and losses resulting from other transactions originally in foreign currencies and then translated into U.S. dollars are included in the consolidated statements of income. For the year ended December 31, 2021, approximately 9% of revenue and 21% of expenses were transacted in foreign currencies as compared to 3% and 17% for the year ended December 31, 2020. For the year ended December 31, 2021, foreign currency transactions resulted in foreign exchange losses of $0.1 million and for the year ended December 31, 2020, foreign currency transactions resulted in foreign exchange losses of $0.3 million. Foreign exchange gains and losses are recorded in other income in the consolidated statement of income.

Fair Value of Financial Instruments

The Company follows accounting pronouncements for Fair Value Measurements and Disclosures, which establishes a fair value hierarchy that requires the Company to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, a three-tier fair value hierarchy has been established, which prioritizes the inputs used in measuring fair value as follows:

Level 1: inputs are unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in active markets for similar assets and liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of assets or liabilities.

Level 3: unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Cash equivalents are measured at fair value and investments are recognized at amortized cost in the Company's financial statements. Accounts receivable and other investments are financial assets with carrying values that approximate fair value due to the short-term nature of these assets. Accounts payable is a financial liability with a carrying value that approximates fair value due to the short-term nature of these liabilities.

Cash and Cash Equivalents and Investments

The Company's cash and cash equivalents and investments consist of the following:

	December 31, 2021	December 31, 2020
Cash	$ 6,789	$ 4,740
Cash equivalents	1,403	1,021
Short-term investments	22,562	30,582
Long-term investments	0	4,640
	$ 30,754	$ 40,983

Cash and Cash Equivalents

On December 31, 2021 and 2020, cash and cash equivalents included bank balances and investments with original maturities less than 90 days. On December 31, 2021 and 2020, the Company's cash equivalents were invested in highly liquid AAA rated money market funds that are required to comply with Rule 2a-7 under the Investment Company Act of 1940. Such funds utilize the amortized cost method of accounting, seek to maintain a constant $1.00 per share price, and are redeemable upon demand. The Company restricts its investments in AAA money market funds to those invested 100% in either short-term U.S. Government Agency securities or bank repurchase agreements collateralized by these same securities. The fair values of these money market funds are established through quoted prices in active markets for identical assets (Level 1 inputs). The cash in the Company's U.S. banks is insured by the Federal Deposit Insurance Corporation up to the insurable limit of $250.

The Company had cash in foreign bank accounts of $3.9 million at December 31, 2021 and $2.9 million at December 31, 2020. The Company had $2.8 million and $2.9 million of cash and cash equivalents in bank accounts in China at December 31, 2021 and December 31, 2020, respectively. In addition, the Company had $1.0 million of cash in bank accounts in Sweden and $0.1 million of cash in bank accounts in France at December 31, 2021. The Company's cash in these foreign bank accounts is not insured. As of December 31, 2021, the Company has no intentions of repatriating the cash in its foreign bank accounts. If the Company decides to repatriate the cash in the foreign bank accounts, it may have trouble doing so in a timely manner. The Company may also be exposed to foreign currency fluctuations and taxes if it repatriates these funds.

Investments

On December 31, 2021 and 2020, the Company's short-term investments consisted of A- or higher rated corporate bonds and certificates of deposit. All the investments on December 31, 2021 and 2020 were classified as held-to-maturity. The bonds and certificates of deposit classified as short-term investments have original maturities greater than 90 days and mature within one year and the bonds and certificates of deposit classified as long-term investments have maturities greater than one year but less than two years. The Company's bond investments are recorded at the purchase price and carried at amortized cost.

Cash equivalents and Level 1 and Level 2 investments measured at fair value were as follows:

	December 31, 2021			December 31, 2020		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Cash equivalents:						
Certificates of deposit	$ 0	$ 0	$ 0	$ 300	$ 0	$ 300
Money market funds	1,403	0	1,403	721	0	721
Total Cash Equivalents	$ 1,403	$ 0	$ 1,403	$ 1,021	$ 0	$ 1,021
Short-Term Investments:						
Corporate bonds	$ 0	$ 19,659	$ 19,659	$ 0	$ 26,318	$ 26,318
Certificates of deposit	2,903	0	2,903	4,264	0	4,264
Total Short-Term Investments	$ 2,903	$ 19,659	$ 22,562	$ 4,264	$ 26,318	$ 30,582
Long-Term Investments:						
Corporate bonds	$ 0	$ 0	$ 0	$ 0	$ 4,382	$ 4,382
Certificates of deposit	0	0	0	258	0	258
Total Long-Term Investments	$ 0	$ 0	$ 0	$ 258	$ 4,382	$ 4,640
Cash equivalents and Investments - book value	$ 4,306	$ 19,659	$ 23,965	$ 5,543	$ 30,700	$ 36,243
Unrealized (losses) gains	$ 1	$ (2)	$ (1)	$ (1)	$ (7)	$ (8)
Cash equivalents and Investments - fair value	$ 4,307	$ 19,657	$ 23,964	$ 5,542	$ 30,693	$ 36,235

The Company categorizes its financial instruments within a fair value hierarchy according to accounting guidance for fair value. The fair value hierarchy is described under the Fair Value of Financial Instruments in Note 1. For the Level 2 investments, the Company uses quoted prices of similar assets in active markets. There were no Level 3 investments on December 31, 2021 or 2020. The fair values in the table above reflect net unrealized losses of $1 and $8 on December 31, 2021 and December 31, 2020, respectively.

Accounts Receivable and Allowance for Credit Losses

Accounts receivable are recorded at invoiced amount with standard net terms for most customers that range between 30 and 90 days. The Company extends credit to its customers based on an evaluation of the customer's financial condition and collateral is generally not required. The Company records allowances for credit losses and credit allowances that reduce the value of accounts receivable to fair value.

The allowances for accounts receivable consisted of the following:

	December 31, 2021	December 31, 2020
Credit loss provision	$ 26	$ 66
Credit allowances	38	47
Total allowances	$ 64	$ 113

The Company is exposed to credit losses primarily through the sale of products. The Company's expected loss methodology for accounts receivable is developed using historical collection experience, current and future economic market conditions, and a review of the current status of customers' trade accounts receivable. Due to the short-term nature of accounts receivable, the estimate of amount of accounts receivable that may not be collected is based on aging of the account receivable balances and the financial condition of customers. Additionally, specific allowance amounts are established to record the appropriate provision for balances with customers that have a higher probability of default. The Company's monitoring activities include timely account reconciliation, dispute resolution, payment confirmation, consideration of customers' financial condition and macroeconomic conditions. Balances are written off when determined to be uncollectible. The Company's allowance for credit losses was $26 at December 31, 2021 and $66 at December 31, 2020.

The following table summarizes the allowance for credit losses for the years ended December 31, 2021 and December 31, 2020:

	December 31, 2021	December 31, 2020
Beginning Balance	$ 66	$ 56
Current period benefit for credit losses	(40)	(167)
Recovery of amounts previously written off	0	177
Ending Balance	$ 26	$ 66

Inventories

Inventories are stated at the lower of cost or net realizable value and include material, labor and overhead costs using the first-in, first-out method of costing. Inventories as of December 31, 2021 and 2020 were composed of raw materials, work-in-process, and finished goods. The Company had consigned inventory of $0.4 million and $0.3 million as of at December 31, 2021 and 2020, respectively. The Company records allowances to reduce the value of inventory to the lower of cost or market, including allowances for excess and obsolete inventory. Reserves for excess inventory are calculated based on the Company's estimate of inventory more than normal and planned usage. Obsolete reserves are based on the Company's identification of inventory where carrying value is above net realizable value. The allowance for inventory losses was $4.1 million and $3.7 million as of December 31, 2021 and 2020, respectively.

Inventories consisted of the following:

	December 31, 2021	December 31, 2020
Raw materials	$ 6,171	$ 5,315
Work in process	690	883
Finished goods	6,830	3,786
Inventories, net	$ 13,691	$ 9,984

Prepaid and Other Current Assets

Prepaid assets are stated at cost and are amortized over the useful lives (up to one year) of the assets.

Property and Equipment

Property and equipment are stated at cost and are depreciated using the straight-line method over the estimated useful lives of the assets. The Company depreciates computer equipment and software licenses over three to five years, office equipment, manufacturing and test equipment and motor vehicles over five years, furniture and fixtures over seven years, and buildings over 30 years. Leasehold improvements are amortized over the shorter of the corresponding lease term or useful life. Depreciation expense and gains and losses on the disposal of property and equipment are included in cost of sales and operating expenses in the consolidated statements of income. Maintenance and repairs are expensed as incurred.

Property and equipment consisted of the following:

	December 31, 2021	December 31, 2020
Building	$ 6,892	$ 6,868
Computers and office equipment	10,604	10,039
Manufacturing and test equipment	16,305	15,394
Furniture and fixtures	1,455	1,437
Leasehold improvements	3,021	2,973
Motor vehicles	20	20
Total property and equipment	38,297	36,731
Less: Accumulated depreciation and amortization	(28,118)	(25,996)
Land	1,770	1,770
Property and equipment, net	$ 11,949	$ 12,505

Depreciation and amortization expense were approximately $3.0 million for the years ended December 31, 2021 and 2020.

Liabilities

Accrued liabilities consisted of the following:

	December 31, 2021	December 31, 2020
Inventory receipts	$ 4,302	$ 3,049
Payroll and other employee benefits	2,266	1,083
Paid time off	1,284	1,028
Deferred revenues	538	242
Operating leases	475	269
Income and sales taxes	415	185
Restructuring	368	15
Warranties	257	285
Employee stock purchase plan	253	224
Customer refunds for estimated returns	248	146
Professional fees and contractors	233	316
Real estate taxes	156	155
Finance leases	62	68
Other	260	251
Total	$ 11,117	$ 7,316

Long-term liabilities consisted of the following:

	December 31, 2021	December 31, 2020
Operating leases	$ 3,600	$ 3,949
Deferred payroll taxes	0	243
Finance leases	92	96
Deferred revenue	181	76
Other	126	23
Total	$ 3,999	$ 4,387

Revenue Recognition

The Company sells antennas and Industrial IoT devices and test & measurement products. All the Company's revenue relates to contracts with customers. The Company's accounting contracts are from purchase orders or purchase orders combined with purchase agreements. The majority of the Company's revenue is recognized on a "point-in-time" basis and a nominal amount of revenue is recognized "over time." The Company satisfies its performance obligations related to the sale of its products generally at the time of shipment, or upon delivery based on the contractual terms with its customers. For products shipped on consignment, the Company recognizes revenue upon customer delivery from the consignment location. For its test & measurement software tools, the Company has a performance obligation to provide software maintenance and support for one year. The Company recognizes revenues for the maintenance and support over this period. The Company recognizes revenue for sales of its products when control transfers, which is predominantly upon shipment from its factory. For products shipped on consignment, the Company recognizes revenue upon delivery from the consignment location. The Company allows its major antenna product distributors to return product under specified terms and conditions and accrues for product returns. See Note 14 for additional information related to revenue policies.

