CUI Global, Inc.
Form 10-K
March 14, 2018
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

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 0-29923

CUI Global, Inc.

(Exact name of registrant as specified in its charter)

Colorado	(3670)	84-1463284
(State or jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

20050 SW 112th Avenue

Tualatin, Oregon 97062

(503) 612-2300

(Address and Telephone Number of Principal Executive Offices and Principal Place of Business)

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

Title of each class	Name of each exchange where registered
Common Stock par value $0.001 per share	The NASDAQ Stock Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if 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 check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting 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 (Do not check if a smaller reporting company)

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 is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates, based on the closing price of our common stock on the last business day of the registrant's most recently completed fiscal second quarter (June 30, 2017), was approximately $61,769,100. Shares of common stock beneficially held by each executive officer and director as well as 5% holders as of June 30, 2017 have been excluded from this computation because these persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for any other purpose.

As of March 14, 2018, the registrant had 28,485,898 shares of common stock outstanding and no shares of Preferred Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

PART I

Item 1. Business

Corporate Overview and Our Products

CUI Global, Inc. and Subsidiaries is collectively referred to as ‘‘CUI Global’’ or “The Company.” CUI Global, Inc. is a Colorado corporation organized on April 21, 1998. CUI Global, Inc.'s principal place of business is located at 20050 SW 112th Avenue, Tualatin, Oregon 97062, phone (503) 612-2300. The Company is a platform company dedicated to maximizing shareholder value through the acquisition, development and commercialization of new, innovative technologies. The Company's operations fall into two reportable segments: Power and Electromechanical segment and Energy segment. In addition, the Company’s corporate overhead activities are included in an ‘‘Other’’ category. CUI Global, Inc. has subsidiaries in 4 countries, including the United States. Through its subsidiaries, CUI Global, Inc. has built a diversified portfolio of industry leading technologies that touch many markets.

Power and Electromechanical Segment

CUI Inc., CUI Japan, and CUI-Canada - Subsidiaries

CUI Inc., is based in Tualatin, Oregon, CUI Japan is based in Tokyo, Japan and CUI-Canada, acquired in March 2015, is based in Toronto, Canada (collectively referred to as "CUI"). These three subsidiaries are providers of electronic components including power supplies, transformers, converters, connectors and industrial controls for Original Equipment Manufacturers (OEMs). Since its inception in 1989, CUI has been delivering quality products, extensive application solutions and superior personal service. CUI's solid customer commitment and honest corporate message are a hallmark in the industry.

The Power and Electromechanical segment aggregates its product offerings into two categories: **power solutions** - including external and embedded ac-dc power supplies, dc-dc converters and basic digital point of load modules and offering a technology architecture that addresses power and related accessories; and **components** - including connectors, speakers, buzzers, and industrial control solutions including encoders and sensors. These offerings provide a technology architecture that addresses power and related accessories to industries as broadly ranging as telecommunications, consumer electronics, medical and defense.

Power Supply Solutions

Our current power line consists of external and embedded ac-dc power supplies, dc-dc converters and basic digital point of load modules. This dynamic, broadly applicable product line accounts for a significant portion of our current revenue.

Digital Power Patent License Agreement with Power-One, Inc.

CUI Inc. entered into a non-exclusive Field of Use Agreement with Power-One, Inc. to license Power-One's Digital Power Technology patents. The license provides access to Power-One's portfolio of Digital Power Technology patents for incorporation into the company's line of digital point of load power modules. The company, through its power division, also manufactures a wide range of embedded and external power electronics devices for OEM manufacturers.

Advanced Power

With the rapid rise in cloud computing and the "Internet of Things," CUI is well positioned with our advanced power portfolio to address these quickly-growing markets. System complexity, energy efficiency regulations and the need for more processing power in smaller spaces has moved digital power to a mandatory technology in data communications, server and storage applications. As one of the early adopters of digital power, CUI continues to be an industry leader in this space. As a founding member of the Architects of Modern Power (AMP) Group® power consortium partnered with Ericsson Power Modules and Murata, CUI is driving change in the industry to ensure supply chain security and push technology innovation for tomorrow's applications. The acquisition of certain assets and certain liabilities of Tectrol, Inc. (now CUI-Canada) in 2015 now allows us to address the front-end power requirements of these same systems, providing a complete power solution for our customers. In an environment where OEMs are working to reduce their approved vendor list, the capability to deliver a full system solution is becoming critical.

During 2014, CUI, Ericsson Power Modules and Murata announced the formation of the Architects of Modern Power (AMP) Group® power consortium. The goal of the AMP alliance is to realize the most technically advanced, end-to-end solutions and provide a complete ecosystem of hardware, software and support. Beyond purely mechanical specifications, it is the standardization of monitoring, control and communications functions, and the creation of common configuration files for plug-and-play interoperability that will ensure compatibility between each firms' products.

Virtual Power Systems and ICE®

CUI Inc. entered into a hardware agreement with Virtual Power Systems (VPS) to be the exclusive third-party design and development provider of ICE (Intelligent Control of Energy) products enabled by the VPS patented software system. The ICE system is a revolutionary Software Defined Power® solution that combines CUI Inc.'s hardware and Virtual Power Systems' software into a platform that increases data centers' power infrastructure utilization. CUI Inc. has an exclusive three-year agreement with VPS, with the potential to extend the partnership for another two years.

Components

AMT® Encoder

CUI Inc. has an exclusive agreement to develop, sell and distribute the AMT encoder worldwide. The AMT series modular encoder is designed with proprietary, capacitive, code-generating technology as opposed to optical or magnetic encoding. This unique device allows breakthroughs in selectable resolution, shaft-adaptation and convenient mounting solutions to bring ease of installation, reduction in SKUs and economies of scale in purchasing. The AMT amounts to almost 2,000 different encoders in one package. The AMT has been awarded several design wins from Motion Control OEM's producing a wide range of products including robotics. This portfolio of products continues to grow and become more diverse in its ability to meet the needs of the customer base.

Anticipated Growth Strategy for Our Power and Electromechanical Segment

We hope to grow our power and electromechanical product line through a planned strategy to increase our name recognition as a technology company. Our plan, already in effect, includes:

- Developing collaborative relationships with our customers by seeking to meet their design needs in a timely and cost-effective manner.
- Developing new technologies and expanded manufacturing capabilities as needed.
- Growing our global sales and distribution through our international distribution channels.
- Directing our marketing efforts through one of our two channels: either directly with the sales representative who understands the targets in the area or through our distributors with partnership marketing.

These areas, however, need forward-looking growth investment to understand the customers' needs and develop products accordingly. We are in line with market standards for quality, customer service and pricing. Our plan is to stay with this mark during our anticipated growth. We intend to expand according to our existing model. This expansion means additional manufacturer representative coverage and outside sales people in strategic areas.

Energy Segment

Orbital Gas Systems, Ltd. and Orbital Gas Systems, North America, Inc. - Subsidiaries

Orbital Gas Systems, Ltd. (Orbital-UK) is based in Stone, Staffordshire in the United Kingdom and Orbital Gas Systems, North America, Inc. (Orbital North America), which initiated operations in 2015, is based in Houston, Texas. Orbital-UK has operated successfully in the natural gas industry for over 30 years and is a leading provider of natural gas infrastructure and high-tech solutions to United Kingdom transmission companies, including: Scotia Gas Networks (SGN); Wales & West; and National Grid, the national gas transmission company in the UK and one of the most respected specialized gas engineering companies in the world. Orbital North America leverages the experience of Orbital-UK in an effort to reach the North American market with the innovative solutions that Orbital-UK customers have benefited from for years.

The Energy segment subsidiaries, collectively referred to as Orbital, have developed a portfolio of products, services and resources to offer a diverse range of personalized gas engineering solutions to the gas utilities, power generation, emissions, manufacturing and automotive industries. Its proprietary VE® Technology enhances the capability and speed of our GasPT® Technology. VE Technology provides a superior method of penetrating the gas flow without the associated vortex vibration, thereby making it a ‘‘stand-alone’’ product for thermal sensing (thermowells) and trace-element sampling.

We deal with several independent licensors for whose intellectual property we compete with other manufacturers. Rights to such intellectual property, when acquired by us, are usually exclusive and the agreements require us to pay the licensor a royalty on our net sales of the item. These license agreements, in some cases, also provide for advance royalties and minimum guarantees to maintain technical rights and exclusivity.

GasPT®

Through an exclusive licensing contract with DNV GL (formerly: GL Industrial Services UK, Ltd.) (formerly: British-based Advantica, Ltd.), CUI Global owns exclusive rights to manufacture, sell and distribute a Gas Quality Inferential Measurement Device designed by DNV GL on a worldwide basis, now marketed as the GasPT. The Company has minimum commitments, including royalty payments, under this licensing contract.

The GasPT, is a low-cost solution for measuring natural gas quality. It can be connected to a natural gas system to provide a fast, accurate, close to real time measurement of the physical properties of the gas, such as thermal conductivity, speed of sound and carbon dioxide content. From these measurements it infers an effective gas mixture comprising five components: methane, ethane, propane, nitrogen, and measured carbon dioxide and then uses ISO6976 to calculate the gas quality characteristics of calorific value (CV), Wobbe index (WI), relative density (RD), and compression factor (Z). An ISO, International Organization for Standardization, is a documented agreement containing technical specifications or other precise criteria to be used consistently as rules, guidelines or definitions of characteristics to ensure that materials, products, processes and services are fit for their purpose.

This new and innovative technology has been certified for use in fiscal monitoring by Ofgem in the United Kingdom, the Polish Oil & Gas Company Department of Testing and Calibration in Warsaw, NOVA Chemical/TransCanada in Canada, the Pipeline Research Counsel International (PRCI) in the US, ENGIE (the French energy giant), and NMi & The International Organization of Legal Metrology (‘‘OIML’’) for SNAM RETE in Italy. At present, there is no equivalent product competition. There are instruments like gas chromatographs (‘‘GC’’) that technically can be considered competition, but they are slow, complicated to use and as much as five times the installed price of the GasPT.

For example, in the case of SNAM RETE, the Italian gas transmission company, there are ~ 7,000 customer access points, servicing 7,500 customers. Those would include city gates, large industrial users, power generation plants and others. All of those customer access ports would be applicable for the GasPT Technology.

In addition, there are more than 50,000 gas-fired turbines in operation worldwide. Each turbine is subject to variances in natural gas quality. Depending on the quality of the gas, by using our GasPT Technology, those very expensive machines can be tuned to run more efficiently and therefore longer with significantly cleaner emissions. Because of the delay in information from the GC’s, such tuning cannot be effectively accomplished. This greater efficiency has led National Grid in the UK to change its entire turbine control strategy, canceling orders for several GC’s and, in 2013, replacing those GC’s with GasPT devices specifically designed for natural gas-fired turbine control.

Orbital has successfully introduced the combined GasPT analyzer and VE sample system (GasPTi) to National Grid, the largest natural gas provider in the UK. In addition, along with passing first phase testing by GE-Energy in October/November 2012, the GasPTi device successfully completed second phase testing with GE-Energy in October 2013. The device is now in final phase testing at GE's Oil & Gas Learning Center in Nuovo Pignone, Florence, Italy.

In January 2012, the company signed a five-year, exclusive distribution agreement for our GasPT technology with an Italian company, SOCRATE s.p.a. for sales, marketing, distribution and service of our GasPT gas metering device for Italy and North Africa, including Libya and Tunisia. SOCRATE is a ‘‘vendor-of-choice’’ for SNAM RETE GAS (‘‘SRG’’). SOCRATE was involved in negotiations with SRG relative to both the 2010 Technical Upgrade of Metering Facilities and 2011/2012 New Capacity and Implementation Plan. In conjunction with those two initiatives, SRG transmission system concluded 24 months of in-field testing with six (6) GasPTi units.

On September 3, 2015, SRG issued a public tender for the installation of at least 3,300 metering devices to change the way SRG monitors its facilities and assets. After a several months bidding process, Orbital and its partner, SOCRATE were awarded the initial purchase order (400 units) under the tender. Those 400 units were delivered on-time and in-budget during 2016. A regulatory issue unrelated to the technology delayed the next phase of the project through 2017. The Company expects the project to resume in 2018. The customer is currently working with its regulatory body to implement a program that would improve its ability to more rapidly deploy the new metering solutions. SRG has confirmed that the GasPT device is still the only qualified technology.

Bio-Methane to Grid

In addition, Orbital has been very involved in developing a method by which bio-methane gas can be injected into the existing natural gas infrastructure without enhancement, thus remaining environmentally-friendly while maintaining a carbon neutral footprint.

Bio-methane gas (produced wherever organic material is decaying) can be, and is a significant source of environmentally-friendly, carbon neutral energy in the U.K. Italy produces as much as 8 billion cubic meters of bio-methane gas per year and could dramatically reduce its carbon footprint by capturing that bio-methane gas in the form of energy. The specific advantages of bio-methane as a source of energy is that it uses already-existing pipeline infrastructure to quickly and efficiently deliver energy to the end-user, who, in most cases, is already connected to the grid.

The problem in the U.K. and elsewhere is maintaining accurate billing after the bio-methane gas is injected into the grid. In brief, how billing is currently done in the U.K. (and throughout much of Western Europe) means that to meet critical calorific value (“CV”) levels, before being injected into the grid, bio-methane gas must be enhanced by injecting propane or some other complex carbon material to allow the bio-methane gas to fit the CV envelope of the regional billing model.

Such enhancement means that the very simple, environmentally-friendly bio-methane gas is transformed into a complex carbon gas, which increases its carbon footprint. In addition, the energy used by fleets of vehicles transporting propane to the propane injectors at each bio-methane-to-grid facility further increases the carbon footprint and resulting pollution to the environment - All-in-all, a very environmentally-unfriendly, highly polluting method of delivering what would otherwise be a “green” alternative energy source.

DNV GL, the well-respected Norwegian consulting firm, has opined that the need to enhance bio-methane gas actually makes such gas less environmentally-friendly than standard natural gas sources.

The question, then, is how to avoid having to enhance bio-methane gas before injecting it into the grid. The answer, simply, is to measure the quality of the gas for billing downstream from the bio-methane injection sites, so the CV does not affect the billing, which is done in a much closer proximity to the end-user; thereby, becoming much more accurate and reliable. A simplified animation of the analysis/issues can be found at a link from our www.CUIGlobal.com website (Future Billing Methodology Animation).

To develop such a billing methodology, DNV GL (in conjunction with Orbital) has produced a “proof-of-concept” proposal. The first portion of that proposal, an industry survey, was memorialized in the Future Billing Methodology

("FBM") Project Consultation Report, which can also be found at the DNV GL website, which is linked to at our www.CUIGlobal.com website (FBM Project Consultation).

That consultation resulted in an approval by Ofgem, the U.K. regulatory authority, to move forward with field trials to "decarbonize" the U.K. energy network. A copy of the Stage Gate Report memorializing that Ofgem approval can be found on the DNV GL website, for which a link can be found on our www.CUIGlobal.com website (FBM Stage Gate Report).

Finally, a comprehensive description of the field trials, including the use of Orbital's proprietary GasPT technology to provide for quick, efficient, accurate, and cost-effective data monitoring, was recently published on January 11, 2018. A copy of that report can be found at the DNV GL website, which is linked to at www.CUIGlobal.com (FBM Project Report).

Orbital has produced an initial, formal bid for the UK project of up to £490,000,000 ($661,000,000 USD at December 31, 2017) over 15 to 20 years. DNV GL and Ofgem, the UK regulatory agency, have both confirmed that the formal bid falls "within budget guidelines."

VE *Technology*®

Orbital holds exclusive worldwide rights to manufacture, sell, design, and otherwise market the VE-Probe, VE sample system, VE thermowell and VE *Technology*® from its United Kingdom-based inventor, EnDet Ltd. The agreement, which includes certain royalty commitments, gives Orbital exclusive and sole control of all technology related to its revolutionary GasPT natural gas metering systems. The GasPT technology provides fast and accurate measurement of the physical properties of the natural gas mixture. By combining the GasPT technology with the equally unique VE *Technology*, which can provide a gas sample from a high-pressure transmission line in less than two seconds, Orbital has created the GasPTi metering system.

The GasPTi system can accurately provide nearly real-time data to the natural gas operator in a total cycle-time of less than five seconds. It provides this analysis at approximately one-fifth of the installation cost of current technology with none of the associated maintenance, carrier gas, calibration gas, or other ancillary costs associated with traditional technology.

VE *Technology* gives us the ability to control and produce the entire bill of materials for our GasPTi systems, thus allowing us to capture a larger margin as we provide this unique metering solution to the natural gas industry.

In addition, the VE *Technology*, combined with applicable detectors, allows us to produce trace-element detectors for such components as mercury (Hg), moisture (H20), and hydrogen sulfide (H2S) that are particularly effective in quickly and accurately identifying these elements. That ability has allowed us to sell a significant number of our probes into the Gorgon LNG Project in Australia, a large Northeastern LNG terminal in the US, and chemical plants throughout North America.

Some of the features of the VE *Technology* that set it apart from its competition are the VE fixed or retractable sampling probe with its patented helical strakes to eliminate vortex shedding and the need for wake calculations and its patented aerodynamic probe tip to actively reject particulate, minimizing the need for filtration and allowing a small bore to optimize sample transit time. In addition, the VE sample system provides a simple, optimized system to deliver a representative sample to any analyzer with no dead volume, threaded connections or components in the sample pathway. Simple concepts and decades of detailed engineering allows very quick and simple customization to suit any application.

Anticipated Growth Strategy for Our Energy Segment

We are presently in the midst of our marketing efforts for our GasPT Inferential Natural Gas Monitoring Device, VE technology products, and other product and integrated solutions. Our strategy includes:

- For GasPT, our strategy has been to identify the large gas utility companies who would most likely provide opportunities for batch sales rather than single unit sales. This approach has focused strongly on the United Kingdom, Europe and North America. The Company will continue its efforts in those areas.
- We will continue identifying prospects for our GasPT technology in the Asian markets.
- Beyond this, our strategy is based on identification of the main geographic locations for liquefied natural gas importation (pipelines and terminals), mixing and blending points and strategic locations for security of supply strategies, which can be current or planned pipelines and import terminals where additional gas quality monitoring may be required.
- Orbital continues to develop new integrated solutions, promote existing technologies, and increase customer relationships.
- The Company will continue to identify opportunities to utilize the unique VE *Technology* beyond the existing product offering, with a focus on gas sampling, thermowells, and trace element sampling applications.

- We signed an exclusive distribution agreement for our GasPT technology with an Italian company, SOCRATE s.p.a., for sales, marketing, distribution and service of our GasPT gas metering device for Italy and North Africa, including Libya and Tunisia.
- During 2016, Orbital signed a Technology and Patent License Agreement with daily Thermetrics, a globally-respected design and manufacturing company providing process industries with precise temperature measurement instrumentation. The Agreement calls for the manufacture and sale of the patented natural gas sampling VE *Technology* in North America. This relationship is expected to allow Orbital to more efficiently penetrate the North American energy market.
- The Company will continue to seek new opportunities to design, manufacture, and produce innovative solutions within the Energy segment to increase customer reach, product innovation, and growth. In such an effort, during 2016, Orbital was awarded a $3.0 million project to design, manufacture, and produce innovative solutions for gas quality and volumetric metering within SGN's (formerly: Scotia Gas Network) Great Britain gas distribution network. Orbital-UK was awarded the contract by DNV GL, a leader within the oil and gas industry. The project is part of DNV GL's Future Billing Methodology ("FBM") Project, which, when implemented in late-2019, could call for the deployment of literally tens-of-thousands of the Company's proprietary GasPT analyzers.

The objective of the SGN project is to optimize gas network design and network operation assumptions. This project will use a pilot trial methodology with the procurement and installation of innovative sensor technologies across pressure tiers in a gas distribution system. These technologies, combined with novel power and communications and a cloud-based data system, will be used by DNV GL to develop a prototype real-time energy demand model, a world first. Innovative technology, such as Orbital’s proprietary GasPT Technology, form the backbone of the solution coupled with custom metering designs to be used to meet the project criteria. The project produces a GasPT application which would allow the millions of residential energy consumers to have immediate, real-time access to the cost of their energy usage.

We continue negotiations with ENGIE, the French transmission company, for deployment of the devices to both GRTgaz (ENGIE’s pipeline subsidiary) and Elengy (ENGIE’s liquid natural gas subsidiary) in the near future. ENGIE has agreed to represent the technology to other Western European, North American, and Asian entities in a partnership with Orbital.

According to the latest industry analysts (including *MarketsandMarkets*), the global GC market reached $2,583.6 million in 2014 and is poised to grow at a CAGR of 6.9% from 2014 to 2019, reaching $3,605.1 million by 2019. Admittedly, that market is mature and is dominated by ‘‘after-market and accessories’’ sales. In contrast, the GasPT Technology is less expensive, more efficient and dramatically faster than any GC. It provides nearly real-time monitoring with no large enclosure, carrier gas and, most significantly, regular technical support and calibration. Taking those factors into account, it is our intention that the GasPT Technology will rapidly and effectively penetrate a large segment of that $2.5+ billion market.

In conclusion, Orbital utilizes internationally recognized distribution partners in various global markets to reach customers throughout the natural gas industry. These distribution partners are utilized to supplement and enhance our existing sales and engineering teams in the UK and USA.

ISO 9001:2008 Certification

CUI Inc.; CUI-Canada; Orbital Gas Systems, Ltd. and Orbital Gas Systems, North America Inc. are certified to the ISO 9001:2008 Quality Management Systems standards and guidelines. These entities are registered as conforming to the requirements of standard: ISO 9001:2008. The CUI Quality Management Systems are applicable to design, development and distribution of electromechanical components for OEM manufacturing. Orbital’s Quality Management Systems are designed to safeguard product quality, health and safety and the environment through the design, build, installation commissioning and after sales processes. ISO 9001 is accepted worldwide as the inclusive international standard that defines quality.

Orbital-UK's Environmental Management System has also been verified by an independent third party (NQA) as complying with the requirements of BS EN ISO 14001:2008. This assists Orbital in meeting applicable environmental legislation and to control the environmental aspects of our activities as a company.

The certification of compliance with ISO 9001:2008 recognizes that our policies, practices and procedures ensure consistent quality in the design services, technology and products we provide to our customers.

Acquisition Strategy

We are constantly alert to potential acquisition targets, both in the form of innovative technology and potential strategic partners. In that regard, we are repeatedly approached by inventors and others, to assess and assist in commercialization and marketing of new technologies. These contacts largely arise because of our reputation and successes as well as our recent technology product line additions including GasPT, VE and ICE. Moreover, much like our past acquisitions, there are many small, well-run electronics and gas industry companies that become available for multiple reasons. We will consider each of these potential opportunities as they arise with a careful analysis of the relevant synergies with our current business, along with the potential for increasing revenue and/or market share.

Research and Development Activities

Research and development costs for CUI Global were approximately $2.5 million, $2.0 million and $1.8 million for the years ended December 31, 2017, 2016 and 2015, respectively. Research and development costs are related to the various technologies for which CUI Global has acquired licensing rights or is developing internally. The expenditures for research and development have been directed primarily towards the further development of power technologies including advanced power products, AMT Capacitive Encoders and towards further development of the GasPT and VE Probe technologies. The Company expects that research and development expenses will continue during 2018 as the Company continues to expand its product offering and technologies due to market acceptance and customer integration.

