

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2019
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: 001-37461



ALARM.COM®

ALARM.COM HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

26-4247032

(I.R.S. Employer
Identification Number)

8281 Greensboro Drive Suite 100 Tysons Virginia

(Address of principal executive offices)

22102

(zip code)

Tel: (877) 389-4033

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	ALRM	The Nasdaq Stock Market LLC

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

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

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer	<input type="checkbox"/>		
Smaller Reporting Company	<input type="checkbox"/>	Emerging Growth Company	<input type="checkbox"/>

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 Exchange Act). Yes No

As of October 29, 2019, there were 48,572,377 outstanding shares of the registrant's common stock, par value \$0.01 per share.

ALARM.COM HOLDINGS, INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE FISCAL QUARTER ENDED SEPTEMBER 30, 2019

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PART I. FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS (unaudited)

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Statements of Operations
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue:				
SaaS and license revenue	\$ 84,924	\$ 74,292	\$ 247,313	\$ 213,248
Hardware and other revenue	42,956	37,556	114,562	95,844
Total revenue	<u>127,880</u>	<u>111,848</u>	<u>361,875</u>	<u>309,092</u>
Cost of revenue⁽¹⁾:				
Cost of SaaS and license revenue	12,438	11,501	37,428	33,334
Cost of hardware and other revenue	35,085	30,491	93,601	73,523
Total cost of revenue	<u>47,523</u>	<u>41,992</u>	<u>131,029</u>	<u>106,857</u>
Operating expenses:				
Sales and marketing	14,533	14,128	43,392	39,562
General and administrative	18,701	43,662	51,785	77,943
Research and development	29,461	22,869	84,375	64,767
Amortization and depreciation	5,467	5,891	15,833	16,154
Total operating expenses	<u>68,162</u>	<u>86,550</u>	<u>195,385</u>	<u>198,426</u>
Operating income / (loss)	12,195	(16,694)	35,461	3,809
Interest expense	(715)	(736)	(2,322)	(2,159)
Interest income	2,703	661	4,317	1,442
Other income, net	6,380	56	6,468	91
Income / (loss) before income taxes	20,563	(16,713)	43,924	3,183
Provision for / (benefit from) income taxes	2,873	(9,061)	3,428	(10,413)
Net income / (loss)	17,690	(7,652)	40,496	13,596
Income allocated to participating securities	—	—	—	(2)
Net income / (loss) attributable to common stockholders	<u>\$ 17,690</u>	<u>\$ (7,652)</u>	<u>\$ 40,496</u>	<u>\$ 13,594</u>
Per share information attributable to common stockholders:				
Net income / (loss) per share:				
Basic	\$ 0.36	\$ (0.16)	\$ 0.84	\$ 0.29
Diluted	\$ 0.35	\$ (0.16)	\$ 0.81	\$ 0.27
Weighted average common shares outstanding:				
Basic	48,518,041	47,812,642	48,360,927	47,494,926
Diluted	50,152,807	47,812,642	50,238,409	49,593,918

(1) Exclusive of amortization and depreciation shown in operating expenses below.

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)
(unaudited)

	September 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 164,323	\$ 146,061
Accounts receivable, net	64,897	49,510
Inventory, net	20,978	22,990
Other current assets	13,495	9,502
Total current assets	263,693	228,063
Property and equipment, net	32,332	27,757
Intangible assets, net	68,802	79,067
Goodwill	63,591	63,591
Deferred tax assets	27,450	28,952
Operating lease right-of-use assets	27,520	—
Other assets	17,618	13,555
Total assets	\$ 501,006	\$ 440,985
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable, accrued expenses and other current liabilities	\$ 33,566	\$ 58,430
Accrued compensation	13,392	13,484
Deferred revenue	3,063	3,356
Operating lease liabilities	6,684	—
Total current liabilities	56,705	75,270
Deferred revenue	6,960	7,820
Long-term debt	64,000	67,000
Operating lease liabilities	35,291	—
Other liabilities	1,884	13,306
Total liabilities	164,840	163,396
Commitments and contingencies (Note 12)		
Stockholders' equity		
Preferred stock, \$0.001 par value, 10,000,000 shares authorized; no shares issued and outstanding as of September 30, 2019 and December 31, 2018.	—	—
Common stock, \$0.01 par value, 300,000,000 shares authorized; 48,572,086 and 48,103,038 shares issued; and 48,571,676 and 48,102,081 shares outstanding as of September 30, 2019 and December 31, 2018, respectively.	486	481
Additional paid-in capital	359,178	341,139
Accumulated deficit	(23,498)	(64,031)
Total stockholders' equity	336,166	277,589
Total liabilities and stockholders' equity	\$ 501,006	\$ 440,985

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Nine Months Ended September 30,	
	2019	2018
Cash flows from operating activities:		
Net income	\$ 40,496	\$ 13,596
Adjustments to reconcile net income to net cash from operating activities:		
Provision for doubtful accounts	722	108
Reserve for product returns	(105)	210
Provision for notes receivable	(3,319)	—
Amortization on patents and tooling	506	701
Amortization and depreciation	15,833	16,154
Amortization of debt issuance costs	81	81
Amortization of operating lease right-of-use assets	4,296	—
Deferred income taxes	1,502	(9,108)
Stock-based compensation	14,721	9,670
Gain on notes receivable	(6,931)	—
Acquired in-process research and development	850	—
Impairment of investment	605	—
Disposal of property and equipment	—	285
Changes in operating assets and liabilities:		
Accounts receivable	(16,004)	(15,145)
Inventory	2,012	(2,729)
Other current and non-current assets	(6,813)	(5,072)
Accounts payable, accrued expenses and other current liabilities	(22,959)	28,472
Deferred revenue	(1,153)	(804)
Operating lease liabilities	(681)	—
Other liabilities	188	(1,441)
Cash flows from operating activities	<u>23,847</u>	<u>34,978</u>
Cash flows used in investing activities:		
Additions to property and equipment	(10,660)	(9,317)
Purchases of in-process research and development	(850)	—
Issuances or purchases of notes receivable	(26,074)	—
Receipt of payment on notes receivable	31,695	—
Cash flows used in investing activities	<u>(5,889)</u>	<u>(9,317)</u>
Cash flows from financing activities:		
Repayments of credit facility	(3,000)	(3,000)
Repurchases of common stock	—	(1)
Issuances of common stock from equity-based plans	3,304	5,254
Cash flows from financing activities	<u>304</u>	<u>2,253</u>
Net increase in cash and cash equivalents	<u>18,262</u>	<u>27,914</u>
Cash and cash equivalents at beginning of the period	<u>146,061</u>	<u>96,329</u>
Cash and cash equivalents at end of the period	<u>\$ 164,323</u>	<u>\$ 124,243</u>

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Statements of Equity
(in thousands)
(unaudited)

	Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount			
Balance as of December 31, 2018	—	\$ —	48,102	\$ 481	\$ 341,139	\$ (64,031)	\$ 277,589
Adoption of accounting standard on leases	—	—	—	—	—	37	37
Common stock issued in connection with equity-based plans	—	—	147	1	1,590	—	1,591
Vesting of common stock subject to repurchase	—	—	—	—	2	—	2
Stock-based compensation expense	—	—	—	—	4,267	—	4,267
Net income	—	—	—	—	—	9,010	9,010
Balance as of March 31, 2019	—	—	48,249	482	346,998	(54,984)	292,496
Common stock issued in connection with equity-based plans	—	—	232	3	698	—	701
Vesting of common stock subject to repurchase	—	—	—	—	2	—	2
Stock-based compensation expense	—	—	—	—	5,433	—	5,433
Net income	—	—	—	—	—	13,796	13,796
Balance as of June 30, 2019	—	—	48,481	485	353,131	(41,188)	312,428
Common stock issued in connection with equity-based plans	—	—	90	1	1,011	—	1,012
Vesting of common stock subject to repurchase	—	—	1	—	2	—	2
Stock-based compensation expense	—	—	—	—	5,034	—	5,034
Net income	—	—	—	—	—	17,690	17,690
Balance as of September 30, 2019	—	\$ —	48,572	\$ 486	\$ 359,178	\$ (23,498)	\$ 336,166

	Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount			
Balance as of December 31, 2017	—	\$ —	47,202	\$ 472	\$ 321,032	\$ (88,677)	\$ 232,827
Adoption of accounting standard on revenue recognition	—	—	—	—	—	3,122	3,122
Common stock issued in connection with equity-based plans	—	—	86	1	995	—	996
Vesting of common stock subject to repurchase	—	—	3	—	14	—	14
Stock-based compensation expense	—	—	—	—	2,784	—	2,784
Net income	—	—	—	—	—	10,515	10,515
Balance as of March 31, 2018	—	—	47,291	473	324,825	(75,040)	250,258
Common stock issued in connection with equity-based plans	—	—	397	4	1,558	—	1,562
Vesting of common stock subject to repurchase	—	—	4	—	14	—	14
Stock-based compensation expense	—	—	—	—	3,631	—	3,631
Net income	—	—	—	—	—	10,733	10,733
Balance as of June 30, 2018	—	—	47,692	477	330,028	(64,307)	266,198
Common stock issued in connection with equity-based plans	—	—	306	3	2,693	—	2,696
Vesting of common stock subject to repurchase	—	—	2	—	13	—	13
Stock-based compensation expense	—	—	—	—	3,486	—	3,486
Net loss	—	—	—	—	—	(7,652)	(7,652)
Balance as of September 30, 2018	—	\$ —	48,000	\$ 480	\$ 336,220	\$ (71,959)	\$ 264,741

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements
September 30, 2019 and 2018
(unaudited)

Note 1. Organization

Alarm.com Holdings, Inc. (referred to herein as Alarm.com, the Company, or we) is the leading platform for the intelligently connected property. We offer a comprehensive suite of cloud-based solutions for the smart residential and commercial property, including interactive security, video monitoring, intelligent automation and energy management. Millions of property owners depend on our technology to intelligently secure, monitor and manage their residential and commercial properties. Our solutions are delivered through an established network of over 8,000 trusted service provider partners, who are experts at selling, installing and supporting our solutions. We derive revenue from the sale of our cloud-based Software-as-a-Service, or SaaS, services, license fees, software, hardware, activation fees and other revenue. Our fiscal year ends on December 31.