Research and Development Costs

The Company expenses research and development costs as incurred. To date, the Company has expensed all software development costs related to research and development because the costs incurred subsequent to the products reaching technological feasibility were not significant.

Advertising Costs

Advertising costs are expensed in the period in which they are incurred. Advertising expense was $0.3 million during the year ended December 31, 2021 and $0.2 million during the year ended December 31, 2020.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and deferred tax assets are recognized for net operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are provided against deferred tax assets, which are not likely to be realized. On a regular basis, management evaluates the recoverability of deferred tax assets and the need for a valuation allowance.

The Company recognizes the effect of income tax positions only if those positions are more likely than not to being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

Deferred tax assets arise when the Company recognizes charges or expenses in the financial statements that will not be allowed as income tax deductions until future periods. The deferred tax assets also include unused tax net operating losses and tax credits that the Company is allowed to carryforward to future years. Accounting rules permit the Company to carry the deferred tax assets on the balance sheet at full value as long as it is more likely than not the deductions, losses, or credits will be used in the future. A valuation allowance must be recorded against a deferred tax asset if this test cannot be met. The Company had a full valuation allowance of $15.3 million at December 31, 2021 and $12.9 million at December 31, 2020. See Note 6 for more information on the deferred tax valuation allowance.

On March 27, 2020, the “Coronavirus Aid, Relief and Economic Security Act” (CARES Act) was signed into law. The CARES Act includes provisions relating to refundable payroll tax credits, deferment of the employer portion of certain payroll taxes, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. Under the CARES Act, the Company is deferring the employer portion of social security taxes and will apply for a refund of its Alternative Minimum Tax credit. At December 31, 2021 and 2020, respectively, the Company had deferred payroll taxes of $0.2 and $0.5 million. The Company recorded a deferred tax asset for the payroll tax liability that was not deductible for income tax purposes. The remaining payroll taxes will be deferred until December 31, 2022.

Sales and Value Added Taxes

Taxes collected from customers and remitted to governmental authorities are presented on a net basis in cost of sales in the accompanying consolidated statements of income.

Shipping and Handling Costs

Shipping and handling costs are included on a gross basis in cost of sales in the accompanying consolidated statements of income.

Goodwill

The Company performs an annual impairment test of goodwill as of the end of the first month of the fourth fiscal quarter (October 31st), or at an interim date if an event occurs or if circumstances change that would indicate that an impairment loss may have been incurred. In performing the annual impairment tests, the Company may consider qualitative factors that would indicate possible impairment. A quantitative fair value assessment is also performed at the reporting unit level. If the fair value exceeds the carrying value, then goodwill is not impaired, and no further testing is performed. If the carrying value exceeds the fair value, the implied fair value of goodwill is then compared against the carrying value of goodwill to determine the amount of impairment.

The process of evaluating the potential impairment of goodwill is subjective because it requires the use of estimates and assumptions in determining a reporting unit’s fair value. The Company calculates the fair value of each reporting unit by using the income approach based on the present value of future discounted cash flows. The discounted cash flow method requires the Company to use estimates and judgments about the future cash flows of the reporting units. Although the Company bases cash flow forecasts on assumptions that are consistent with plans and estimates the Company uses to manage the underlying reporting units, there is significant judgment in determining the cash flows attributable to these reporting units, including markets and market share, sales volumes and mix, research and development expenses, tax rates, capital spending, discount rate and working capital changes. Cash flow forecasts are based on reporting unit operating plans for the early years and business projections in later years. The Company believes the accounting estimate related to the valuation of goodwill is a critical accounting estimate because it requires the Company to make assumptions that are

highly uncertain about the future cash flows of the reporting units. Changes in these estimates can have a material impact on the Company’s financial statements.

The Company performed its annual goodwill test at October 31, 2021 and at October 31, 2020 for the goodwill of $6.3 million and $3.3 million, respectively. The increase in goodwill in 2021 is from the acquisition of Smarteq in April 2021.The Company performed both a qualitative analysis of goodwill and a quantitative analysis. There were no triggering events during the year, and the fair value of the reporting unit was higher than its carrying value in the quantitative analysis. Based on the Company’s analysis, there was no impairment of goodwill as of the testing dates because the fair value of the reporting unit exceeded its carrying value by a significant margin.

Long-Lived and Definite-Lived Intangible assets

The Company reviews definite-lived intangible assets, investments, and other long-lived assets for impairment when events or changes in circumstances indicate that their carrying values may not be fully recoverable. This analysis differs from the Company’s goodwill analysis in that definite-lived intangible asset impairment is only deemed to have occurred if the sum of the forecasted undiscounted future cash flows related to the assets being evaluated is less than the carrying value of the assets. The estimate of long-term undiscounted cash flows includes long-term forecasts of revenue growth, gross margins, and operating expenses. All these items require significant judgment and assumptions. There were no impairments related to long-lived assets used for operations during the years ended December 31, 2021, and 2020.

Recent Accounting Pronouncements

In January 2017, the FASB issued ASU 2017-04, Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment (ASU 2017-14). This new guidance eliminates the requirement to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit’s carrying amount over its fair value. The changes are effective for smaller reporting companies for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and early adoption is permitted. The Company is currently evaluating the impact that this guidance will have on its consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting. This update provides optional expedients and exceptions for applying generally accepted accounting principles to certain contract modifications and hedging relationships that reference London Inter-bank Offered Rate (LIBOR) or another reference rate expected to be discontinued. Topic 848 is effective upon issuance and generally can be applied through December 31, 2022. The Company is currently evaluating the impact of Topic 848 on the consolidated financial statements.

In October 2021, the FASB issued ASU 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers. This update requires that an acquirer recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606 as if the acquirer had originated the contracts. This ASU should be applied prospectively to business combinations occurring on or after the effective date of the update. This update is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period, but should be applied to all acquisitions occurring in the annual period of adoption. The Company is currently evaluating the impact of this ASU on our consolidated financial statements and related disclosures.

In November 2021, the FASB issued ASU 2021-10, Government Assistance (Topic 831): Disclosures by Business Entities about Government Assistance. This Update, which aims to increase transparency of government assistance, require annual disclosures about transactions with a government that are accounted for by applying a grant or contribution accounting model. Under this ASU, an entity is required to disclose (1) the types of assistance, (2) an entity’s accounting for assistance, and (3) the effect of the assistance on entity’s financial statements. This Update is effective for all entities within their scope for financial statements issued for annual periods beginning after December 15, 2021. Early adoption is permitted. The Company is evaluating the effect of adoption of the Update on our financial statements and related disclosures, but does not expect to have an impact on either the financial statements or the related disclosures.

2. Earnings per Share

The Company computes earnings per share data under two different disclosures, basic and diluted, for all periods in which consolidated statements of income are presented. Basic earnings per share is computed by dividing net income by the weighted average number of shares of common stock outstanding, less shares subject to repurchase. Diluted earnings per share are computed by dividing net income by the weighted average number of shares of common stock and common stock equivalents outstanding. Common stock equivalents consist of stock options using the treasury stock method. Common stock options are excluded from the computation of diluted earnings per share if their effect is anti-dilutive.

The following table provides a reconciliation of the numerators and denominators used in calculating basic and diluted earnings per share:

	Years Ended December 31, 2021		Years Ended December 31, 2020	
Basic Income Per Share computation:				
Numerator:				
Net income	$	153	$	3,417
Denominator:				
Common shares outstanding		18,017,006		18,207,396
Net Income per common share - basic				
Net income	$	0.01	$	0.19
Diluted Income Per Share computation:				
Denominator:				
Common shares outstanding		18,017,006		18,207,396
Restricted shares subject to vesting		104,798		191,392
Total shares		18,121,804		18,398,788
Income per common share - diluted				
Net income	$	0.01	$	0.19

3. Business Combinations

On April 30, 2021, the Company acquired all the outstanding stock of Smarteq, a Swedish company based in Kista, Sweden, that designs antennas for specialized Industrial IoT and vehicular applications, pursuant to a Sale Purchase Agreement ("SPA") between PCTEL and Allgon Aktiebolag, a Swedish company and holder of the outstanding stock of Smarteq. Smarteq owns all the outstanding stock of SAS Smarteq France ("Smarteq France"), which engages in sales of Smarteq products.

Pursuant to the SPA, the Company acquired Smarteq for a cash purchase price consisting of SEK 53.0 million plus working capital adjustments of SEK 1.6 million and an adjustment for the net cash at closing of SEK 2.1 million for total cash consideration of SEK 56.8 million ($6.8 million), all of which was provided from PCTEL's existing cash. The Company believes the acquisition of Smarteq will provide a strong local presence, expertise, and channel partners to accelerate revenue growth in Europe, as well as a complementary portfolio of products for our Industrial IoT and intelligent transportation customers worldwide. The Company has only one segment but reports revenues and gross margin by its two product lines. The results for Smarteq are included with the Company's antenna and Industrial IoT device product line. The Company applied the provisions of Accounting Standards Codification (ASC) 805, Business Combinations, in accounting for its acquisitions. It requires the Company to recognize separately from goodwill the assets acquired, and the liabilities assumed, at the acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the acquisition date fair values of the net assets acquired and the liabilities assumed. While the Company uses its best estimates and assumptions where applicable to accurately value assets acquired and liabilities assumed at the acquisition date, its estimates are inherently uncertain and subject to refinement. The purchase price allocation is preliminary because the evaluations necessary to assess the fair values of the net assets acquired are still in process. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company will record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments will be recorded to the consolidated statements of income. The operating results of the acquired business are included in the Company's Consolidated Financial Statements from the date of the acquisition.

Fair Value of Purchase Consideration:

The following table summarizes the fair value of purchase consideration to acquire Smarteq:

Fair value of purchase consideration		
Cash	$	6,785
Working capital adjustment		(5)
Total purchase consideration	$	6,780

Preliminary Purchase Price Allocation:

The Company acquired all of the assets and liabilities of Smarteq, including cash of $0.5 million and debt of $0.1 million.
The following is an allocation of the purchase price as of the April 30, 2021 closing date based upon a preliminary estimate of the fair value of the assets acquired and liabilities assumed by the Company in the acquisition:

Preliminary Purchase Price Allocation:

Cash	$	503
Accounts receivable		1,415
Prepaid expenses and other assets		109
Inventories		1,286
Right of use assets		232
Property and equipment		131
Intangible assets		1,983
Accounts payable		(981)
Accrued liabilities		(837)
Lease liabilities - short-term		(102)
Lease liabilities - long-term		(112)
Debt		(91)
Identifiable assets acquired	$	3,536
Goodwill		3,244
Total purchase price	$	6,780

The following is a summary of identifiable intangible assets acquired and the related expected lives for the finite-lived intangible assets:

Finite-lived assets:

Customer relationships	$	787
Trade names		639
Technology		438
Other intangible assets		119
	$	1,983

Intangible Assets:	**Useful Life**
Customer relationships	5 years
Trade names	5 years
Technology	5 years
Other intangible assets	.5 to 5 years

Assumptions in the Allocations of Purchase Price

The Company prepared the purchase price allocation and in doing so utilized reports of a third-party valuation expert to calculate the fair value of the identifiable intangible assets. Estimates of fair value require management to make significant estimates and assumptions which are preliminary and subject to change upon finalization of the valuation analysis. The goodwill recognized is attributable primarily to the acquired workforce, expected synergies, and other benefits that the Company believes will result from integrating the Smarteq operations with the operations of the Company. Updates to and/or completion of the valuations of certain assets acquired and liabilities assumed may result in changes to the recorded amounts of assets and liabilities, with corresponding adjustments to goodwill amounts in subsequent periods. The Company expects to complete the purchase price allocation within 12 months of the respective acquisition date. The areas that are not yet finalized relate to goodwill and inventory.