Employees

As of December 31, 2017, CUI Global, Inc., together with its consolidated subsidiaries, had 333 employees. As of December 31, 2017, 75 of its employees in Canada are represented by a labor union. This is a decrease in total employees from the 357 total employees reported as of December 31, 2016 and a slight decrease in unionized employees from the 76 reported as of December 31, 2016. The Company considers its relations with its employees to be good. The Company plans to add additional staff as needed to handle all phases of its business.

Intellectual Property License Evolution

AMT® encoder technology

Through an exclusive licensing contract with AnderMotion Technologies, LLC, signed on or about April 20, 2009, CUI acquired exclusive rights to manufacture, sell and distribute motion control devices utilizing the AMT encoder technology.

Novum® Digital POL technology

Through a non-exclusive licensing agreement with Power-One, Inc., signed on or about September 18, 2009, CUI has access to Power-One’s portfolio of Digital Power Technology patents for incorporation into CUI’s advanced power solutions.

GasPT® technology

Through an exclusive licensing contract with DNV GL (formerly: GL Industrial Services UK, Ltd.) (formerly British-based Advantica, Ltd.) ("GL") and signed on or about January 4, 2010, CUI Global acquired exclusive rights to manufacture, sell and distribute a Gas Quality Inferential Measurement Device (GasPT), designed by GL, on a worldwide basis. According to the agreement, a percentage of sales is remitted back to DNV GL in the form of a royalty payment.

VE-Probe and VE Technology

On July 30, 2013, our Orbital subsidiary acquired exclusive worldwide rights to manufacture, sell, design, and otherwise market the VE Technology from its United Kingdom-based inventor, EnDet Ltd. The agreement, which includes ongoing royalty requirements, gives Orbital exclusive and sole control of all VE-based technology.

Virtual Power Systems and ICE®

CUI entered into a hardware agreement with Virtual Power Systems (VPS) to be the exclusive third-party design and development provider of ICE (Intelligent Control of Energy) products enabled by the VPS patented software system. The ICE system is a revolutionary Software Defined Power® solution that combines CUI's hardware and Virtual Power Systems' software into a platform that increases data centers' power infrastructure utilization. CUI has an exclusive three-year agreement with VPS, with the potential to extend the partnership for another two years.

Intellectual Property Protection

The Company relies on various intellectual property laws and contractual restrictions to protect its proprietary rights in products, logos and services. These include confidentiality, invention assignment and nondisclosure agreements with employees, contractors, suppliers and strategic partners. The confidentiality and nondisclosure agreements with employees, contractors and suppliers are in perpetuity or for a sufficient length of time so as to not threaten exposure of proprietary information.

Under the United States Trademark Act of 1946, as amended, and the system of international registration of trademarks governed by international treaties, the Madrid Agreement concerning the international registration of marks and the protocol relating to the Madrid Agreement, administered by the World Intellectual Property Organization, which maintains the international register and, in several instances, direct trademark registration in foreign countries, we and our subsidiaries actively maintain up to date the following trademarks: CUI INC, AMT, Novum, CUI Global, GasPT, IRIS, AMP, Architects of Modern Power, AMP Group, Solus, Total Power Solutions and Orbital Gas Systems.

The Company continuously reviews and updates the existing intellectual property filings and files new documentation both nationally and internationally (Patent Cooperation Treaty) in a continuing effort to maintain up-to-date protection of its intellectual property.

For those intellectual property applications pending, there is no assurance that the registrations will be granted. Furthermore, the Company is exposed to the risk that other parties may claim the Company infringes their existing patent and trademark rights, which could result in the Company's inability to develop and market its products unless the Company enters into licensing agreements with the technology owner or could force the Company to engage in costly and potentially protracted litigation.

Competitive Business Conditions

The industries in which the company competes are very broad. We operate a commoditized power and electromechanical parts distribution business that is focused on efficiency of delivery and competitive pricing to differentiate our products from competitors. The market is subject to some volatility due to production requirements of larger global firms. We feel that our power and electromechanical parts distribution business is diverse and broad. We have very strong retail distribution partners that maximize our product exposure to new designs and small to medium sized customers. We focus on the OEM market and supply higher levels of support, customer service and a constantly expanding product line in order to further differentiate from our competitors. This product line ranges from a $0.02 connector to a several thousand dollar power solution – all different products for different customers. Additionally, we utilize third-party external sales representative organizations to penetrate new customers otherwise not readily available to the company.

CUI is becoming more recognized in the power supply market and has differentiated itself through technology with a foundation of legacy and product quality. As of December 31, 2017, our Power and Electromechanical segment accounted for approximately 77% of our revenues and our Energy segment accounted for approximately 23% of our revenues. We continue to add new products and technologies that will provide us the opportunity to compete outside of price and more on innovative technology and strategic partnerships.

From our portfolio of full-featured power supplies, we believe that we are competitive with market leaders in our space and that the market is ready for new technologies and new ideas. With the shift toward digitally-based power supplies accelerating, our strategy is to develop a true software-defined power ecosystem where the sum of the components is greater than its parts.

Similarly, the natural gas inferential metering device, the GasPT along with our VE Technology, competes in a mature industry with established competitors. There are significant investments being made globally into the natural gas extraction and transportation infrastructure. Our natural gas quality measurement system is a comparably low-cost solution to measuring natural gas quality as compared to our best competition. It can be connected to a natural gas system to provide a fast, accurate, close to real-time measurement of the physical properties, such as thermal conductivity, speed of sound and carbon dioxide content. From these measurements it infers an effective gas mixture comprising five components: methane, ethane, propane, nitrogen and measured carbon dioxide and then uses ISO6976 to calculate the gas quality characteristics of calorific value (CV), Wobbe index (WI), relative density (RD) and compression factor (Z). This technology has been certified for use in fiscal monitoring by Ofgem in the United Kingdom and SNAM RETE in Italy. There is no equivalent product competition. There are instruments like gas chromatographs that are technically competition, but they are slower and more complicated to use and as much as five times the installed price of the GasPT system.

Philanthropic Philosophy

In an industry first, CUI has chosen that, in addition to sales commission, many of our sales representative firms will also receive a charity commission to be donated to charities of their choice. One of CUI’s values is generosity, which includes philanthropic giving. We give in our local community and we want to also give in the communities in which we do business.

Item 1A. Risk Factors

RISK FACTORS

Our business is subject to various risks and uncertainties. Investors should read carefully the following factors as well as the cautionary statements referred to in ‘‘Forward-Looking Statements’’ herein. If any of the risks and uncertainties described below or elsewhere in this annual report on Form 10-K actually occur, the Company's business, financial condition or results of operations could be materially adversely affected.

Risks Related to Our Business and Products

Historically, we have generated annual losses from operations and we may need additional funding in the future.

Historically, on an annual basis, we have not generated sufficient revenues from operations to self-fund our capital and operating requirements. For the year ended 2017, we had a net loss of $12.6 million and our accumulated deficit as of December 31, 2017 was $108.6 million. If we are not able to generate sufficient income and cash flows from operations to fund our operations and growth plans, we may seek additional capital from equity and debt placements or corporate arrangements. Additional capital may not be available on terms favorable to us, or at all. If we raise additional funds by issuing equity securities, our shareholders may experience dilution. Debt financing, if available, may involve restrictive covenants or security interests in our assets. If we raise additional funds through collaboration arrangements with third parties, it may be necessary to relinquish some rights to technologies or products. If we are unable to raise adequate funds or generate them from operations, we may have to delay, reduce the scope of, or eliminate some or all of our growth plans or liquidate some or all of our assets.

There is no assurance we will achieve or sustain profitability.

For the year ended December 31, 2017, we had a net loss of $12.6 million. There is no assurance that we will achieve or sustain profitability. If we fail to achieve or sustain profitability, the price of our common stock could fall and our ability to raise additional capital could be adversely affected.

We have expanded our business activities and these activities may not be successful and may divert our resources from our existing business activities.

Our historical business was a commoditized power and electromechanical parts distribution business. In recent years, we have focused our business on the acquisition, development and commercialization of new and innovative technologies/products. We may not be successful in acquiring technologies that are commercially viable. We may fail to successfully develop or commercialize technologies that we acquire. Research, development and commercialization of such acquired technologies may disproportionately divert our resources from our other business activities.

If our manufacturers or our suppliers are unable to provide an adequate supply of products, our growth could be limited and our business could be harmed.

We rely on third parties to supply components for and to manufacture our products. In order to grow our business to achieve profitability, we will need our manufacturers and suppliers to increase, or scale up, production and supply by a significant factor over current levels. There are technical challenges to scaling up capacity that may require the investment of substantial additional funds by our manufacturers or suppliers and hiring and retaining additional management and technical personnel who have the necessary experience. If our manufacturers and suppliers are unable to do so, we may not be able to meet the requirements to grow our business to anticipated levels. We also may represent only a small portion of our supplier's or manufacturer's business, and if they become capacity constrained, they may choose to allocate their available resources to other customers that represent a larger portion of their business.

Our international operations are subject to increased risks, which could harm our business, operating results and financial condition.

Our ability to manage our business and conduct our operations internationally requires considerable management attention and resources and is subject to a number of risks, including the following:

- challenges caused by distance, language and cultural differences and by doing business with foreign agencies and governments;
- longer payment cycles in some countries;
- uncertainty regarding liability for services and content;
- credit risk and higher levels of payment fraud;
- currency exchange rate fluctuations and our ability to manage these fluctuations;
- foreign exchange controls that might prevent us from repatriating cash earned in countries outside the U.S.;
- import and export requirements that may prevent us from shipping products or providing services to a particular market and may increase our operating costs;
- potentially adverse tax consequences;
- higher costs associated with doing business internationally;
- political, social and economic instability abroad, terrorist attacks and security concerns in general;
- reduced or varied protection for intellectual property rights in some countries; and
- different employee/employer relationships and the existence of workers' councils and labor unions.

In addition, compliance with complex foreign and U.S. laws and regulations that apply to our international operations increases our cost of doing business in international venues and could expose us or our employees to fines and penalties. These numerous and sometimes conflicting laws and regulations include import and export requirements, content requirements, trade restrictions, tax laws, sanctions, internal and disclosure control rules, data privacy requirements, labor relations laws, U.S. laws such as the Foreign Corrupt Practices Act and local laws prohibiting corrupt payments to governmental officials. Violations of these laws and regulations could result in fines, civil and criminal penalties against us, our officers or our employees, prohibitions on the conduct of our business and damage to our reputation. Any such violations could include prohibitions on our ability to offer our products and services in one or more countries and could also materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, our business and our operating results.

Our revenues depend on key customers and suppliers.

The Company's major product lines in 2017, 2016 and 2015 were power and electromechanical products and natural gas infrastructure and high-tech solutions.

During 2017, over 36% of revenues were derived from two customers, Digi-Key Electronics at 26% and Future Electronics at 10%. During 2016, over 19% of revenues were derived from one customer, Digi-Key Electronics. During 2015, over 31% of revenues were derived from two customers, Digi-Key Electronics at 20% and National Grid at 11%.

At December 31, 2017, of the gross trade accounts receivable totaling approximately $11.0 million, approximately 21% was due from two customers: GL Industrial Services UK Ltd. at 11% and Digi-Key Electronics at 10%. At December 31, 2016, of the gross trade accounts receivable totaling approximately $9.5 million, approximately 30% was due from three customers: Scotia Gas Networks plc at 10%, Socrate S.p.A. at 10%, and National Grid at 10%.

During 2017, the Company had one supplier concentration of 12% related to inventory product received.

With the United Kingdom operations of Orbital, the Company also has foreign revenue and trade accounts receivable concentrations in the United Kingdom of 17% and 28%, respectively as of and for the year ended December 31, 2017 and 20% and 27%, respectively as of and for the year ended December 31, 2016. Additionally, at December 31, 2017 the Company had accounts receivable concentrations of 11% in Canada and at December 31, 2016, the Company had accounts receivable concentrations of 11% in China and 10% in Italy.

There is no assurance that we will continue to maintain all of our existing key customers in the future. Should we, for any reason, discontinue our business relationship with any one of these key customers, the impact to our revenue stream would be substantial. For additional information on our concentrations, see Note 17 – Concentrations.

We rely on third-party distributors to generate a substantial part of our revenue and, if we fail to expand and manage our distribution channels, our revenues could decline and our growth prospects could suffer.

We derive a substantial portion of our revenues from sales of our power and electromechanical component products through distributors and we expect that sales through these distributors will represent a substantial portion of our revenues for the foreseeable future. Our ability to expand our distribution channels depends in part on our ability to educate our distributors about our products, which are complex. Many of our distributors have established relationships with our competitors. If our distributors choose to place greater emphasis on products and services of their own or those offered by our competitors, our ability to grow our business and sell our products may be adversely affected. If our distributors do not effectively market and sell our products, or if they fail to meet the needs of our customers, then our ability to grow our business and sell our products may be adversely affected. The loss of one or more of our larger distributors, which may cease marketing our products with limited or no notice and our possible inability to replace them, could adversely affect our sales. Our failure to recruit additional distributors or any reduction or delay in their sales of our products or conflicts between distributor sales and our direct sales and marketing activities could materially and adversely affect our results of operations.

We are a relatively small specialty component and solutions business and face formidable competition.

We are a relatively small company with limited capitalization in comparison to many of our international competitors in each of our business segments. Because of our size and capitalization, we believe that we have not yet established sufficient market awareness in our segments that is essential to our continued growth and success in all of our markets. We face formidable competition in every aspect of our business from other companies, many of whom have greater name recognition, more resources and broader product offerings than ours.

We also expect competition to intensify in the future. For example, the market for our power and electromechanical components and our inferential natural gas monitoring device, the GasPT, is emerging and is characterized by rapid technological change, evolving industry standards, frequent new product introductions and shortening product life cycles. Our future success in keeping pace with technological developments and achieving product acceptance depends upon our ability to enhance our current products and to continue to develop and introduce new product offerings and enhanced performance features and functionality on a timely basis at competitive prices. Our inability, for technological or other reasons, to enhance, develop, introduce or deliver compelling products in a timely manner, or at all, in response to changing market conditions, technologies or customer expectations, could have a material adverse effect on our operating results and growth prospects. Our ability to compete successfully will depend in large measure on our ability to maintain a technically skilled development and engineering staff and to adapt to technological changes and advances in the industry, including providing for the continued compatibility of our products with evolving industry standards and protocols in a competitive environment.

Acquisitions could result in operating difficulties, dilution and other harmful consequences.

We continue our process of integrating recent acquisitions into our own business model and we expect to continue to evaluate and enter into discussions regarding a wide array of potential strategic transactions. These transactions could be material to our financial condition and results of operations. The process of integrating an acquired company, business or technologies may create unforeseen operating difficulties and expenditures. The areas where we face risks include:

- implementation or remediation of controls, procedures and policies of the acquired company;
- diversion of management time and focus from operating our business to acquisition integration challenges;
- coordination of product, engineering and sales and marketing functions;
- transition of operations, users and customers into our existing customs;
- cultural challenges associated with integrating employees from the acquired company into our organization;
- retention of employees from the businesses we acquire;
- integration of the acquired company’s accounting, management information, human resource and other administrative systems;
- liability for activities of the acquired company before the acquisition, including patent and trademark infringement claims, violations of laws, commercial disputes, tax liabilities and other known and unknown liabilities;
- litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former shareholders, or other third parties;

- in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political and regulatory risks associated with specific countries;
- failure to successfully further develop the acquired technologies; and
- other as yet unknown risks that may impact our business.

Our failure to address these risks or other problems encountered in connection with our past or future acquisitions could cause us to fail to realize the anticipated benefits of such acquisitions, incur unanticipated liabilities and harm our business generally. For example, a majority of Orbital's revenues for each of its last two fiscal years has come from a few customers. If we fail to continue to do business with Orbital's primary customers at substantially similar or greater levels than recent historical levels, our financial condition, results of operations and growth prospects would be significantly harmed.

Future acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses, write-offs of goodwill, or reductions to our tangible net worth any of which could harm our business, financial condition, results of operations and prospects. Also, the anticipated benefit of many of our acquisitions may not materialize.

We will need to grow our organization and we may encounter difficulties in managing this growth.

As of December 31, 2017, CUI Global, Inc., together with its consolidated subsidiaries, had 333 full-time employees. We expect to experience growth in the number of our employees and the scope of our operations as we follow our growth strategy. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel, which may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. The physical expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of new products. If our management is unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize new products and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Our operating results will vary over time and such fluctuations could cause the market price of our common stock to decline.

Our operating results may fluctuate significantly due to a variety of factors, many of which are outside of our control. Because revenues for any future period are not predictable with any significant degree of certainty, you should not rely on our past results as an indication of our future performance. If our revenues or operating results fall below the expectations of investors or securities analysts or below any estimates we may provide to the market, the price of our common shares would likely decline substantially. Factors that could cause our operating results and stock price to fluctuate include:

- varying demand for our products due to the financial and operating condition of our distributors and their customers, distributor inventory management practices and general economic conditions;
- inability of our contract manufacturers and suppliers to meet our demand;
- success and timing of new product introductions by us and the performance of our products generally;
- announcements by us or our competitors regarding products, promotions or other transactions;
- costs related to responding to government inquiries related to regulatory compliance;
- our ability to control and reduce product costs;
- changes in the manner in which we sell products;
- volatility in foreign exchange rates, changes in interest rates and/or the availability and cost of financing or other working capital to our distributors and their customers; and
- the impact of write downs of excess and obsolete inventory.

Our operating expenses will increase as we make further expenditures to enhance and expand our operations in order to support additional growth in our business and national stock market reporting and compliance obligations.

Historically, we limited our investment in operations, but in the future, we expect our operations and marketing investments to increase substantially to support our anticipated growth and as a result of our listing on the NASDAQ Stock Market. We are making significant investments in using more professional services and expanding our operations outside the United States. We intend to make additional investments in personnel and continue to expand our operations to support anticipated growth in our business. In addition, we may determine the need in the future to build a direct sales force to market and sell our products or provide additional resources or cooperative funds to our distributors. Such changes to our existing sales model would likely result in higher selling, general and administrative expenses as a percentage of our revenues. We expect our increased investments to adversely affect operating income in the short term while providing long-term benefit.

Our business depends on a strong brand and failing to maintain and enhance our brand would hurt our ability to expand our base of distributors, customers and end-users.

We believe that we have not yet established sufficient market awareness in our various markets. Market awareness of our capabilities and products is essential to our continued growth and our success in all of our markets. We expect the brand identity that we have developed through CUI, GasPT, Orbital Gas Systems, IRIS, ICE, and AMT to significantly contribute to the success of our business. Maintaining and enhancing these brands is critical to expanding our base of distributors, customers and end-users. If we fail to maintain and enhance our brands, or if we incur excessive expenses in this effort, our business, operating results and financial condition will be materially and adversely affected. Maintaining and enhancing our brands will depend largely on our ability to be a technology leader and continue to provide high-quality products, which we may not do successfully.

New entrants and the introduction of other distribution models in our markets may harm our competitive position.

The markets for development, distribution and sale of our products are rapidly evolving. New entrants seeking to gain market share by introducing new technology and new products may make it more difficult for us to sell our products and could create increased pricing pressure, reduced profit margins, increased sales and marketing expenses or the loss of market share or expected market share, any of which may significantly harm our business, operating results and financial condition.

Adverse conditions in the global economy and disruption of financial markets may significantly restrict our ability to generate revenues or obtain debt or equity financing.

The global economy continues to experience volatility and uncertainty and governments in many countries continue to evaluate and implement spending cuts designed to reduce budget deficits. These conditions and deficit reduction measures could reduce demand for our products and services, including through reduced government infrastructure projects, which would significantly jeopardize our ability to achieve our sales targets. These conditions could also affect our potential strategic partners, which in turn, could make it more difficult to execute a strategic collaboration. Moreover, volatility and disruption of financial markets could limit our customers' ability to obtain adequate financing or credit to purchase and pay for our products and services in a timely manner, or to maintain operations and result in a decrease in sales volume. General concerns about the fundamental soundness of domestic and international economies may also cause customers to reduce purchases. Changes in governmental banking, monetary and fiscal policies to restore liquidity and increase credit availability may not be effective. Economic conditions and market turbulence may also impact our suppliers' ability to supply sufficient quantities of product components in a timely manner, which could impair our ability to fulfill sales orders. It is difficult to determine the extent of the economic and financial market problems and the many ways in which they may affect our suppliers, customers, investors and business in general. Continuation or further deterioration of these financial and macroeconomic conditions could significantly harm sales, profitability and results of operations.

One of our subsidiaries and certain suppliers are in Japan and located in areas subject to natural disasters or other events that could stop us from having our products made or shipped or could result in a substantial delay in our production or development activities.

We have sales, development and manufacturing resources in Japan. The risk of earthquakes, typhoons and other natural disasters in this geographic area is significant due to the proximity of major earthquake fault lines. Despite precautions taken by us and our third-party providers, a natural disaster or other unanticipated problems, at our location in Japan or at third-party providers could cause interruptions in the products that we provide. Any disruption resulting from these events could cause significant delays in shipments of our products until we are able to shift our manufacturing, assembly or testing from the affected contractor(s) to another third-party vendor. We cannot assure you that alternative capacity could be obtained on favorable terms, if at all.

Defects in our products could harm our reputation and business.

Our products are complex and have contained and may contain undetected defects or errors, especially when first introduced or when new versions are released. Defects in our products may lead to product returns and require us to implement design changes or updates.

Any defects or errors in our products, or the perception of such defects or errors, could result in:

- expenditure of significant financial and product development resources in efforts to analyze, correct, eliminate or work around errors or defects;
- loss of existing or potential customers or distributors;
- delayed or lost revenue;
- delay or failure to attain market acceptance;
- delay in the development or release of new products or services;
- negative publicity, which will harm our reputation;
- warranty claims against us;
- an increase in collection cycles for accounts receivable, which could result in an increase in our provision for doubtful accounts and the risk of costly litigation; and
- harm to our results of operations.

We and our contract manufacturers purchase some components, subassemblies and products from a limited number of suppliers. The loss of any of these suppliers may substantially disrupt our ability to obtain orders and fulfill sales as we design and qualify new components.

We rely on third-party components and technology to build and operate our products and we rely on our contract manufacturers to obtain the components, subassemblies and products necessary for the manufacture of our products. Shortages in components that we use in our products are possible and our ability to predict the availability of such components is limited. If shortages occur in the future, as they have in the past, our business, operating results and financial condition would be materially adversely affected. Unpredictable price increases of such components due to market demand may occur. While components and supplies are generally available from a variety of sources, we and our contract manufacturers currently depend on a single or limited number of suppliers for several components for our products. If our suppliers of these components or technology were to enter into exclusive relationships with other providers or were to discontinue providing such components and technology to us and we were unable to replace them cost effectively, or at all, our ability to provide our products would be impaired. Therefore, we may be unable to meet customer demand for our products, which would have a material adverse effect on our business, operating results and financial condition.

We depend on key personnel and will need to recruit new personnel as our business grows.

As a small company, our future success depends in a large part upon the continued service of key members of our senior management team who are critical to the overall management of CUI Global and our subsidiary companies, Orbital, Orbital Gas Systems, North America, Inc., CUI Inc., CUI Japan, and CUI-Canada as well as the development of our technologies, our business culture and our strategic direction. The loss of any of our management or key personnel could seriously harm our business and we do not maintain any key-person life insurance policies on the lives of these critical individuals.