Note 2. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include our accounts and those of our majority-owned and controlled subsidiaries after elimination of intercompany accounts and transactions.

These unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP, for interim financial information and the applicable rules and regulations of the Securities and Exchange Commission, or the SEC. Accordingly, they do not include all the information and footnotes required by GAAP for annual financial statements. They should be read together with our audited consolidated financial statements and related notes thereto for the year ended December 31, 2018 included in our Annual Report on Form 10-K filed with the SEC on March 1, 2019, or the Annual Report. The condensed consolidated balance sheet as of December 31, 2018 was derived from our audited financial statements, but does not include all disclosures required by GAAP for annual financial statements.

In the opinion of management, these condensed consolidated financial statements include all normal recurring adjustments necessary for a fair statement of the results of operations, financial position and cash flows. The results of operations for the three and nine months ended September 30, 2019 are not necessarily indicative of the results that can be expected for our entire fiscal year ending December 31, 2019.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Our estimates, judgments and assumptions are continually evaluated based on available information and experience. Because of the use of estimates inherent in the financial reporting process, actual results could differ from those estimates. Estimates are used when accounting for revenue recognition, allowances for doubtful accounts, allowance for hardware returns, estimates of obsolete inventory, long-term incentive compensation, stock-based compensation, income taxes, legal reserves, contingent consideration and goodwill and intangible assets.

Reclassifications

Certain previously reported amounts in the condensed consolidated statements of operations for the three and nine months ended September 30, 2018 have been reclassified to conform to our current presentation to reflect interest income separately, which was previously included in other income, net.

Significant Accounting Policies

Except for as disclosed herein, there have been no other material changes to our significant accounting policies during the three and nine months ended September 30, 2019 from those disclosed in our Annual Report.

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements (Unaudited) — (Continued)
September 30, 2019 and 2018

Leases

We determine if an arrangement contains a lease at the inception of the arrangement. As part of the lease determination process, we assess several factors, including, but not limited to, whether we have the right to control and direct the use of the asset and whether the other party has a substantive substitution right. If we enter into leases that contain multiple components, we identify separate lease components based on whether or not the right to use the underlying assets is distinct and either highly dependent or highly interrelated with other rights in the contract. We also evaluate whether there are any non-lease components in the arrangement. For certain classes of underlying assets, such as data centers, we have elected not to separate non-lease components from lease components. For all other classes of underlying assets, if separate lease and non-lease components are identified, we allocate the consideration in the contract to the lease and non-lease components using the relative stand-alone selling price method at the lease inception.

Many of our leases include options to renew at our sole discretion. We also have several leases that provide us an option to terminate the lease prior to the end of the lease term. These renewal and termination options are included in the lease term at the commencement date when we are reasonably certain the options will be exercised. When assessing the likelihood of electing these options, we consider the length of the renewal period, market conditions, our expansion plans, the existence of a termination penalty, as well as other factors. Our lease agreements do not contain any material residual value guarantees, restrictive covenants or variable lease payments.

Right-of-use, or ROU, assets represent our right to use an underlying asset for the term of the lease and lease liabilities represent our obligation to make lease payments throughout the term of the lease. ROU assets and lease liabilities are recognized as of the commencement date of the lease based on the present value of contractual lease payments due over the term of the lease. We use our incremental borrowing rate to determine the present value of the lease payments, as our leases do not state the rate implicit in the lease. Our incremental borrowing rate is determined on a collateralized basis at the commencement date of the lease.

ROU assets and lease liabilities resulting from operating leases are recorded on our condensed consolidated balance sheets. We did not have any finance leases or subleases as of September 30, 2019 and December 31, 2018.

Lease expense is recognized on a straight-line basis over the term of the lease and is recorded in general and administrative expense. Some of our leases include tenant improvement allowances, which are recorded when we are reasonably certain to utilize the allowance and are amortized on a straight-line basis over the shorter of the lease terms or the asset lives. Leases with an initial lease term of twelve months or less are considered short-term leases. Short-term leases are not recorded on our condensed consolidated balance sheets. Expenses associated with short-term leases are recognized on a straight-line basis over the term of the lease and are recorded in general and administrative expense. Short-term lease costs were immaterial for the three and nine months ended September 30, 2019.

Recent Accounting Pronouncements

Adopted

On February 25, 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2016-02, "Leases (Topic 842)" or Topic 842, which requires lessees to recognize operating and financing lease liabilities and corresponding ROU assets on the balance sheet. The update also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. In July 2018, the FASB amended the update to allow entities to apply the transition requirements of Topic 842 at the adoption date rather than at the beginning of the earliest comparative period presented. Accordingly, the amendments in Topic 842 were effective for us beginning January 1, 2019.

On January 1, 2019, we adopted Topic 842 by applying the modified retrospective approach to all of our leases in effect as of that date. We used the optional transition method, which required us to record the initial effect of Topic 842 as a cumulative-effect adjustment to retained earnings on January 1, 2019. Additionally, we elected to use the package of practical expedients for the adoption of Topic 842, which allowed us not to reassess: (i) whether any expired or existing contracts are or contain leases, (ii) lease classification for any expired or existing leases and (iii) whether initial direct costs for any existing leases qualify for capitalization under Topic 842. We also used the hindsight practical expedient when determining the lease term and assessing impairment of ROU assets.

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements (Unaudited) — (Continued)
September 30, 2019 and 2018

The adoption of Topic 842 resulted in the recording of the following amounts on our condensed consolidated balance sheets (in thousands):

Balance Sheet Caption	As of January 1, 2019
Property and equipment, net	\$ 1,057
Operating lease right-of-use assets	28,432
Operating lease liabilities (current)	5,699
Operating lease liabilities (noncurrent)	36,957
Accounts payable, accrued expenses and other current liabilities	(1,548)
Other liabilities	(11,656)
Accumulated deficit	37

The adoption of Topic 842 did not materially impact our condensed consolidated statements of operations, condensed consolidated statement of equity and condensed consolidated statements of cash flows.

Not Yet Adopted

On June 16, 2016, the FASB issued ASU 2016-13, "*Financial Instruments - Credit Losses (Topic 326)*," which provides guidance designed to provide financial statement users with more information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. From November 2018 to May 2019, amendments to Topic 326 were issued to clarify numerous accounting topics. When determining such expected credit losses, the guidance requires companies to apply a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The amendment is effective on a modified retrospective basis for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted for fiscal years and interim periods beginning after December 15, 2018. To date, we have assessed the manner in which we currently estimate the allowance for doubtful accounts on our trade receivables, the composition of our notes receivable and our historical credit loss activity. We are currently assessing forecasted market conditions and the impact this pronouncement may have on our consolidated financial statements. This pronouncement will require additional disclosures within our notes to the consolidated financial statements.

On August 28, 2018, the FASB issued ASU 2018-13, "*Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*," which provides guidance designed to improve the effectiveness of fair value measurement disclosures in notes to the financial statements. The update removes several existing disclosure requirements, including, but not limited to: (i) the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, (ii) the policy for timing of transfers between levels and (iii) the valuation processes for Level 3 fair value measurements. The update also adds additional disclosure requirements for public companies, including but not limited to: (i) the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period and (ii) the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. The update also modifies and clarifies several existing disclosure requirements. The amendment in this update is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The additional disclosure requirements and one of the modifications to an existing disclosure requirement should be applied prospectively while all other disclosure changes should be applied retrospectively to all periods presented upon the effective date. Early adoption is permitted. We are currently assessing the impact this pronouncement may have on our fair value measurement disclosures; however, this pronouncement is not expected to have a material impact on our consolidated financial statements.

Note 3. Revenue from Contracts with Customers

Revenue Recognition

We derive our revenue from three primary sources: the sale of cloud-based SaaS services on our integrated Alarm.com platform, the sale of licenses and services on our non-hosted software platform, or Software platform, and the sale of hardware products. We sell our platform and hardware solutions to service provider partners that resell our solutions and hardware to residential and commercial property owners, who are the service provider partners' customers. Our subscribers consist of all of the properties maintained by those residential and commercial property owners to which we are delivering at least one of our solutions. We also sell our hardware to distributors who resell the hardware to service provider partners. We enter into contracts with our service provider partners that establish pricing for access to our platform solutions and for the sale of hardware. These contracts typically have an initial term of one year, with subsequent renewal terms of one year. Our service provider partners typically enter into contracts with our subscribers, which our service provider partners have indicated range from three to five years in length.

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements (Unaudited) — (Continued)
September 30, 2019 and 2018

When determining the amount of consideration we expect to be entitled to for the sale of our hardware, we estimate the variable consideration associated with customer returns. We record a reserve against revenue for hardware returns based on historical returns. For the twelve months ended September 30, 2019, our reserve against revenue for hardware returns was 1%, as compared to 2% for the same period in the prior year. We evaluate our hardware reserve on a quarterly basis or if there is an indication of significant changes in return experience. Historically, our returns of hardware have not significantly differed from our estimated reserve. Additionally, we provide assurance-type warranties related to the intended functionality of the products and services provided and those warranties typically allow for the return of hardware up to one year past the date of sale. These warranties were not identified as separate performance obligations.