The fair value of the customer relationships was determined using the multi-period excess earnings method (“MPEEM”). MPEEM estimates the value of an intangible asset by quantifying the amount of residual (or excess) cash flows generated by the future customer cash flows, and discounting those cash flows to the present value. Future cash flows for customers were estimated based on forecasted revenue and costs, taking into account the growth rates, customer attrition, and contributory charges. The fair value of the customer backlog was calculated using the present value of the cash flows associated with the acquired backlog.

The fair values of the trade names, developed technology, and exclusive rights were determined using the relief-from-royalty method. The relief-from-royalty method is a specific application of the discounted-cash-flow method, which is a form of the income approach. It is based on the principle that ownership of the intangible asset relieves the owner of the need to pay a royalty to another party in exchange for rights to use the asset. Key assumptions to estimate the hypothetical royalty rate include observable royalty rates, which are

royalty rates in negotiated licenses and market-based royalty rates which are royalty rates found in available market data for licenses involving similar assets.

The fair value of covenants not to compete was estimated using the with-or-without method. The with-and-without method estimates the value of an intangible asset by quantifying the loss of economic profits under a hypothetical condition where only the subject intangible does not exist and needs to be re-created. Projected revenues, operating expenses and cash flows are calculated in each "with" and "without" scenario and the difference in the cash flow is discounted to present value.

Inventory was valued at net realizable value. Inventories of $1.3 million include a net positive fair value adjustment of $0.2 million. Finished goods were valued assuming hypothetical revenues adjusted for disposal costs and an adjustment was recorded for the inventory value not expected to be realized. The inventory step-up was calculated based on the net realizable value, on a part-by-part basis, of the inventory on the opening balance sheet. The amortization expense was recorded based on the consumption of those parts. Approximately $0.1 million of the inventory fair value step-up was recognized during the three months ended December 31, 2021 and $0.4 million was recognized during the period from the acquisition date through December 31, 2021.

The Company assumed gross accounts receivable of $1.4 million. Based on Smarteq's bad debt experience and a review of the receivables, the Company does not anticipate an issue with collectability.

The Company assumed liabilities in the acquisition which primarily consist of accounts payable, accrued employee compensation and certain operating liabilities. The fair value of the liabilities assumed are valued at their cash settlement value.

As part of the acquisition of Smarteq on April 30, 2021, the Company assumed an office lease. The office in Kista, Sweden has 4,080 square feet used for engineering, sales, and administration and the lease term is through July 31, 2023. On the acquisition date, the Company recorded $0.2 million for each of the right-of-use assets and the lease liabilities.

The Company assumed Smarteq France's five-year loan of approximately $0.1 million with an interest rate of 0.57%. The loan was part of a program from the French Ministry of Economy and Finance to provide support for French businesses during the COVID-19 pandemic. The loan is denominated in Euros. Payment of the interest and principal on the loan are deferred until June 2022 and the loan term ends in May 2026.

The Company recorded net deferred tax assets of $2.4 million, primarily relating to deferred tax assets for net operating losses. The Company also booked a deferred tax asset for inventory reserves and deferred tax liabilities related to intangible asset amortization that is not deductible for income taxes. The Company booked a full valuation allowance against the net deferred tax assets. While the Company expects book and tax profits in 2021 and future periods, Smarteq has recorded a three-year cumulative tax loss. Based on this objective evidence and uncertainty associated with the COVID-19 pandemic, the Company recorded a full valuation allowance on the opening balance sheet.

Goodwill recorded in connection with the acquisition was $3.2 million. The Company does not expect to deduct any of the acquired goodwill for tax purposes. The Company recorded $0.3 million of transaction costs for the three months ended June 30, 2021 in general and administrative expenses in the statement of operations. The transaction costs will not be deductible for income tax purposes.

Supplemental pro forma financial information

The following unaudited pro forma financial information presents the combined results of operations for each of the periods presented as if the Smarteq acquisition had occurred as of January 1, 2020:

	Years Ended December 31,	
	2021	2020
Net Revenue - pro forma combined	$ 90,525	$ 85,232
Net Income - pro forma combined	805	1,871
Weighted Average Shares:		
Basic	18,017	18,207
Diluted	18,122	18,399
Net Income per Share:		
Basic	$ 0.04	$ 0.10
Diluted	$ 0.04	$ 0.10

The following adjustments were included in the unaudited pro forma combined net revenues:

	Years Ended December 31,	
	2021	2020
Net Revenue	$ 87,807	$ 77,456
Add: Net Revenue - acquired business	2,718	7,776
Net Revenue - pro forma combined	$ 90,525	$ 85,232

The following adjustments were included in the unaudited pro forma combined net income (loss):

	Years Ended December 31,	
	2021	2020
Net Income	$ 153	$ 3,417
Add: Results of operations of acquired business	183	(172)
Less: pro forma adjustments		
Amortization of intangibles	(308)	(417)
Inventory fair value adjustments	493	(484)
Acquisition related expenses	304	(425)
Interest expense	(20)	(48)
Net Income - pro forma combined	$ 805	$ 1,871

The unaudited pro forma financial information has been adjusted to reflect the amortization expense for acquired intangibles, removal of historical intangible asset amortization and recognition of expense associated with the step-up of inventory.

The pro forma data is presented for illustrative purposes only, and the historical results of Smarteq are based on its books and records prior to the acquisition and are not necessarily indicative of the consolidated results of operations of the combined business had the acquisition actually occurred as of January 1, 2020. In addition, future results may vary significantly from the pro forma results reflected herein and should not be relied upon as an indication of the results of future operations of the combined business. The unaudited pro forma financial information does not reflect any operating efficiencies and cost savings that may be realized from the integration of the acquired entity. For the period from acquisition date through December 31, 2021, $6.0 million of revenue and a net loss of $0.1 million was included in the Company's consolidated statements of income related to Smarteq.

4. Goodwill and Other Intangible Assets

Goodwill

The change in the carrying amount of goodwill during the year ended December 31, 2021 is as follows:

	Amount
Balance at December 31, 2020	$ 3,332
Acquisition of Smarteq	3,244
Foreign currency translation	(242)
Balance at December 31, 2021	$ 6,334

The increase in goodwill of $3.0 million resulted from the acquisition of Smarteq in April 2021. The Company performs an annual impairment test of goodwill as of the end of the first month of the fourth fiscal quarter (October 31), or at an interim date if an event occurs or if circumstances change that would indicate that an impairment loss may have been incurred. In performing the annual impairment test, the Company may consider qualitative factors that would indicate possible impairment. A quantitative fair value assessment is also performed at the reporting unit level. If the fair value exceeds the carrying value, then goodwill is not impaired, and no further testing is performed. If the carrying value exceeds the fair value, the implied fair value of goodwill is then compared against the carrying value of goodwill to determine the amount of impairment. In addition to the annual impairment test, the Company is required to regularly assess whether a triggering event has occurred which would require interim impairment testing. The Company considered the current and expected future economic and market conditions and its impact on each of the reporting units. Further, the Company assessed the current market capitalization and financial forecasts. There were no triggering events during the years ended December 31, 2021 and December 31, 2020. The Company will continue to monitor goodwill for impairment going forward.

Intangible Assets

The Company amortized intangible assets with finite lives on a straight-line basis over the estimated useful lives, which ranged from six months to five years.

The summary of amortization expense in the consolidated statements of income is as follows:

	Years Ended December 31,	
	2021	2020
Cost of revenues	$ 57	$ 112
Operating expenses	210	32
Total	$ 267	$ 144

The summary of other intangible assets, net is as follows:

	December 31, 2021			December 31, 2020		
	Cost	Accumulated Amortization	Net Book Value	Cost	Accumulated Amortization	Net Book Value
Customer contracts and relationships	$ 17,609	$ 16,978	$ 631	$ 16,880	$ 16,880	$ 0
Patents and technology	10,049	9,698	351	9,644	9,644	0
Trademarks and trade names	1,563	1,051	512	972	972	0
Other	110	25	85	0	0	0
	$ 29,331	$ 27,752	$ 1,579	$ 27,496	$ 27,496	$ 0

In April 2021, the Company recorded $2.0 million of finite-lived intangible assets for the acquisition of Smarteq, and during the year ended December 31, 2021, the Company recorded amortization expense of $0.3 million and foreign currency translation adjustment of $0.2 million.

The Company amortizes intangible assets with finite lives on a straight-line basis over the estimated useful lives, which range from six months to five years. In the Consolidated Statement of Income, amortization expense was approximately $0.3 million for the year ended December 31, 2021, and $0.1 million for the year ended December 31, 2020. Amortization for technology assets is included in cost of revenues and amortization for all other intangible assets is included in operating expenses. For the years ended December 31, 2021 and 2020, intangible amortization of $0.1 million was included in cost of revenues.

The assigned lives and weighted average amortization periods by intangible asset category are summarized below:

Intangible Assets	Assigned Life	Weighted Average Amortization Period
Customer contracts and relationships	5 years	5.0
Patents and technology	5 years	5.0
Trademarks and trade names	5 years	5.0
Other	.5 to 5 years	3.6

Prior to the acquisition of Smarteq, the Company's intangible assets were fully amortized as of February 2020.

The future amortization expenses are as follows:

Fiscal Year	Amount
2022	$ 374
2023	374
2024	360
2025	353
2026	118
Total	$ 1,579

5. Restructuring

The following table summarizes the Company's restructuring accrual activity for the years ended December 31, 2021, and 2020:

	Severance	Lease Termination	Total
Balance at January 1, 2020	$ 12	$ 33	$ 45
Restructuring expense	124	0	124
Payments made	(136)	(106)	(242)
Payments received	0	88	88
Balance at December 31, 2020	$ 0	$ 15	$ 15
Restructuring expense	900	0	900
Payments made	(532)	(15)	(547)
Payments received	0	0	0
Balance at December 31, 2021	$ 368	$ 0	$ 368

The restructuring liability is recorded on the balance sheet in accrued liabilities at December 31, 2021 and 2020.

China Manufacturing

The Company initiated a restructuring plan in 2019 to transition manufacturing from its Tianjin, China facility to contract manufacturers in China and to the Company's Bloomingdale, Illinois facility due to uncertainties with its Tianjin facility lease and also to optimize the cost structure of the antenna product line and create flexibility in antenna manufacturing. For the year ended December 31, 2021, the Company incurred restructuring expenses of $0.1 million for employee severance and benefits related to the separation of 16 employees. For the year ended December 31, 2020, the Company incurred restructuring expenses of $0.1 million for employee severance and benefits related to the separation of 12 employees. Severance costs were paid from the Company's cash in its China bank accounts. During the first quarter 2022, the Company completed the manufacturing transition and incurred restructuring expense of $0.8 million related to the elimination of 69 positions.