If we are successful in expanding our product and customer base, we will need to add additional key personnel as our business continues to grow. If we cannot attract and retain enough qualified and skilled staff, the growth of the business may be limited. Our ability to provide services to customers and expand our business depends, in part, on our ability to attract and retain staff with professional experiences that are relevant to technology development and other functions the Company performs. Competition for personnel with these skills is intense. We may not be able to recruit or retain the caliber of staff required to carry out essential functions at the pace necessary to sustain or expand our business.

We believe our future success will depend in part on the following:

- the continued employment and performance of our senior management;
- our ability to retain and motivate our officers and key employees; and
- our ability to identify, attract, hire, train, retain and motivate other highly skilled technical, managerial, marketing, sales and customer service personnel.

Risks Related to Our Intellectual Property and Technology

If we fail to protect our intellectual property rights adequately, our ability to compete effectively or to defend ourselves from litigation could be impaired.

We rely primarily on patent, copyright, trademark and trade secret laws, as well as confidentiality and non-disclosure agreements and other methods, to protect our proprietary technologies and know-how. Given the costs of obtaining patent protection, we may choose not to protect certain innovations that later turn out to be important. Furthermore, there is always the possibility, despite our efforts, that the scope of the protection gained will be insufficient or that an issued patent may be deemed invalid or unenforceable. We license a significant amount of our underlying intellectual property from third parties, i.e., AMT Encoder Technology, Novum Digital Point of Load Technology, ICE Technology, GasPT Technology and VE *Technology*. The loss of our rights as a licensee under any of these or future technology licensing arrangements, or the exclusivity provisions of these agreements, could have a material adverse impact upon our financial position and results of operations.

Monitoring unauthorized use of our intellectual property is difficult and costly. Unauthorized use of our intellectual property may occur in the future without our knowledge. The steps we have taken may not prevent unauthorized use of our intellectual property. Further, we may not be able to detect unauthorized use of, or take appropriate steps to enforce our intellectual property rights. Our competitors may also independently develop similar technology. Our failure to effectively protect our intellectual property could reduce the value of our technology in licensing arrangements or in cross-licensing negotiations and could impair our ability to compete. Any failure by us to meaningfully protect our intellectual property could result in competitors offering products that incorporate our most technologically advanced features, which could seriously reduce demand for our products.

In the future we may need to initiate infringement claims or litigation. Litigation, whether we are a plaintiff or a defendant, can be expensive and time-consuming and may divert the efforts of our technical staff and managerial personnel, which could result in lower revenues and higher expenses, whether or not such litigation results in a determination favorable to us.

Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information.

We have devoted substantial resources to the development of our proprietary technology and trade secrets. In order to protect our proprietary technology and trade secrets, we rely in part on confidentiality agreements with our key employees, licensees, independent contractors and other advisors. These agreements may not effectively prevent disclosure of our trade secrets and may not provide an adequate remedy in the event of unauthorized disclosure of our trade secrets. We may have difficulty enforcing our rights to our proprietary technology and trade secrets, which could have a material adverse effect on our business, operating results and financial condition. In addition, others may independently discover trade secrets and proprietary information and in such cases we could not assert any trade secret rights against such parties. Costly and time consuming litigation could be necessary to determine and enforce the scope of our proprietary rights and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

If a third party asserts that we are infringing on its intellectual property, whether successful or not, it could subject us to costly and time-consuming litigation and our business may be adversely affected.

The technology industry is characterized by the existence of a large number of patents, trademarks and copyrights and by frequent litigation based on allegations of infringement or other violations of intellectual property rights. Third parties may assert patent and other intellectual property infringement claims against us or the parties from whom we license our technological rights in the form of lawsuits, letters or other forms of communication. These claims, whether or not successful, could:

- divert management’s attention;
- result in costly and time-consuming litigation;
- require us to enter into royalty or licensing agreements, which may not be available on acceptable terms, or at all; and
- require us to redesign our products to avoid infringement.

As a result, any third-party intellectual property claims against us could increase our expenses and adversely affect our business. Even if we have not infringed any third parties’ intellectual property rights, we cannot be sure our legal defenses will be successful and even if we are successful in defending against such claims, our legal defense could require significant financial resources and management time. Finally, if a third party successfully asserts a claim that our products infringe its proprietary rights, royalty or licensing agreements might not be available on terms we find acceptable or at all and we may be required to pay significant monetary damages to such third party.

If our contract manufacturers do not respect our intellectual property and trade secrets, our business, operating results and financial condition could be materially adversely affected.

Because most of our contract manufacturers operate outside the United States, where prosecution of intellectual property infringement and trade secret theft is more difficult than in the United States, certain of our contract manufacturers, their affiliates, their other customers or their suppliers may attempt to use our intellectual property and trade secrets to manufacture our products for themselves or others without our knowledge. Although we attempt to enter into agreements with our manufacturers to preclude them from using our intellectual property and trade secrets, we may be unsuccessful in monitoring and enforcing our intellectual property rights. Although we take steps to stop counterfeits, we may not be successful and customers who purchase these counterfeit goods may have a bad experience and our brand may be harmed. If such an impermissible use of our intellectual property or trade secrets were to occur, our ability to sell our products at competitive prices and to be the sole provider of our products may be adversely affected and our business, operating results and financial condition could be materially and adversely affected.

Risks Related to Our Common Stock

Our common stock price may be volatile, which could result in substantial losses for individual shareholders.

The market price for the Company's common stock is volatile and subject to wide fluctuations in response to factors, including the following, some of which are beyond our control, which means our market price could be depressed and could impair our ability to raise capital:

- actual or anticipated variations in our quarterly operating results;
- announcements of technological innovations or new products or services by the Company or our competitors;
- conditions or trends relating to our gas technologies or power and electromechanical technologies;
- changes in the economic performance and/or market valuations of other power and electromechanical, electronic component, industrial controls, gas metering, monitoring and sampling related companies;
- conditions or trends relating to the marketing, sale or distribution of power and electromechanical components and industrial controls to OEM manufacturing customers;
- changes in the economic performance and/or market valuations of other inferential natural gas monitoring device or power and electromechanical components and industrial electronic component related companies;
- additions or departures of key personnel;
- fluctuations of the stock market as a whole;
- announcements about our earnings that are not in line with expectations;
- announcements by our competitors of their earnings that are not in line with expectations;
- the volume of shares of common stock available for public sale;
- sales of stock by us or by our shareholders;
- short sales, hedging and other derivative transactions on shares of our common stock;
- our ability to retain existing customers, attract new customers and satisfy our customers' requirements;
- general economic conditions;
- changes in our pricing policies;
- our ability to expand our business;

- the effectiveness of our personnel;
- new product and service introductions;
- technical difficulties or interruptions in our services;
- the timing of additional investments in our products;
- regulatory compliance costs;
- costs associated with future acquisitions of technologies and businesses; and
- extraordinary expenses such as litigation or other dispute-related settlement payments.

These factors may materially and adversely affect the market price of our common stock, regardless of our performance. In addition, the stock market in general and the market for technology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our actual operating performance. Additionally, because the trading volume of our stock is not large, there can be a disparity between the bid and the asked price that may not be indicative of the stock’s true value.

Offers or availability for sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

Sales of a significant number of shares of our common stock in the public market could harm the market price of our common stock and make it more difficult for us to raise funds through future offerings of common stock.

We have never paid dividends on our common stock and do not expect to pay any in the foreseeable future.

Potential purchasers should not expect to receive a return on their investment in the form of dividends on our common stock. The Company has never paid cash dividends on its common stock and the Company does not expect to pay dividends in the foreseeable future.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Our payment of any future dividends will be at the discretion of our board of directors after taking into account various factors, including but not limited to our financial condition, operating results, cash needs, growth plans and the terms of any credit agreements that we may be a party to at the time. Our ability to pay dividends may be further restricted by the terms of any of our future debt or preferred securities. Accordingly, investors must rely on sales of their own common stock after price appreciation, which may never occur, as the only way to realize their investment. Investors seeking cash dividends should not purchase shares of our stock.

There is a limited public trading market for our common stock so you may not be able to resell your stock and may not be able to turn your investment into cash.

Our common stock is currently traded on the NASDAQ Stock Market under the trading symbol ‘‘CUI.’’ Our shares of common stock are thinly traded. Due to the illiquidity, the market price may not accurately reflect our relative value. There can be no assurance that there will be an active market for our shares of common stock either now or in the future. Because our common stock is thinly traded, a large block of shares traded can lead to a dramatic fluctuation in the share price and investors may not be able to liquidate their investment in us at all or at a price that reflects the value of the business.

Risks Relating to Shareholder Rights

Our board of directors has the authority, without shareholder approval, to issue preferred stock with terms that may not be beneficial to existing common shareholders and with the ability to adversely affect shareholder voting power and perpetuate their control.

Although we do not have any preferred stock outstanding presently, our Articles of Incorporation allow us to issue shares of preferred stock without any vote or further action by our shareholders. Our board of directors has the authority to issue preferred stock without further shareholder approval, as well as the authority to fix and determine the relative rights and preferences of preferred stock. As a result, our board of directors could authorize the issuance of a series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock or other preferred shareholders and the right to the redemption of the shares, together with a premium, prior to the redemption of our common stock.

Preferred stock could be used to dilute a potential hostile acquirer. Accordingly, any future issuance of preferred stock or any rights to purchase preferred shares may have the effect of making it more difficult for a third party to acquire control of us. This may delay, defer or prevent a change of control or an unsolicited acquisition proposal. The issuance of preferred stock also could decrease the amount of earnings attributable to and assets available for distribution to, the holders of our common stock and could adversely affect the rights and powers, including voting rights, of the holders of our common stock and preferred stock.

Our Articles of Incorporation limits director liability, thereby making it difficult to bring any action against them for breach of fiduciary duty.

CUI Global, Inc. is a Colorado corporation. As permitted by Colorado law, the Company's Articles of Incorporation limits the liability of directors to CUI Global, Inc. or its shareholders for monetary damages for breach of a director's fiduciary duty, with certain exceptions. These provisions may discourage shareholders from bringing suit against a director for breach of fiduciary duty and may reduce the likelihood of derivative litigation brought by shareholders on behalf of the Company against a director.

Our charter documents and note outstanding to IED, Inc. may inhibit a takeover that shareholders consider favorable.

Provisions of our Articles of Incorporation and Bylaws may delay or discourage transactions involving an actual or potential change in control of the Company, including transactions in which shareholders might otherwise receive a premium for their shares, or transactions that our shareholders might otherwise deem to be in their best interests. These provisions:

- provide that the authorized number of directors may be changed by resolution of the board of directors;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum; and
- do not provide for cumulative voting rights.

CUI Global issued a note to IED, Inc. in connection with our acquisition of CUI Inc. The note provides that, for so long as any obligations are outstanding under the note, IED will have a right to match any bona fide offer from a third party to acquire CUI Inc. by any means. This matching right could discourage third parties from making an offer to acquire us, which would involve indirectly acquiring CUI Inc., or from acquiring CUI Inc. directly, in a transaction our shareholders might find advantageous because any such offer could be matched by IED and result in the third party utilizing time and resources to formulate an offer without being able to complete a transaction.

Risks Related to Our 2013 Acquisition of Orbital Gas Systems Ltd. in the United Kingdom, and our March 2015 Acquisition of CUI-Canada

A significant portion of our total assets at Orbital Gas Systems Ltd. consists of goodwill, which is subject to periodic impairment analysis, and a significant impairment determination in any future period could have an adverse effect on our results of operations even without a significant loss of revenue or increase in cash expenses attributable to such period.

As of December 31, 2017, we have goodwill totaling approximately $4.6 million associated with the acquisition of Orbital Gas Systems Ltd and CUI-Canada. We are required to evaluate this goodwill for impairment based on the fair value of the operating business units to which this goodwill relates, at least once a year. This estimated fair value could change if we are unable to achieve operating results at the levels that have been forecasted, the market valuation of those business units decreases based on transactions involving similar companies, or there is a permanent, negative change in the market demand for the services offered by the business units. These changes could result in an impairment of the existing goodwill balance that could require a material non-cash charge to our results of operations. See Note 2 - Summary of Significant Accounting Policies - Indefinite-Lived Intangibles and Goodwill Assets for more information on the Company’s goodwill impairment testing and the $3.2 million impairment taken against goodwill in 2017.

Our operating results may be affected by fluctuations in foreign currency exchange rates, which may affect our operating results in U.S. dollar terms.

A portion of our revenue arises from our international operations and we anticipate that, as we grow, our revenues from international operations will increase. Revenues generated and expenses incurred by our international operations are often denominated in foreign currencies. As a result, our consolidated U.S. dollar financial statements are subject to fluctuations due to changes in exchange rates as revenues and expenses of our international operations are translated from local currencies into U.S. dollars. In addition, our financial results are subject to changes in exchange rates that impact the settlement of transactions. The Company does not currently undertake any hedges to protect against adverse foreign currency exposure.

The United Kingdom's proposed withdrawal from the European Union could have an adverse effect on our business and financial results.

On June 23, 2016, a referendum was held in the United Kingdom to determine whether the country should remain a member of the European Union, with voters approving to withdraw from the EU (commonly referred to as Brexit). The UK is currently scheduled to depart on March 29, 2019. Following the referendum, the UK government began discussions with the EU on the terms and conditions of the withdrawal from the EU and on terms of a transition period to December 31, 2020 proposed by the EU but not yet agreed upon. Current uncertainty over the final outcome of the negotiations between the UK and EU, could have an adverse effect on our business and financial results. The long-term effects of Brexit will depend on the terms negotiated between the UK and the EU, which may take years to complete. Our Orbital operations in the UK could be impacted by the global economic uncertainty caused by Brexit.

The announcement of Brexit caused significant volatility in global stock markets and currency exchange rate fluctuations that resulted in the strengthening of the U.S. dollar against foreign currencies in which we conduct business. Volatility in exchange rates is expected to continue in the short term and a strong U.S. dollar relative to the British pound and other currencies may adversely affect our results of operations. During periods of a strengthening dollar, the local currency results of our international operations may translate into fewer U.S. dollars. Uncertainty over Brexit and currency fluctuations could also impact our customers, who may curtail or postpone near-term capital investments or take other actions that adversely affect the growth of our volume and revenue streams from these customers.

In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the UK determines which EU laws to replace or replicate. Our UK operations may incur additional costs and expenses as we adapt to potentially divergent regulatory frameworks from the rest of the EU.

The UK may need to adopt specific legislation and apply for regulatory authorization and permission in separate EU member states. This may impact our overall business opportunities to operate in the EU and UK seamlessly. These added challenges may impact our customers' overall business, which may impact our volume and revenue.

Any of these effects of Brexit, among others, could adversely affect our business and financial results.

Our gas quality inferential measurement device, GasPT®, has not gained market acceptance as rapidly as we anticipated.

Our future financial performance and ability to commercialize the GasPT device and compete successfully will depend on our ability to effectively manage acceptance and introduction of our GasPT device in the natural gas quality inferential measurement device market. Although we have entered into agreements and letters of understanding with third parties, which could result in substantial sales of the GasPT device over the next several years, there is no assurance we will sell at or near the number of units forecasted under these contracts.

Several factors have and may continue to contribute to the slower than anticipated market acceptance of the GasPT device, such as: disruptive technologies, such as the GasPT device, are slow to be accepted in a mature industry, such as natural gas distribution; extensive testing and research required by large natural gas distribution customers takes an extended period of time before such potential customers place firm orders; macro-economic issues in the natural gas industry may slow or impede capital expenditures; registration, regulatory approvals, certifications and licensing requirements in foreign countries.

Our strategy has been to establish market acceptance and credibility with potential customers through a campaign of product exposure and disclosure of highly acceptable test results of recognized international testing laboratories along with industry seminars, conventions, trade shows, professional periodicals and public relations. While we believe that the base has been laid for substantial sales of our GasPT device over the next several years, there is no assurance that our strategy and efforts will be successful.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

During September 2013, our wholly owned subsidiary, CUI Properties, LLC, signed closing documents on the purchase of our Tualatin, Oregon corporate office real estate located at 20050 SW 112th Avenue in the Tualatin Franklin Business Park. In addition to the corporate office, the property also includes the Company's warehouse facility for CUI Inc. The purchase price for this acquisition was $5.1 million and was partially funded by a promissory note payable to Wells Fargo Bank in the amount of $3.7 million plus interest at the rate of 2.0% above LIBOR, payable over ten years.

In January 2015, the Company entered into a three-year lease for our 13,175 square foot Houston facility. In November 2017, the Company relocated to a larger rented office and warehouse space in Houston, TX, of approximately 40,000 square feet that runs until 2022.

In March 2015, as part of the Tectrol (CUI-Canada) acquisition, the Company leased a 73,700 square foot manufacturing facility in Toronto, Canada that runs until 2020.

In September 2015, Orbital completed the construction of a new 46,000 square foot state-of-the-art manufacturing/administration/research and development facility on its existing site in the UK to supplement existing office space. This enhanced onsite facility enabled the Company to not renew its lease on an additional building it was leasing for manufacturing and office space requirements.

Additionally, CUI Japan has leased space in Tokyo, Japan, which is used as a sales office and is leased through March 2020.

The Company has enough manufacturing and office capacity to meet its business needs for the foreseeable future.

Item 3. Legal Proceedings

The Company and its subsidiaries are not parties in any legal proceedings. No director, officer or affiliate of the Company, any owner of record or beneficially of more than five percent of any class of voting securities of the Company or any associate of any such director, officer, affiliate of the Company or security holder is a party adverse to the Company or any of its subsidiaries or has a material interest adverse to the Company or any of its subsidiaries.

Item 4. Mine Safety Disclosure

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Description of Securities

The Company's Common Stock is traded on The NASDAQ Stock Market under the trading symbol ''CUI.'' The Company currently has authorized 325,000,000 common shares, par value $0.001 per share, and as of December 31, 2017, the Company's issued and outstanding shares consisted of 28,406,856 shares of common stock of which 27,890,719 shares are freely tradable without restriction or limitation under the Securities Act. As of December 31, 2017, the Company had in excess of 3,000 beneficial holders of our common stock and in excess of 2,300 shareholders of record. The actual number of shareholders is greater than this number of record holders and includes shareholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees.

The holders of Common Stock are entitled to one vote per share and do not have cumulative voting rights. Holders of the Company's Common Stock do not have any pre-emptive or other rights to subscribe for or purchase additional shares of capital stock and no conversion rights, redemption or sinking-fund provisions.

Market Value

The Company's Common Stock is traded on the NASDAQ Stock Market under the trading symbol ''CUI.'' The following table sets forth, the high and low sales prices of our Common Stock on the NASDAQ during each quarter of the two most recent years.

	High	Low
2017		
First Quarter	$6.90	$4.31
Second Quarter	4.93	3.17
Third Quarter	4.12	3.01
Fourth Quarter	4.35	2.44
2016		
First Quarter	$9.42	$6.18
Second Quarter	8.40	4.85
Third Quarter	6.14	4.01
Fourth Quarter	7.39	4.30

Stock Performance Graph

The following graph compares the performance of our common stock to the performance of the NASDAQ Composite Index and the Russell 2000 Index. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity markets. The comparisons in the chart below are provided in response to SEC disclosure requirements and are not intended to forecast or be indicative of future performance of our common stock. We issued 7,392,856 shares in October 2017, which increased the total number of shares outstanding by about 35% and this had a dilutive effect on the share price as reflected in the following graph.

	Period Ending					
Index	**12/31/2012 ***	**12/31/2013**	**12/31/2014**	**12/31/2015**	**12/31/2016**	**12/31/2017**
CUI Global, Inc.	$100.00	$ 115.12	$ 135.70	$ 128.23	$ 126.23	$ 50.09
NASDAQ Composite	100.00	140.12	160.78	171.97	187.22	242.71
Russell 2000	100.00	138.82	145.62	139.19	168.85	193.58

* Assumed $100 invested on 12/31/2012 in stock or index, including reinvestment of dividends. Fiscal year ended December 31.

Source: SNL Financial LC, Charlottesville, VA

Dividend Policy

The Company has never paid cash dividends on its Common Stock and the Company does not expect to pay dividends in the foreseeable future.

We currently expect to retain future earnings to finance the growth and development of our business. The timing, amount and form of future dividends, if any, will depend on, among other things, our future results of operations and cash flows; our general financial condition and future prospects; our capital requirements and surplus; contractual restrictions; the amount of distributions, if any, received by us from our subsidiaries; and other factors deemed relevant by our board of directors. Any future dividends on our common shares would be declared by and subject to the discretion of our board of directors.

Common Stock Reserved for Future Issuances

Set forth below is a summary of the outstanding securities, transactions and agreements, which relate to 964,180 shares of common stock the Company is required to reserve for potential future issuances.

- *964,180 common shares reserved for outstanding options issued under our Equity Compensation Plans.* As of December 31, 2017, there were reserved for issuance an aggregate of 964,180 shares of common stock for options outstanding under the Company's 2008 Equity Incentive Plan and the Company's 2009 Equity Incentive Plan (Executive).

- *1,526,439 common shares authorized for issuance under our Equity Compensation Plans.* As of December 31, 2017, the Company has 1,526,439 common shares authorized and available for issuance under the Company option plans.

Other than as described herein, as of the date of this report, there are currently no plans, arrangements, commitments or understandings for the issuance of additional shares of Common Stock.

RECENT SALES OF UNREGISTERED SECURITIES

Following is a list of all securities we sold within the past three years, which were not registered under the Securities Act. The Company relied on Section 4(2) of the Securities Act of 1933 as the basis for an exemption from registration for the following issuances.

2017 Sales of Unregistered Securities

Common Stock Issued During 2017

(Dollars in thousands)

Dates of issuance	Type of issuance	Expense/ Prepaid	Stock issuance recipient	Reason for issuance	Total no. of shares	Grant date fair value recorded at

						issuance	
January, April, August and October 2017	Vested restricted common stock	Expense	Four board members	Director compensation	49,980	$ 200	
January, February and June 2017	Common stock	Expense	Three Employees	Approved bonuses	28,634	182	(1)
January and December 2017	Common stock	Expense	Related party, James McKenzie	Pursuant to royalty agreement	3,293	16	(1)
January and February 2017	Common stock	Expense	Two Employees	Cashless stock option exercises	245	—	(2)
May 2017	Common stock	Prepaid expense/expense	Third-party consultant	Strategic investor marketing services	15,000	57	(3)
Total 2017 issuances					97,152	$ 455	(4)(5)

(1) Includes bonuses and royalty of $176 thousand that were accrued and expensed in 2016.
(2) The Company received $0 for the issuance in the cashless option exercises.
(3) Amount includes $24 thousand that was included in prepaid expense at December 31, 2017.
(4) Does not include stock expense of $170 thousand included in accrued liabilities at December 31, 2017 for unissued stock.
(5) Does not include registered 7,392,856 shares issued in October 2017 via the S-3 registration statement. See Note 12. Shareholders' Equity for more information on the October share issuances.