Hardware and other revenue may also include activation fees charged to some of our service provider partners for activation of a new subscriber account on our platforms, as well as fees paid by service provider partners for our marketing services. Our service provider partners use services on our platforms, such as support tools and applications, to assist in the installation of our solutions in subscriber properties. This installation marks the beginning of the service period on our platforms and, on occasion, we earn activation revenue for fees charged for this service. The activation fee is non-refundable, separately negotiated and specified in our contractual arrangements with our service provider partners and is charged to the service provider partner for each subscriber activated on our platforms. The decision whether to charge an activation fee is based in part on the expected number of subscribers to be added by our service provider partners and as a result, many of our largest service provider partners do not pay an activation fee. Activation fees are not offered on a stand-alone basis separate from our SaaS offering and are billed and received at the beginning of the arrangement. We record activation fees initially as deferred revenue and we recognize these fees ratably over the expected term of the subscribers' account which we estimate is ten years based on our annual attrition rate. The portion of these activation fees included in current and long-term deferred revenue as of our balance sheet date represents the amounts that will be recognized ratably as revenue over the following twelve months, or longer as appropriate, until the ten-year expected term is complete. The balance of deferred revenue for activation fees was \$8.4 million and \$9.2 million as of September 30, 2019 and December 31, 2018, respectively, which combines current and long-term balances.

SaaS and license revenue associated with our contracts is invoiced and revenue is recognized at an amount that corresponds directly with the value of the performance completed to date. Additionally, the consideration received from hardware sales corresponds directly with the stand-alone selling price of the hardware. As a result, we have elected to use the practical expedient related to the amount of transaction price allocated to the unsatisfied performance obligations and therefore, we have not disclosed the total remaining revenue expected to be recognized on all contracts or the expected period over which the remaining revenue would be recognized.

Contract Assets

At contract inception, we assess the goods and services promised in our contracts with customers and identify a performance obligation for each distinct promise to transfer a good or service, or bundle of goods or services. To identify the performance obligations, we consider all of the goods or services promised in the contract, whether explicitly stated or implied based on customary business practices. We record a contract asset when we satisfy a performance obligation by transferring a promised good or service. Contract assets can be conditional or unconditional depending on whether another performance obligation must be satisfied before payment can be received. We receive payments from our service provider partners based on the billing schedule established in our contracts. All of the accounts receivable presented in the balance sheet represent unconditional rights to consideration. We do not have any assets from contracts containing conditional rights and we do not have any assets from satisfied performance obligations that have not been invoiced.

We recognize an asset related to the costs incurred to obtain a contract only if we expect to recover those costs and we would not have incurred those costs if the contract had not been obtained. We recognize an asset from the costs incurred to fulfill a contract if the costs (i) are specifically identifiable to a contract, (ii) enhance resources that will be used in satisfying performance obligations in future and (iii) are expected to be recovered. Our contract assets consist of capitalized commission costs and upfront payments made to a customer. Based on the policy above, we capitalize a portion of our commission costs as an incremental cost of obtaining a contract. When calculating the incremental cost of obtaining a contract, we exclude any commission costs related to metrics that could be satisfied without obtaining a contract, including training-related metrics. We amortize our commission costs over a period of three years, which is consistent with the period over which the products and services related to the commission are transferred to the customer. The three-year period was determined based on our review of historical enhancements and upgrades to our products and services. We applied the portfolio approach to account for the amortization of contract costs as each contract has similar characteristics. Upfront payments made to a customer are capitalized and amortized over the expected period of benefit and are recorded as a reduction to revenue.

The current portion of capitalized commission costs and upfront payments made to a customer is included in other current assets within our condensed consolidated balance sheets. The non-current portion of capitalized commission costs and upfront payments made to a customer is reflected in other assets within our condensed consolidated balance sheets. Our amortization

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of contract assets during the three and nine months ended September 30, 2019 was \$0.6 million and \$1.8 million, respectively, as compared to \$0.5 million and \$1.5 million during the same periods in the prior year.

We review the capitalized costs for impairment at least annually. Impairment exists if the carrying amount of the asset recognized from contract costs exceeds the remaining amount of consideration we expect to receive in exchange for providing the goods and services to which such asset relates, less the costs that relate directly to providing those good and services and that have not been recognized as an expense. We did not record an impairment loss on our contract assets during the three and nine months ended September 30, 2019 and 2018.

The changes in our contract assets are as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Beginning of period balance	\$ 3,849	\$ 2,879	\$ 2,881	\$ —
Commission costs and upfront payments to a customer capitalized in period	333	489	2,438	4,344
Amortization of contract assets	(613)	(490)	(1,750)	(1,466)
End of period balance	<u>\$ 3,569</u>	<u>\$ 2,878</u>	<u>\$ 3,569</u>	<u>\$ 2,878</u>

Contract Liabilities

Contract liabilities include payments received in advance of performance under the contract, and are realized with the associated revenue recognized under the contract. All of the deferred revenue presented in the balance sheet represents contract liabilities resulting from advance cash receipts from customers or amounts billed in advance to customers from the sale of services. Changes in deferred revenue are due to our performance under the contract as well as to cash received from new contracts for which services have not been provided.

The changes in our contract liabilities are as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Beginning of period balance	\$ 10,980	\$ 11,971	\$ 11,176	\$ 12,678
Revenue deferred in period	542	1,225	3,013	2,706
Revenue recognized from amounts included in contract liabilities	(1,499)	(1,322)	(4,166)	(3,510)
End of period balance	<u>\$ 10,023</u>	<u>\$ 11,874</u>	<u>\$ 10,023</u>	<u>\$ 11,874</u>

The revenue recognized from amounts included in contract liabilities primarily relates to prepayment contracts with customers as well as payments of activation fees.

Note 4. Accounts Receivable, Net

The components of accounts receivable, net are as follows (in thousands):

	September 30, 2019	December 31, 2018
Accounts receivable	\$ 68,123	\$ 52,850
Allowance for doubtful accounts	(2,100)	(1,425)
Allowance for product returns	(1,126)	(1,915)
Accounts receivable, net	<u>\$ 64,897</u>	<u>\$ 49,510</u>

For the three and nine months ended September 30, 2019, we recorded a provision for doubtful accounts of \$0.2 million and \$0.7 million, respectively, as compared to less than \$0.1 million and \$0.1 million for the same periods in the prior year.

For the three and nine months ended September 30, 2019, we recorded a reduction to the reserve for product returns of \$0.1 million, as compared to less than \$0.1 million and \$0.2 million reserve recorded for the same periods in the prior year.

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Historically, we have not experienced write-offs for uncollectible accounts or sales returns that have differed significantly from our estimates.

Note 5. Inventory, Net

The components of inventory, net are as follows (in thousands):

	September 30, 2019	December 31, 2018
Raw materials	\$ 7,530	\$ 6,396
Finished goods	13,448	16,594
Total inventory, net	<u>\$ 20,978</u>	<u>\$ 22,990</u>

Note 6. Acquisitions

Asset Acquisition

On September 18, 2019, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired certain assets of an unrelated third party and substantially all of the acquired assets consisted of in-process research and development, or IPR&D. We believe the acquisition of the IPR&D will strengthen our comprehensive suite of cloud-based solutions.

In consideration for the purchase of the IPR&D, we paid \$0.9 million in cash on September 18, 2019, with the remaining \$0.1 million expected to be paid 18 months following the acquisition date, pending any indemnification obligations. The \$1.0 million consideration related to IPR&D was expensed at the time of the asset acquisition, as the IPR&D had no alternative future use.

Subsequent Event - Acquisition of a Business

On October 21, 2019, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired 85% of the issued and outstanding capital stock of PC Open Incorporated, a Washington corporation, doing business as OpenEye. OpenEye provides cloud-managed video surveillance solutions for the commercial market. We believe the acquisition of OpenEye will provide us with a comprehensive suite of interactive cloud-based services spanning video, access control, intrusion and automation for domestic and international commercial enterprises.

In consideration for the purchase of 85% of the issued and outstanding capital stock of OpenEye, we paid \$61.3 million in cash on October 21, 2019, after deducting \$2.8 million related to an agreed holdback. The purchase price is subject to certain post-closing adjustments including the final determination of closing working capital, in accordance with the terms of the stock purchase agreement. An earn-out of up to an additional \$11.0 million is payable if certain calendar 2020 targets are met. The purchase price allocation was not finalized as of the filing date of this Quarterly Report on Form 10-Q.

Note 7. Goodwill and Intangible Assets, Net

The changes in goodwill by reportable segment are outlined below (in thousands):

	Alarm.com	Other	Total
Balance as of January 1, 2019	\$ 63,591	\$ —	\$ 63,591
Goodwill acquired	—	—	—
Balance as of September 30, 2019	<u>\$ 63,591</u>	<u>\$ —</u>	<u>\$ 63,591</u>

There were no impairments of goodwill during the three and nine months ended September 30, 2019 and 2018.

The following table reflects changes in the net carrying amount of the components of intangible assets (in thousands):

	Customer Relationships	Developed Technology	Trade Name	Total
Balance as of January 1, 2019	\$ 77,264	\$ 1,678	\$ 125	\$ 79,067
Amortization	(9,276)	(926)	(63)	(10,265)
Balance as of September 30, 2019	<u>\$ 67,988</u>	<u>\$ 752</u>	<u>\$ 62</u>	<u>\$ 68,802</u>

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We recorded \$3.4 million and \$10.3 million of amortization related to our intangible assets for the three and nine months ended September 30, 2019, respectively, as compared to \$3.8 million and \$11.4 million for the same periods in the prior year. There were no impairments of long-lived intangible assets during the three and nine months ended September 30, 2019 and 2018.