On October 8, 2020, the lease of the premises on which the Company's China manufacturing operations were conducted expired and the renewal was uncertain. The Company was notified that the Chinese Party Central Committee and the State Council were accelerating the layout optimization and transformation of the industrial park in which the Company's leased premises is located and, accordingly, leases and lease extensions for all premises in the industrial park were suspended. As a result of the uncertainty regarding the Tianjin Lease renewal, the Company accelerated its plan to transition all manufacturing in Tianjin to contract manufacturers. The Company completed the manufacturing transition in the first quarter 2022. With the transition complete, the Company will vacate the Tianjin manufacturing facility during the first half of 2022. The Company plans to retain a team of 10-15 employees associated with sourcing, quality, and local customer support at a new leased facility in Tianjin, China. See Note 8 for additional information on the Tianjin lease.

Beijing Restructuring

As a cost saving initiative, the Company separated 14 employees from its Beijing office in November 2021. The terminated positions were primarily related to antenna engineering in addition to office and sales support. The Company incurred restructuring expenses of $0.8 million consisting of employee severance and related employee benefits and for professional fees associated with employee separations. The Company rehired four former Beijing employees through a third-party employment agency to provide sales and engineering support.

6. Income Taxes

The domestic and foreign components of the income (loss) before expense for income taxes were as follows:

	Years Ended December 31, 2021	Years Ended December 31, 2020
Domestic	$ 1,359	$ 4,447
Foreign	(1,167)	(1,001)
	$ 192	$ 3,446

The expense for income taxes consisted of the following:

	Years Ended December 31,	
	2021	2020
Current:		
Federal	$ 0	$ 0
State	33	29
Foreign	6	0
	39	29
Deferred:		
Federal	0	0
State	0	0
Foreign	0	0
	0	0
Total	$ 39	$ 29

A reconciliation of the expense for income taxes at the federal statutory rate compared to the expense at the effective tax rate is as follows:

	Years Ended December 31	
	2021	2020
Statutory federal income tax rate	21%	21%
State income tax, net of federal benefit	56%	7%
Tax effect of permanent differences	56%	1%
Change in valuation allowance	16%	-19%
Effective state rate change to deferred tax assets	8%	0%
Stock-based compensation windfalls	-53%	-1%
Foreign income taxed at different rates	53%	1%
Research and development credits	-134%	-9%
Other	-3%	0%
	20%	1%

The Company recorded net income tax expense of $39 for the year ended December 31, 2021. The 2021 effective rate differed from the Federal rate of 21% primarily because the Company has a full valuation allowance on its deferred tax assets. The Company's valuation allowance is due to the uncertainty regarding the utilization of the deferred tax assets.

The Company recorded net income tax expense of $29 for the year ended December 31, 2020. The 2020 effective tax rate differed from the Federal rate of 21% primarily because the Company had a full valuation allowance on its deferred tax assets.

Under the U.S. tax guidelines, a U.S. shareholder of controlled foreign corporations ("CFCs") is required to include in gross income the amount of its global intangible low-taxed income ("GILTI"). Generally, the GILTI inclusion is the U.S. shareholder's allocable share of certain income earned through its CFCs ("net CFC tested income") in excess of a deemed 10% return on the shareholder's allocable share of certain of the CFC's depreciable, tangible assets less certain interest expense items ("net deemed tangible income return"). The Company elected to treat taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the period cost method). The amount included for GILTI did not have a significant impact on the Company's tax provision for the years ended December 31, 2021 or December 31, 2020.

The Company recognizes all interest and penalties as income tax expense. There was no income tax expense related to interest and penalties for the years ended December 31, 2021 or 2020.

Deferred Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

The net deferred tax accounts consist of the following:

	December 31,	
	2021	2020
Deferred Tax Assets:		
Net operating loss carryforwards	$ 6,874	$ 4,138
Amortization	2,346	2,942
Federal, foreign, and state credits	2,666	2,399
Inventory reserves	1,076	995
Deferred gain	863	866
Deferred rent	476	498
Stock compensation	498	465
Accrued vacation	276	264
Other	417	401
Gross deferred tax assets	15,492	12,968
Valuation allowance	(15,258)	(12,938)
Net deferred tax asset	234	30
Deferred Tax Liabilities:		
Depreciation	(234)	(30)
Net Deferred Tax Assets	$ 0	$ 0

At December 31, 2021, the Company had gross deferred tax assets of $15.5 million, deferred tax liabilities of $0.2 million and a valuation allowance of $15.3 million. At December 31, 2020, the Company had gross deferred tax assets of $13.0 million, deferred tax liabilities of $30, and a valuation allowance of $12.9 million. At December 31, 2021 and 2020 respectively, the deferred tax assets included $2.3 million and $2.9 million related to intangible assets acquired under purchase accounting which are amortized for tax purposes over 15 years, but for shorter periods under generally accepted accounting principles.

The deferred tax assets net of deferred tax liabilities consisted of the following balances by tax jurisdiction:

	December 31,	
	2021	2020
United States	$ 11,941	$ 12,157
China	1,169	781
Sweden	2,148	0
Net Deferred Tax Assets before valuation allowance	$ 15,258	$ 12,938
Valuation Allowance	(15,258)	(12,938)
Net Deferred Tax Assets	$ 0	$ 0

On a regular basis, the Company evaluates the recoverability of deferred tax assets and the need for a valuation allowance. Such evaluations involve the application of significant judgment. The Company considers multiple factors in its evaluation of the need for a valuation allowance. The Company's net deferred tax assets consist of assets related to net operating losses and credits as well as assets related to timing differences. The Company's net operating losses and credits have a finite life primarily based on the 20-year carryforward rule for federal net operating losses (NOLs) generated through December 31, 2017. The timing differences have a ratable reversal pattern over approximately 10 years. Under the new rules enacted with the Tax Act, tax losses incurred in 2018 and future periods will not expire, thereby extending the period by which the Company's deferred tax assets can be realized. However, these post 2017 losses are subject to a limitation of 80% of current taxable income.

In accordance with ASC 740 "Accounting for Income Taxes" ("ASC 740"), the Company evaluates deferred income tax assets quarterly to determine if valuation allowances are required or should be adjusted. ASC 740 requires that companies assess whether valuation allowances should be established against their deferred tax assets based on consideration of all available evidence, both positive and negative, using a "more likely than not" standard. At December 31, 2021 and December 31, 2020, the Company had a full valuation allowance on its deferred tax assets in its three country jurisdictions. For U.S. tax purposes, the Company recorded book income during 2021 but generated a tax loss and its earnings were below its projections. While the Company has recorded pretax book income for the prior three years and believes its financial outlook remains positive, it did not meet expectations in 2021 for revenues or earnings and the recovery from the COVID-19 pandemic has created a high level of uncertainty. Because of difficulties with forecasting financial results historically, and due to the uncertainties associated with the COVID-19 pandemic, the Company maintained a full valuation allowance on its deferred tax assets at December 31, 2021. The Company's performance versus its projections in both of the prior two years are considered significant negative evidence that is difficult to overcome on a "more likely than not" standard through objectively verifiable

data. While the Company believes its financial outlook remains positive, under the accounting standards, objective verifiable evidence will have greater weight than subjective evidence such as the Company's projections for future growth.

Based on an evaluation in accordance with the accounting standards, as of December 31, 2021, the Company has a valuation allowance of $11.9 million which was recorded against the net U.S. deferred tax assets, a valuation allowance of $1.2 million recorded against the net China deferred tax assets, and $2.2 million recorded against the net Sweden deferred tax assets in order to measure the deferred tax assets that are more likely than not to be realized based on the weight of all the available evidence.

Until an appropriate level of profitability is attained, the Company expects to maintain a full valuation allowance on its U.S. net deferred tax assets. Any U.S. or foreign tax benefits or tax expense recorded on its consolidated statement of income will be offset with a corresponding valuation allowance until such time that the Company changes its determination related to the realization of deferred tax assets. In the event that the Company changes its determination as to the amount of deferred tax assets that can be realized, the Company will adjust its valuation allowance with a corresponding impact to the provision for income taxes in the period in which such a determination is made.

The analysis that the Company prepared to determine the valuation allowance required significant judgment and assumptions regarding future market conditions, as well as forecasts for profits, taxable income, and taxable income by jurisdiction. Due to the sensitivity of the analysis, changes to the assumptions in subsequent periods could have a material effect on the valuation allowance.

Accounting for Uncertainty for Income Taxes

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	December 31,	
	2021	2020
Beginning of period	$ 808	$ 759
Addition related to tax positions in current year	40	49
End of period	$ 848	$ 808

Because the Company has a full valuation allowance against its deferred tax assets, the reversal of these unrecognized tax benefits would have no impact on its effective tax rate. The Company does not anticipate that its unrecognized tax benefits will significantly increase or decrease within the next twelve months.

Audits

The Company and its subsidiaries file income tax returns in the U.S. and various foreign jurisdictions. The Company's U.S. federal tax returns remain subject to examination for 2017 and subsequent periods, although loss carryovers generated in prior years remain subject to examination. The Company's state tax returns remain subject to examination for 2015 and subsequent periods. The Company's foreign tax returns in China remain subject to examination for 2011 and subsequent periods.

Summary of Carryforwards

At December 31, 2021, the Company has a federal net operating loss carryforward of $5.3 million that expires between 2031 and 2037 and a Federal net operating loss carryforward of $8.2 million with no expiration. The Company has state net operating loss carryforwards of $15.4 million that expire between 2022 and 2038. Additionally, the Company has $1.8 million of federal research credits that expire between 2030 and 2041 and $1.5 million of state research credits with no expiration. The Company has a China net operating loss carryforward of $2.2 million that expires between 2025 and 2027 and of China research credits of $0.4 million that expire between 2024 and 2027. The Company has a Sweden net operating loss carryforward of $11.8 million with no expiration.

Investment in Foreign Operations

The Company has recorded income tax related to the deemed dividend of earnings for its subsidiary in China. The Company considers such earnings permanently reinvested. Upon repatriation of these earnings, the Company would be subject to local withholding taxes.

CARES Act

On March 27, 2020, the "Coronavirus Aid, Relief and Economic Security Act" (CARES Act) was signed into law. The CARES Act includes provisions relating to refundable payroll tax credits, deferment of the employer portion of certain payroll taxes, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. Under the CARES Act, the Company deferred the employer portion of social security taxes in 2020 and applied for a refund of its Alternative Minimum Tax credit. At December 31, 2021 and 2020, respectively, the Company had deferred payroll taxes of $0.2 and $0.5 million of payroll taxes. The Company recorded

a deferred tax asset for the payroll tax liability that was not deductible for income tax purposes. The remaining payroll taxes will be deferred until December 31, 2022.

7. Commitments and Contingencies

Warranty Reserve and Sales Returns

The Company allows its major distributors and certain other customers to return unused product under specified terms and conditions. The Company accrues for product returns based on historical sales and return trends. The refund liability was $0.2 million and $0.1 million at December 31, 2021 and 2020, respectively, and is included in other accrued liabilities in the accompanying consolidated balance sheets.