2016 Sales of Unregistered Securities

Common Stock Issued During 2016

(Dollars in thousands)

Date of issuance	Type of issuance	Expense/ Prepaid/ Cash	Stock issuance recipient	Reason for issuance	Total no. of shares	Grant date fair value recorded at issuance	
January, April, July and October 2016	Vested restricted common stock	Expense	Five board members	Director compensation	46,854	$ 267	(1)
January and July 2016	Vested restricted common stock	Expense	Four Employees	Approved bonuses	56,782	381	(2)
January, March, September and December 2016	Common stock	Expense	Related party, James McKenzie	Pursuant to royalty agreement	6,275	38	
February and April 2016	Common stock	Expense	Three Employees	Cashless Stock option exercise	718	—	(3)
Total 2016 issuances					110,629	$ 686	(4)

(1) Includes $38 thousand of stock-based expense related to 2015 director fees accrued and expensed in the fourth quarter of 2015.
(2) Bonuses of $366 thousand were accrued and expensed in the fourth quarter of 2015.
(3) The Company received $0 for issuances via cashless option exercise.
(4) Does not include stock expense of $176 thousand included in accrued liabilities at December 31, 2016.

2015 Sales of Unregistered Securities

Common Stock Issued During 2015

(Dollars in thousands)

Dates of issuance	Type of issuance	Expense/ Prepaid	Stock issuance recipient	Reason for issuance	Total no. of shares	Grant date fair value recorded at issuance	
January, June, August, November 2015	Vested restricted common stock	Expense	Directors	Director compensation	12,228	$ 77	
January 2015	Vested restricted common stock	Expense	New Director of Sales and Marketing - Orbital Gas Systems, North America	Sign-on bonus	17,655	125	
March 2015	Vested restricted common stock	Prepaid expense/expense	Consultant	Compensation for strategic investor marketing services	10,000	63	(1)
April, August 2015	Common stock	Expense	Former employee and employee	Cashless stock option exercise	122	—	(2)
May, June, July 2015	Vested restricted common stock	Expense	Employee	Approved bonus	14,404	72	
July 2015	Common stock	Expense	Related parties, James McKenzie, and IED, Inc.	Pursuant to royalty agreement	4,070	22	
Total 2015 issuances					58,479	$ 359	(3)

(1) Amount includes $31 thousand that was included in prepaid expense at December 31, 2015.
(2) The Company received $0 for issuances via cashless option exercise.
(3) There was $404 thousand of stock-based expense related to employee stock-based bonuses and vested restricted stock units earned in 2015 but not issued until the first quarter of 2016.

Shares Eligible for Future Sale

As of December 31, 2017, we had outstanding 28,406,856 shares of Common Stock. Of these shares, 27,890,719 shares are freely tradable without restriction or limitation under the Securities Act.

The 516,137 shares of Common Stock held by existing shareholders as of December 31, 2017 that are ‘‘restricted’’ within the meaning of Rule 144 adopted under the Securities Act (the ‘‘Restricted Shares’’), may not be sold unless they are registered under the Securities Act or sold pursuant to an exemption from registration, such as the exemption provided by Rule 144 promulgated under the Securities Act. The Restricted Shares were issued and sold by us in private transactions in reliance upon exemptions from registration under the Securities Act.

Item 6. Selected Financial Data

The following tables contain selected consolidated financial data as of the dates and for the periods presented. The selected consolidated balance sheet data as of December 31, 2017 and 2016 and the selected consolidated statement of operations data for the years ended December 31, 2017, 2016, and 2015 have been derived from our audited consolidated financial statements and related notes that we have included elsewhere in this Form 10-K. The selected consolidated balance sheet data as of December 31, 2015, 2014, and 2013 and the selected consolidated statement of operations data for the years ended December 31, 2014 and 2013 have been derived from audited consolidated financial statements that are not presented in this Form 10-K. The timing of acquisitions and divestitures completed during the years presented affects the comparability of the selected financial data.

The selected historical consolidated financial data as of any date and for any period are not necessarily indicative of the results that may be achieved as of any future date or for any future period. You should read the following selected historical financial data in conjunction with the more detailed information contained in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes that we have presented elsewhere in this Form 10-K.

(In thousands, except per share amounts)	For the Years Ended December 31,				
	2017	2016	2015 *	2014	2013 *
Selected Statements of Operations Data:					
Total revenues	$83,275	$86,461	$86,240	$76,045	$60,652
Cost of revenues	55,406	54,200	53,948	47,494	37,147
Gross profit	27,869	32,261	32,292	28,551	23,505
Selling, general and administrative expense	33,921	34,239	33,023	25,924	19,446
Depreciation and amortization	2,163	2,366	2,862	4,197	3,011
Research and development	2,525	2,016	1,848	1,306	943
(Credit to) provision for bad debt	(13)	93	195	(39)	211
Impairment of goodwill and intangible assets (a)	3,155	—	4	32	—
Other operating expenses	47	57	54	27	10
Loss from operations	(13,929)	(6,510)	(5,694)	(2,896)	(116)
Impairment on note receivable (b)	—	—	—	—	(502)
Other income (expense)	234	(251)	(260)	(123)	(280)
Interest expense	(500)	(467)	(441)	(508)	(443)
(Loss) before taxes	(14,195)	(7,228)	(6,395)	(3,527)	(1,341)
Income tax (benefit) expense	(1,606) (c)	38	(408)	(726)	(398)
Net loss	$(12,589)	$(7,266)	$(5,987)	$(2,801)	$(943)
Basic and diluted loss per common share	$(0.56)	$(0.35)	$(0.29)	$(0.14)	$(0.05)

* Includes the operations of CUI-Canada since its acquisition in March 2015 and the operations of Orbital Gas Systems, Limited since its acquisition in September 2013.

(In thousands, except share data)	As of December 31,				
	2017	2016	2015	2014	2013
Selected Balance Sheet Data:					
Cash and cash equivalents	$12,646	$4,617	$7,267	$11,704	$16,576
Short-term investments held to maturity	—	—	—	11,160	10,869
Total current assets	41,276	32,103	38,157	43,126	44,684
Total assets	87,909	79,843	90,848	93,054	99,160
Total current liabilities	18,914	17,738	17,055	12,355	15,296
Total liabilities	30,423	31,208	31,332	27,084	30,602
Total Stockholders' equity	57,486	48,635	59,516	65,970	68,558
Common shares outstanding	28,406,856	20,916,848	20,806,219	20,747,740	20,566,663

(a) During the year ended December 31, 2017, management determined that an impairment of $3.2 million was necessary related to goodwill at Orbital-UK. During the year ended December 31, 2014, management determined that an impairment of $32 thousand was necessary related to intangible, technology rights for a product line that was determined to have a shortened expected life.

(b) During 2013, it was determined that the note receivable related to the divestment of Comex Electronics had become impaired, at which time the Company recorded an impairment of $0.5 million.

(c) There was an $887 thousand tax benefit generated from the effect of the USA Tax Cut and Jobs Act (“Tax Act”) passed in December 2017. See Note 16 Income Taxes for more information on this benefit.

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

Important Note about Forward-Looking Statements

The following discussion and analysis should be read in conjunction with our audited consolidated financial statements as of December 31, 2017 and notes thereto included in this document and our unaudited 10-Q filings for the first three quarters of 2017 and the notes thereto. In addition to historical information, the following discussion and other parts of this Form 10-K contain forward-looking information that involves risks and uncertainties. Our actual results could differ materially from those anticipated by such forward-looking information due to factors discussed elsewhere in this Form 10-K.

The statements that are not historical constitute ‘‘forward-looking statements.’’ Said forward-looking statements involve risks and uncertainties that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements, expressed or implied by such forward-looking statements. These forward-looking statements are identified by the use of such terms and phrases as ‘‘expects,’’ ‘‘intends,’’ ‘‘goals,’’ ‘‘estimates,’’ ‘‘projects,’’ ‘‘plans,’’ ‘‘anticipates,’’ ‘‘should,’’ ‘‘future,’’ ‘‘believes,’’ and ‘‘s

The variables, which may cause differences include, but are not limited to, the following: general economic and business conditions; competition; success of operating initiatives; operating costs; advertising and promotional efforts; the existence or absence of adverse publicity; changes in business strategy or development plans; the ability to retain management; availability, terms and deployment of capital; business abilities and judgment of personnel; availability of qualified personnel; labor and employment benefit costs; availability and costs of raw materials and supplies; and changes in, or failure to comply with various government regulations. Although the Company believes that the assumptions underlying the forward-looking statements contained herein are reasonable, any of the assumptions could be inaccurate; therefore, there can be no assurance that the forward-looking statements included in this Form 10-K will prove to be accurate.

In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such information should not be regarded as a representation by the Company or any person that the objectives and expectations of the Company will be achieved.

Overview

CUI Global, Inc. is a Colorado corporation organized on April 21, 1998. The Company's principal place of business is located at 20050 SW 112th Avenue, Tualatin, Oregon 97062, phone (503) 612-2300. CUI Global is a platform company dedicated to maximizing shareholder value through the acquisition, development and commercialization of new, innovative technologies. Through its subsidiaries, CUI Global has built a diversified portfolio of industry leading technologies that touch many markets.

Critical Accounting Policies

Our financial statements and related public financial information are based on the application of accounting principles generally accepted in the United States (''GAAP''). GAAP requires the use of estimates, assumptions, judgments and subjective interpretations of accounting principles that have an impact on the assets, liabilities, revenue, and expense amounts reported. These estimates can also affect supplemental information contained in our external disclosures including information regarding contingencies, risk and financial condition. We believe our use of estimates and underlying accounting assumptions adhere to GAAP and are consistently applied. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ materially from these estimates under different assumptions or conditions. We continue to monitor significant estimates made during the preparation of our financial statements.

While all of our significant accounting policies impact the Company’s financial condition and results of operations, we view certain of these policies as critical. Policies determined to be critical are those policies that have the most significant impact on our financial statements and require management to use a greater degree of judgment and estimates. Actual results may differ from those estimates. Our management believes that given current facts and circumstances, it is unlikely that applying any other reasonable judgments or estimate methodologies would have caused a material change in our results of operations, financial position or liquidity for the periods presented in this report.

Asset Impairment

The Company reviews its long-lived assets including finite-lived intangibles for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset exceeds its fair value and may not be recoverable. In performing the review for recoverability, the Company estimates the future cash flows expected to result from the use of the asset and its eventual disposition. If the sum of the expected future cash flows (undiscounted and without interest charges) is less than the carrying amount of the asset, an impairment loss is recognized as the excess of the carrying amount over the fair value. Otherwise, an impairment loss is not recognized. Management estimates the fair value and the estimated future cash flows expected. Any changes in these estimates could impact whether there was impairment and the amount of the impairment.

During the year ended December 31, 2015, management recorded a $2 thousand impairment for a patent within the Power and Electromechanical segment as the Company chose not to continue pursuit of the related patent grants and a $2 thousand impairment of its capitalized website costs for its Japan site after choosing to translate its U.S.-based website into Japanese.

Indefinite-Lived Intangibles and Goodwill Assets

The Company accounts for business combinations under the acquisition method of accounting in accordance with ASC 805, ‘‘Business Combinations,’’ where the total purchase price is allocated to the tangible and identified intangible assets acquired and liabilities assumed based on their estimated fair values. The purchase price is allocated using the information currently available, and may be adjusted, up to one year from acquisition date, after obtaining more information regarding, among other things, asset valuations, liabilities assumed and revisions to preliminary estimates. The purchase price in excess of the fair value of the tangible and identified intangible assets acquired less liabilities assumed is recognized as goodwill.

Annual Test. The Company tests for indefinite-lived intangibles and goodwill impairment in the second quarter of each year and whenever events or circumstances indicate that the carrying amount of the asset exceeds its fair value and may not be recoverable. The Company’s qualitative assessment of impairment for indefinite-lived assets at May 31, 2017, followed the guidance in ASC 350-30-35-18A and 18B. The Company performed a qualitative analysis of goodwill and indefinite-lived intangibles at May 31, 2017, and determined there was no impairment of indefinite-lived intangibles and goodwill at that time.

Under current accounting guidance, CUI Global is not required to calculate the fair value of a reporting unit unless the entity determines, based on a qualitative assessment, that it is more likely than not that its fair value is less than its carrying amount. The guidance includes a number of factors to consider in conducting the qualitative assessment. The Company tests for goodwill impairment in the second quarter of each year and whenever events or changes in circumstances indicate that the carrying amount of the asset exceeds its fair value and may not be recoverable.

As detailed in ASC 350-20-35-3A, in performing its testing for goodwill, management completes a qualitative analysis to determine whether it was more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. To complete this review, management follows the steps in ASC 350-20-35-3C to evaluate the fair values of the intangibles and goodwill and considers all known events and circumstances that might trigger an impairment of goodwill.

Interim Test. During the fourth quarter of 2017, the Company determined that there were indicators present to suggest that it was more likely than not that the fair value of the Orbital-UK reporting unit was less than its carrying amount. The significant changes for the Orbital-UK reporting unit subsequent to the annual goodwill impairment test performed as of May 31, 2017 included a decline in the 2017 actual revenue, operating income and cash flows compared to previously forecasted results and a decline in the 2018 forecasted revenue, operating income and cash flows due in part to the longer than expected temporary halt in shipping of its GasPT product to a major customer in Italy and market uncertainty due to the continuing effects of Brexit.

To test the Orbital-UK reporting unit for impairment, the Company used a quantitative test. The Company estimated the fair value of the Orbital-UK reporting unit using a blend of a market approach and an income approach, which was deemed to be the most indicative of fair value in an orderly transaction between market participants. Under the income approach, the Company determined fair value based on estimated future cash flows of the Orbital-UK reporting unit discounted by an estimated weighted-average cost of capital, reflecting the overall level of inherent risk of the Orbital-UK reporting unit and the rate of return an outside investor would expect to earn. The Company based its cash flow projections for the Orbital-UK reporting unit using a forecast of cash flows and a terminal value developed by capitalizing an assumed stabilized cash flow figure. The forecast and related assumptions were derived from an updated financial forecast prepared during the fourth quarter of 2017. Under the market approach, appropriate valuation multiples were derived from the historical operating data of selected guideline companies. The valuation multiples were evaluated and adjusted based on the strengths and weaknesses of the Company relative to the selected guideline companies and the multiple was then applied to the appropriate operating data of the Company to arrive at an indication of fair market value. As a result of the analysis, the Company concluded that the carrying value of the Orbital-UK reporting unit exceeded its estimated fair value. The quantitative test for the Orbital-UK reporting unit resulted in an impairment for the Orbital-UK reporting unit, and the Company recorded a goodwill impairment charge of $3.2 million during the fourth quarter of 2017.

The remaining goodwill related to the Orbital-UK reporting unit as of December 31, 2017 was $4.5 million, which is included in the Energy segment. As of December 31, 2017, there was also goodwill remaining for CUI Inc., CUI-Canada and CUI-Japan reporting units, which are included in the Power and Electromechanical segment.

In 2016 and 2015, the analysis, determined there was no impairment necessary to goodwill. Through these reviews, management concluded there were no events or circumstances that triggered an impairment (and there was no expectation that a reporting unit or a significant portion of a reporting unit would be sold or otherwise disposed of in the following year), therefore, no further analysis was necessary to prepare for goodwill impairment beyond the steps in 350-20-35-3C in accordance with current accounting guidance. On a periodic basis, we will also perform a quantitative analysis of goodwill impairment and in 2016, in addition to the qualitative analysis, we performed a quantitative analysis of goodwill impairment and concluded no impairment of goodwill was required.

Stock-Based Compensation

The Company accounts for stock-based compensation using FASB Accounting Standards Codification No. 718 (''FASB ASC 718''), ''Compensation – Stock Compensation.'' FASB Codification No. 718 requires the fair value of all stock-based employee compensation awarded to employees to be recorded as an expense over the related vesting period.

Stock bonuses issued to employees are recorded at fair value using the market price of the stock on the date of grant and expensed over the vesting period or immediately if fully vested on date of issuance. Employee stock options are recorded at fair value using the Black-Scholes option pricing model. The underlying assumptions used in the Black-Scholes option pricing model by the Company are taken from publicly available sources including: (1)

volatility, which is calculated using historic stock price information from online finance websites such as Google Finance and Yahoo Finance; (2) the stock price on the date of grant is obtained from online finance websites such as those previously noted; (3) the appropriate discount rates are obtained from the United States Federal Reserve economic research and data website; and (4) other inputs are determined based on previous experience and related estimates. With regards to expected volatility, the Company utilizes an appropriate period for historical share prices for CUI Global, Inc. that best reflect the expected volatility for determining the fair value of our stock options.

Valuation of Non-Cash Capital Stock Issuances

The Company values its stock transactions based upon the fair value of the equity instruments. Various methods can be used to determine the fair value of an equity instrument. The Company may use the fair value of the consideration received, the quoted market price of the stock or a contemporaneous cash sale of the common or preferred stock. Each of these methods may produce a different result. Management uses the method it determines most appropriately reflects the stock transaction. If a different method was used it could impact the expense and equity stock accounts.

Revenue Recognition

Power and Electromechanical Segment

Product revenue is recognized in the period when persuasive evidence of an arrangement with a customer exists, the products are shipped and title has transferred to the customer, the price is fixed or determinable, and collection is reasonably assured. The Company sells to distributors pursuant to distribution agreements that have certain terms and conditions such as the right of return and price protection, which inhibit revenue recognition unless they can be reasonably estimated as we cannot assert the price is fixed and determinable and estimate returns. For one distributor that comprises 26% of revenue, we have such history and ability to estimate and therefore recognized revenue upon sale to the distributor and record a corresponding reserve for the estimated returns. For three other distributor arrangements that represents a combined 15% of revenue, we recognize revenue on a sell-through basis, and accordingly defer revenue and the related costs until such time as the distributor resells the product.

Energy Segment

For production-type contracts meeting the Company's minimum threshold, revenues and related costs on the contracts, are recognized using the ''percentage of completion method'' of accounting in accordance with ASC 605-35, *Accounting for Performance of Construction-Type and Certain Production Type Contracts* (''ASC 605-35''). Under this method, contract revenues and related expenses are recognized over the performance period of the contract in direct proportion to the costs incurred as a percentage of total estimated costs for the entirety of the contract. Costs include direct material, direct labor, subcontract labor and any allocable indirect costs. The Company captures certain job costs as work progresses, including labor, material and costs not invoiced. Margin adjustments are made as information pertaining to contracts changes. All un-allocable indirect costs and corporate general and administrative costs are charged to the periods as incurred. The amount of costs not invoiced is captured to ensure an estimated margin consistent with that expected at the completion of the project. In the event a loss on a contract is foreseen, the Company recognizes the loss when it is determined. Contract costs plus recognized profits are accumulated as deferred assets, and billings and/or cash received are recorded to a deferred revenue liability account. The net of these two accounts for any individual project is presented as ''Costs in excess of billings,'' an asset account, or ''Billings in excess of costs,'' a liability account.

Production type contracts that do not qualify for use of the percentage of completion method are accounted for using the ''completed contract method'' of accounting in accordance with ASC 605-35-25-57. Under this method, contract costs are accumulated as deferred assets, and billings and/or cash received is recorded to a deferred revenue liability account, during the periods of construction, but no revenues, costs, or profits are recognized in operations until the period within which completion of the contract occurs. A contract is considered complete when all costs except insignificant items have been incurred; the equipment is operating according to specifications and has been accepted by the customer.

For product sales in the Energy segment, revenue is recognized in the period when persuasive evidence of an arrangement with a customer exists, the products are shipped and title has transferred to the customer, the price is fixed or determinable, and collection is reasonably assured.

Revenues from warranty and maintenance activities are recognized ratably over the term of the warranty and maintenance period and the unrecognized portion is recorded as deferred revenue.

Liquidity and Capital Resources

General

As of December 31, 2017, CUI Global held Cash and cash equivalents of $12.6 million. Operations, other intangible assets, and equipment have been funded through cash on hand, the October 2017 equity raise and short-term credit facilities during the year ended December 31, 2017.

Cash used in Operations

There was a use of cash from operations of approximately $9.4 million during the year ended December 31, 2017. This was an increase from the use of cash from operations of approximately $0.6 million and approximately $6.2 million for the years ended December 31, 2016 and 2015, respectively. Overall, the change in cash used in operations is primarily the result of the net loss in 2017 before non-cash expenses affected by changes in assets and liabilities.

The cash from operations in 2017 compared to 2016 was negatively affected by a larger net loss attributable to the Energy segment and the timing of accounts receivable collections and accounts payable payments in both the Energy and Power and Electromechanical Segments.

During 2017, in addition to the change in trade accounts receivable and accounts payable, significant factors that impacted the cash used in operations included cash used for inventory purchases of approximately $0.4 million associated with timing of customer orders and ongoing projects, $0.5 million related to the change in deposits and other assets due to the increase in long-term prepaid royalties at Orbital-UK, $0.4 million use of cash related to changes in accrued expenses primarily due to a change in accrued compensation in the Energy segment and a $0.4 million use of cash from changes in prepaid assets that affected all three segments. Changes in costs in excess of billings and billings in excess of cost were a combined approximate $0.3 million source of cash in the period related to billings on projects in the Energy segment and unearned revenue increased $2.7 million primarily in relation to increases in deferred revenue from distributor activity within the Power and Electromechanical segment.

On a segment basis, in 2017, the Power and Electromechanical segment contributed cash from operations of approximately $3.9 million while the Energy segment used cash of approximately $8.4 million and the Other category used cash of approximately $4.9 million. The Energy segment was hampered by the continued costs of building brand awareness in North America and a regulatory issue in Italy unrelated to the technology that delayed the next phase of a significant GasPT project through 2017. The Company expects the project to resume in 2018. The customer is currently working with its regulatory body to implement a program that would improve its ability to more rapidly deploy the new metering solutions.

We believe cash from operations will improve in the Energy segment in 2018 due to the expected resumption of the Italian project and growth in the North American business. As the North American Orbital business matures, this operation is expected to contribute cash and earnings, but not in the short term. The Power and Electromechanical segment is expected to continue to provide cash from operations and we believe the cash usage rate in the Other category to continue to be stable at the new lower level due to cost cutting initiatives put in place during 2017.

The use of cash from operations in 2016 was benefited by lower accounts receivable balances in both segments at December 31, 2016 compared to December 31, 2015 as a result of improved collections in both segments and the transition of Tectrol customers to CUI-Canada that delayed some payments at the end of 2015. CUI-Canada's and Orbital-UK's cash from operations improved significantly from 2015 while Orbital Gas Systems, North America, Inc. continued to use more cash than it produced due to the cost of establishing the Orbital brand in the U.S.

During 2016, in addition to the change in trade accounts receivable, significant factors that impacted the cash used in operations included cash used for inventory purchases that increased approximately $1.7 million associated with timing of customer orders and ongoing projects, changes in costs in excess of billings and billings in excess of cost were a combined approximate $1.3 million use of cash in the period related to billings on projects in the Energy segment and unearned revenue increased $1.2 million primarily in relation to increases in deferred revenue from distributor activity within the Power and Electromechanical segment.

Negative cash flow in 2015 from operations of $6.2 million was significantly affected by operating requirements from Orbital Gas Systems North America and CUI-Canada during the year ended December 31, 2015. The change in cash used in operations is primarily the result of the net loss in 2015 before non-cash expenses as well as changes in assets and liabilities.