The following tables reflect the weighted average remaining life and carrying value of finite-lived intangible assets (in thousands, except weighted-average remaining life):

	September 30, 2019			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value	Weighted- Average Remaining Life
Customer relationships	\$ 103,926	\$ (35,938)	\$ 67,988	9.2
Developed technology	13,959	(13,207)	752	2.3
Trade name	1,084	(1,022)	62	2.0
Other	234	(234)	—	—
Total intangible assets	\$ 119,203	\$ (50,401)	\$ 68,802	

	December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value	Weighted- Average Remaining Life
Customer relationships	\$ 103,926	\$ (26,662)	\$ 77,264	9.9
Developed technology	13,959	(12,281)	1,678	2.1
Trade name	1,084	(959)	125	2.4
Other	234	(234)	—	—
Total intangible assets	\$ 119,203	\$ (40,136)	\$ 79,067	

Note 8. Other Assets

Purchases of Patents and Patent Licenses

From time to time, we enter into agreements to purchase patents or patent licenses. The carrying value, net of amortization, of our purchased patents and patent licenses was \$2.6 million and \$2.9 million as of September 30, 2019 and December 31, 2018, respectively. As of September 30, 2019 and December 31, 2018, \$0.5 million of patent costs were included in other current assets and \$2.1 million and \$2.4 million of patent costs were included in other assets, respectively. We have \$5.9 million of historical cost in purchased patents and patent licenses. We are amortizing the patent costs over the estimated useful lives of the patents, which range from three years to twelve years. Patent cost amortization of \$0.1 million and \$0.3 million for the three and nine months ended September 30, 2019, respectively, as compared to \$0.1 million and \$0.4 million for the same periods in the prior year, was included in cost of SaaS and license revenue in our condensed consolidated statements of operations. Patent cost amortization of less than \$0.1 million and \$0.1 million was included in amortization and depreciation in our condensed consolidated statements of operations for the three and nine months ended September 30, 2019, respectively. There was no amortization of patent costs included in amortization and depreciation during the three and nine months ended September 30, 2018.

Loan to a Distribution Partner

In September 2016, we entered into dealer and loan agreements with a distribution partner. The dealer agreement enables the distribution partner to resell our SaaS services and hardware to their subscribers. Under the loan agreements, we agreed to loan the distribution partner up to \$4.0 million, collateralized by all assets owned by the distribution partner. The advance period for the loan was amended in August 2017 to begin each year on September 1 and end each year on December 31. Interest on the outstanding principal accrued at a rate per annum equal to the greater of 6.0% or the Eurodollar Base Rate, or LIBOR, plus 4.0%, as determined on the first date of each annual advance period. The repayment of principal and accrued interest was due in three installments beginning in July and ending in August following the advance period. The term date of the loan was August 31, 2019; however, the borrower had the option to extend the term of the loan for two successive terms of one year each.

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In May 2018, the loan agreement with our distribution partner was amended to convert the entire \$4.0 million note receivable outstanding into a \$4.0 million term loan. The term loan matures on July 31, 2022 and requires annual principal repayments of \$1.0 million on July 31 of each year. We received the first \$1.0 million principal payment due under this term loan in July 2019. The term loan also requires monthly interest payments, with interest accruing on the outstanding principal balance at a rate per annum equal to 6.0% through June 30, 2018 and a rate per annum equal to the LIBOR rate on the first of any interest period plus 7.0% beginning on July 1, 2018. As of September 30, 2019 and December 31, 2018, \$1.0 million of the note receivable balance was included in other current assets in our condensed consolidated balance sheets. As of September 30, 2019 and December 31, 2018, \$2.0 million and \$3.0 million of the note receivable balance was included in other assets in our condensed consolidated balance sheets, respectively.

In April 2017, we entered into a subordinated credit agreement with an affiliated entity of the distribution partner and loaned the affiliated entity \$3.0 million, with a maturity date of November 21, 2022. Interest on the outstanding principal balance accrues at a rate of 8.5% per annum and requires monthly interest payments. The \$3.0 million loan receivable balance was included in other assets as of September 30, 2019 and December 31, 2018.

For the three and nine months ended September 30, 2019, we recognized \$0.4 million and \$1.3 million of revenue from the distribution partners associated with these loans, respectively, as compared to \$0.2 million and \$0.9 million for the same periods in the prior year.

Loan to a Hardware Supplier

In October 2018, we entered into a subordinate convertible promissory note with one of our hardware suppliers, or the October 2018 Promissory Note, which was amended in November 2018, January 2018 and February 2019 as a result of the hardware supplier's financial restructuring. In March 2019, we entered into a separate secured promissory note with the same hardware supplier, which, together with the October 2018 Promissory Note, we refer to as the Promissory Notes. Under the Promissory Notes, we agreed to provide the hardware supplier loans of up to \$7.4 million, collateralized by all assets owned by the supplier. Interest on the outstanding principal accrued at a rate per annum equal to 12.0%, of which 6.0% per annum was payable in cash and the remaining 6.0% per annum was payable in kind. Payment of accrued interest was due quarterly beginning with the quarter ended March 31, 2019. The repayment of principal was due at the term date, which was the earlier of (i) the five-year anniversary of the issuance date of each of the Promissory Notes, (ii) the occurrence of a change of control, (iii) one day following the maturity day of the hardware supplier's senior indebtedness or (iv) immediately upon the acceleration of the hardware supplier's senior indebtedness.

In March 2019, we also purchased and acquired a secured promissory note, or the Acquired Promissory Note, that matured on March 30, 2019 and was originally executed between our hardware supplier and another third-party secured creditor. The Acquired Promissory Note had an outstanding balance of \$26.6 million as of December 31, 2018, including interest. Interest on the outstanding principal accrued at a rate per annum equal to 3.0%. Under the terms of the Acquired Promissory Note, we paid \$16.4 million to the third-party secured creditor in exchange for all of the rights associated with the Acquired Promissory Note, including a security interest and a right to enforce that interest against all assets owned by the hardware supplier. In addition to the \$16.4 million paid in March 2019, we agreed to pay the third-party secured creditor an additional \$6.0 million, subject to certain contingencies measured as of May 4, 2019. Based on the outcome of those contingencies, we recorded a \$6.0 million liability in March 2019 related to the Acquired Promissory Note and paid the \$6.0 million contingent liability during the three months ended September 30, 2019. The fair value of the Acquired Promissory Note at the date of purchase was \$22.4 million, which represented the initial cash consideration paid in March 2019 and the contingent consideration paid in September 2019.

On May 6, 2019, we entered into a forbearance agreement with the hardware supplier, or the Forbearance Agreement. Under the Forbearance Agreement, the hardware supplier agreed to pay us the outstanding balance of principal and interest under the Promissory Notes and the Acquired Promissory Note before June 30, 2019. In consideration for the full and timely payments under the Forbearance Agreement, we agreed to temporarily forbear from exercising the remedies available to us with respect to the collateral securing the Promissory Notes and the Acquired Promissory Note. On June 24, 2019, we entered into a Forbearance Extension Agreement with the hardware supplier, under which the hardware supplier agreed to pay us \$7.4 million on or before June 24, 2019. In consideration for the \$7.4 million payment under the Forbearance Extension Agreement, we agreed to temporarily forbear from exercising the remedies available to us with respect to the collateral securing the Promissory Notes and the Acquired Promissory Note until July 10, 2019.

On June 24, 2019, we received a payment of \$7.4 million from the supplier for the partial satisfaction of amounts due under the Promissory Notes and the Acquired Promissory Note. On July 15, 2019, we received an additional payment of \$25.0 million from the supplier and converted the remaining \$5.6 million outstanding notes receivable balance into an equity investment in the hardware supplier. We have concluded that the \$5.6 million equity investment does not meet the criteria for consolidation and will be accounted for using the measurement alternative. Under the alternative, we measure investments without readily determinable fair values at cost, less impairment, adjusted for observable price changes from orderly transactions for identical or similar investments. As a result of the payments received, we reversed the \$3.3 million reserve related to the October 2018 Promissory Note that was previously recorded during the three months ended December 31, 2018. The reversal of the reserve

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was recorded as a reduction to general and administrative expense in our condensed consolidated statements of operations during the three months ended June 30, 2019.

As a result of the \$25.0 million payment received and conversion of the \$5.6 million outstanding notes receivable balance into an equity investment on July 15, 2019, we recorded interest of \$1.7 million within interest income and a gain of \$6.9 million within other income, net, in our condensed consolidated statements of operations during the three and nine months ended September 30, 2019, related to the Promissory Notes and the Acquired Promissory Note.

As of September 30, 2019, there was no remaining outstanding balance of the Promissory Notes and the Acquired Promissory Note. As of December 31, 2018, the outstanding balance of the Promissory Notes excluding interest was \$3.3 million and was included in other assets in our condensed consolidated balance sheets prior to any adjustments for impairment.