The Company offers repair and replacement warranties of primarily five years for antennas and Industrial IoT devices and for scanning receivers. The Company's warranty reserve is based on historical sales and costs of repair and replacement trends. The warranty reserve was $0.3 million at December 31, 2021 and 2020 and is included in other accrued liabilities in the accompanying consolidated balance sheets.

	Year Ended December 31,	
	2021	2020
Beginning balance	$ 285	$ 444
Provisions for warranties	65	44
Consumption of reserves	(93)	(203)
Ending balance	$ 257	$ 285

8. Leases

The Company has operating leases for facilities and finance leases for office equipment. Leases with an initial term of 12 months or less are not recorded on the balance sheet. The Company determines if an arrangement is a lease at inception of a contract. Right of Use ("ROU") assets represent the Company's right to use an underlying asset during the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the lease commencement date based on the net present value of fixed lease payments over the lease term. The Company's lease term is deemed to include options to extend or terminate the lease when it is reasonably certain that it will exercise that option. ROU assets also include any advance lease payments made and exclude lease incentives. As most of the Company's operating leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments on a collateralized basis. Finance lease agreements generally include an interest rate that is used to determine the present value of future lease payments. Operating fixed lease expense and finance lease depreciation expense are recognized on a straight-line basis over the lease term.

The Company's lease cost for the year ended December 31, 2021 and 2020 included the following components:

	Years Ended December 31,	
	2021	2020
Operating lease costs	$ 453	$ 642
Short-term lease costs	167	114
Variable lease costs	6	2
Amortization of finance lease assets	72	77
Interest on finance lease liabilities	7	8
Total lease cost	$ 705	$ 843

The table below summarizes the Company's scheduled future minimum lease payments under operating and finance leases recorded on the balance sheet as of December 31, 2021:

Year	Operating Leases	Finance Leases
2022	$ 630	$ 66
2023	638	44
2024	581	33
2025	501	15
2026	494	6
Thereafter	2,180	0
Total minimum payments required	5,024	164
Less: amount representing interest	949	10
Present value of net minimum lease payments	4,075	154
Less: current maturities of lease obligations	(475)	(62)
Long-term lease obligations	$ 3,600	$ 92

The weighted average remaining lease terms and discount rates for all the Company's operating and finance leases were as follows as of December 31, 2021 and 2020:

	Years Ended December 31,	
	2021	2020
Weighted-average remaining lease term - finance leases	3.0 years	2.9 years
Weighted-average remaining lease term - operating leases	8.4 years	9.6 years
Weighted-average discount rate - finance leases	4%	4%
Weighted-average discount rate - operating leases	5%	5%

The table below presents supplemental balance sheet information related to leases during the year ended December 31, 2021 and 2020:

Leases	Consolidated Balance Sheet Classification	Year Ended December 31, 2021	2020
Assets:			
Operating right-of-use assets	Other noncurrent assets	$ 2,289	$ 2,272
Finance right-of-use assets	Other noncurrent assets	148	157
Total lease assets		$ 2,437	$ 2,429
Liabilities:			
Current			
Operating lease liabilities	Accrued liabilities	$ 475	$ 269
Finance lease liabilities	Accrued liabilities	62	68
Noncurrent			
Operating lease liabilities	Long-term liabilities	3,600	3,949
Finance lease liabilities	Long-term liabilities	92	96
Total lease liabilities		$ 4,229	$ 4,382

In January 2019, the Company entered into an eleven-year lease ending February 28, 2031 for 21,030 square feet of office space in Clarksburg, Maryland for the Company's test & measurement product line. The Company moved the operations for its test & measurement product line from its Germantown, Maryland office in January 2020. The Company recognized a present value ROU asset of $2.1 million in August 2019, which was the lease commencement date for accounting purposes. The present value of the ROU asset on the commencement date reflected 14 months of rent abatement and $1.5 million in tenant improvement incentives in the form of cash reimbursements which the Company fully utilized during 2019 and 2020.

On April 30, 2021, as part of the acquisition of Smarteq, the Company assumed an office lease with a lease term ending July 31, 2023. The office in Kista, Sweden has 4,080 square feet used for engineering, sales, and administration personnel. On the acquisition date, the Company recorded $0.2 million for each of the ROU assets and the lease liabilities.

In June 2021, the Company signed a one-year lease renewal for its engineering design center in Beijing, China. The total lease obligation was approximately $0.1 million. As a cost saving initiative, the Company separated all 14 employees from its Beijing office in November 2021. The Company plans to close this Beijing office in the first quarter 2022. Four former employees in Beijing were rehired through a third-party employment agency and will provide sales and engineering support.

On October 16, 2020, the Wang Zhuang Village Committee issued a notice informing PCTEL Tianjin that the Chinese Party Central Committee and the State Council were accelerating the layout optimization and transformation of the industrial park in which the leased premises is located, and accordingly leases and lease extensions for all premises in the industrial park were suspended. As a result of the uncertainty regarding the Tianjin Lease renewal, the Company accelerated its plan to transition all manufacturing in Tianjin to contract manufacturers. The Company completed the manufacturing transition in the first quarter 2022. With the transition complete, the Company plans to vacate the Tianjin manufacturing facility during the first half of 2022. The Company plans to retain a team of 10-15 employees associated with sourcing, quality, and local customer support at a new leased facility in Tianjin, China. In November 2021, the Company entered into a two-year lease ending December 31, 2023 for 1,694 square feet of office space in Tianjin, China. The Company recognized a present value of the right of use asset of $0.1 million on December 31, 2021.

9. Shareholders' Equity

Common Stock

The activity related to common shares outstanding is as follows:

	Years Ended December 31, 2021	Years Ended December 31, 2020
Beginning of year	18,429,350	18,611,289
Issuance of common stock on exercise of stock options	2,420	19,606
Restricted stock awards, net of cancellations	171,634	202,748
Director share awards	61,186	60,998
Equity awards under Short-Term Incentive Plan	0	189,121
Issuance of common stock from purchase of Employee Stock Purchase Plan shares	164,258	157,706
Cancellation of stock for withholding tax for vested shares	(95,674)	(148,499)
Common stock Repurchases	(495,144)	(663,619)
End of Year	18,238,030	18,429,350

Preferred Stock

The Company is authorized to issue up to 5,000,000 shares of preferred stock in one or more series, each with a par value of $0.001 per share. As of December 31, 2021, and 2020, no shares of preferred stock were issued or outstanding.

10. Stock-Based Compensation

Stock Plans

Common Stock Reserved for Future Issuance

A summary of the reserved shares of common stock for future issuance are as follows:

Stock Plan	December 31, 2021	December 31, 2020
PCTEL, Inc. 2019 Stock Incentive Plan	1,870,260	2,109,184
PCTEL, Inc. 2015 Stock Incentive Plan	299,979	299,979
PCTEL, Inc. 2019 Employee Stock Purchase Plan	1,478,036	1,642,294
Total shares reserved	3,648,275	4,051,457

These shares available exclude stock options outstanding.

Stock Incentive Plans

At the 2019 Annual Meeting of Shareholders, the shareholders adopted and approved the PCTEL, Inc. 2019 Stock Incentive Plan (the "2019 Stock Plan") upon the recommendation of the Board of Directors. The purpose of the 2019 Stock Plan is to promote the interests of the Company and its stockholders by aiding the Company in attracting and retaining employees, officers, consultants, independent contractors, and non-employee directors capable of assuring the future success of the Company, to provide such persons with opportunities for stock ownership in the Company and to offer such persons incentives to put forth maximum effort for the success of the Company's business. The 2019 Stock Plan replaced the PCTEL, Inc. Stock Incentive Plan adopted in 2015 (the "2015 Stock Plan").

The 2019 Stock Plan, which is administered by the Compensation Committee of the Company's Board of Directors, authorizes the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, and other stock-based awards. The aggregate number of shares that may be issued under all stock-based awards made under the 2019 Stock Plan will be the sum of (i) 2,213,000 shares and (ii) any shares subject to any outstanding award under the 2015 Stock Plan that after the effective date of the 2019 Stock Plan are not purchased, are forfeited, or are reacquired by the Company or otherwise not delivered to the participant due to termination or cancellation of such award. At December 31, 2021, the number of shares available in the 2019 Stock Plan that were from the 2015 Plan was 299,979. The Board of Directors may from time to time amend, suspend, or terminate the 2019 Stock Plan, subject to its terms. Currently the 2019 Stock Plan does not allow share "recycling", repricing of stock options or stock appreciation rights or dividend equivalents to be paid on unvested awards. Further, the 2019 Stock Plan does not contain an "evergreen" provision that will automatically increase the number of shares authorized for issuance under the 2019 Stock Plan.

Employee Stock Purchase Plan

The PCTEL, Inc. 2019 Employee Stock Purchase Plan ("the 2019 ESPP") is to provide employees with an opportunity to purchase shares of PCTEL common stock through accumulated payroll deductions. Encouraging employees to acquire equity ownership in PCTEL assures a closer alignment of the interests of participating employees with those of the Company's stockholders. The 2019 ESPP is administered by the Compensation Committee of the Company's Board of Directors. Subject to change by the administrator, shares of PCTEL common stock may be purchased during consecutive offering periods that begin approximately every six months commencing on the first trading day on or after April 1 and terminating on the last trading day of the offering period ending on September 30 and commencing on the first trading day on or after October 1 and terminating on the last trading day of the offering period ending on March 31. Unless and until the administrator determines otherwise, the purchase price will be equal to 85% of the fair market value of PCTEL common stock on the first day of an offering period or the last day of an offering period, whichever is lower. The administrator may from time to time amend, suspend, or terminate the 2019 ESPP, subject to its terms.

Stock-Based Compensation Expense

The consolidated statements of income include $2.9 million and $2.5 million of stock compensation expense for the years ended December 31, 2021 and 2020, respectively. The Company did not capitalize any stock compensation expense during the years ended December 31, 2021, and 2020.

The stock-based compensation expense by type is as follows:

	Years Ended December 31,	
	2021	2020
Service-based awards	$ 1,405	$ 1,803
Director awards	373	402
Performance-based awards (long-term incentive plan)	576	28
Performance-based awards (short-term incentive plan)	300	0
Employee stock purchase plan	267	245
Stock options	0	1
Total	$ 2,921	$ 2,479

The stock-based compensation is reflected in the consolidated statements of income as follows:

	Years Ended December 31,	
	2021	2020
Cost of revenues	$ 268	$ 272
Research and development	543	530
Sales and marketing	658	559
General and administrative	1,452	1,118
Total	$ 2,921	$ 2,479

The following table presents a summary of the remaining unrecognized share-based compensation expense related to our outstanding share-based awards as of December 31, 2021:

Award Type		Remaining Unrecognized Compensation Expense	Weighted Average Life (Years)
Service-based awards	$	1,483	1.4
Performance-based awards	$	1,914	1.9

Service-Based Awards

Restricted Stock

The Company grants service-based restricted shares as employee incentives under the 2019 Stock Plan. When service-based restricted stock is granted to employees, the Company records deferred stock compensation within additional paid-in capital, representing the fair value of the restricted stock on the grant date. The Company records stock compensation expense on a straight-line basis over the vesting period of the applicable service-based restricted shares. During the years ended December 31, 2021 and 2020, the Company awarded executives and key-managers long-term incentives comprised one-third of service-based restricted stock and two-thirds of performance-based restricted stock. The Company awarded service-based restricted stock to all other participating employees. The service-based restricted shares vest in three substantially equal annual increments.