During 2015, significant factors that impacted the cash used in operations included the increased receivables of approximately $3.3 million with $1.4 million of it due to credit sales generated following the opening of Orbital Gas Systems North America and the acquisition of CUI-Canada coupled with increased sales volume and the timing of deliveries and related sales terms across the Company. Cash used for inventory purchases increased approximately $3.7 million associated with timing of customer orders and ongoing projects. Additionally, the cash flow from operations was impacted by an approximate $0.9 million increase in prepaid expenses and other current assets associated largely with prepaid insurance premiums, product purchases, royalties and consulting services fees. Also, changes in costs in excess of billings and billings in excess of cost were a combined approximate $2.9 million use of cash in the period related to billings on projects in the Energy segment. The overall use in operating cash was partially offset by an increase in accounts payable of approximately $2.1 million primarily due to the timing of goods receipts and the related terms along with the increase due to the addition of Orbital Gas Systems, North America, Inc. and CUI-Canada. Accrued expenses increased $1.8 million related largely to an increase in accrued compensation. Unearned revenue increased $2.2 million primarily in relation to increases in deferred revenue from distributor activity within the Power and Electromechanical segment.

During 2017, 2016 and 2015, the Company used stock and options as a form of payment to certain vendors, consultants, directors and employees. For years ended December 31, 2017, 2016 and 2015, the Company recorded a total of $0.4 million, $0.7 million and $1.3 million, respectively for share-based compensation related to equity given, or to be given, to employees, directors and consultants for services provided and as payment for royalties earned. The decreases in 2017 compared to 2016 and in 2016 compared to 2015 were due to lower stock-based bonuses and lower stock option vesting expense as all remaining unvested stock options fully vested in 2016.

Capital Expenditures and Investments

During the years ended 2017, 2016 and 2015, CUI Global invested $0.9 million, $0.8 million and $5.0 million, respectively, in fixed assets. These investments typically include additions to equipment for engineering and research and development, tooling for manufacturing, furniture, computer equipment for office personnel, facilities improvements and other fixed assets as needed for operations. The 2015 investments in property and equipment included the construction of a new 46,000 square foot state-of-the-art manufacturing/administration/research and development facility in the UK to supplement existing office space at Orbital. The Company anticipates further investment in fixed assets during 2018 in support of its on-going business and continued development of product lines and technologies.

CUI Global invested $0.6 million, $0.9 million, and $0.1 million in other intangible assets during 2017, 2016 and 2015, respectively. These investments typically include product certifications, technology rights, capitalized website development, software for engineering and research and development and software upgrades for office personnel. Investments in 2017 primarily related to product certifications in the Power and Electromechanical segment and investments in software in the Energy segment. The increased investments in 2016 were due to an increase in product certifications and an ongoing ERP software implementation at Orbital-UK. The Company expects its investment in other intangible assets will continue throughout 2018.

The Company did not invest in short-term investments classified as held to maturity and did not receive any money from maturities in 2017 or 2016. In 2015, the Company received $11.1 million from maturities of these investments. These investments included money market securities, certificates of deposit, commercial paper and corporate notes. Investments made by the Company are subject to an investment policy, which limits our risk of loss exposure by setting appropriate credit quality requirements for investments held, limiting maturities to be one year or less, and setting appropriate concentration levels to prevent concentrations. This includes a requirement that no more than 3% of the portfolio, or $500,000, whichever is greater, may be invested in one particular issue.

On March 5, 2015, the Company closed on an Asset Purchase Agreement to acquire certain assets and assume certain liabilities of Tectrol, Inc., a Toronto, Canada corporation. The acquisition was effective March 1, 2015 and is included from that date in the Company's Power and Electromechanical segment. The final adjusted purchase price for the acquisition of Tectrol was $4.5 million, which included the present value of $0.3 million of royalties to be paid on future sales, which was recorded as $0.2 million of contingent consideration and had a balance of $45 thousand at December 31, 2017. See Note 4 Acquisitions, for more information on the Tectrol acquisition.

Financing Activities

During the years ended December 31, 2017, 2016, and 2015, the Company issued payments of $29 thousand, $41 thousand and $32 thousand, respectively, against capital leases of motor vehicles and equipment. The Company paid $89 thousand, $85 thousand and $81 thousand against the mortgage note payable in 2017, 2016 and 2015, respectively. Also in 2017 and 2016, the Company issued payments of $61 thousand and $59 thousand, respectively, toward the contingent liability associated with the Tectrol acquisition.

At December 31, 2017, the Company had a $6 million two-year revolving line of credit (LOC) and a 1.5 million British pound sterling overdraft facility (approximately $2 million at December 31, 2017). As of January 1, 2018, the credit line for the LOC was lowered to $4 million in accordance with the agreement. For the year ended December 31, 2017, the Company recorded proceeds of $22.3 million from the line of credit and recorded proceeds of $9.8 million from the Company's overdraft facility in the U.K. These proceeds were paid back during 2017 and the balances on each of these credit facilities was zero at December 31, 2017.

S-3 registration

The Company filed an S-3 registration statement on March 14, 2017 containing a prospectus that was effective March 29, 2017. With this filing, CUI Global may from time to time issue various types of securities, including common stock, preferred stock, debt securities and/or warrants, up to an aggregate amount of $100 million.

On October 23, 2017, the Company closed on an underwritten public offering of 7,392,856 shares at a public offering price of $2.80 per share, including 964,285 shares sold at the public offering price pursuant to the underwriter's exercise in full of its option to purchase additional shares to cover over-allotments. The net proceeds to CUI Global (after deducting underwriting discount and other expenses payable by the Company) were approximately $18.9 million. The Company has used and intends to continue to use the net proceeds from the offering primarily for general corporate purposes, which includes operating expenses, working capital to improve and promote its commercially available products, advance product candidates, future acquisitions or share repurchases, to expand international presence and commercialization, for general capital expenditures and for satisfaction of debt obligations. In 2017, the Company used some of the proceeds of the public offering to pay off its line of credit and overdraft facility.

As the Company focuses on strategic acquisitions, technology development, product line additions, developing CUI-Canada operations, and developing Orbital Gas Systems, North America, Inc., it will fund these activities together with related sales and marketing efforts for its various product offerings with cash on hand, including proceeds from the October 2017 issuances through the S-3 registration statement, and available debt.

CUI Global may raise additional capital needed to fund the further development and marketing of its products as well as payment of its debt obligations.

See the section entitled Recent Sales of Unregistered Securities for a complete listing of all unregistered securities transactions.

Financing activities – related party activity

During 2017, 2016 and 2015, $0.3 million, $0.3 million, and $0.3 million, respectively in interest payments were made in relation to the promissory notes issued to related party, IED, Inc. The promissory note terms include a due date of May 15, 2020 and an interest rate of 5% per annum, with interest payable monthly and the principal due as a balloon payment at maturity.

Please see Note 9 Notes Payable and Note 13 Related Party Transactions for further discussion of these transactions.

Recap of Liquidity and Capital Resources

During the year ended December 31, 2017, the Company continued to use cash at Orbital Gas Systems North America in Houston while the CUI-Canada operation was more fully integrated into the Company's Power and Electromechanical segment. As expected in the two years following two major additions, along with an ongoing focus on research and development and growth initiatives, cash usage was greater than what it will be when the businesses are fully mature. The net cash used in operating activities increased to $9.4 million from $0.6 million in 2016 with much of that due to the ongoing efforts to grow the current businesses as well as the effects of the delay in the major GasPT project in Italy and overall economic effects of Brexit and the transition in the UK, which has resulted in considerable delays in economic activities in the UK.

The Wells Fargo mortgage promissory note has a balance at December 31, 2017 of $3.4 million due, of which $94 thousand is the current portion. See Note 9 Notes Payable for more information on this note.

The Company's wholly owned subsidiary, CUI Inc. renewed its two-year revolving Line of Credit (LOC) with Wells Fargo Bank in the principal amount of $6.0 million line of credit, until June 1, 2019 with a scheduled decrease in the LOC limit to $4.0 million as of January 1, 2018. On October 5, 2016, Orbital Gas Systems Ltd. signed a five-year agreement with the London branch of Wells Fargo Bank N.A. for a multi-currency variable rate overdraft facility with a facility limit of 1.5 million pounds sterling ($2.0 million at December 31, 2017) that expires on October 5, 2021. See Note 10 Working Capital Line of Credit and Overdraft Facility for more information on these two credit facilities.

At December 31, 2017, the Company had cash and cash equivalents balances of $12.6 million. At December 31, 2017 and 2016, the Company had $0.9 million and $0.8 million, respectively, of cash and cash equivalents balances at domestic financial institutions, which were covered under the FDIC insured deposits programs and $0.2 million and $0.2 million, respectively, at foreign financial institutions covered under the United Kingdom Financial Services Compensation (FSC) and the Canada Deposit Insurance Corporation (CDIC). At December 31, 2017 and 2016, the Company held $0.1 million and $0.2 million, respectively, in Japanese foreign bank accounts, $0.1 million and $1.0 million, respectively, in European foreign bank accounts and $0.1 million and $0.1 million, respectively, in Canadian bank accounts.

The following tables present our contractual obligations as of December 31, 2017:

(In thousands)	Payments due by period Less than 1 year	1 to 3 years	3 to 5 years	After 5 years	Total
Capital lease obligations:					
Minimum lease payments	$4	$8	$2	$—	$14
Operating lease obligations:					
Operating leases	934	1,311	789	—	3,034
Notes payable obligations:					
Notes payable maturities	94	5,506	224	2,830	8,654
Interest on notes payable (1)	265	365	—	—	630
Total Obligations	$1,297	$7,190	$1,015	$2,830	$12,332

[(1)] The interest on notes payable includes fixed interest on the related party note payable to IED, Inc. and does not include the variable interest on the mortgage payable. For further information regarding notes payable see Note 9 Notes Payable.

As of December 31, 2017, the Company had an accumulated deficit of $108.6 million.

The Company expects the revenues from its Power and Electromechanical and Energy Segments, cash on hand, and cash available from line of credit and overdraft facility to cover operating and other expenses for the next twelve months of operations. However, in the short-term, the Company expects its Orbital operation in Houston to continue to need cash support until it can firmly establish itself. The CUI-Canada operation in the Power and Electromechanical segment acquired in 2015 will also continue to be near break even in the short-term. If revenues and other funds are not sufficient to cover all operating and other expenses, additional funding may be required. There is no assurance the Company will be able to raise such additional capital. The failure to raise capital or generate product sales in the expected time frame would have a material adverse effect on the Company.

Off-Balance Sheet Arrangements

As of December 31, 2017, the Company had no off-balance sheet arrangements.

Results of Operations

The following tables set forth, for the periods indicated, contain certain financial information regarding revenue and costs by segment:

(Dollars in thousands)	For the Year Ended December 31, 2017							
	Power and Electro - Mechanical	Percent of Segment Revenues	Energy	Percent of Segment Revenues	Other	Percent of Segment Revenues	Total	Percent of Total Revenues
	$	%	$	%	$	%	$	%
Total Revenues	$64,432	100.0 %	$18,843	100.0 %	$—	— %	$83,275	100.0 %
Cost of revenue	42,493	66.0 %	12,913	68.5 %	—	— %	55,406	66.5 %
Gross Profit	21,939	34.0 %	5,930	31.5 %	—	— %	27,869	33.5 %
Operating expenses:								
Selling, general and administrative	16,415	25.5 %	12,588	66.8 %	4,918	— %	33,921	40.7 %
Depreciation and amortization	818	1.2 %	1,345	7.2 %	—	— %	2,163	2.6 %
Research and development	2,303	3.6 %	222	1.2 %	—	— %	2,525	3.0 %
Bad debt	3	— %	(16)	(0.1)%	—	— %	(13)	— %
Impairment of goodwill and intangible assets	3	— %	3,152	16.7 %	—	— %	3,155	3.8 %
Other operating expenses	42	0.1 %	5	— %	—	— %	47	0.1 %
Total operating expenses	19,584	30.4 %	17,296	91.8 %	4,918	— %	41,798	50.2 %
Income (loss) from operations	$2,355	3.6 %	$(11,366)	(60.3)%	$(4,918)	— %	$(13,929)	(16.7)%

(Dollars in thousands)	For the Year Ended December 31, 2016							
	Power and Electro - Mechanical	Percent of Segment Revenues	Energy	Percent of Segment Revenues	Other	Percent of Segment Revenues	Total	Percent of Total Revenues
	$	%	$	%	$	%	$	%
Total Revenues	$58,403	100.0 %	$28,058	100.0 %	$—	— %	$86,461	100.0 %
Cost of revenue	38,059	65.2 %	16,141	57.5 %	—	— %	54,200	62.7 %
Gross Profit	20,344	34.8 %	11,917	42.5 %	—	— %	32,261	37.3 %
Operating expenses:								
	16,756	28.7 %	12,006	42.8 %	5,477	— %	34,239	39.6 %

Selling, general and administrative								
Depreciation and amortization	963	1.6 %	1,401	5.0 %	2	— %	2,366	2.7 %
Research and development	1,873	3.2 %	143	0.5 %	—	— %	2,016	2.3 %
Bad debt	49	0.1 %	44	0.2 %	—	— %	93	0.1 %
Other operating expenses (income)	58	0.1 %	(1)	— %	—	— %	57	0.1 %
Total operating expenses	19,699	33.7 %	13,593	48.5 %	5,479	— %	38,771	44.8 %
Income (loss) from operations	$645	1.1 %	$(1,676)	(6.0)%	$(5,479)	— %	$(6,510)	(7.5)%

(Dollars in thousands)	For the Year Ended December 31, 2015							
	Power and Electro - Mechanical	Percent of Segment Revenues	Energy	Percent of Segment Revenues	Other	Percent of Segment Revenues	Total	Percent of Total Revenues
	$	%	$	%	$	%	$	%
Total Revenues	$58,037	100.0 %	$28,203	100.0 %	$—	— %	$86,240	100.0 %
Cost of revenue	36,287	62.5 %	17,661	62.6 %	—	— %	53,948	62.6 %
Gross Profit	21,750	37.5 %	10,542	37.4 %	—	— %	32,292	37.4 %
Operating expenses:								
Selling, general and administrative	16,178	27.9 %	12,216	43.4 %	4,629	— %	33,023	38.3 %
Depreciation and amortization	915	1.6 %	1,941	6.9 %	6	— %	2,862	3.3 %
Research and development	1,707	3.0 %	141	0.5 %	—	— %	1,848	2.1 %
Bad debt	70	0.1 %	125	0.4 %	—	— %	195	0.2 %
Impairment of intangible assets	4	— %	—	— %	—	— %	4	— %
Other operating expenses	20	— %	34	0.1 %	—	— %	54	0.1 %
Total operating expenses	18,894	32.6 %	14,457	51.3 %	4,635	— %	37,986	44.0 %
Income (loss) from operations	$2,856	4.9 %	$(3,915)	(13.9)%	$(4,635)	— %	$(5,694)	(6.6)%

Revenue

Revenues by Segment (Dollars in thousands)	For the Years Ended December 31, 2017	Percent Change	2016	Percent Change	2015
Power and Electromechanical	$64,432	10.3 %	$58,403	0.6 %	$58,037
Energy	18,843	(32.8)%	28,058	(0.5)%	28,203
Other	—	— %	—	— %	—
Total revenues	$83,275	(3.7)%	$86,461	0.3 %	$86,240

2017 compared to 2016

Revenues in 2017 are attributable to continued sales and marketing efforts, sales through the distribution channel customers, the CUI-Canada related product line, and the revenues generated since the January 2015 opening of Orbital Gas Systems, North America, Inc. Net revenues for the year ended December 31, 2017 were lower than in 2016 due to lower revenues in our Energy segment associated with the timing of customer project delivery schedules and a regulatory issue in Italy unrelated to the technology that delayed the next phase of that project through 2017 as well as lower translated revenue at our UK operations due to the lower value British pound Sterling following Brexit. The value of the British pound Sterling began a slow recovery after bottoming out in the first quarter of 2017 and was no longer a negative factor in the fourth quarter as compared to 2016. The Italian contract is still in place and the

Company announced in October 2017 that the tariff issue has been resolved and the Company expects deliveries to resume in 2018. Partially offsetting the decrease in the Energy segment, was an increase in revenue in the Power and Electromechanical segment for the year ended December 31, 2017 due to the timing of customer delivery schedules and sell through activity at distributors.

The customer orders related to the Power and Electromechanical segment are associated with the existing product offering, continued new product introductions, continued sales and marketing programs, new customer engagements, distribution channel sales, and the addition in March 2015 of the products from CUI-Canada. In October 2017, the Company announced its first order for its new power monitoring and switching system (ICE Switch) for data centers that is expected to be delivered in the first quarter of 2018.

The Power and Electromechanical segment held a backlog of customer orders of approximately $20.2 million as of December 31, 2017 compared to a backlog of customer orders of approximately $18.1 million at December 31, 2016. At December 31, 2017, the Energy segment held a backlog of customer orders of approximately $12.6 million compared to approximately $12.1 million at December 31, 2016.

CUI Inc. introduced 1,122 new products during the year ended 2017 compared to 968 new products during the year ended 2016. The continued product expansion including ICE products, and moving smaller sales through the distribution channel is expected to continue to result in revenue growth in future periods as CUI's sales group and support staff continues to reach new customers, further expand relationships with existing customers and continued new product introductions in efforts to have CUI products designed into new projects.

2016 compared to 2015

Revenues in 2016 were attributable to continued sales and marketing efforts, sales through the distribution channel customers, the CUI-Canada related product line, and the revenues generated since the January 2015 opening of Orbital Gas Systems, North America, Inc. Net revenues in 2016 were generally consistent compared to 2015 but would have been more significantly improved except for lower translated Orbital-UK operations as a result of falling foreign currency rates in the UK following the Brexit vote. However, the lower rates did not have a significant effect on operating or net income.

The Power and Electromechanical segment held a backlog of customer orders of approximately $18.1 million as of December 31, 2016 compared to a backlog of customer orders of approximately $19.7 million as of December 31, 2015. At December 31, 2016, the Energy segment held a backlog of customer orders of approximately $12.1 million compared to approximately $12.5 million as of December 31, 2015. In 2016, the Energy segment's Orbital Gas Systems, North America, Inc. subsidiary completed its first full year of operations and made progress on its goals of self-sustainability with four consecutive quarters of revenue growth. CUI Inc. introduced 968 new products during the year ended 2016 compared to 838 new products during the year ended 2015.

<u>*Cost of Revenue*</u>

	For the Years Ended December 31,				
Cost of Revenues by Segment		Percent		Percent	
(Dollars in thousands)	2017	Change	2016	Change	2015
Power and Electromechanical	$42,493	11.7 %	$38,059	4.9 %	$36,287
Energy	12,913	(20.0)%	16,141	(8.6)%	17,661
Other	—	— %	—	— %	—
Total cost of revenues	$55,406	2.2 %	$54,200	0.5 %	$53,948

2017 compared to 2016

The cost of revenues as a percentage of revenue increased to 67% during the year ended December 31, 2017 from 63% during the year ended December 31, 2016. The increase in the cost of revenues as a percentage of revenue was due to a less favorable product mix particularly in the Energy segment in 2017 including a decreased volume of higher margin GasPT sales. The Power and Electromechanical segment also had a slight decrease in its gross margin associated with product mix. As a result of the less favorable product mix in the Energy segment, for the year ended December 31, 2017, the cost of revenues as a percentage of revenue increased 11 percentage points from 58% to 69%.

Cost of sales in the Energy segment were lower in 2017 compared to 2016 due to lower sales volumes. The percentage of cost of sales for the Power and Electromechanical segment increased from 65% to 66%. In addition to the increased cost of sales percentage, costs of sales in the Power and Electromechanical segment increased due to higher sales volume in 2017 compared to 2016. The Company expects improved cost of revenues as a percentage of revenues in 2018 as a result of increased sales of higher margin products including GasPT.

2016 compared to 2015

The cost of revenues as a percentage of revenue remained consistent at 63% during the years ended December 31, 2016 and 2015. The cost of revenues as a percentage of revenue was due to the offsetting factors of improved product mix including an increased volume of higher margin GasPT sales in the Energy segment, which were offset by lower margins in the Power and Electromechanical segment. As a result of the improved product mix in the Energy segment, for the year ended December 31, 2016, the cost of revenues as a percentage of revenue dropped 5 percentage points from 63% to 58%. This improvement helped to offset lower margins incurred in the Power and Electromechanical segment as the segment's cost of revenues as a percentage of revenue increased slightly to 65% from 63%.

Selling, General and Administrative Expenses

Selling, General, and Administrative Expense by Segment (Dollars in thousands)	For the Years Ended December 31, 2017	Percent Change	2016	Percent Change	2015
Power and Electromechanical	$16,415	(2.0)%	$16,756	3.6 %	$16,178
Energy	12,588	4.8 %	12,006	(1.7)%	12,216
Other	4,918	(10.2)%	5,477	18.3 %	4,629
Total SG&A	$33,921	(0.9)%	$34,239	3.7 %	$33,023

Selling, General and Administrative (SG&A) expenses includes such items as wages, consulting, general office expenses, business promotion expenses and costs of being a public company including legal and accounting fees, insurance and investor relations.

2017 compared to 2016

During the year ended December 31, 2017, SG&A decreased $0.3 million compared to the prior-year comparative period. The decrease for the year is largely due to $0.6 million in severance costs incurred in 2016 in the Power and Electromechanical segment for the transition of the R&D team to CUI-Canada and for various positions within the Energy segment during the year ended December 31, 2016 compared to severance costs in 2017 primarily in the Energy segment that were less than $0.3 million. The increase in the Energy segment is due to the severance costs at Orbital-UK and increased advertising expense in the Energy segment of $0.2 million. The remaining decreases in SG&A during the year ended December 31, 2017 were associated with various cost saving measures begun in the second quarter of 2017 and due to the lower sales volume in 2017 compared to 2016. SG&A increased to 41% of total revenue in 2017 compared to 40% of total revenue during the year ended December 31, 2016.

2016 compared to 2015

During the year ended December 31, 2016, SG&A increased $1.2 million compared to the year ended December 31, 2015. The increase for the year is largely due to $0.6 million in severance costs incurred in the Power and Electromechanical segment for the transition of the R&D team to CUI-Canada and for various positions within the Energy segment during the year ended December 31, 2016. Increased audit and accounting fees in the year ended December 31, 2016 of $0.7 million, included in the Other category contributed to the increased SG&A. Partially offsetting the increased SG&A for the year ended December 31, 2016 was a $0.3 million decrease in non-severance-related SG&A associated with the activities of Orbital Gas Systems, North America, Inc., which opened in January 2015 and had increased start-up related costs in its first three months of operations. The remaining increases in SG&A during the year ended December 31, 2016 were associated with the ongoing activities to reach new customers, promote new product lines including Novum, GasPT, IRIS and VE, and new product introductions partially offset by foreign currency translation decreases at Orbital-UK. SG&A increased to 40% of total revenue compared to 38% of total revenue during the year ended December 31, 2015.

The Company anticipates the amount of sales and marketing expenditures and general and administrative expenses will improve from the 2017 levels following cost saving measures implemented during the year.

Depreciation and Amortization

Depreciation and Amortization by Segment (Dollars in thousands)	For the Years Ended December 31, 2017	Percent Change	2016	Percent Change	2015
Power and Electromechanical	$1,505	4.2 %	$1,445	14.9 %	$1,258
Energy	1,345	(4.0)%	1,401	(28.0)%	1,945
Other	—	— %	2	(66.7)%	6
Total depreciation and amortization	$2,850	0.1 %	$2,848	(11.2)%	$3,209

The depreciation and amortization expenses are associated with depreciating buildings, furniture, vehicles, equipment, software and other intangible assets over the estimated useful lives of the related assets. The above table includes $0.7 million, $0.5 million, and $0.3 million of depreciation and amortization, in 2017, 2016 and 2015, respectively that was included in cost of sales in the Power and Electromechanical segment and less than $0.1 million of depreciation and amortization included in cost of sales in the Energy segment in 2015.