Note 9. Fair Value Measurements

The following table presents our assets and liabilities measured at fair value on a recurring basis (in thousands):

**Fair Value Measurements on a Recurring Basis as of
September 30, 2019**

Fair value measurements in:	Level 1	Level 2	Level 3	Total
Assets:				
Money market accounts	\$ 137,052	\$ —	\$ —	\$ 137,052
Total	\$ 137,052	\$ —	\$ —	\$ 137,052
Liabilities:				
Subsidiary unit awards	\$ —	\$ —	\$ 185	\$ 185
Total	\$ —	\$ —	\$ 185	\$ 185

**Fair Value Measurements on a Recurring Basis as of
December 31, 2018**

Fair value measurements in:	Level 1	Level 2	Level 3	Total
Assets:				
Money market accounts	\$ 117,392	\$ —	\$ —	\$ 117,392
Total	\$ 117,392	\$ —	\$ —	\$ 117,392
Liabilities:				
Subsidiary unit awards	\$ —	\$ —	\$ 385	\$ 385
Total	\$ —	\$ —	\$ 385	\$ 385

The following table summarizes the change in fair value of the Level 3 liabilities for subsidiary unit awards with significant unobservable inputs (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Beginning of period balance	\$ 185	\$ 389	\$ 385	\$ 3,160
Total losses included in earnings	—	—	—	31
Settlements	—	—	(200)	(2,802)
End of period balance	\$ 185	\$ 389	\$ 185	\$ 389

The money market accounts are included in our cash and cash equivalents in our condensed consolidated balance sheets. Our money market assets are valued using quoted prices in active markets.

The liability for the subsidiary unit awards relates to agreements established with employees of our subsidiaries for cash awards contingent upon the subsidiary companies meeting certain financial milestones such as revenue, working capital, EBITDA and EBITDA margin. We account for these subsidiary awards using fair value and establish liabilities for the future payment for the repurchase of subsidiary units under the terms of the agreements based on estimating revenue, working capital, EBITDA and EBITDA margin of the subsidiary units over the periods of the awards through the anticipated repurchase dates. We

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estimated the fair value of each liability by using a Monte Carlo simulation model for determining each of the projected measures by using an expected distribution of potential outcomes. The fair value of each liability is calculated with thousands of projected outcomes, the results of which are averaged and then discounted to estimate the present value. At each reporting date until the respective payment dates, we will remeasure these liabilities, using the same valuation approach based on the applicable subsidiary's revenue and future collection of financed customer receivables, the unobservable inputs, and we will record any changes in the employee's compensation expense. Some of the awards are subject to the employees' continued employment and therefore recorded on a straight-line basis over the remaining service period. During the nine months ended September 30, 2019, we settled \$0.2 million of the liability related to the subsidiary unit awards. The remaining liability balances are included in either accounts payable, accrued expenses and other current liabilities or other liabilities in our condensed consolidated balance sheets (see Note 12).

We monitor the availability of observable market data to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or model-based valuation techniques may require the transfer of financial instruments from one fair value level to another. In such instances, the transfer is reported at the beginning of the reporting period. There were no transfers between Levels 1, 2 or 3 during the three and nine months ended September 30, 2019 and 2018. We also monitor the value of the investments for other-than-temporary impairment on a quarterly basis. No other-than-temporary impairments occurred during the three and nine months ended September 30, 2019 and 2018.

Note 10. Leases

We lease office space, data centers and office equipment under non-cancelable operating leases with various expiration dates through 2026. In August 2014, we signed a lease for office space in Tysons, Virginia, where we relocated our headquarters to in February 2016. We have subsequently entered into amendments to this lease to provide us with additional office space. In May 2019 and July 2019, we entered into two amendments to the lease for our corporate headquarters, which provides for additional office space, additional parking spaces, the extension of additional storage space and additional tenant improvement allowance. The lease term ends in 2026, includes a five-year renewal option and a cumulative tenant improvement allowance of \$11.2 million.

Supplemental information related to leases is presented in the table below (in thousands, except weighted-average term and discount rate):

	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Operating lease cost	\$ 1,932	\$ 5,570
Cash paid for amounts included in the measurement of operating lease liabilities	2,211	6,139
Operating lease right-of-use assets obtained in exchange for new operating lease liabilities	1,133	3,384
		September 30, 2019
Weighted-average remaining lease term — operating leases		6.0 years
Weighted-average discount rate — operating leases		4.0%

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Maturities of lease liabilities are as follows (in thousands):

Year Ended December 31,	Operating Leases⁽¹⁾	
Remainder of 2019	\$	2,041
2020		8,304
2021		8,204
2022		7,133
2023		6,505
2024 and thereafter		15,196
Total lease payments		47,383
Less: imputed interest ⁽²⁾		5,408
Present value of lease liabilities	\$	41,975

(1) Operating lease payments exclude \$9.1 million of legally binding minimum lease payments for leases executed but not yet commenced and includes less than \$0.1 million for options to extend lease terms that were reasonably certain of being exercised.

(2) Imputed interest was calculated using the incremental borrowing rate applicable for each lease.

Prior to our adoption of Topic 842, rent expense was \$6.3 million, \$6.2 million and \$4.8 million for the years ended December 31, 2018, 2017 and 2016, respectively.

The following table presents the future minimum lease payments under the non-cancelable operating leases as of December 31, 2018 prior to our adoption of Topic 842 (in thousands):

Year Ended December 31,	Minimum Lease Payments	
2019	\$	7,044
2020		7,168
2021		6,974
2022		6,719
2023		6,348
2024 and thereafter		14,838
Total	\$	49,091

Note 11. Liabilities

The components of accounts payable, accrued expenses and other current liabilities are as follows (in thousands):

	September 30, 2019	December 31, 2018
Accounts payable	\$ 20,693	\$ 20,214
Accrued expenses	9,234	34,557
Subsidiary unit awards	129	200
Other current liabilities	3,510	3,459
Accounts payable, accrued expenses and other current liabilities	\$ 33,566	\$ 58,430

The components of other liabilities are as follows (in thousands):

	September 30, 2019	December 31, 2018
Deferred rent	\$ —	\$ 11,656
Other liabilities	1,884	1,650
Other liabilities	\$ 1,884	\$ 13,306

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Note 12. Debt, Commitments and Contingencies

The debt, commitments and contingencies described below would require us, or our subsidiaries, to make payments to third parties under certain circumstances.

Debt

On October 6, 2017, we entered into a \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. Upon entry into the 2017 Facility, we borrowed \$72.0 million, which was used to repay the previously outstanding balance under our previous credit facility. The 2017 Facility matures in October 2022 and includes an option to further increase the borrowing capacity to \$175.0 million with the consent of the lenders. Costs incurred in connection with the 2017 Facility were capitalized and are being amortized as interest expense over the term of the 2017 Facility. The 2017 Facility is secured by substantially all of our assets, including our intellectual property. During each of the three and nine months ended September 30, 2019 and 2018, we repaid \$1.0 million and \$3.0 million of the outstanding balance of the 2017 Facility, respectively.

The outstanding principal balance on the 2017 Facility accrues interest at a rate equal to, at our option, either (1) LIBOR, plus an applicable margin based on our consolidated leverage ratio, or (2) the highest of (a) the Wall Street Journal prime rate, (b) the Federal Funds rate plus 0.50%, or (c) LIBOR plus 1.00% plus an applicable margin based on our consolidated leverage ratio. For the three and nine months ended September 30, 2019, we elected for the outstanding principal balance to accrue interest at LIBOR plus 1.50%, LIBOR plus 1.75%, LIBOR plus 2.00%, and LIBOR plus 2.50% when our consolidated leverage ratio is less than 1.00:1.00, greater than or equal to 1.00:1.00 but less than 2.00:1.00, greater than or equal to 2.00:1.00 but less than 3.00:1.00 and greater than or equal to 3.00:1.00, respectively. The 2017 Facility also carries an unused line commitment fee of 0.20%. For the nine months ended September 30, 2019, the effective interest rate on the 2017 Facility was 4.61%, as compared to 4.05% for the same period in the prior year.

The carrying value of the 2017 Facility was \$64.0 million and \$67.0 million as of September 30, 2019 and December 31, 2018, respectively. The 2017 Facility includes a variable interest rate that approximates market rates and, as such, we classified the liability as Level 2 within the fair value hierarchy and determined that the carrying amount of the 2017 Facility approximated its fair value as of September 30, 2019 and December 31, 2018. The 2017 Facility contains various financial and other covenants that require us to maintain a maximum consolidated leverage ratio not to exceed 3.50:1.00 and a consolidated fixed charge coverage ratio of at least 1.25:1.00. As of September 30, 2019, we were in compliance with all financial and non-financial covenants and there were no events of default.

On November 30, 2018, we amended the 2017 Facility to incorporate the parameters that must be met for us to repurchase our outstanding common stock under the stock repurchase program authorized by our board of directors on November 29, 2018.

Commitments and Contingencies

Repurchase of Subsidiary Units

In 2011, we formed a subsidiary that offers to professional residential property management and vacation rental management companies technology solutions for remote monitoring and control of properties, including access control and energy management. Since its formation, we granted an award of subsidiary stock to the founder and president. The vesting of the award is based upon the subsidiary meeting certain minimum financial targets from the date of commercial availability, which was determined to be June 1, 2013, until the fourth anniversary. In 2016, we amended the term of the award, extending the valuation date for the first payment in cash to December 31, 2017, amending the financial targets and allowing for payments in cash based on the future collection of financed customer receivables from 2018 to 2020 that existed as of the valuation date. During the nine months ended September 30, 2019, we settled \$0.2 million of the liability related to the subsidiary unit awards. We recorded a liability of \$0.1 million in accounts payable, accrued expenses and other current liabilities and \$0.1 million in other liabilities related to this commitment in our condensed consolidated balance sheet as of September 30, 2019. We recorded a liability of \$0.2 million in accounts payable, accrued expenses and other current liabilities and a liability of \$0.2 million in other liabilities related to this commitment in our condensed consolidated balance sheet as of December 31, 2018.

At each reporting date until the respective payment dates, we will remeasure these liabilities, and we will record any changes in fair value in general and administrative expense (see Note 9).

Indemnification Agreements

We have various agreements that may obligate us to indemnify the other party to the agreement with respect to certain matters. Generally, these indemnification provisions are included in contracts arising in the normal course of business. Although we cannot predict the maximum potential amount of future payments that may become due under these indemnification agreements, we do not believe any potential liability that might arise from such indemnity provisions is probable or material.