The following table summarizes service-based restricted stock activity:

	Years ended December 31,					
	2021			2020		
Unvested Restricted Stock Awards	Shares		Weighted Average Fair Value	Shares		Weighted Average Fair Value
Beginning of year	432,422	$	6.91	474,771	$	6.11
Shares awarded	170,158		8.04	201,233		7.91
Shares vested	(272,274)		6.58	(239,615)		6.18
Shares cancelled	(3,970)		7.84	(3,967)		6.19
End of year	326,336	$	7.76	432,422	$	6.91

The intrinsic values of service-based restricted shares that vested were $2.2 million and $1.9 million during the years ended December 31, 2021, and 2020, respectively.

Restricted Stock Units

The Company grants service-based restricted stock units as employee incentives. Restricted stock units are primarily granted to foreign employees for long-term incentive purposes. Employee restricted stock units are service-based awards and are amortized over the vesting period. At the vesting date, these units are converted to shares of common stock. The Company records expense on a straight-line basis for restricted stock units.

The following summarizes the service-based restricted stock unit activity:

	Years Ended December 31,					
	2021			2020		
Unvested Restricted Stock Units	Shares		Weighted Average Fair Value	Shares		Weighted Average Fair Value
Beginning of year	9,083	$	7.02	8,117	$	5.83
Units awarded	17,800		7.11	6,448		7.48
Units vested/Shares awarded	(5,446)		6.47	(5,482)		5.80
End of year	21,437	$	7.23	9,083	$	7.02

The intrinsic values of service-based restricted stock units that vested were $42 and $44, during the years ended December 31, 2021, and 2020, respectively.

Stock Options

The Company may grant stock options to purchase common stock to employees, but generally issues stock options only to new employees. The Company issues stock options with exercise prices no less than the fair value of the Company's stock on the grant date. Employee options are subject to installment vesting and although the vesting may vary from year to year, it is typically over a period of three years. Stock options may be exercised at any time prior to their expiration date or within 180 days of termination of employment, or such shorter time as may be provided in the related stock option agreement. The Company grants stock options with a ten-year life.

The following table summarizes the Company's stock option activity:

	Years Ended December 31,			
	2021		2020	
	Options Outstanding	Weighted Average Exercise Price	Options Outstanding	Weighted Average Exercise Price
Beginning of Year	16,250	$ 6.54	150,246	$ 7.11
Options exercised	(6,000)	5.48	(61,767)	7.13
Options forfeited	0	0	(188)	5.00
Options cancelled/expired	(6,250)	7.89	(72,041)	7.23
End of Year	4,000	$ 6.02	16,250	$ 6.54
Exercisable	3,916	$ 6.00	15,620	$ 6.52

The Company did not grant any stock options during 2021 or 2020. During the year ended December 31, 2021, the Company received proceeds of $8 and issued 1,420 shares for the exercise of 6,000 options. The intrinsic value of the options exercised was $53.

During the year ended December 31, 2020, the Company received proceeds of $0.1 million from the exercise of 9,412 options and issued 10,194 shares for the exercise of 52,355 options. The intrinsic value of the options exercised was $0.1 million.

The following table summarizes information about stock options outstanding under all stock option plans:

	Options Outstanding				Options Exercisable			
Range of Exercise Prices	Number Outstanding	Weighted Average Contractual Life (Years)	Intrinsic Value	Weighted-Average Exercise Price	Number Exercisable	Weighted Average Contractual Life (Years)	Intrinsic Value	Weighted Average Exercise Price
$ 5.06 - $ 6.98	4,000	2.42	$ 1	$ 6.02	3,916	2.40	$ 1	$ 6.00

The weighted average contractual life and intrinsic value on December 31, 2021, was the following:

	Weighted Average Contractual Life (years)	Intrinsic Value
Options Outstanding	2.42	$ 1
Options Exercisable	2.40	$ 1

The intrinsic value is based on the share price of $5.67 at December 31, 2021.

For the outstanding stock options, the Company used the Black-Scholes option valuation model for estimating the fair value. The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. Option valuation models require the input of highly subjective assumptions including the expected stock price volatility and expected option life as well a risk-free rate and the dividend yield. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, the existing models may not necessarily provide a reliable single measure of the fair value of the employee stock options.

The dividend yield rate was calculated by dividing the Company's annual dividend by the closing price on the grant date. The risk-free interest rate was based on the U.S. Treasury yields with a remaining term that approximates the expected life of the options granted. The Company calculated the volatility based on a five-year historical period of the Company's stock price. The expected life used for options granted was based on historical data of employee exercise performance. The Company records expense based on the grading vesting method.

Performance-Based Awards

Short-Term Incentive Plan

Incentive compensation earned by executives and key managers under the Company's 2021 Short-Term Incentive Plan ("STIP") was to be settled 50% in cash and 50% in shares of the Company's stock payment of which generally is earned based on revenues and adjusted EBITDA targets. For the year ended December 31, 2021, the Company's board of directors approved bonuses of $0.3 million payable in the Company's stock to executive and key managers. The shares related to the 2021 bonus were issued to executives and key managers during the first quarter 2022.

Long-Term Incentive Plan

The Company grants performance-based awards to executives and key managers under its Long-Term Incentive Plan ("LTIP") to encourage sustainable growth, consistent earnings, and management retention. Based on the fair value of the shares on the grant date, the Company records stock compensation expense over the performance period based on the estimated achievement of the award.

The following table summarizes the performance award activity:

	Years Ended December 31,			
	2021		2020	
Unvested Performance Awards - at Target	Awards	Weighted Average Fair Value	Awards	Weighted Average Fair Value
Beginning of Year	316,726	$ 6.84	171,437	$ 5.27
Awards granted	187,864	8.15	145,289	8.70
Awards cancelled	(171,437)	5.27	0	0.00
End of Year	333,153	$ 8.39	316,726	$ 6.84

The Company granted performance awards to executives and key managers under the 2021 LTIP in February 2021. The performance period for the 2021 LTIP is from January 1, 2021 through December 21, 2023. At target, the total fair market value of the award was $1.5 million based on a weighted average share price of $8.15. On the award date, the aggregate number of shares that could be earned at target was 187,864 and the maximum number of aggregate shares that could be earned was 328,762.

Under the 2021 LTIP and similar plans from 2019 and 2020, shares of the Company's stock can be earned based on achievement of a three-year revenue growth target with a penalty if a certain adjusted EBITDA level is not maintained. If the Company achieves less than the target growth over the performance period, the participant will receive fewer shares than the target award, determined on a straight-line basis. If the Company achieves greater than the target growth, the participant will receive more shares than the target award on an accelerated basis. Participants are required to be in service at the determination date of the award following the end of the performance period in order to receive the award. Shares earned will be fully vested shares. The Company records stock compensation expense over the performance periods based on the Company's estimate of the aggregate number of shares that will be earned under the incentive plans.

Since the Company did not meet its three-year revenue target for the 2019 LTIP, no awards were granted and the remaining awards at target of 171,437 were cancelled.

The following table summarizes the active performance-based long-term incentive plans at December 31, 2021:

		Number of Shares That Could Be Earned:		
LTIP award	Share Price on Grant Date	Target	Maximum	Performance Period
2020 LTIP	$ 8.70	145,289	254,256	January 1, 2020 through December 31, 2022
2021 LTIP	$ 8.15	187,864	328,762	January 1, 2021 through December 31, 2023
		333,153	583,018	

Employee Stock Purchase Plan

The following table summarizes the ESPP activity:

	Years Ended December 31,			
	2021		2020	
	Shares	Weighted Average Fair Value at Grant Date	Shares	Weighted Average Fair Value at Grant Date
Outstanding, beginning of year	0	$ 0.00	0	$ 0.00
Granted	164,258	1.62	157,706	1.68
Vested	(164,258)	1.62	(157,706)	1.68
Outstanding, end of year	0	$ 0.00	0	$ 0.00

Based on the 15% discount and the fair value of the option feature of this plan, the ESPP is considered compensatory. Compensation expense is calculated using the fair value of the employees' purchase rights under the Black-Scholes model. During the years ended December 31, 2021 and 2020, the Company received proceeds of $0.8 million and $0.9 million from the ESPP, respectively.

The Company calculated the fair value of each employee stock purchase grant under the ESPP on the date of grant using the Black-Scholes option-pricing model using the following assumptions:

	Employee Stock Purchase Plan	
	2021	2020
Dividend yield	3.1%	4.1%
Risk-free interest rate	0.1%	0.1%
Expected volatility	48%	44%
Expected life (in years)	0.5	0.5

The dividend yield rate was calculated by dividing the Company's annual dividend by the closing price on the grant date. The risk-free interest rate was based on the U.S. Treasury yields with remaining term that approximates the expected life of the options granted. The Company calculated the volatility based on a five-year historical period of the Company's stock price. The expected life used was based on the offering period.

Board of Director Awards

The Company grants equity awards to members of its Board of Directors for an annual retainer and for committee service in shares of the Company's stock. In addition, new directors receive a one-time grant of $55 paid in service-based restricted shares which vest in equal annual increments over three years. In February 2021, 2,416 service-based shares vested related to new director grants, with a fair value of $20. In May 2021, the Company issued 61,186 shares of the Company's stock, of which 49,652 with a fair value of $0.3 million vested immediately upon issuance, with the remainder vesting one year after issuance. During the year ended December 31, 2020, the Company issued 60,998 shares of the Company's stock with a fair value of $0.4 million which vested immediately.

The following table summarizes the director awards activity:

	Years Ended December 31,			
	2021		2020	
	Shares	Weighted Average Fair Value at Grant Date	Shares	Weighted Average Fair Value at Grant Date
Outstanding, beginning of year	2,416	$ 6.90	4,831	$ 6.90
Granted	61,186	6.57	60,998	6.59
Vested	(52,068)	(6.65)	(63,413)	(6.60)
Outstanding, end of year	11,534	$ 6.57	2,416	$ 6.90

Employee Withholding Taxes on Stock Awards

For ease in administering the issuance of stock awards, the Company holds back shares of vested restricted stock awards and short-term incentive plan stock awards, if paid in the Company's stock, for the value of the statutory withholding taxes. For each individual receiving a stock award, the Company redeems the shares it computes as the value for the withholding tax and remits this amount to the

appropriate tax authority. For withholding taxes related to stock awards, the Company paid $0.8 million and $1.1 million during the years ended December 31, 2021 and December 31, 2020, respectively.