2017 compared to 2016

Depreciation and amortization increased slightly for the year ended December 31, 2017 compared to the comparable period in 2016. The increase in depreciation and amortization at the Power and Electromechanical segment was due to additional product certification investments in 2017, which was partially offset by decreased depreciation and amortization at Orbital-UK due to generally lower foreign currency rates in 2017 compared to 2016.

2016 compared to 2015

Depreciation and amortization decreased for the year ended December 31, 2016 compared to the comparable period in 2015 as the intangible asset associated with the order backlog acquired with Orbital-UK was fully amortized during the first quarter of 2015 and UK assets were depreciated at lower foreign currency rates in 2016 compared to 2015. The increase in depreciation and amortization at the Power and Electromechanical segment was due to additional product certification investments in 2016 and the purchase of CUI-Canada in March 2015, which meant that 2016 had two more months of CUI-Canada depreciation and amortization than in 2015.

<u>*Research and Development*</u>

	For the Years Ended December 31,				
Research and Development by Segment		Percent		Percent	
(Dollars in thousands)	2017	Change	2016	Change	2015
Power and Electromechanical	$2,303	23.0 %	$1,873	9.7 %	$1,707
Energy	222	55.2 %	143	1.4 %	141
Other	—	— %	—	— %	—
Total research and development	$2,525	25.2 %	$2,016	9.1 %	$1,848

The research and development costs are related to the various technologies for which CUI Global has acquired licensing rights or is developing internally. The expenditures for research and development have been directed primarily towards the further development of advanced power technologies including ICE technology, AMT Capacitive Encoders and towards the development of the GasPT and VE technologies. The Company expects that 2018 research and development expenses will be consistent with 2017 as the Company continues to expand its product offering and technologies due to market acceptance and customer integration.

Impairment Loss

As of December 31, 2017, management calculated an excess carrying amount for its Orbital-UK goodwill resulting in a $3.2 million impairment. See Critical Accounting Policies - Indefinite-Lived Intangibles and Goodwill Assets for more information on the impairment calculation.

Bad Debt

(Credit to) Provision for Bad Debt by Segment (Dollars in thousands)	For the Years Ended December 31, 2017	Percent Change	2016	Percent Change	2015
Power and Electromechanical	$3	(93.9)%	$ 49	(30.0)%	$70
Energy	(16)	(136.4)%	44	(64.8)%	125
Other	—	— %	—	— %	—
Total (credit to) provision for bad debt	$(13)	(114.0)%	$ 93	(52.3)%	$195

(Credit to) provision for bad debt in 2017, 2016 and 2015 represents less than ½% of total revenues and relates to miscellaneous receivables, which the Company has either recorded an allowance for doubtful collections of the receivable or for which the Company has determined the balance to be uncollectible. Credits to the provision for bad debt are generated when aged receivables are collected at a higher rate than was previously reserved for. This results in the calculated reserve being reduced.

Other Income (expense)

(Dollars in thousands)	For the Years Ended December 31, 2017	Percent Change	2016	Percent Change	2015
Foreign exchange gain (loss)	$69	(116.3)%	$(423)	8.2 %	$(391)
Earnings from investment	—	— %	—	(100.0)%	53
Interest income	20	25.0 %	16	(57.9)%	38
Unrealized gain on derivative	111	(1.8)%	113	465.0 %	20
Amortization of investment premiums and discounts	—	— %	—	(100.0)%	(15)
Other, net	34	(20.9)%	43	22.9 %	35
Total Other income (expense)	$234	(193.2)%	$(251)	(3.5)%	$(260)

Investment Income

The Company recognized investment income on equity investment in an affiliate of $0 in both 2017 and 2016, and $53 thousand for the first nine months of 2015. The Company discontinued the equity method of accounting for its investment as of October 1, 2015. During the three months ended March 31, 2016, the investment in TPI was exchanged for a note receivable from TPI of $0.4 million, which was the carrying value of the investment, earning interest at 5% per annum, due June 30, 2019. The Company recorded $18 thousand of interest income for the year ended December 31, 2017 and $19 thousand of interest income from the note in the year ended December 31, 2016. The interest receivable is settled on a quarterly basis via a non-cash offset against the finders-fee royalties earned by TPI on GasPT sales. Any remaining finders-fee royalties balance is offset against the note receivable quarterly.

Management reviewed the note receivable for non-collectability as of December 31, 2017 and concluded that no allowance was necessary. For more information on this investment, see Note 2 Summary of Significant Accounting Policies - Investment and Note Receivable, to the Consolidated Financial Statements under Part II, Item 8, ‘‘Financial Statements and Supplementary Data.’’

Interest Expense

The Company incurred $0.5 million, $0.5 million, and $0.4 million of interest expense during 2017, 2016 and 2015, respectively. Interest expense is for interest on the secured note, secured promissory note, and line of credit and overdraft facility. A slight increase in 2017 was due primarily to the increased use of the Company's short-term credit facilities prior to the Company's public issuance of stock in October 2017.

Provision (benefit) for taxes

2017 compared to 2016

The Company is subject to taxation in the U.S., various state and foreign jurisdictions. We continue to record a full valuation allowance against the Company's U.S. net deferred tax assets as it is not more likely than not that the Company will realize a benefit from these assets in a future period. In future periods, tax benefits and related deferred tax assets will be recognized when management concludes realization of such amounts is more likely than not. In 2017, a net benefit of $1.6 million, was recorded to the income tax provision for the year ended December 31, 2017 resulting in an effective tax rate of 11.3% compared to a $38 thousand tax expense for the year ended December 31, 2016 and an effective tax rate of (0.5)%. For the year ended December 31, 2017, the income tax benefit primarily represents benefits from foreign net operating losses and the $0.9 million benefit resulting from the rate changes passed in the December 2017 Tax Act, partially offset by state minimum taxes and taxes on a profitable foreign jurisdiction, whereas, for the year ended December 31, 2016, the income tax provision primarily represents state minimum taxes and taxes on a profitable foreign jurisdiction. See Note 16 Income Taxes, for more information on the effects of the December 2017 Tax Act. As of December 31, 2017, we have federal, state and foreign net operating loss carry forwards of approximately $62.2 million, $57.2 million, and $5.0 million, respectively, and for which the federal and state net operating loss carry-forwards will expire between 2019 and 2037.

2016 compared to 2015

In 2016, a net expense of $38 thousand, was recorded to the income tax provision for the year ended December 31, 2016 resulting in an effective tax rate of (0.5%) compared to a $0.4 million tax benefit for the year ended December 31, 2015 and an effective tax rate of 6.4%. For the year ended December 31, 2016, the income tax provision primarily represents state minimum taxes and taxes on a profitable foreign jurisdiction, whereas, for the year ended December 31, 2015, the income tax benefit primarily represents benefits from foreign net operating losses partially offset by state minimum taxes and taxes on profitable foreign jurisdictions.

Consolidated Net Loss

2017 compared to 2016

The Company had a net loss of $12.6 million for the year ended December 31, 2017 compared to a net loss of $7.3 million for the year ended December 31, 2016. The increase in the consolidated net loss for 2017 was primarily the result of lower revenues coupled with increased cost of revenues due to a less favorable product mix in 2017 compared to 2016, and an impairment to goodwill of $3.2 million.

2016 compared to 2015

The Company had a net loss of $7.3 million for the year ended December 31, 2016 compared to a net loss of $6.0 million for the year ended December 31, 2015. The increase in the consolidated net loss for 2016 was primarily the result of increased selling, general and administrative expenses, and increased tax expense.

Effect of Inflation and Changing Prices

The Company believes, that during fiscal years ended December 31, 2017, 2016 and 2015, the effect of a hypothetical 100 basis point shift in foreign currency exchange rates applicable to our business would not have had a material impact on our consolidated financial statements.

Recently Adopted and Recently Issued Accounting Standards

Information on recently adopted and recently issued accounting standards is included in Note 2 Summary of Significant Accounting Policies **-** Recent Accounting Pronouncements, to the Consolidated Financial Statements under Part II, Item 8, ‘‘Financial Statements and Supplementary Data.’’

Item 7A. Quantitative and Qualitative Disclosure about Market Risk

We are exposed to market risk in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. This market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates. The Company neither holds nor issues financial instruments for trading purposes.

The following sections provide quantitative information on the Company's exposure to foreign currency exchange rate risk and stock price risk. The Company makes use of sensitivity analyses that are inherently limited in estimating actual losses in fair value that can occur from changes in market conditions.

Foreign Currency Exchange Rates

The Company conducts operations in four principal currencies: the U.S. dollar, the British pound sterling, the Canadian dollar and the Japanese yen. These currencies operate primarily as the functional currency for the Company's U.S., UK, Canadian and Japanese operations, respectively. Cash is managed centrally within each of the four regions with net earnings invested in the U.S. and working capital requirements met from existing U.S. intercompany liquid funds.

Because of fluctuations in currency exchange rates, the Company is subject to currency translation exposure on the results of its operations. Foreign currency translation risk is the risk that exchange rate gains or losses arise from translating foreign entities' statements of earnings and balance sheets from functional currency to the Company's reporting currency, the U.S. dollar, for consolidation purposes. As currency exchange rates fluctuate, translation of our Statements of Operations into U.S. dollars affects the comparability of revenues and operating expenses between years.

Revenues and operating expenses are primarily denominated in the currencies of the countries in which our operations are located, the U.S., UK, Canada and Japan. Our consolidated results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates.

The table below details the percentage of revenues and expenses by the three principal currencies for the fiscal years ended December 31, 2017, 2016 and 2015:

	U.S. Dollar		British Pound Sterling		Canadian Dollar (1)		Japanese Yen	
Fiscal year ended December 31, 2017								
Revenues	80	%	19	%	—	%	1	%

Operating expenses	61	%	30	%	8	%	1	%
Fiscal year ended December 31, 2016								
Revenues	72	%	27	%	—	%	1	%
Operating expenses	67	%	25	%	7	%	1	%
Fiscal year ended December 31, 2015								
Revenues	69	%	29	%	1	%	1	%
Operating expenses	66	%	27	%	6	%	1	%

(1) On March 5, 2015, the Company closed on an asset purchase agreement to acquire the assets of Tectrol, Inc. (CUI-Canada) which was effective March 1, 2015, see Note 4 Acquisitions.

To date, we have not entered into any hedging arrangements with respect to foreign currency risk and have limited activity with forward foreign currency contracts or other similar derivative instruments.

Investment Risk

The Company has an Investment Policy that, *inter alia*, provides an internal control structure that takes into consideration safety (credit risk and interest rate risk), liquidity and yield. Our Investment officers, CEO and CFO, oversee the investment portfolio and compile a quarterly analysis of the investment portfolio.

Cash and cash equivalents are diversified and maintained with several financial institutions. Deposits held with banks may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand and are maintained with financial institutions of reputable credit, therefore, bear minimal credit risk.

The Company has trade receivable and revenue concentrations with large customers, which include a large concentration of trade receivables and revenues in the United Kingdom.

Item 8. Financial Statements and Supplementary Data

This item includes the following financial information:

Report of Independent Registered Public Accounting Firm

Stockholders and Board of Directors

CUI Global, Inc.

Tualatin, Oregon

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of CUI Global, Inc. and Subsidiaries (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income and (loss), changes in stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017**,** 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, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated March 14, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Perkins & Company, P.C.

We have served as the Company's auditor since 2014.

Portland, Oregon

March 14, 2018

CUI Global, Inc.

Consolidated Balance Sheets

As of December 31, 2017 and 2016

(In thousands, except share and per share data)	December 31, 2017	December 31, 2016
Assets:		
Current Assets:		
Cash and cash equivalents	$12,646	$4,617
Trade accounts receivable, net of allowance of $135 and $151, respectively	10,833	9,375
Inventories, net of allowance of $946 and $774, respectively	13,892	13,202
Costs in excess of billings	2,299	2,735
Prepaid expenses and other	1,606	2,174
Total current assets	41,276	32,103
Property and equipment, less accumulated depreciation of $4,155 and $3,299, respectively	11,242	10,952
Goodwill	17,641	20,125
Other intangible assets, less accumulated amortization of $11,900 and $9,438, respectively	15,568	16,201
Note receivable, less current portion	317	362
Deposits and other assets	1,865	100
Total assets	$87,909	$79,843
Liabilities and Stockholders' Equity:		
Current Liabilities:		
Accounts payable	$5,110	$6,170
Mortgage note payable, current portion	94	89
Capital lease obligation, current portion	4	28
Accrued expenses	4,182	4,542
Billings in excess of costs	1,840	1,977
Unearned revenue	7,684	4,932
Total current liabilities	18,914	17,738
Long term mortgage note payable, less current portion	3,256	3,350
Long term note payable, related party	5,304	5,304
Capital lease obligation, less current portion	9	12
Derivative liability	356	467
Deferred tax liabilities	2,414	4,120
Other long-term liabilities	170	217
Total liabilities	30,423	31,208
Stockholders' Equity:		
Preferred stock, par value $0.001; 10,000,000 shares authorized; no shares issued at December 31, 2017 or December 31, 2016	—	—

Common stock, par value $0.001; 325,000,000 shares authorized; 28,406,856 shares issued and outstanding at December 31, 2017 and 20,916,848 shares issued and outstanding at December 31, 2016	28	21
Additional paid-in capital	169,527	150,174
Accumulated deficit	(108,559)	(95,970)
Accumulated other comprehensive loss	(3,510)	(5,590)
Total stockholders' equity	57,486	48,635
Total liabilities and stockholders' equity	$87,909	$79,843

See accompanying notes to consolidated financial statements

CUI Global, Inc.

Consolidated Statements of Operations

For the Years Ended December 31, 2017, 2016 and 2015

(In thousands, except share and per share amounts)	2017	2016	2015
Total revenues	$83,275	$86,461	$86,240
Cost of revenues	55,406	54,200	53,948
Gross profit	27,869	32,261	32,292
Operating expenses:			
Selling, general and administrative	33,921	34,239	33,023
Depreciation and amortization	2,163	2,366	2,862
Research and development	2,525	2,016	1,848
(Credit to) provision for bad debt	(13)	93	195
Impairment of goodwill and intangible assets	3,155	—	4
Other operating expenses	47	57	54
Total operating expenses	41,798	38,771	37,986
Loss from operations	(13,929)	(6,510)	(5,694)
Other income (expense)	234	(251)	(260)
Interest expense	(500)	(467)	(441)
Loss before taxes	(14,195)	(7,228)	(6,395)
Income tax (benefit) expense	(1,606)	38	(408)
Net loss	$(12,589)	$(7,266)	$(5,987)
Basic and diluted weighted average number of shares outstanding	22,397,865	20,897,812	20,792,494
Basic and diluted loss per common share	$(0.56)	$(0.35)	$(0.29)

See accompanying notes to consolidated financial statements

CUI Global, Inc.

Consolidated Statements of Comprehensive Income and (Loss)

For the Years Ended December 31, 2017, 2016 and 2015

(In thousands)

	2017	2016	2015
Net loss	$(12,589)	$(7,266)	$(5,987)
Other comprehensive income (loss)			
Foreign currency translation adjustment	2,080	(4,150)	(1,708)
Comprehensive loss	$(10,509)	$(11,416)	$(7,695)

See accompanying notes to consolidated financial statements

CUI Global, Inc.

Consolidated Statements of Changes in Stockholders' Equity

For the Years Ended December 31, 2017, 2016 and 2015

(In thousands, except share amounts)

	Common Stock		Additional Paid-in	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Capital	Deficit	Income (Loss)	Equity
Balance, December 31, 2014	20,747,740	$ 21	$ 148,398	$ (82,717)	$ 268	$ 65,970
Options granted for services and compensation	—	—	478	—	—	478
Common stock issued for exercises of options	122	—	—	—	—	—
Common stock issued and to be issued for compensation, services, and royalty payments	58,357	—	763	—	—	763
Net loss for the year ended December 31, 2015	—	—	—	(5,987)	—	(5,987)
Other comprehensive loss	—	—	—	—	(1,708)	(1,708)
Balance, December 31, 2015	20,806,219	21	149,639	(88,704)	(1,440)	59,516
Options granted for services and compensation	—	—	227	—	—	227
Common stock issued for exercises of options	718	—	—	—	—	—
Common stock issued for compensation, services, and royalty payments	109,911	—	308	—	—	308
Net loss for the year ended December 31, 2016	—	—	—	(7,266)	—	(7,266)
Other comprehensive loss	—	—	—	—	(4,150)	(4,150)
Balance, December 31, 2016	20,916,848	21	150,174	(95,970)	(5,590)	48,635
Issuance of common stock, net	7,392,856	7	18,898	—	—	18,905
Common stock issued for exercises of options	245	—	—	—	—	—
Common stock issued for compensation, services, and royalty	96,907	—	455	—	—	455

payments						
Net loss for the year ended December 31, 2017	—	—	—	(12,589)	—	(12,589)
Other comprehensive income	—	—	—	—	2,080	2,080
Balance, December 31, 2017	28,406,856	$ 28	$ 169,527	$ (108,559)	$ (3,510)	$ 57,486

See accompanying notes to consolidated financial statements

CUI Global, Inc.

Consolidated Statements of Cash Flows

For the Years Ended December 31, 2017, 2016 and 2015

(In thousands)

	2017	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$(12,589)	$(7,266)	$(5,987)
Adjustments to reconcile net (loss) to net cash used in operating activities:			
Depreciation	1,009	925	854
Amortization of intangibles	1,841	1,923	2,355
Amortization of investment premiums and discounts	—	—	15
Stock and options issued and stock to be issued for compensation, royalties and services	425	734	1,267
Unrealized gain on derivative liability	(111)	(113)	(20)
Non-cash royalties, net (see Note 2 - Investment and note receivable)	(3)	19	—
Non-cash earnings on equity method investment	—	—	(53)
(Credit to) provision for bad debt expense and returns allowances	(13)	93	192
Credit to warranty reserve	(16)	—	—
Deferred income taxes	(1,767)	(107)	(534)
Non-cash unrealized foreign currency (gains)/losses	(362)	172	219
Impairment of goodwill and intangible assets	3,155	—	4
Inventory reserve	138	312	94
Loss on disposal of assets	47	57	54
Other, net	—	—	(5)
(Increase) decrease in operating assets:			
Trade accounts receivable	(1,150)	4,432	(3,323)
Inventories	(411)	(1,672)	(3,708)
Costs in excess of billings	591	(1,454)	(1,612)
Prepaid expenses and other current assets	(421)	105	(856)
Deposits and other assets	(506)	(25)	68
Increase (decrease) in operating liabilities:			
Accounts payable	(1,163)	495	2,050
Accrued expenses	(448)	(518)	1,847
Contingent consideration	3	(54)	—
Unearned revenue	2,666	1,179	2,204
Billings in excess of costs	(284)	162	(1,307)
NET CASH USED IN OPERATING ACTIVITIES	(9,369)	(601)	(6,182)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Acquisition of a business, net of contingent consideration (Note 4)	—	—	(4,285)
Purchase of property and equipment	(893)	(824)	(5,045)

Proceeds from sale of property and equipment	8	27	17
Investments in other intangible assets	(638)	(850)	(128)
Proceeds from notes receivable	39	—	—
Maturities of short term investments held to maturity	—	—	11,145
Receipts from deferred property grant	—	—	425
NET CASH (USED IN) PROVIDED BY INVESTING ACTIVITIES	(1,484)	(1,647)	2,129
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from overdraft facility	9,782	—	—
Payments on overdraft facility	(9,782)	—	—
Proceeds from line of credit	22,332	—	—
Payments on line of credit	(22,332)	—	—
Payments on capital lease obligations	(29)	(41)	(32)
Payments on notes and loans payable	(89)	(85)	(81)
Payments on contingent consideration	(61)	(59)	—
Proceeds from sales of common stock, net of offering costs	18,905	—	—
NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES	18,726	(185)	(113)
Effect of exchange rate changes on cash	156	(217)	(271)
Net increase (decrease) in cash and cash equivalents	8,029	(2,650)	(4,437)
Cash and cash equivalents at beginning of year	4,617	7,267	11,704
CASH AND CASH EQUIVALENTS AT END OF YEAR	$12,646	$4,617	$7,267
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Income taxes paid	$158	$211	$44
Interest paid, net of capitalized interest	$500	$469	$440
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:			
Common stock issued and issuable for royalties payable pursuant to product agreements, related party	$16	$38	$22
Contingent consideration recorded in acquisition	$—	$—	$216
Common stock issued and to be issued for consulting services and compensation in common stock	$439	$270	$741
Exchange of investment in TPI in return for note receivable (Note 2)	$—	$385	$—
Accrued property and equipment purchases at December 31	$27	$45	$99
Accrued investment in other intangible assets at December 31	$15	$48	$50
Assets acquired via capital leases	$—	$19	$—

See accompanying notes to consolidated financial statements

CUI Global, Inc.

Notes to Consolidated Financial Statements

1. NATURE OF OPERATIONS AND BASIS OF PRESENTATION

CUI Global Inc. (CUI Global) is a platform company composed of two segments, the Power and Electromechanical segment and the Energy segment.

The Power and Electromechanical segment is made up of the wholly owned subsidiaries: CUI Inc. (CUI), based in Tualatin, Oregon; CUI Japan, based in Tokyo, Japan; and CUI-Canada, based in Toronto, Canada. All three subsidiaries are providers of power and electromechanical components including power supplies, transformers, converters, connectors and industrial controls for Original Equipment Manufacturers (OEMs).

The Power and Electromechanical segment defines its product offerings into two categories: **power solutions**, which consists of external and embedded ac-dc power supplies, dc-dc converters, and advanced power solutions including the ICE products, and **components** including connectors, speakers, buzzers, and control solutions including encoders and sensors. These offerings provide a technology architecture that addresses power and related accessories to industries as broadly ranging as consumer electronics, medical and defense.

The Company's Energy segment is made up of Orbital Gas Systems Ltd. (Orbital-UK) and Orbital Gas Systems, North America, Inc. (Orbital North America), collectively referred to as "Orbital." This business segment was formed when in April 2013, CUI Global acquired 100% of the capital stock of Orbital-UK, a United Kingdom-based provider of natural gas infrastructure and advanced technology, including metering, odorization, remote telemetry units (''RTU'') and a diverse range of personalized gas engineering solutions to the gas utilities, power generation, emissions, manufacturing and automotive industries. In January 2015, CUI Global formed and opened Orbital Gas Systems, North America, Inc. a wholly owned subsidiary, to represent the Energy segment in the North American market. GasPT® and VE® *Technology* products are sold through Orbital.

During the year ended December 31, 2017, total revenues at CUI Global consisted of 77% from the Power and Electromechanical segment and 23% from the Energy segment.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates include estimates used to review the Company’s goodwill, impairments and estimations of long-lived assets, revenue recognition on percentage of completion type contracts, allowances for uncollectible accounts, inventory valuation, warranty reserves, valuations of non-cash capital stock issuances and the valuation allowance on deferred tax assets. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable in the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of CUI Global, Inc. and its wholly owned subsidiaries CUI Inc., CUI Japan, CUI-Canada (included since March 1, 2015), CUI Properties, LLC, Orbital Gas Systems, Ltd. and Orbital Gas Systems, North America, Inc. hereafter referred to as the ‘‘Company.’’ Significant intercompany accounts and transactions have been eliminated in consolidation.