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Letters of Credit

As of September 30, 2019 and December 31, 2018, we had no outstanding letters of credit under the 2017 Facility.

Legal Proceedings

On October 22, 2019, EcoFactor, Inc. filed a patent infringement complaint with the U.S. International Trade Commission asserting four U.S. patents covering smart thermostat technology against a number of defendants, including Alarm.com Incorporated, Alarm.com Holdings, Inc., Ecobee Ltd., Ecobee, Inc., Google, LLC, Daikin Industries, Ltd., Daikin America, Inc., Daikin North America LLC, Schneider Electric USA, Inc., Schneider Electric SE, and Vivint, Inc. We are currently reviewing this matter and have made no determination yet regarding the merits of the case. Based on currently available information, we have determined a loss is not probable or reasonably estimable at this time.

On August 24, 2017, Alarm.com Incorporated and its wholly-owned subsidiary ICN Acquisition, LLC, filed a patent infringement complaint against ipDatatel, in the United States District Court for the Eastern District of Texas. The parties subsequently stipulated to transfer the case to the Southern District of Texas. The complaint sought injunctive relief to stop the further sale of the infringing ipDatatel's products and systems, and damages for the infringement of Alarm.com's patents. The parties have entered into a confidential settlement agreement, and on July 19, 2019, the parties filed a Stipulation of Dismissal with the Court, and the matter is now closed. Additionally, all of ipDatatel's petitions for inter partes review were terminated.

On April 25, 2017, Alarm.com Incorporated and its wholly-owned subsidiary ICN Acquisition, LLC, filed a patent infringement complaint against Protect America, Inc., or Protect America, and SecureNet Technologies, LLC, or SecureNet, in the United States District Court for the Eastern District of Virginia. The complaint seeks injunctive relief to stop the further sale of the infringing Protect America and SecureNet products and systems, and damages for the infringement of Alarm.com's patents. The complaint asserts that the technology in the Protect America and SecureNet Alarm Systems products infringe one or more claims of Alarm.com's patents: United States Patent Numbers 7,113,090; 7,633,385; 8,395,494; 8,493,202; 8,612,591; 8,860,804; and 9,141,276. If the litigation is successful, Alarm.com will be entitled to receive monetary damages, injunctive relief, and any other relief, including attorneys' fees. In June 2017, Alarm.com filed an amended complaint against Protect America only and voluntarily dismissed SecureNet from the suit, reserving the right to refile. In September 2017, Alarm.com voluntarily dismissed the amended complaint in the United States District Court of the Eastern District of Virginia and refiled a complaint against Protect America, with substantially the same allegations, in the United States District Court of the Eastern District of Texas. The parties subsequently stipulated to transfer the case to the Western District of Texas. In March 2019, the parties agreed to dismiss U.S. Patent Nos. 7,633,385, 8,395,494, and 8,493,202 from the case without prejudice. Protect America moved to dismiss U.S. Patent No. 9,141,276 based on invalidity, which Alarm.com has opposed. A claim construction hearing was held in May 2019. The Court has not yet scheduled a jury trial.

On June 2, 2015, Vivint, Inc., or Vivint, filed a lawsuit against us in U.S. District Court, District of Utah, alleging that our technology directly and indirectly infringes six patents that Vivint purchased. Vivint is seeking permanent injunctions, enhanced damages and attorneys' fees. We answered the complaint on July 23, 2015. Among other things, we asserted defenses based on non-infringement and invalidity of the patents in question. On August 19, 2016, the U.S. District Court, District of Utah stayed the litigation pending inter partes review by the U.S. Patent Trial and Appeal Board, or PTAB, of five of the patents in suit. In March 2017, the PTAB issued final written decisions relating to two patents finding all challenged claims unpatentable. In May 2017, the PTAB issued final written decisions relating to the remaining three patents that found certain claims unpatentable, while certain other claims were not found to be unpatentable. Vivint appealed the decisions to the U.S. Court of Appeals for the Federal Circuit, or the Federal Circuit, and we cross-appealed. In July 2018, the Federal Circuit issued orders affirming the PTAB's March 2017 decisions that invalidated all challenged claims of two patents. The U.S. District Court, District of Utah lifted the stay on the litigation on June 26, 2017, with Vivint proceeding with its case on four of the six patents in its complaint. No trial date has been set. In September 2017, the U.S. Patent and Trademark Office, or PTO, ordered ex parte reexaminations of certain claims of two of the remaining patents in suit, at our request. On October 30, 2018 and November 5, 2018, the PTO issued final office actions in the pending reexaminations rejecting all claims being examined as unpatentable over the prior art. Vivint appealed these rejections to the PTAB on March 29, 2019 and April 4, 2019. The U.S. District Court, District of Utah has ordered the litigation regarding the nine claims (from two patents) rejected by the PTO during the reexaminations be stayed until November 15, 2019. On April 3, 2019, the U.S. District Court, District of Utah heard argument on the parties' cross motions for claim construction and Alarm.com's motion for partial summary judgment as to invalidity. Decisions on these motions are pending. On December 20, 2018, the Federal Circuit issued an order regarding the inter partes review of three of the remaining patents in suit that vacated, reversed and remanded the PTAB's ruling with regard to the construction of a term ("communication device identification code") as requested by Alarm.com and affirmed the PTAB's May 2017 rulings invalidating certain of the Vivint patents in all other respects. On July 24, 2019, the PTAB issued further decisions with respect to two of the remaining patents in suit, finding additional claims unpatentable in view of the Federal Circuit's December 20, 2018 decision. Vivint appealed the July 24, 2019 decisions to the Federal Circuit on September 25, 2019.

Should Vivint prevail in proving Alarm.com infringes one or more of its patent claims, we could be required to pay damages

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of Vivint's lost profits and/or a reasonable royalty for sales of our solution, enjoined from making, using and selling our solution if a license or other right to continue selling such elements is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. The outcome of the legal claim and proceeding against us cannot be predicted with certainty. We believe we have valid defenses to Vivint's claims. Based on currently available information, we have determined a loss is not probable or reasonably estimable at this time.

On December 30, 2015, a putative class action lawsuit was filed against us in the U.S. District Court for the Northern District of California, or the Court, alleging violations of the Telephone Consumer Protection Act, or TCPA. The complaint does not allege that Alarm.com itself violated the TCPA, but instead seeks to hold us responsible for the marketing activities of one of our service providers as well as calls made by one of this service provider's sub-dealer agents under principles of agency and vicarious liability. On August 30, 2018, we reached an agreement in principle to settle the case for total cash consideration of \$28.0 million. On October 25, 2018, we entered into a definitive settlement agreement, or Settlement Agreement, and submitted it to the Court for approval. In entering into the definitive settlement agreement, we are making no admission of liability.

Pursuant to the Settlement Agreement, among other things, (1) we agreed to pay total cash consideration of \$28.0 million into a settlement fund, (2) we agreed to implement certain business practice changes to increase awareness of TCPA compliance, (3) each party to the Settlement Agreement agreed to a mutual release of claims relating to any claim or potential claim relating to the marketing activities described in the complaint, and (4) each party covenanted not to sue the other with regard to the released claims. In addition, we agreed to no longer allow the service provider identified in the litigation as purportedly violating the TCPA to continue activating new accounts for Alarm.com products and services following preliminary Court approval of the Settlement Agreement.

On December 19, 2018, the Court granted plaintiffs' motion for preliminary approval of the Settlement Agreement and certified the class for settlement purposes. Pursuant to the Preliminary Approval Order, the administrator provided notice of the settlement to class members, and class members had to file claims, opt out of the settlement or object to the settlement by April 16, 2019. The Final Approval Hearing was held on August 13, 2019, and the Court approved the Settlement Agreement.

We made an initial payment of \$5.0 million to the settlement administrator on January 2, 2019, and the remaining payment of \$23.0 million was made on September 30, 2019. The release of claims includes all alleged damages incurred related to the lawsuit. Any attorneys' fees awarded by the Court and all costs of notice and claims administration will be paid from the settlement fund. The \$28.0 million settlement was reflected in general and administrative expenses within our condensed consolidated statements of operations for the three and nine months ended September 30, 2018.

In addition to the matters described above, we may be required to provide indemnification to certain of our service provider partners for certain claims regarding our solutions. For example, we are incurring costs associated with the indemnification of our service provider ADT, LLC in two ongoing patent infringement suits: *Applied Capital, Inc. v. The ADT Corporation et al.* and *Varatec, LLC v. ADT, LLC*.

On July 13, 2016, Applied Capital, Inc., or Applied Capital, filed a lawsuit against ADT, LLC, the ADT Corporation, and Icontrol Networks, Inc. in U.S. District Court, the District of New Mexico. *Applied Capital, Inc v. The ADT Corporation et al.*, D. New Mexico Case No. 1-16-cv-00815. Icontrol was dismissed without prejudice on May 22, 2017. Applied Capital alleges that ADT's sales of ADT Pulse directly and indirectly infringes U.S. Patent Nos. 8,378,817 and 9,728,082, which were allegedly purchased by Applied Capital. Applied Capital is seeking damages and attorneys' fees. ADT answered Applied Capital's amended complaint on July 16, 2018. Among other things, ADT has asserted defenses based on non-infringement and invalidity of the patents-in-suit. On April 5, 2019, Applied Capital filed a lawsuit for breach of contract against Rodney Fox, the inventor of the patents-in-suit, in the Second Judicial District Court, County of Bernalillo in New Mexico State Court (No. D-202-CV-2019-02841). Mr. Fox counterclaimed, alleging that he is the rightful owner of the patents-in-suit. Based on the dispute of ownership, on October 15, 2019, ADT filed a motion to stay in this matter pending its resolution. The court issued its claim construction order on August 12, 2019, fact discovery closes on November 12, 2019, and opening expert reports are due on December 12, 2019. The pretrial conference is scheduled for August 5, 2020; however, the trial date has not yet been set.