Share Repurchases

On November 6, 2019, the Board of Directors approved a share repurchase program, and on March 10, 2020 the Board of Directors reauthorized the program pursuant to which the Company was authorized to repurchase up to $7.0 million of its common stock through the end of 2020 (“2019 Repurchase Plan”). The Company spent $2.0 million to repurchase 375,046 shares at an average price of $5.36 during the three months ended March 31, 2020. The Company retired the repurchased shares. Due to uncertainties related to the COVID-19 pandemic and to protect the Company’s cash position, on April 1, 2020 the Board of Directors approved the termination of the 2019 Repurchase Plan.

On November 4, 2020, the Board of Directors approved a new share repurchase program, pursuant to which the Company was authorized to repurchase $5.0 million of its common stock through the end of 2021 (“2020 Repurchase Plan”). The 2020 Repurchase Plan became effective November 10, 2020 and was completed in September 2021. The Company spent $1.8 million to repurchase 288,573 shares at an average price of $6.30 during the three months ended December 31, 2020 and spent $3.2 million during the nine months ended September 30, 2021 to repurchase 495,144 shares at an average price of $6.45. The Company retired all repurchased shares.

Authorized Shares

On May 29, 2020, the Company filed a Certificate of Amendment to its Amended and Restated Certificate of Incorporation (i) changing the Company’s name from “PC-Tel, Inc.” to “PCTEL, Inc.” and (ii) decreasing the number of authorized shares of common stock from 100,000,000 shares to 50,000,000 shares.

11. Product Line, Customer and Geographic Information

Product Line Information:

The following tables are the product line revenues and gross profits for the years ended December 31, 2021, and 2020:

	Year Ended December 31, 2021			
	Antennas and Industrial IoT Devices	Test & Measurement Products	Corporate	Total
Revenues	$ 63,025	$ 25,704	$ (922)	$ 87,807
Gross Profit	$ 21,031	$ 19,592	$ (145)	$ 40,478
Gross Profit %	33.4%	76.2%	NA	46.1%

	Year Ended December 31, 2020			
	Antennas and Industrial IoT Devices	Test & Measurement Products	Corporate	Total
Revenues	$ 50,540	$ 27,565	$ (649)	$ 77,456
Gross Profit	$ 17,665	$ 20,244	$ 18	$ 37,927
Gross Profit %	35.0%	73.4%	NA	49.0%

Customer Concentration:

One customer accounted for 10% or more of revenues during the year ended December 31, 2021, and no customer accounted for more than 10% or more of revenues during the year ended 2020.

	Years Ended December 31,	
Revenues	**2021**	**2020**
Customer A	10%	8%

The following table represents the two customers that accounted for 10% or more of total trade accounts receivable on December 31, 2020. As of December 31, 2021, no customer accounted for more than 10% of accounts receivables.

Trade Accounts Receivable	As of December 31, 2021	2020
Customer A	5%	31%
Customer B	4%	10%

Geographic Information:

The Company's revenue to customers by geographic location, as a percent of total revenues, is as follows:

Region	Years Ended December 31, 2021	2020
Europe, Middle East, & Africa	23%	17%
Asia Pacific	8%	8%
Other Americas	4%	3%
Total Foreign sales	35%	28%
Total Domestic sales	65%	72%
	100%	100%

The long-lived assets by geographic region are as follows:

	December 31, 2021	2020
United States	$ 17,070	$ 22,439
Sweden	4,897	0
China	333	479
	$ 22,300	$ 22,918

12. Benefit Plans

The Company's 401(k) plan covers all of the U.S. employees beginning the first of the month following the first month of their employment. Under this plan, employees may elect to contribute up to 15% of their current compensation to the 401(k) plan up to the statutorily prescribed annual limit. The Company matches 100% of the employee's elective deferrals up to 4% of their compensation. The Company may make discretionary contributions to the 401(k) plan but there were no discretionary contributions during the years ended December 31, 2021 or 2020. The Company also contributes to various defined contribution retirement plans for foreign employees. Contributions for foreign employees increased for the year ended December 31, 2021 because employer contributions to Chinese government sponsored retirement programs were suspended during 2020 due to the COVID-19 pandemic and because contributions for Smarteq employees commenced in 2021.

The Company's contributions to retirement plans were as follows:

	Years ended December 31, 2021	2020
PCTEL, Inc. 401(k) profit sharing plan - US employees	$ 725	$ 729
Defined contribution plans - China foreign employees	303	43
Defined contribution plans - Sweden foreign employees	101	0
Defined contribution plans - Other foreign employees	27	28
Total	$ 1,156	$ 800

13. Accumulated Other Comprehensive Income

Accumulated other comprehensive loss of $360 at December 31, 2021 and accumulated other comprehensive income of $18 at December 31, 2020, consists of foreign currency translation adjustments.

14. Revenue from Contracts with Customers

Under Topic 606, a contract with a customer is an agreement which both parties have approved, that creates enforceable rights and obligations, has commercial substance, and has identified payment terms, and for which collectability is probable. Once the Company has entered into a contract, it is evaluated to identify performance obligations. For each performance obligation, revenue is recognized as control of promised goods or services transfers to the customer in an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. The amount of revenue recognized takes into account variable consideration, such as returns and volume rebates. A majority of the Company's revenue is short cycle in nature with shipments within one year from purchase order. The Company's payment terms generally range between 30 to 90 days.

All of the Company's revenue relates to contracts with customers. The Company's accounting contracts are from purchase orders or purchase orders combined with purchase agreements. The majority of the Company's revenue is recognized on a "point-in-time" basis and a nominal amount of revenue is recognized "over time". For the sale of products, the Company satisfies its performance obligations generally at the time of shipment, or upon delivery based on the contractual terms with its customers. For products shipped on consignment, the Company recognizes revenue upon delivery from the consignment location. For its test & measurement software tools, the Company has a performance obligation to provide software maintenance and support for one year. The Company recognizes revenues for the maintenance and support over this period.

The Company considers shipping and handling performed by the Company as fulfillment activities. Amounts billed for shipping and handling are included in revenues, while costs incurred for shipping and handling are included in cost of revenues. The Company excludes taxes from the transaction price. Cost of contracts include sales commissions. The Company expenses the cost of contracts when incurred because the amortization period is one year or less.

For the test & measurement product line, performance obligations for the sale of products and software licenses are satisfied at a point in time and the performance obligations for post contract support ("PCS"), extended warranties, and data storage are satisfied over time. If there is no standalone selling price for the performance obligations satisfied over time, the Company uses a market assessment approach for the standalone selling price. This standalone selling price is consistent for all customers.

Antenna product line sales have either contract pricing or negotiated prices on individual purchase orders. Variable consideration related to specific customers or orders that impacts the stand-alone selling price includes right of return, rebate incentives, or quantity-based pricing. The Company allows its major distributors and certain other customers to return unused antennas under specified terms and conditions. The Company estimates product returns based on historical sales and return trends and records a corresponding refund liability. The refund liability was $0.2 million and $0.1 million at December 31, 2021 and December 31, 2020, respectively, and is included within accrued liabilities on the accompanying consolidated balance sheets. Additionally, the Company recorded an asset based on historical experience for the amount of product expected to be returned to inventory as a result of the return, which is recorded in inventories in the consolidated balance sheets. The product return asset was $0.1 million at December 31, 2021 and December 31, 2020.

There were no contract assets at December 31, 2021 or December 31, 2020. The Company records contract liabilities for deferred revenue and customer prepayments. Contract liabilities are recorded in accrued liabilities and long-term liabilities in the consolidated balance sheets. The contract liability was $0.9 million and $0.4 million at December 31, 2021 and at December 31, 2020, respectively. The Company recognized revenue of $1.1 million and $0.8 million during the years ended December 31, 2021, and December 31, 2020 respectively, related to contract liabilities at the beginning of the period.

15. Paycheck Protection Program Loan

On April 16, 2020, the Company received a $3.5 million paycheck protection program ("PPP") loan from the Small Business Administration. Based upon subsequent guidance regarding PPP loan eligibility, the Company returned the funds on April 30, 2020.

16. Subsequent Events

The Company evaluates subsequent events occurring between the most recent balance sheet date and the date that the financial statements are available to be issued in order to determine whether the subsequent events are to be recorded and/or disclosed in the Company's financial statements and footnotes. The financial statements are considered to be available to be issued at the time that they are filed with the SEC.

Other than the event described below, there were no subsequent events or transactions that required recognition or disclosure in the unaudited interim consolidated financial statements.

During the first quarter 2022, the Company completed the transition of manufacturing from its Tianjin manufacturing facility to contract manufacturers. The Company terminated 69 positions from the Tianjin facility and incurred restructuring expense of $0.8 million related to employee severance and related benefits.

Item 9: Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A: Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Our management evaluated, with the participation of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures as defined by Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures are effective to ensure that information we are required to disclose in our reports that we file or submit under Securities Exchange Act of 1934 as amended, (i) is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. Our internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officers, or persons performing similar functions, and effected by our board of directors, management, and other personnel, 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 (GAAP) and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of PCTEL;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of PCTEL are being made only in accordance with authorizations of management and directors of PCTEL; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of PCTEL's assets that could have a material effect on the financial statements.

Our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In making its assessment of internal control over financial reporting, management used the criteria described in "*2013 Internal Control – Integrated Framework*" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Based on our management's assessment of internal control over financial reporting, management has concluded that, as of December 31, 2021, our internal control over financial reporting was effective to provide assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

As permitted by SEC guidance, the scope of management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2021 excluded Smarteq Wireless AB ("Smarteq"), which was acquired in 2021. Smarteq's total assets and net revenue represented approximately 11% and 7%, respectively, of the consolidated total assets and net revenue of PCTEL, Inc. as of and for the year ended December 31, 2021.

Grant Thornton LLP, our independent registered public accounting firm, has audited and issued their report on our internal control over reporting, which is included herein.

(c) Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B: Other Information

None.

Item 9C: Disclosures Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10: Directors, Executive Officers and Corporate Governance

The information required by this Item 10 will be included in PCTEL's proxy statement for the 2022 Annual Meeting of Stockholders under the captions "Proposal #1 Election of Directors," "Information About Our Executive Officers," and "Corporate Governance" is incorporated by reference herein. The proxy statement will be filed with the SEC pursuant to Rule 14a-6 under the Exchange Act in accordance with applicable SEC deadlines and is incorporated in this Item 10 by reference.

Item 11: Executive Compensation

The information required by this Item 11 will be included in PCTEL's proxy statement for the 2022 Annual Meeting of Stockholders under the captions "Executive Compensation and Other Matters," and "Compensation of Directors," and is incorporated by reference herein.

Item 12: Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item 12 will be included in PCTEL's proxy statement for the 2022 Annual Meeting of Stockholders under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Executive Compensation and Other Matters-Equity Plans and Awards" and is incorporated by reference herein.

Item 13: Certain Relationships and Related Transactions, and Director Independence

The information required by this Item 13 will be included in PCTEL's proxy statement for the 2022 Annual Meeting of Stockholders under the caption "Corporate Governance" and is incorporated by reference herein.

Item 14: Principal Accountant Fees and Services

The information required by this Item 14 will be included in PCTEL's proxy statement for the 2022 Annual Meeting of Stockholders under the captions "Summary of Fees" of Proposal #3 and "Pre-Approval of Independent Auditor Services and Fees" and is incorporated by reference herein.