Fair Value of Financial Instruments

Accounting Standards Codification (‘‘ASC’’) 820 ‘‘Fair Value Measurements and Disclosures’’ (‘‘ASC 820’’) defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles in the U.S., and enhances disclosures about fair value measurements. ASC 820 describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value, which are the following:

- Level 1 – Pricing inputs are quoted prices available in active markets for identical assets or liabilities as of the reporting date.
- Level 2 – Pricing inputs are quoted for similar assets, or inputs that are observable, either directly or indirectly, for substantially the full term through corroboration with observable market data. Level 2 includes assets or liabilities valued at quoted prices adjusted for legal or contractual restrictions specific to these investments.
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Level 3 – Pricing inputs are unobservable for the assets or liabilities; that is, the inputs reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability.

The Company determines when a financial instrument transfers between levels based on management's judgment of the significance of unobservable inputs used to calculate the fair value of the financial instrument.

Management believes the carrying amounts of the short-term financial instruments, including cash and cash equivalents, accounts receivable, costs in excess of billings, prepaid expense and other assets, accounts payable, accrued liabilities, billings in excess of costs, unearned revenue, and other liabilities reflected in the accompanying balance sheet approximate fair value at December 31, 2017 and 2016 due to the relatively short-term nature of these instruments. Mortgage debt and related notes payable approximate fair value based on current market conditions. The Company measures its derivative liability on a recurring basis using significant observable inputs (Level 2). The Company's derivative liability is valued using a LIBOR swap curve.

Cash and Cash Equivalents

Cash includes deposits at financial institutions with maturities of three months or less. The Company at times has cash in banks in excess of FDIC insurance limits and places its temporary cash investments with high credit quality financial institutions. The Company considers all highly liquid marketable securities with maturities of 90 days or less at the date of acquisition to be cash equivalents. Cash equivalents include money market funds, certificates of deposit and commercial paper. At December 31, 2017 and 2016, the Company had $0.9 million and $0.8 million, respectively, of cash and cash equivalents balances at domestic financial institutions that were covered under the FDIC insured deposits programs and $0.2 million and $0.2 million, respectively, at foreign financial institutions covered under the United Kingdom Financial Services Compensation (FSC) and the Canada Deposit Insurance Corporation (CDIC). At December 31, 2017 and 2016, the Company held $0.1 million and $0.2 million, respectively, in Japanese foreign bank accounts and $0.1 million and $1.0 million, respectively, in European foreign bank accounts and $0.1 million and $0.1 million, respectively, in Canadian bank accounts.

Investment and Note Receivable

Test Products International, Inc. ("TPI") is a provider of handheld test and measurement equipment. Through the acquisition of CUI Inc., the Company obtained 352,589 common shares (representing an 8.94% interest from January 1 to March 31, 2014 and 8.5% thereafter). Through September 30, 2015, CUI Global enjoyed a close association with TPI through common related parties, IED, Inc. and James McKenzie as well as through participation that allowed for a significant amount of influence over TPI's business decisions. Accordingly, through September 30, 2015, for financial statement purposes, the Company recognized its investment in TPI under the equity method.

Subsequent to September 30, 2015, CUI Global and its common related parties were unable to obtain a timely financial report, which was inconsistent with prior periods, evidencing a reduction in the influence of CUI Global over TPI. Based on this change in influence, and CUI Global's level of technical control through its 8.5% equity interest, management determined that effective with the quarter ended December 31, 2015 that CUI Global no longer had significant influence over TPI. Accordingly, the Company's investment in TPI was accounted for under the cost method in the fourth quarter of 2015. During the three months ended March 31, 2016, the investment in TPI was exchanged for a note receivable from TPI of $0.4 million, which was the carrying value of the investment, earning interest at 5% per annum, due June 30, 2019. The Company recorded $18 thousand and $19 thousand of interest income from the note for the years ended December 31, 2017 and 2016, respectively. The interest receivable is settled on a quarterly basis via a non-cash offset against the finders-fee royalties earned by TPI on GasPT sales. Finders-fee royalties of $16 thousand and $37 thousand were earned by TPI in the years ended December 31, 2017 and 2016, respectively, and offset against the note receivable quarterly. The Company also received $39 thousand in cash payments against the note in the year ended December 31, 2017. CUI Global reviewed the note receivable for non-collectability as of December 31, 2017 and concluded that no allowance was necessary.

Presented below are the equity method earnings through nine months ended September 30, 2015, which is the final period that CUI Global had significant influence over TPI:

(In thousands)	For the Nine Months Ended September 30, 2015
Revenues	$ 10,718
Operating income	674
Net profit	621
Other comprehensive profit (loss):	
Foreign currency translation adjustment	—
Comprehensive net profit	$ 621
Company share of net profit	$ 53

Accounts Receivable and Allowance for Uncollectible Accounts

Accounts receivable consist of the receivables associated with revenue derived from product sales including present amounts due to contracts accounted for under percentage of completion method. An allowance for uncollectible accounts is recorded to allow for any amounts that may not be recoverable, based on an analysis of prior collection experience, customer credit worthiness and current economic trends. Based on management's review of accounts receivable, an allowance for doubtful accounts of $0.1 million and $0.2 million at December 31, 2017 and 2016, respectively, is considered adequate. The reserve in both periods considers aged receivables that management believes should be specifically reserved for as well as historic experience with bad debts to determine the total reserve appropriate for each period. Receivables are determined to be past due based on the payment terms of original invoices. The Company grants credit to its customers, with standard terms of Net 30 days. The Company routinely assesses the financial strength of its customers and, therefore, believes that its accounts receivable credit risk exposure is limited. Additionally, the Company maintains a foreign credit receivables insurance policy that covers many of the CUI Inc. foreign customer receivable balances in effort to further reduce credit risk exposure. Activity in the allowance for doubtful accounts for the years ended December 31, 2017, 2016 and 2015 is as follows:

(In thousands)	For the Years ended December 31,		
	2017	2016	2015
Allowance for doubtful accounts, beginning of year	$151	$90	$254
(Credit) charge to costs and expenses	(13)	93	192
Deductions	(3)	(32)	(356)
Allowance for doubtful accounts, end of year	$135	$151	$90

Inventories

Inventories consist of finished and unfinished products and are stated at the lower of cost or market through either the first-in, first-out (FIFO) method as a cost flow convention or through the moving average cost method.

At December 31, 2017, and 2016, inventory is presented on the balance sheet net of reserves. The Company provides reserves for inventories estimated to be excess, obsolete or unmarketable. The Company's estimation process for assessing the net realizable value is based upon its known backlog, projected future demand, historical usage and expected market conditions. Manufactured inventory includes material, labor and overhead. Inventory by category consists of:

(In thousands)	As of December 31, 2017	2016
Finished goods	$10,792	$9,684
Raw materials	3,287	3,357
Work-in-process	759	935
Inventory reserves	(946)	(774)
Total inventories	$13,892	$13,202

Activity in inventory reserves is as follows:

(In thousands)	For the Years ended December 31, 2017	2016	2015
Inventory reserves, beginning of year	$774	$483	$394
Charge to costs and expenses	138	312	94
Other additions (deductions)	34	(21)	(5)
Inventory reserves, end of year	$946	$774	$483

Prepaid Expenses, Deposits and Other

(In thousands)	As of December 31, 2017	2016
Prepaid expenses and other	$1,606	$2,174
Deposits and other assets	1,865	100

During the second quarter of 2017, prepaid royalties in the amount of $1.6 million were transferred to long-term and included in Deposits and other assets from prepaid expenses due to a change in the estimated period of when those prepayments will be amortized based upon management's assessment of future GasPT sales. There was $1.8 million of prepaid royalties included in Deposits and other assets at December 31, 2017.

Land, Buildings, Improvements, Furniture, Vehicles, Equipment, and Leasehold Improvements

Land is recorded at cost and includes expenditures made to ready it for use. Land is considered to have an infinite useful life.

Buildings and improvements are recorded at cost.

Furniture, vehicles, and equipment are recorded at cost and include major expenditures, which increase productivity or substantially increase useful lives.

Leasehold improvements are recorded at cost and are depreciated over the lesser of the lease term, estimated useful life, or ten years.

The cost of buildings, improvements, furniture, vehicles, and equipment is depreciated over the estimated useful lives of the related assets.

Depreciation is computed using the straight-line method for financial reporting purposes. The estimated useful lives for buildings, improvements, furniture, vehicles, and equipment are as follows:

	Estimated Useful Life (years)
Buildings and improvements	5 to 39
Furniture and equipment	3 to 10
Vehicles	3 to 5

Maintenance, repairs and minor replacements are charged to expenses when incurred. When furniture, vehicles and equipment are sold or otherwise disposed of, the asset and related accumulated depreciation are removed from this account, and any gain or loss is included in the statement of operations.

Long-Lived Assets

Long-lived assets including finite-lived identifiable assets are periodically reviewed for impairment whenever circumstances and situations change such that there is an indication that the carrying amounts may not be recoverable. In performing the review for recoverability, the future cash flows expected to result from the use of the asset and its eventual disposition are estimated. If the sum of the expected future cash flows (undiscounted and without interest charges) is less than the carrying amount of the long-lived asset, an impairment loss is recognized as the excess of the carrying amount over the fair value. Otherwise, an impairment loss is not recognized. Management estimates the fair value and the estimated future cash flows expected. Any changes in these estimates could impact whether there was impairment and the amount of the impairment.

Identifiable Intangible Assets

Intangible assets are stated at cost net of accumulated amortization and impairment. The fair value for intangible assets acquired through acquisitions is measured at the time of acquisition utilizing the following inputs, as needed:

1. Inputs used to measure fair value are unadjusted quote prices available in active markets for the identical assets or liabilities if available.

2. Inputs used to measure fair value, other than quoted prices included in 1, are either directly or indirectly observable as of the reporting date through correlation with market data, including quoted prices for similar assets and liabilities in active markets and quoted prices in inactive markets. This includes assets and liabilities valued using models or other pricing methodologies that do not require significant judgment since the input assumptions used in the models, such as interest rates and volatility factors, are corroborated by readily observable data from actively quoted markets for substantially the full life of the asset.

3. Inputs used to measure fair value are unobservable inputs supported by little or no market activity and reflect the use of significant management judgment. These values are generally determined using pricing models for which the assumptions utilize management’s estimates of market participant assumptions.

4. Expert appraisal and fair value measurement as completed by third-party experts.

The following are the estimated useful life for the intangible assets:

	Estimated Useful Life (years)	
Finite-lived intangible assets		
Order backlog	2	
Trade name - Orbital	10	
Trade name - V-Infinity	5	
Trade name - CUI-Canada	3	
Customer list - Orbital	10	
Customer list - CUI-Canada	7	
Technology rights	20	(1)
Technology-Based Asset - Know How	12	
Technology-Based Asset - Software	10	
Technology-Based Asset - Power	7	
Software	3 to 5	(2)
Patents		(3)

	See endnote	
Other intangible assets	See endnote	(4)
<u>Indefinite-lived intangible assets</u>		
Trade name - CUI	See endnote	(5)
Customer list - CUI	See endnote	(5)
Patents pending technology	See endnote	(5)

(1) Technology rights are amortized over a 20-year life or the term of the rights agreement.
(2) Software assets are recorded at cost and include major expenditures, which increase productivity or substantially increase useful lives.
(3) Patents are amortized over the life of the patent. Any patents not approved will be expensed at that time.
(4) Other intangible assets are amortized over an appropriate useful life, as determined by management in relation to the other intangible asset characteristics.
(5) Indefinite-lived intangible assets are reviewed annually for impairment and when circumstances suggest.

Indefinite-Lived Intangibles and Goodwill Assets

The Company accounts for business combinations under the acquisition method of accounting in accordance with ASC 805, ‘‘Business Combinations,’’ where the total purchase price is allocated to the tangible and identified intangible assets acquired and liabilities assumed based on their estimated fair values. The purchase price is allocated using the information currently available, and may be adjusted, up to one year from the acquisition date, after obtaining more information regarding, among other things, asset valuations, liabilities assumed and revisions to preliminary estimates. The purchase price in excess of the fair value of the tangible and identified intangible assets acquired less liabilities assumed is recognized as goodwill.

Annual Test. The Company tests for indefinite-lived intangibles and goodwill impairment in the second quarter of each year and whenever events or circumstances indicate that the carrying amount of the asset exceeds its fair value and may not be recoverable. The Company’s qualitative assessment of impairment for indefinite-lived assets at May 31, 2017, followed the guidance in ASC 350-30-35-18A and 18B. The Company performed a qualitative analysis of goodwill and indefinite-lived intangibles at May 31, 2017, and determined there was no impairment of indefinite-lived intangibles and goodwill at that time.

Under current accounting guidance, CUI Global is not required to calculate the fair value of a reporting unit unless the entity determines, based on a qualitative assessment, that it is more likely than not that its fair value is less than its carrying amount. The guidance includes a number of factors to consider in conducting the qualitative assessment. The Company tests for goodwill impairment in the second quarter of each year and whenever events or changes in circumstances indicate that the carrying amount of the asset exceeds its fair value and may not be recoverable.

As detailed in ASC 350-20-35-3A, in performing its testing for goodwill, management completes a qualitative analysis to determine whether it was more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. To complete this review, management follows the steps in ASC 350-20-35-3C to evaluate the fair values of the intangibles and goodwill and considers all known events and circumstances that might trigger an impairment of goodwill.

Interim Test. During the fourth quarter of 2017, the Company determined that there were indicators present to suggest that it was more likely than not that the fair value of the Orbital-UK reporting unit was less than its carrying amount. The significant changes for the Orbital-UK reporting unit subsequent to the annual goodwill impairment test performed as of May 31, 2017 included a decline in the 2017 actual revenue, operating income and cash flows compared to previously forecasted results and a decline in the 2018 forecasted revenue, operating income and cash flows due in part to the longer than expected temporary halt in shipping of its GasPT product to a major customer in Italy and market uncertainty due to the continuing effects of Brexit.

To test the Orbital-UK reporting unit for impairment, the Company used a quantitative test. The Company estimated the fair value of the Orbital-UK reporting unit using a blend of a market approach and an income approach, which was deemed to be the most indicative of fair value in an orderly transaction between market participants. Under the income approach, the Company determined fair value based on estimated future cash flows of the Orbital-UK reporting unit discounted by an estimated weighted-average cost of capital, reflecting the overall level of inherent risk of the Orbital-UK reporting unit and the rate of return an outside investor would expect to earn. The Company based its cash flow projections for the Orbital-UK reporting unit using a forecast of cash flows and a terminal value developed by capitalizing an assumed stabilized cash flow figure. The forecast and related assumptions were derived from an updated financial forecast prepared during the fourth quarter of 2017. Under the market approach, appropriate valuation multiples were derived from the historical operating data of selected guideline companies. The valuation multiples were evaluated and adjusted based on the strengths and weaknesses of the Company relative to the selected guideline companies and the multiple was then applied to the appropriate operating data of the Company to arrive at an indication of fair market value. As a result of the analysis, the Company concluded that the carrying value of the Orbital-UK reporting unit exceeded its estimated fair value. The quantitative test for the Orbital-UK reporting unit resulted in an impairment for the Orbital-UK reporting unit, and the Company recorded a goodwill impairment charge of $3.2 million during the fourth quarter of 2017.

The remaining goodwill related to the Orbital-UK reporting unit as of December 31, 2017 was $4.5 million, which is included in the Energy segment. As of December 31, 2017, there was also goodwill remaining for CUI Inc., CUI-Canada and CUI-Japan reporting units, which are included in the Power and Electromechanical segment.

In 2016 and 2015, the analysis, determined there was no impairment necessary to goodwill. Through these reviews, management concluded there were no events or circumstances that triggered an impairment (and there was no expectation that a reporting unit or a significant portion of a reporting unit would be sold or otherwise disposed of in the following year), therefore, no further analysis was necessary to prepare for goodwill impairment beyond the steps in 350-20-35-3C in accordance with current accounting guidance. On a periodic basis, we will also perform a quantitative analysis of goodwill impairment and in 2016, in addition to the qualitative analysis, we performed a quantitative analysis of goodwill impairment and concluded no impairment of goodwill was required.

Patent Costs

The Company estimates the patents it has filed have a future beneficial value; therefore it capitalizes the costs associated with filing for its patents. At the time the patent is approved, the patent costs associated with the patent are amortized over the useful life of the patent. If the patent is not approved, at that time the costs will be expensed.

Accrued expenses

Accrued expenses are liabilities that reflect expenses on the statement of operations that have not been paid or recorded in accounts payable at the end of the period. At December 31, 2017 and December 31, 2016, accrued expenses of $4.2 million and $4.5 million, respectively, included $1.9 million and $2.2 million, respectively, of accrued compensation and $1.3 million and $1.1 million, respectively, of accrued inventory payable.

Derivative instruments

The Company uses various derivative instruments including forward currency contracts, and interest rate swaps to manage certain exposures. These instruments are entered into under the Company’s corporate risk management policy to minimize exposure and are not for speculative trading purposes. The Company recognizes all derivatives as either assets or liabilities in the consolidated balance sheet and measures those instruments at fair value. Changes in the fair value of derivatives are recognized in earnings. The Company has limited involvement with derivative instruments and does not trade them. From time to time, the Company may enter into foreign currency exchange contracts to minimize the risk associated with foreign currency exchange rate exposure from expected future cash flows. The Company has entered into one interest rate swap, which has a maturity date of ten years from the date of inception, and is used to minimize the interest rate risk on the variable rate mortgage. During the years ended December 31, 2017, 2016 and 2015, the Company had unrealized gains of $111 thousand, $113 thousand, and $20 thousand, respectively, related to the derivative liabilities.

Derivative Liabilities

The Company evaluates embedded conversion features pursuant to FASB Accounting Standards Codification No. 815 (‘‘FASB ASC 815’’), ‘‘Derivatives and Hedging,’’ which requires a periodic valuation of the fair value of derivative instruments and a corresponding recognition of liabilities associated with such derivatives.

Stock-Based Compensation

The Company records its stock-based compensation expense under its stock option plans and also issues stock for services. The Company accounts for stock-based compensation using FASB Accounting Standards Codification No. 718 (‘‘FASB ASC 718’’), ‘‘Compensation – Stock Compensation.’’ FASB ASC 718 requires the fair value of all stock-based employee compensation awarded to employees to be recorded as an expense over the related vesting period.

Stock bonuses issued to employees are recorded at fair value using the market price of the stock on the date of grant and expensed over the vesting period or immediately if fully vested on date of issuance. Employee stock options are recorded at fair value using the Black-Scholes option pricing model. The underlying assumptions used in the Black-Scholes option pricing model by the Company are taken from publicly available sources including: (1) volatility, which is calculated using historic stock price information from online finance websites such as Google Finance and Yahoo Finance; (2) the stock price on the date of grant is obtained from online finance websites such as those previously noted; (3) the appropriate discount rates are obtained from the United States Federal Reserve economic research and data website; and (4) other inputs are determined based on previous experience and related estimates. With regards to expected volatility, the Company utilizes an appropriate period for historical share prices for CUI Global that best reflect the expected volatility for determining the fair value of its stock options.

See Note 12 Stockholders' Equity for additional disclosure and discussion of the employee stock plan and activity.

Common stock, stock options and common stock warrants issued to other than employees or directors are also recorded on the basis of their fair value, as required by FASB ASC 505, which is measured as of the date required by FASB ASC 505, ‘‘Equity – Based Payments to Non-Employees.’’ In accordance with FASB ASC 505, the stock options or common stock warrants are valued using the Black-Scholes option pricing model on the basis of the market price of the underlying common stock on the ‘‘valuation date,’’ which for options and warrants related to contracts that have substantial disincentives to non-performance is the date of the contract, and for all other contracts is the performance completion date. Expense related to the options and warrants is recognized on a straight-line basis over the shorter of the period over which services are to be received or the vesting period. Where expense must be recognized prior to a valuation date, the expense is computed based off an estimate of the fair value of the stock award as valued under the Black-Scholes option pricing model on the basis of the market price of the underlying common stock at the end of the period, and any subsequent changes in the market price of the underlying common stock up through the valuation date is reflected in the expense recorded in the subsequent period in which that change occurs.

Common stock issued to other than employees or directors subject to performance (performance based awards) require interpretation to include ASC 505-50-30-13 as to when the counterparty’s performance is complete based on delivery, or other relevant performance criteria in accordance with the relevant agreement. When performance is complete, the common stock is issued and the expense recorded on the basis of their value as required by FASB ASC 505 on the date the performance requirement is achieved.

Defined Contribution Plans

The Company has a 401(k) retirement savings plan that allows employees to contribute to the plan after they have completed 60 days of service and are 18 years of age. The Company matches the employee's contribution up to 6% of total compensation. CUI Inc., Orbital Gas Systems, North America, and CUI Global made total employer contributions, net of forfeitures, of $0.4 million, $0.4 million, and $0.4 million for 2017, 2016 and 2015, respectively.

Orbital-UK operates a defined contribution retirement benefit plan for employees who have been employed with the company at least 12 months and who chose to enroll in the plan. Orbital-UK contributes to its plan the equivalent of 5% of the employee's salary and the employee has the option to contribute pre-tax earnings. Orbital-UK made total employer contributions of $0.2 million, $0.3 million and $0.3 million during 2017, 2016, and 2015, respectively.

Revenue Recognition

Power and Electromechanical segment

Product revenue is recognized in the period when persuasive evidence of an arrangement with a customer exists, the products are shipped and title has transferred to the customer, the price is fixed or determinable, and collection is reasonably assured. The Company sells to distributors pursuant to distribution agreements that have certain terms and conditions such as the right of return and price protection, which inhibit revenue recognition unless they can be reasonably estimated as we cannot assert the price is fixed and determinable and estimate returns. For one distributor that comprises 26% of consolidated revenue, we have such history and ability to estimate and therefore recognize revenue upon sale to the distributor and record a corresponding reserve for the estimated returns. For three other distributor arrangements that represents a combined 15% of revenue, we recognize revenue on a sell-through basis, and accordingly defer revenue and the related costs until such time as the distributor resells the product.

Energy segment

For production-type contracts meeting the Company's minimum threshold, revenues and related costs on these contracts are recognized using the ''percentage of completion method'' of accounting in accordance with ASC 605-35, *Accounting for Performance of Construction-Type and Certain Production Type Contracts* (''ASC 605-35''). Under this method, contract revenues and related expenses are recognized over the performance period of the contract in direct proportion to the costs incurred as a percentage of total estimated costs for the entirety of the contract. Costs include direct material, direct labor, subcontract labor and any allocable indirect costs. The Company captures certain job costs as work progresses, including labor, material and costs not invoiced. Margin adjustments are made as information pertaining to contracts changes. All un-allocable indirect costs and corporate general and administrative costs are charged to the periods as incurred. The amount of costs not invoiced is captured to ensure an estimated margin consistent with that expected at the completion of the project. In the event a loss on a contract is foreseen, the Company recognizes the loss when it is determined. Contract costs plus recognized profits are accumulated as deferred assets, and billings and/or cash received are recorded to a deferred revenue liability account. The net of these two accounts for any individual project is presented as ''Costs in excess of billings,'' an asset account, or ''Billings in excess of costs,'' a liability account. At December 31, 2017, the Costs in excess of billings balance was $2.3 million and the Billings in excess of costs balance was approximately $1.8 million.