On March 4, 2019, Varatec, LLC, or Varatec, sued ADT, LLC d/b/a ADT Security Services in U.S. District Court for the Northern District of Illinois *Varatec, LLC v. ADT, LLC d/b/a ADT Security Services*, N.D. Illinois Case No. 1-19-cv-01543. Varatec alleges that ADT's sales of ADT Pulse directly and indirectly infringe U.S. Patent No. 7,792,256, which was assigned to Varatec. Varatec seeks a permanent injunction, enhanced damages, and attorneys' fees. On May 23, 2019, ADT filed a motion seeking to dismiss the complaint for failure to state a claim, on the basis that the asserted patent fails to claim patent eligible subject matter. On July 3, 2019, third-party Unified Patents Inc. filed a petition seeking inter partes review of the asserted patent by the PTAB. After the completion of briefing of ADT's motion to dismiss, the parties agreed to stay the case pending resolution of the inter partes review, and the court granted the parties' motion on August 14, 2019.

Should either Applied Capital or Varatec prevail on the claims that one or more elements of ADT's products infringe, we could be required to indemnify ADT for damages in the form of a reasonable royalty or ADT could be enjoined from making,

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using and selling our solution if a license or other right to continue selling our technology is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. The outcome of these legal claims cannot be predicted with certainty. We believe there are valid defenses to the claims made by Applied Capital and Varatec. Based on currently available information, we have determined a loss is not probable or reasonably estimable at this time.

We may also be a party to litigation and subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business.

Other than the preceding matters, we are not a party to any lawsuit or proceeding that, in the opinion of management, is reasonably possible or probable of having a material adverse effect on our financial position, results of operations or cash flows. We reserve for contingent liabilities based on ASC 450, "Contingencies," when it is determined that a liability, inclusive of defense costs, is probable and reasonably estimable. Litigation is subject to many factors that are difficult to predict, so there can be no assurance that, in the event of a material unfavorable result in one or more claims, we will not incur material costs.

Note 13. Stock-Based Compensation

Stock-based compensation expense is included in the following line items in the condensed consolidated statements of operations (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Sales and marketing	\$ 534	\$ 301	\$ 1,385	\$ 855
General and administrative	1,714	1,191	4,762	3,700
Research and development	2,787	1,965	8,574	5,115
Total stock-based compensation expense	<u>\$ 5,035</u>	<u>\$ 3,457</u>	<u>\$ 14,721</u>	<u>\$ 9,670</u>

The following table summarizes the components of non-cash stock-based compensation expense (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Stock options and assumed options	\$ 941	\$ 850	\$ 2,836	\$ 2,666
Restricted stock units	4,046	2,585	11,746	6,900
Restricted stock awards	—	—	—	1
Employee stock purchase plan	48	22	139	103
Total stock-based compensation expense	<u>\$ 5,035</u>	<u>\$ 3,457</u>	<u>\$ 14,721</u>	<u>\$ 9,670</u>
Tax benefit from stock-based awards	<u>\$ 565</u>	<u>\$ 2,958</u>	<u>\$ 4,050</u>	<u>\$ 6,899</u>

We granted an aggregate of 30,000 and 140,500 stock options pursuant to our 2015 Equity Incentive Plan, or the 2015 Plan, during the three and nine months ended September 30, 2019, respectively, as compared to an aggregate of 4,000 and 180,500 stock options for the same periods in the prior year. There were 60,043 and 258,668 stock options exercised during the three and nine months ended September 30, 2019, respectively, as compared to 281,709 and 721,573 stock options for the same periods in the prior year. We granted an aggregate of 88,308 and 425,324 restricted stock units during the three and nine months ended September 30, 2019, respectively, as compared to an aggregate of 54,300 and 266,470 restricted stock units for the same periods in the prior year. There were 15,880 and 177,946 restricted stock units that vested during the three and nine months ended September 30, 2019, respectively, as compared to 8,168 and 21,714 restricted stock units vested during the same periods in the prior year.

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Note 14. Earnings / (Loss) Per Share

Basic and Diluted Earnings / (Loss) Per Share

The components of basic and diluted earnings / (loss) per share, or EPS, are as follows (in thousands, except share and per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income / (loss)	\$ 17,690	\$ (7,652)	\$ 40,496	\$ 13,596
Less: income allocated to participating securities	—	—	—	(2)
Net income / (loss) attributable to common stockholders (A)	<u>\$ 17,690</u>	<u>\$ (7,652)</u>	<u>\$ 40,496</u>	<u>\$ 13,594</u>
Weighted average common shares outstanding — basic (B)	48,518,041	47,812,642	48,360,927	47,494,926
Dilutive effect of stock options, restricted stock units and restricted stock awards	1,634,766	—	1,877,482	2,098,992
Weighted average common shares outstanding — diluted (C)	<u>50,152,807</u>	<u>47,812,642</u>	<u>50,238,409</u>	<u>49,593,918</u>
Net income / (loss) per share:				
Basic (A/B)	\$ 0.36	\$ (0.16)	\$ 0.84	\$ 0.29
Diluted (A/C)	\$ 0.35	\$ (0.16)	\$ 0.81	\$ 0.27

The following securities have been excluded from the calculation of diluted weighted average common shares outstanding as the inclusion of these securities would have an anti-dilutive effect:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Stock options	187,792	191,169	177,292	191,469
Restricted stock awards	—	—	—	—
Restricted stock units	325,108	33,100	239,450	33,100
Common stock subject to repurchase	410	4,005	410	4,005

Participating securities are composed of certain stock options granted under the 2015 Plan, and previously granted under the 2009 Equity Incentive Plan, that may be exercised before the options have vested. Unvested shares have a non-forfeitable right to dividends. Unvested shares issued as a result of early exercise are subject to repurchase by us upon termination of employment or services at the original exercise price. The common stock subject to repurchase is no longer classified as participating securities when shares revert to common stock outstanding as the awards vest and our repurchase right lapses.

Note 15. Significant Service Providers

During the three and nine months ended September 30, 2019, our 10 largest revenue service provider partners accounted for 52% of our consolidated revenue as compared to 57% and 58% for the same periods in the prior year. One of our service provider partners within the Alarm.com segment individually represented greater than 15% but not more than 20% of our revenue for the three and nine months ended September 30, 2019 and 2018.

One individual service provider partner in the Alarm.com segment represented more than 10% of accounts receivable as of September 30, 2019 and December 31, 2018.

Note 16. Income Taxes

For purposes of interim reporting, our annual effective income tax rate is estimated in accordance with ASC 740-270, "Interim Reporting." This rate is applied to the pre-tax book income of the entities expected to be benefited during the year. Discrete items that impact the tax provision are recorded in the period incurred.

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For the three and nine months ended September 30, 2019, we recorded a provision for income taxes of \$2.9 million and \$3.4 million, respectively, resulting in an effective income tax rate of 14.0% and 7.8% for those periods. For the three and nine months ended September 30, 2018, we recorded a benefit from income taxes of \$9.1 million and \$10.4 million, respectively, resulting in an effective income tax rate of 54.2% and (327.1)% for those periods. Our effective tax rates were different from the statutory rate primarily due to the tax windfall benefits from employee stock-based payment transactions, foreign derived intangible income deduction and research and development tax credits claimed, partially offset by the impact of non-deductible meal and entertainment expenses and state taxes.

We recognize a valuation allowance if, based on the weight of available evidence, both positive and negative, it is more likely than not that some portion, or all, of net deferred tax assets will not be realized. Due to the uncertainty of realization of certain deferred tax assets related to our Canadian net operating losses and research and development tax credits, we established a valuation allowance of \$0.3 million during the second quarter of 2019, which remained at \$0.3 million as of September 30, 2019. As of December 31, 2018, based on our historical and expected future taxable earnings, we believed it was more likely than not that we would realize all of the benefit of the existing deferred tax assets. Accordingly, we did not record a valuation allowance as of December 31, 2018.

We apply guidance for uncertainty in income taxes that requires the application of a more likely than not threshold to the recognition and de-recognition of uncertain tax positions. If the recognition threshold is met, this guidance permits us to recognize a tax benefit measured at the largest amount of the tax benefit that, in our judgment, is more likely than not to be realized upon settlement. We recorded a reduction to the unrecognized tax benefits of \$0.2 million for research and development tax credits claimed during each of the nine months ended September 30, 2019 and 2018.

As of September 30, 2019 and December 31, 2018, we accrued \$0.1 million of total interest expense related to unrecognized tax benefits. We recognize interest and penalties related to unrecognized tax benefits as a component of income tax expense.

Note 17. Segment Information

We have two reportable segments:

- Alarm.com segment
- Other segment

Our chief operating decision maker is our chief executive officer. Management determined the operational data used by the chief operating decision maker is that of the two reportable segments. Management bases strategic goals and decisions on these segments and the data presented below is used to measure financial results.

Our Alarm.com segment represents our cloud-based and Software platforms for the intelligently connected property and related solutions that contributed 94% and 93% of our revenue for the three and nine months ended September 30, 2019, respectively, as compared to 93% and 94% for the same periods in the prior year. Our Other segment is focused on researching, developing and offering residential and commercial automation solutions and energy management products and services in adjacent markets. Inter-segment revenue includes sales of hardware between our segments.