PART IV

Item 15: Exhibits and Financial Statement Schedules

(a) (1) Financial Statements

The Report of Independent Registered Public Accounting Firm is included on page 24-26 of the Form 10-k. The Consolidated Financial Statements are included in Part II, Item 8 of this Annual Report on Form 10-K on pages 27 to 31.

(a) (2) Financial Statement Schedules

The following financial statement schedule is filed as a part of this Report under Schedule II immediately preceding the signature page: Schedule II — Valuation and Qualifying Accounts for the two fiscal years ended December 31, 2021.

PCTEL, INC.
SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS
(in thousands)

	Balance at Beginning of Year	Charged to Costs and Expenses	Additions (Deductions)	Balance at End of Year
Year Ended December 31, 2020:				
Allowance for doubtful accounts	$ 104	161	(152)	$ 113
Warranty reserves	$ 444	(203)	44	$ 285
Deferred tax asset valuation allowance	$ 13,490	0	(552)	$ 12,938
Year Ended December 31, 2021:				
Allowance for doubtful accounts	$ 113	0	(49)	$ 64
Warranty reserves	$ 285	(95)	67	$ 257
Deferred tax asset valuation allowance	$ 12,938	0	2,320	$ 15,258

All other schedules called for by Form 10-K are omitted because they are inapplicable, or the required information is shown in the financial statements, or notes thereto, included herein.

(a) (3) Exhibits (numbered in accordance with Item 601 of Regulation S-K)

The exhibits listed below are filed or incorporated by reference as part of this Annual Report on Form 10-K. We will furnish at no cost a copy of any exhibit filed with or incorporated by reference into this Annual Report on Form 10-K. Oral or written requests for copies of any exhibits should be directed to us, with attention to Company Secretary.

Exhibit No.		Description	Reference
3.1		Amended and Restated Certificate of Incorporation of PCTEL, Inc. (P)	Incorporated by reference to Exhibit Number 3.2 filed with the Registrant's Registration Statement on Form S-1 (File No. 333-84707).
3.2		Certificate of Amendment to Amended and Restated Certificate of Incorporation of PCTEL, Inc.	Incorporated by reference to Exhibit Number 3.1 filed with the Registrant's Current Report on Form 8-K on June 4, 2020.
3.3		Amended and Restated Bylaws of the Registrant	Incorporated by reference to Exhibit Number 3.2 filed with the Registrant’s Annual Report on Form 10-K for fiscal year ended December 31, 2019
4.1		Specimen common stock certificate (P)	Incorporated by reference to Exhibit Number 4.1 filed with the Registrant's Registration Statement on Form S-1 (File No. 333-84707).
4.2		Description of Securities	Incorporated by reference to Exhibit Number 4.2 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2020.
10.1	*	Form of Indemnification Agreement between PCTEL, Inc. and each of its directors and officers (P)	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Registration Statement on Form S-1 (File No. 333-84707).
10.1.1	*	Form of Indemnification Agreement between PCTEL, Inc. and each of its directors and officers, as amended and restated August 5, 2020. (P)	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020.
10.2	*	Form of Severance Benefits Letter	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021.
10.3	*	Employee Stock Purchase Plan, as amended and restated June 10, 2014	Incorporated by reference from Appendix A to the Registrant's Definitive Proxy Statement on Schedule 14A filed April 30, 2014.
10.4	*	PCTEL, Inc., Stock Plan, as amended and restated June 30, 2015	Incorporated by reference From Appendix A to the Registrant’s Definitive Proxy Statement on Schedule 14A filed on April 30, 2015.
10.5	*	Employment Agreement dated December 5, 2016 between PCTEL, Inc. and David A. Neumann	Incorporated by reference to Exhibit Number 10.15 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2016.
10.6	*	Amended and Restated Management Retention Agreement dated April 9, 2013 between PCTEL, Inc. and David A. Neumann	Incorporated by reference to Exhibit Number 10.16 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2016.
10.6.1	*	First Amendment to Amended and Restated Management Retention Agreement dated December 13, 2016 between PCTEL, Inc. and David A. Neumann	Incorporated by reference to Exhibit Number 10.16.1 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2016.
10.6.2	*	Form of Management Retention Agreement dated May 6, 2020 between PCTEL, Inc. and David A. Neumann superseding the Amended and Restated Retention Agreement Dated April 9, 2013, as amended.	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.
10.7	*	Form of Management Retention Agreement	Incorporated by reference to Exhibit Number 10.9 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018

Exhibit No.		Description	Reference
10.7.1	*	Form of Management Retention Agreement dated May 6, 2020 for Section 16 Officers.	Incorporated by reference to Exhibit Number 10.2 filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020
10.8	*	FY 2019 Amended and Restated Sales Compensation Plan dated March 15, 2019 between PCTEL, Inc. and Arnt Arvik	Incorporated by reference to Exhibit Number 10.12 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018
10.9	*	PCTEL, Inc. Long-Term Incentive Award Agreement dated February 6, 2019	Incorporated by reference to Exhibit Number 10.13 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018
10.10		Lease Agreement between FP Gateway 270, LLC (Landlord) and PCTEL, Inc. (Tenant) \	Incorporated by reference to Exhibit Number 10.14 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2018
10.11	*	PCTEL, Inc. 2019 Stock Incentive Plan	Incorporated by reference from Appendix A to the registrants Definitive Proxy Statement on Schedule 14A Filed April 16, 2019.
10.12	*	PCTEL, Inc. 2019 Employee Stock Purchase Plan	Incorporated by reference from Appendix B to the registrants Definitive Proxy Statement on Schedule 14A Filed April 16, 2019.
10.13	*	PCTEL, Inc. Long-Term Incentive Award Agreement dated February 5, 2020	Incorporated by reference to Exhibit Number 10.14 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2019
10.14	*	PCTEL, Inc. Long-Term Incentive Award Agreement (RSUs) dated February 5, 2020	Incorporated by reference to Exhibit Number 10.15 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2019
10.15	*	Sales Compensation Plan dated January 22, 2021 between PCTEL, Inc. and Arnt Arvik	Incorporated by reference to Exhibit Number 10.15 filed with the Registrant's Annual Report on Form 10-K for fiscal year ended December 31, 2020.
10.16	*	First Amendment to the Sales Compensation Plan dated September 1, 2021 between PCTEL, Inc. and Arnt Arvik	Incorporated by reference to Exhibit Number 10.1 filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2021.
21		List of significant subsidiaries	Filed Herewith
23		Consent of Grant Thornton LLP	Filed Herewith
24		Power of Attorney	Included on Signature page of this Annual Report on Form-10K
31.1		Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15(d)-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002	Filed Herewith
31.2		Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15(d)-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002	Filed Herewith

Exhibit No.	Description	Reference
32	Certifications of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of Sarbanes-Oxley Act of 2002.	Filed Herewith
101.INS	Inline XBRL Instance Document	Filed Herewith
101.SCH	Inline XBRL Taxonomy Extension Schema	Filed Herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase	Filed Herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase	Filed Herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase	Filed Herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase	Filed Herewith
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).	Filed Herewith

* Management contract or compensatory plan or arrangement required to be filed as an Exhibit hereto.
(P) Paper Filing

Item 16: Form 10-K Summary

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized:

PCTEL, Inc.
A Delaware corporation

/s/ DAVID A. NEUMANN
David A. Neumann

Chief Executive Officer
Dated: March 15, 2022

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David A. Neumann and Kevin McGowan, jointly and severally his or her attorneys-in-fact, each with power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or their substitute or substitutes, may do or cause to be done by virtue hereof.

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.

Signature	Title	Date
/s/ DAVID A. NEUMANN (David A. Neumann)	Chief Executive Officer	March 15, 2022
/s/ KEVIN MCGOWAN (Kevin McGowan)	Chief Financial Officer (Principal Financial and Accounting Officer)	March 15, 2022
/s/ CINDY K. ANDREOTTI (Cindy K. Andreotti)	Director	March 15, 2022
/s/ GINA HASPILAIRE (Gina Haspilaire)	Director	March 15, 2022
/s/ CYNTHIA KEITH (Cynthia Keith)	Director	March 15, 2022
/s/ STEVEN D. LEVY (Steven D. Levy)	Director	March 15, 2022
/s/ GIACOMO MARINI (Giacomo Marini)	Director	March 15, 2022
/s/ M. JAY SINDER (M. Jay Sinder)	Director	March 15, 2022

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CORPORATE INFORMATION

BOARD OF DIRECTORS
David A. Neumann
Chief Executive Officer
PCTEL, Inc.

Cindy K. Andreotti
President and CEO
The Andreotti Group

Gina Haspilaire
Vice President – Open Connect
Netflix, Inc.

Cynthia A. Keith
Retired Partner
PricewaterhouseCoopers, LLP

Steven D. Levy
Chairman of the Board, PCTEL, Inc.
Retired Lehman Brothers Executive

Giacomo Marini
Chairman
Noventi LLC

M. Jay Sinder
Chief Financial Officer
Jellyvision Labs, Inc.

ELECTED OFFICERS
David A. Neumann
Chief Executive Officer

Arnt Arvik
Vice President and Chief Sales Officer

Shelley J. Bacastow
Senior Vice President, Chief Legal Officer and
Company Secretary

Rishi Bharadwaj
Senior Vice President and Chief Operating Officer

Suzanne Cafferty
Vice President Product Management
& Global Marketing

Kevin McGowan
Vice President and Chief Financial Officer

Sumeet Paul
Vice President and Chief Information Officer

Les W. Sgnilek
Vice President Corporate Resources and
Chief Risk Officer

TRANSFER AGENT
EQ Shareholder Services
1110 Centre Pointe Curve, Suite 101
Mendota Heights, MN 55120
Tel: 1.800.468.9716

INDEPENDENT PUBLIC ACCOUNTANTS
Grant Thornton LLP
Chicago, IL

ANNUAL MEETING
The Annual Meeting of Stockholders will be
held in person and virtually via the internet
Date: Wednesday May 25, 2022
Time: 11:00 am Central Time
In person: 471 Brighton Drive
Bloomingdale, IL 60108 U.S.A.
Virtually:
www.virtualshareholdermeeting.com/PCTI2022

INVESTOR RELATIONS
Attention: Company Secretary
company.secretary@pctel.com

GLOBAL HEADQUARTERS
471 Brighton Drive
Bloomingdale, IL 60108 U.S.A.
Tel: 1.630.372.6800
Fax: 1.630.233.8076

OTHER OFFICES
22600 Gateway Center Drive, Suite 100
Clarksburg, MD 20871 U.S.A.
Tel: 1.301.515.0036
Fax: 1.301.515.0037

787 White Pond Drive, Suite A
Akron, OH 44320
Tel: 1.630.372.6800

SUBSIDIARIES
PCTEL (Tianjin) Wireless
Telecommunications Products Co., Ltd.
286 AnShanXi Road
NanKai District
Tianjin China PR China

Smarteq Wireless AB
Reg. No. 556128-5437
Kronborgsgränd 7
SE-164 46, Kista, Sweden
Tel: 46.8.792.92.00