Production-type contracts that do not qualify for use of the percentage of completion method are accounted for using the ''completed contract method'' of accounting in accordance with ASC 605-35-25-57. Under this method, contract costs are accumulated as deferred assets, and billings and/or cash received is recorded to a deferred revenue liability account, during the periods of construction, but no revenues, costs, or profits are recognized in operations until the period within which completion of the contract occurs. A contract is considered complete when all costs except insignificant items have been incurred; the equipment is operating according to specifications and has been accepted by the customer.

For product sales in the Energy segment, revenue is recognized in the period when persuasive evidence of an arrangement with a customer exists, the products are shipped and title has transferred to the customer, the price is fixed or determinable, and collection is reasonably assured.

Revenues from warranty and maintenance activities are recognized ratably over the term of the warranty and maintenance period and the unrecognized portion is recorded as deferred revenue.

Shipping and Handling Costs

Amounts billed to customers in sales transactions related to shipping and handling represent revenues earned for the goods provided and are included in sales, and were approximately $17 thousand, $23 thousand, and $48 thousand, for the years ended December 31, 2017, 2016 and 2015, respectively. The Company expenses inbound shipping and handling costs as cost of revenues.

Warranty Reserves

A warranty reserve liability is recorded based on estimates of future costs on sales recognized. At December 31, 2017 and 2016, the balance of approximately $40 thousand and $52 thousand, respectively, for warranty reserve liability is included in accrued expenses on the balance sheet.

Advertising

The costs incurred for producing and communicating advertising are charged to operations as incurred. Advertising expense for the years ended December 31, 2017, 2016 and 2015 were $1.8 million, $1.7 million, and $1.4 million, respectively. In addition to these advertising costs, the Company also incurs advertising related costs for advertising completed in partnership with its distributors. These costs are offset against revenues. During 2017, 2016 and 2015, the advertising costs offset against revenues were $0.3 million, $0.3 million, and $0.4 million, respectively.

Income Taxes

Income taxes are accounted for under the asset and liability method of FASB Accounting Standards Codification No. 740 (''FASB ASC 740''), ''Income Taxes.'' Under FASB ASC 740, 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. 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 as income in the period that includes the enactment date. Deferred tax assets are reduced by a valuation allowance to the extent that management believes it is more likely than not that such deferred tax assets will not be realized.

Valuation allowances have been established against all domestic based deferred tax assets due to uncertainties in the Company's ability to generate sufficient taxable income in future periods to make realization of such assets more likely than not. In future periods, tax benefits and related domestic deferred tax assets will be recognized when management considers realization of such amounts to be more likely than not. The Company has not provided for valuation allowances on deferred tax assets in any other jurisdiction.

The Company recognizes interest and penalties, if any, related to its tax positions in income tax expense.

CUI Global files consolidated income tax returns with its U.S. based subsidiaries for federal and many state jurisdictions in addition to separate subsidiary income tax returns in Japan, the United Kingdom and Canada. As of December 31, 2017, the Company is not under examination by any income tax jurisdiction. The Company is no longer subject to USA examination for years prior to 2014.

Net Loss per Share

In accordance with FASB Accounting Standards Codification No. 260 (''FASB ASC 260''), ''Earnings per Share,'' basic net loss per share is computed by dividing the net loss available to common stockholders for the period by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) available to common stockholders by the weighted average number of diluted shares outstanding during the period calculated using the treasury stock method. Due to the Company's net loss in 2017, 2016 and 2015, the assumed exercise of stock options using the treasury stock method would have had an antidilutive effect and therefore all options for the three years were excluded from the calculation of diluted net loss per share for each of the three years. Accordingly, diluted net loss per share is the same as basic net loss per share for 2017, 2016 and 2015. The weighted average shares outstanding included 63,602; 25,811 and 61,548 of shares that are considered outstanding, but unissued as of December 31, 2017, 2016 and 2015, respectively, for shares to be issued in accordance with a royalty agreement pertaining to sales of the GasPT devices and unpaid equity share bonuses in all three years, and unpaid director compensation in 2015.

The following table summarizes the number of stock options outstanding excluding amounts applicable to contingent conversion option, which may dilute future earnings per share:

	As of December 31,		
	2017	2016	2015
Options, outstanding	964,180	966,681	970,847

Any common shares issued as a result of stock options or warrants would come from newly issued common shares, from our remaining authorized shares.

The following is the calculation of basic and diluted earnings per share:

	For the Years Ended December 31,		
(In thousands, except share and per share amounts)	2017	2016	2015
Net loss	$(12,589)	$(7,266)	$(5,987)
Basic and diluted weighted average number of shares outstanding	22,397,865	20,897,812	20,792,494
Basic loss per common share	$(0.56)	$(0.35)	$(0.29)
Diluted loss per common share	$(0.56)	$(0.35)	$(0.29)

Foreign Currency Translation

The financial statements of the Company's foreign offices have been translated into U.S. dollars in accordance with FASB ASC 830, ‘‘Foreign Currency Matters’’ (FASB ASC 830). All balance sheet accounts have been translated using the exchange rate in effect at the balance sheet date. Statement of Operations amounts have been translated using an appropriately weighted average exchange rate for the year. The translation gains and losses resulting from the changes in exchange rates during 2017, 2016 and 2015 have been reported in accumulated other comprehensive income (loss), except for gains and losses resulting from the translation of intercompany receivables and payables, which are included in earnings for the period.

Segment Reporting

Operating segments are defined in accordance with ASC 280-10 as components of an enterprise for which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The measurement basis of segment profit or loss is income (loss) from operations. Management has identified six operating segments based on the activities of the Company in accordance with ASC 280-10. These operating segments have been aggregated into three reportable segments. The three reportable segments are Power and Electromechanical, Energy and Other. The Power and Electromechanical segment is focused on the operations of CUI Inc., CUI-Canada, Inc. and CUI Japan for the sale of internal and external power supplies and related components and industrial controls. The Energy segment is focused on the operations of Orbital Gas Systems Ltd. and Orbital Gas Systems, North America, Inc. which includes gas related test and measurement systems, including the GasPT. The Other segment represents the remaining activities that are not included as part of the other reportable segments and represent primarily corporate activity.

The following information represents segment activity as of and for the year ended December 31, 2017:

(In thousands)	Power and Electro-Mechanical	Energy	Other	Total
Revenues from external customers	$ 64,432	$ 18,843	$—	$ 83,275
Depreciation and amortization (1)	1,505	1,345	—	2,850
Interest expense	249	1	250	500
Impairment of goodwill and intangible expense	3	3,152	—	3,155
Income (loss) from operations	2,355	(11,366)	(4,918)	(13,929)
Segment assets	49,392	26,512	12,005	87,909
Other intangibles assets, net	8,899	6,669	—	15,568
Goodwill	13,092	4,549	—	17,641
Expenditures for segment assets (2)	955	576	—	1,531

The following information represents segment activity as of and for the year ended December 31, 2016:

(In thousands)	Power and Electro-Mechanical	Energy	Other	Total
Revenues from external customers	$ 58,403	$ 28,058	$—	$ 86,461
Depreciation and amortization (1)	1,445	1,401	2	2,848
Interest expense	221	6	240	467
Income (loss) from operations	645	(1,676)	(5,479)	(6,510)
Segment assets	49,830	29,632	381	79,843

Other intangibles assets, net	9,262	6,939	—	16,201
Goodwill	13,083	7,042	—	20,125
Expenditures for segment assets (2)	1,032	642	—	1,674

The following information represents segment activity as of and for the year ended December 31, 2015:

(In thousands)	Power and Electro-Mechanical	Energy	Other	Total
Revenues from external customers	$ 58,037	$28,203	$—	$86,240
Depreciation and amortization (1)	1,258	1,945	6	3,209
Earnings on equity method investment	53	—	—	53
Interest expense	226	4	211	441
Income (loss) from operations	2,856	(3,915)	(4,635)	(5,694)
Segment assets	51,600	37,029	2,219	90,848
Other intangibles assets, net	9,577	9,167	2	18,746
Goodwill	13,077	8,450	—	21,527
Expenditures for segment assets (2)	859	4,314	—	5,173

(1) For the years ended December 31, 2017, 2016 and 2015, depreciation and amortization totals included $0.7 million, $0.5 million and $0.3 million, respectively that were classified as cost of revenues in the Consolidated Statements of Operations.

(2) Includes purchases of property, plant and equipment and the investment in other intangible assets. Excludes amounts for the CUI – Canada, Inc. acquisition in 2015.

The following information represents revenue by country:

	For the Years Ended December 31,					
(In thousands)	2017		2016		2015	
	Amount	%	Amount	%	Amount	%
USA	$50,875	61 %	$46,514	54 %	$46,641	54 %
United Kingdom	14,522	17 %	17,337	20 %	21,407	25 %
China	5,381	7 %	5,930	7 %	4,950	6 %
All Others	12,497	15 %	16,680	19 %	13,242	15 %
Total	$83,275	100%	$86,461	100%	$86,240	100%

The following information represents long-lived assets (excluding deferred tax assets) by country:

	As of December 31,	
(In thousands)	2017	2016
USA	$27,662	$28,089
United Kingdom	17,739	18,431
Other	1,232	1,205
	$46,633	$47,725

<u>Revisions</u>

Immaterial revisions were made to the consolidated statement of cash flows. For the years ended December 31, 2016 and 2015, $172 thousand and $219 thousand, respectively, were reclassified from effect of exchange rate changes on cash to non-cash unrealized foreign currency losses included as a reconciling item to cash provided by operating activities. This change was related primarily to unrealized foreign currency losses on intercompany advances to Orbital-UK.

<u>Recent Accounting Pronouncements</u>

In January 2017, the FASB issued Accounting Standards Update ("ASU") No. 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. ASU 2017-04 simplifies the goodwill impairment test by eliminating Step 2 from the test among other technical changes intended to streamline the impairment test. The amendment requires an entity to perform its annual, or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. The amendments should be applied on a prospective basis.

The Company is required to adopt ASU 2017-04 for its annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019 and may early adopt as early as its first annual or interim impairment testing date following January 1, 2017. The Company elected to early adopt the amendments of this standard effective with its May 31, 2017 goodwill impairment test. The early adoption of this standard did not impact the Company's financial condition, results of operations, and cash flows for its annual impairment test.

In August 2016, the FASB issued Accounting Standards Update ("ASU") No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 clarifies whether eight specifically identified cash flow issues should be categorized as operating, investing or financing activities in the statement of cash flows. The guidance will be effective for the fiscal year beginning after December 15, 2017, including interim periods within that year. The Company is currently assessing the impact of this ASU on its consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). ASU 2016-13 is intended to provide financial statement users with more useful information about expected credit losses on financial assets held by a reporting entity at each reporting date. The new standard replaces the existing incurred loss impairment methodology with a methodology that requires consideration of a broader range of reasonable and supportable forward-looking information to estimate all expected credit losses. This ASU is effective for fiscal years and interim periods within those years beginning after December 15, 2019 and early adoption is permitted for fiscal years and interim periods within those years beginning after December 15, 2018. The Company is currently assessing the impact of this ASU on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (''ASU 2016-02''). ASU 2016-02 requires lessees to present right-of-use assets and lease liabilities (with the exception of short-term leases) on the balance sheet. The new guidance will be effective for public business entities for fiscal years beginning after December 15, 2018 including interim periods within that fiscal year. We are currently evaluating the impact of the Company's pending adoption of ASU 2016-02 on the Company's consolidated financial statements and will adopt the standard in 2019.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory* ("ASU 2015-11") that requires entities to measure inventory at the lower of cost or net realizable value. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The guidance is effective for fiscal years beginning after December 15, 2016 including interim periods within those fiscal years. The guidance must be applied on a prospective basis. The guidance has not had a material impact on our financial statements.

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"), which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five-step process to achieve this core principle and, in doing so, more judgment and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP. The standard was originally effective for annual periods beginning after December 15, 2016, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a modified retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional note disclosures). On July 9, 2015, the FASB affirmed its proposal to defer the effective date of the new revenue standard for public entities by one year to annual reporting periods beginning after December 15, 2017, and interim periods beginning in the first interim period within the year of adoption. After evaluating the transition options, the Company has chosen to implement using the modified retrospective method.

The cumulative effect adjustment to be recorded as of January 1, 2018 is expected to be approximately a net $1.9 million decrease to accumulated deficit due to an approximate $2.8 million from the Power and Electromechanical segment transition adjustment partially offset by a $0.9 million from the Energy segment transition adjustment. Certain Power and Electromechanical revenue recorded as sell through under previous guidance will be recorded at the time of sale net of appropriate reserves consistent with other sales in the Power and Electromechanical segment. The Energy segment transition adjustment is due to certain production-type contracts that lacked a specific enforceable right to payment for revenue recorded using percentage of completion method under the previous guidance. These contracts typically contained termination clauses based on milestones that were not deemed specific enough to warrant revenue recognition over time under the new guidance.

3. INVESTMENTS AND FAIR VALUE MEASUREMENTS

The Company's fair value hierarchy for its cash equivalents, marketable securities and derivative instruments as of December 31, 2017 and December 31, 2016, respectively, was as follows:

(In thousands)

December 31, 2017	Level 1	Level 2	Level 3	Total
Money market securities	$ 16	$—	$ —	$16
Total assets	$ 16	$—	$ —	$16
Derivative instrument payable	$ —	$356	$ —	$356
Contingent consideration	—	—	45	45
Total liabilities	$ —	$356	$ 45	$401

December 31, 2016	Level 1	Level 2	Level 3	Total
Money market securities	$ 16	$—	$—	$16
Total assets	$ 16	$—	$—	$16
Derivative instrument payable	$ —	$467	$—	$467
Contingent consideration	—	—	103	103
Total liabilities	$ —	$467	$103	$570

Fair Value Measurements

Using Significant Unobservable Inputs (Level 3 - recurring basis)

(In thousands)	Contingent consideration
Balance at December 31, 2016	$ 103
Payment	(61)
Quarterly fair value adjustment	3
Balance at December 31, 2017	$ 45

There were no transfers between Level 3 and Level 2 in 2017 as determined at the end of the reporting period. The contingent consideration liability is associated with the acquisition of Tectrol in March 2015 and represents the present value of the expected future contingent payment based on revenue projections of select Tectrol legacy products. The inputs used to measure contingent consideration are classified as Level 3 within the valuation hierarchy. The valuation is not supported by market criteria and reflects the Company's internal revenue forecasts. Since the valuation is not supported by market criteria, the valuation is completely dependent on unobservable inputs. During quarterly updates of the valuation, the calculation of the value is based on actual and reasonably estimated future revenues. Based on the Company's fourth quarter 2017 analysis, the Company adjusted the current value of the contingent consideration based on updated revenue projections.

The fair values of the reporting units subject to the Company's quantitative impairment analysis were determined utilizing a blend of a market and an income approach to determine the estimated fair values of the reporting units, as discussed in Note 2. The fair value measurements and models were classified as non-recurring Level 3 measurements.

4. ACQUISITION

CUI-Canada, Inc.

On March 5, 2015, the Company closed on an Asset Purchase Agreement to acquire certain assets and assume certain liabilities of Tectrol, Inc., a Toronto, Canada corporation. The acquisition was effective March 1, 2015 and is included from that date in the Company's Power and Electromechanical segment. As a part of this acquisition strategy, CUI Global, Inc. formed a wholly owned Canadian corporate subsidiary, CUI-Canada, Inc., to receive these acquired assets and liabilities. That entity entered into a five-year lease of the Toronto facility where Tectrol, Inc. was operating its business. CUI-Canada, Inc. operations include the design and manufacture assembly of electronic power conversion devices such as AC/DC power supplies, DC/DC power supplies, linear power supplies and uninterruptable power supplies.

The purchase price for the acquisition of the assets was \$5.2 million subject to good faith adjustments by the parties according to the final value of the non-obsolete inventory conveyed and other closing adjustments. In addition, the agreement calls for an earn-out/royalty payment of two percent of the gross sales (for specific, identified customers) over a period of three years from the closing date, up to a maximum of \$0.3 million that may or may not be paid to the seller within 90 days of each calendar year-end, depending on performance by the identified customer(s). The final adjusted purchase price for the acquisition of Tectrol was \$4.5 million, which included the present value of \$0.3 million of royalties to be paid on future sales, which was recorded as \$0.2 million of contingent consideration. At December 31, 2017, \$45 thousand of contingent consideration is included on the balance sheet in accrued expenses. The full purchase price less the contingent consideration was paid in cash. The Company funded the consideration paid to the shareholder of Tectrol with existing cash and cash equivalents and funds from short-term investments that had matured.

The acquisition was accounted for using the acquisition method of accounting and the purchase price was allocated to the assets acquired and liabilities assumed based upon their estimated fair values at the date of acquisition.

The allocation of the purchase price is as follows:

(In thousands)	
Purchase price	$4,501
Inventory	$2,302
Property and equipment	831
Software	73
Intangible, customer lists	270
Intangible, trademark and trade name	130
Intangible, technology-based asset	1,000
Goodwill	64
Liabilities assumed	(169)
	$4,501

The table below summarizes the condensed pro forma information of the results of operations of the Company, for the year ended December 31, 2015 and 2014 as though the acquisition had been completed as of January 1, 2014:

For the year ended December 31, 2015

(In thousands)	CUI Global, Inc.	Tectrol, Inc.	Adjustment (1)	Pro forma
Gross revenue	$86,240	$4,837	$ —	$91,077
Total expenses	92,227	5,212	31	97,470
Net loss	$(5,987)	$(375)		$(6,393)

For the year ended December 31, 2014

(In thousands)	CUI	Tectrol, Inc.	Adjustment (1)	Pro forma

	Global, Inc.			
Gross revenue	$76,045	$16,494	$ —	$92,539
Total expenses	78,846	17,804	186	96,836
Net loss	$(2,801)	$(1,310)		$(4,297)

(1) Adjustment to recognize the estimated depreciation and amortization expense for each of the presented periods assuming amortization of the intangible assets and depreciation of tangible assets over their estimated useful lives. Estimated depreciation and amortization for the unaudited pro forma condensed consolidated statements of operations are $31 thousand and $0.2 million for 2015 and 2014, respectively.

The above unaudited condensed pro forma information does not purport to represent what the Companies' combined results of operations would have been if such transactions had occurred at the beginning of the period presented, and are not indicative of future results.

5. PROPERTY AND EQUIPMENT, NET

Property and equipment is summarized as follows:

	At December 31,	
(In thousands)	2017	2016
Land	$1,205	$1,170
Buildings and improvements	8,476	8,069
Equipment	5,716	5,012
	15,397	14,251
Less accumulated depreciation	(4,155)	(3,299)
	$11,242	$10,952

Depreciation expense for the years ended December 31, 2017, 2016 and 2015 was $1.0 million, $0.9 million, and $0.9 million, respectively.

During the year ended December 31, 2017, the Company disposed of $0.3 million of property and equipment with an accumulated depreciation at disposal of $0.3 million. During the year ended December 31, 2016, the Company disposed of $0.9 million of property and equipment with an accumulated depreciation at disposal of $0.8 million.

6. GOODWILL AND OTHER INTANGIBLE ASSETS

At December 31, 2017 and 2016, the gross carrying amount and accumulated amortization of intangible assets, other than goodwill, are as follows:

(In thousands)	*Estimated Useful Life (years)	December 31, 2017 Gross Carrying Amount	Accumulated Amortization	Identifiable Intangible Assets, less Accumulated Amortization	December 31, 2016 Gross Carrying Amount	Accumulated Amortization	Identifiable Intangible Assets, less Accumulated Amortization
Finite-lived intangible assets							
Power and Electro-Mechanical Segment							
Trademark and trade name - V-Infinity	5	$ 1,095	$ (1,095)	$ —	$ 1,095	$ (986)	$ 109
Trademark and trade name - AMP Group	3	27	(23)	4	27	(14)	13
Trademark and trade name - CUI-Canada	3	128	(121)	7	128	(79)	49
Technology rights	7 and 20**	1,291	(578)	713	1,291	(410)	881
Computer software	3 to 5	971	(850)	121	926	(807)	119
Product certifications	3	1,412	(820)	592	1,059	(479)	580
Customer relationships - CUI-Canada	7	267	(108)	159	267	(70)	197
Other intangible assets	***	114	(113)	1	121	(109)	12
Total Power and Electro-Mechanical		5,305	(3,708)	1,597	4,914	(2,954)	1,960
Energy Segment							
Order backlog	2	3,006	(3,006)	—	2,748	(2,748)	—
Trade name - Orbital-UK	10	1,616	(768)	848	1,478	(554)	924
Customer list - Orbital-UK	10	6,284	(2,985)	3,299	5,746	(2,155)	3,591
Technology rights	20**	337	(150)	187	308	(106)	202
Technology-Based Asset - Know How	12	2,546	(1,008)	1,538	2,328	(727)	1,601
Technology-Based Asset - Software	10	552	(262)	290	505	(189)	316
Computer software	3 to 5	520	(13)	507	301	(2)	299
Other intangible assets	***	—	—	—	9	(3)	6
Total Energy Segment		14,861	(8,192)	6,669	13,423	(6,484)	6,939
Indefinite-lived intangible assets							

Power and Electro-Mechanical Segment						
Trade mark and trade name - CUI Inc.	4,893	—	4,893	4,893	—	4,893
Customer list - CUI Inc.	1,857	—	1,857	1,857	—	1,857
Patents pending - Technology	552	—	552	552	—	552
	7,302	—	7,302	7,302	—	7,302
Total Identifiable other intangible assets	$ 27,468	$ (11,900)	$ 15,568	$ 25,639	$ (9,438)	$ 16,201

* All intangibles are reviewed annually for impairment, or sooner if circumstances change.

** Technology rights include $1.0 million of capitalized costs that are related to our CUI-Canada acquisition in March 2015. The CUI-Canada technology rights are amortized over a 7-year life. The rest of the technology rights are amortized over a 20-year life.

*** Other intangible assets are amortized over an appropriate useful life, as determined by management in relation to the other intangible asset characteristics.

Intangible asset amortization by category was as follows:

(In thousands)	For the Years Ended December 31, 2017	2016	2015
Order backlog	$—	$—	$422
Trademarks and trade name	316	434	442
Customer lists/relationships	638	669	744
Technology rights	198	193	177
Technology-based assets	255	269	303
Computer software	83	76	69
Product certifications	343	260	170
Other intangibles	8	22	28
Total amortization	$1,841	$1,923	$2,355

Estimated Future Amortization by Category of Finite-lived Intangible Assets at December 31, 2017 was as follows:

(In thousands)	For the Years Ending December 31, 2018	2019	2020	2021	2022	2023 and thereafter	Totals
Trademarks and trade name	$173	$162	$162	$162	$162	$ 38	$859
Customer lists/relationships	667	667	667	667	635	155	3,458
Technology rights	201	193	185	185	67	69	900
Technology-based assets	267	267	267	267	267	493	1,828
Computer software	168	174	146	71	58	11	628
Product Certifications	350	189	53	—	—	—	592
Other Intangibles	1						