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Management evaluates the performance of its segments and allocates resources to them based on operating income (loss) as compared to prior periods and current performance levels. The reportable segment operational data is presented in the table below (in thousands):

Three Months Ended September 30, 2019

			Intersegment		Total
	Alarm.com	Other	Alarm.com	Other	
SaaS and license revenue	\$ 79,954	\$ 4,970	\$ —	\$ —	\$ 84,924
Hardware and other revenue	41,016	5,484	(1,287)	(2,257)	42,956
Total revenue	120,970	10,454	(1,287)	(2,257)	127,880
Operating income / (loss)	12,772	(561)	62	(78)	12,195

Three Months Ended September 30, 2018

			Intersegment		Total
	Alarm.com	Other	Alarm.com	Other	
SaaS and license revenue	\$ 70,884	\$ 3,408	\$ —	\$ —	\$ 74,292
Hardware and other revenue	34,642	5,978	(1,343)	(1,721)	37,556
Total revenue	105,526	9,386	(1,343)	(1,721)	111,848
Operating income / (loss)	(15,593)	(1,084)	26	(43)	(16,694)

Nine Months Ended September 30, 2019

			Intersegment		Total
	Alarm.com	Other	Alarm.com	Other	
SaaS and license revenue	\$ 233,459	\$ 13,854	\$ —	\$ —	\$ 247,313
Hardware and other revenue	107,884	15,810	(3,364)	(5,768)	114,562
Total revenue	341,343	29,664	(3,364)	(5,768)	361,875
Operating income / (loss)	37,182	(1,782)	71	(10)	35,461

Nine Months Ended September 30, 2018

			Intersegment		Total
	Alarm.com	Other	Alarm.com	Other	
SaaS and license revenue	\$ 204,622	\$ 8,626	\$ —	\$ —	\$ 213,248
Hardware and other revenue	88,245	15,143	(3,585)	(3,959)	95,844
Total revenue	292,867	23,769	(3,585)	(3,959)	309,092
Operating income / (loss)	8,335	(4,548)	(211)	233	3,809

			Intersegment		Total
	Alarm.com	Other	Alarm.com	Other	
Assets as of September 30, 2019	\$ 534,948	\$ 18,144	\$ (52,086)	\$ —	\$ 501,006
Assets as of December 31, 2018	482,666	19,629	(61,309)	(1)	440,985

Our SaaS and license revenue for the Alarm.com segment included software license revenue of \$10.8 million and \$32.8 million for the three and nine months ended September 30, 2019, respectively, as compared to \$10.5 million and \$30.6 million for the same periods in the prior year. There was no software license revenue recorded for the Other segment during the three and nine months ended September 30, 2019 and 2018.

Depreciation and amortization expense was \$5.5 million and \$15.8 million for the Alarm.com segment for the three and nine months ended September 30, 2019, respectively, as compared to \$5.8 million and \$15.9 million for the same periods in the prior year. Depreciation and amortization expense was less than \$0.1 million for the Other segment for each of the three and nine months ended September 30, 2019, as compared to \$0.1 million and \$0.2 million for the same periods in the prior year. Additions

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to property and equipment were \$4.7 million and \$8.5 million for the Alarm.com segment for the three and nine months ended September 30, 2019, respectively, as compared to \$3.9 million and \$10.1 million for the same periods in the prior year. Additions to property and equipment were \$0.1 million for the Other segment for each of the three and nine months ended September 30, 2019, as compared to less than \$0.1 million and \$0.1 million for the same periods in the prior year.

We derived substantially all of our revenue from North America for the three and nine months ended September 30, 2019 and 2018. Substantially all of our long-lived assets were in North America as of September 30, 2019 and December 31, 2018.

Note 18. Related Party Transactions

Installation Partner

Our installation partner in which we have a 48.2% ownership interest performs installation services for security dealers and also provides installation services for us and certain of our subsidiaries. We account for this investment using the equity method. As of September 30, 2019 and December 31, 2018, our investment balance in our installation partner was zero. During the three and nine months ended September 30, 2019 and 2018, we recorded \$0.1 million and \$0.3 million of cost of hardware and other revenue in connection with this installation partner, respectively. As of September 30, 2019 and December 31, 2018, the accounts payable balance to our installation partner was less than \$0.1 million.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with (1) our condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q and (2) the audited consolidated financial statements and the related notes and management's discussion and analysis of financial condition and results of operations for the fiscal year ended December 31, 2018 included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed on March 1, 2019 with the Securities and Exchange Commission, or the SEC. This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are often identified by the use of words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "will," "would" or the negative or plural of these words or similar expressions or variations and such forward-looking statements include, but are not limited to, statements with respect to our financial outlook; the impact of new accounting standards; our business strategy, plans and objectives for future operations; continued enhancements of our platform and new product offerings; our future financial and business performance and the potential impact of trade policies and related tariffs on our cost of hardware revenue and hardware revenue margins. The events described in these forward-looking statements are subject to a number of risks, uncertainties, assumptions and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified in this Quarterly Report on Form 10-Q and those discussed in the section titled "Risk Factors" set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q and in our other Securities and Exchange Commission, or SEC, filings. You should not rely upon forward-looking statements as predictions of future events. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

Alarm.com is the leading platform for the intelligently connected property. We offer a comprehensive suite of cloud-based solutions for smart residential and commercial properties, including interactive security, video monitoring, intelligent automation, energy management and wellness solutions. Millions of property owners depend on our technology to intelligently secure, monitor and manage their residential and commercial properties. In the last year alone, our platforms processed more than 200 billion data points generated by over 90 million connected devices. We believe that this scale of subscribers, connected devices and data operations makes us the leader in the connected property market.

Our solutions are delivered through an established network of over 8,000 trusted service providers, who are experts at selling, installing and supporting our solutions. We primarily generate Software-as-a-Service, or SaaS, and license revenue through our service provider partners, who resell these services and pay us monthly fees. Our service provider partners have indicated that they typically have three to five-year service contracts with residential and commercial property owners who use our solutions. We also generate hardware and other revenue, primarily from our service provider partners and distributors. Our hardware sales include connected devices that enable our services, such as video cameras, gateway modules and smart thermostats. We believe that the length of our service relationships with residential and commercial property owners, combined with our robust platforms and over 15 years of operating experience, contribute to a compelling business model.

Our technology platforms are designed to make connected properties safer, smarter and more efficient. Our solutions are used in both smart residential and commercial properties, which we refer to as the connected property market and we have designed our technology platforms for all market participants. This includes not only the residential and commercial property owners who subscribe to our services, but also the hardware partners who manufacture devices that integrate with our platforms and the service provider partners who install and maintain our solutions.

Our service provider partners can deploy our interactive security, video monitoring, intelligent automation and energy management solutions as stand-alone offerings or as combined solutions to address the needs of a broad range of customers. Our technology enables subscribers to seamlessly connect to their property through our family of mobile apps, websites, and new engagement platforms like voice control through Amazon Echo and Google Home, wearable devices like the Apple Watch, and TV platforms such as Apple TV and Amazon Fire TV.

Highlights of Third Quarter Results

We primarily generate SaaS and license revenue, our largest source of revenue, through our service provider partners who resell our services and pay us monthly fees. Our service provider partners sell, install and support Alarm.com solutions that enable residential and commercial property owners to intelligently secure, connect, control and automate their properties. Our service provider partners have indicated that they typically have three to five-year service contracts with residential or commercial property owners. Our subscribers consist of all of the properties maintained by those residential and commercial property owners to which we are delivering at least one of our solutions. We derive a portion of our revenue from licensing our intellectual property to third parties on a per customer basis. SaaS and license revenue represented 66% and 68% of our revenue during the three and nine months ended September 30, 2019, respectively, as compared to 66% and 69% in the same periods in the prior year.

We also generate SaaS and license revenue from monthly fees charged to service providers on a per subscriber basis for access to our non-hosted software platform, or Software platform. The non-hosted software for interactive security, automation and related solutions is typically deployed and operated by the service provider in its own network operations center. Software license revenue represented 8% and 9% of our revenue during the three and nine months ended September 30, 2019, as compared to 9% and 10% for the same periods in the prior year.

We also generate revenue from the sale of hardware, including video cameras, cellular radio modules, thermostats, image sensors and other peripherals, that enables our solutions. We have a rich history of innovation in cellular technology that enables our robust SaaS offering. Hardware and other revenue represented 34% and 32% of our revenue during the three and nine months ended September 30, 2019, respectively, as compared to 34% and 31% in the same periods in the prior year. We typically expect hardware and other revenue to fluctuate as a percentage of total revenue.

Highlights of our financial performance for the periods covered in this Quarterly Report include:

- SaaS and license revenue increased 14% to \$84.9 million in the three months ended September 30, 2019 from \$74.3 million in the three months ended September 30, 2018. SaaS and license revenue increased 16% to \$247.3 million in the nine months ended September 30, 2019 from \$213.2 million in the nine months ended September 30, 2018. Included in SaaS and license revenue was software license revenue, which increased to \$10.8 million in the three months ended September 30, 2019 from \$10.5 million in the three months ended September 30, 2018. Software license revenue increased to \$32.8 million in the nine months ended September 30, 2019 from \$30.6 million in the nine months ended September 30, 2018.
- Total revenue increased 14% to \$127.9 million in the three months ended September 30, 2019 from \$111.8 million in the three months ended September 30, 2018. Revenue increased 17% to \$361.9 million in the nine months ended September 30, 2019 from \$309.1 million in the nine months ended September 30, 2018.
- Net income / (loss) was \$17.7 million and \$(7.7) million for the three months ended September 30, 2019 and 2018, respectively. Net income was \$40.5 million and \$13.6 million for the nine months ended September 30, 2019 and 2018, respectively.
- Adjusted EBITDA, a non-GAAP measurement of operating performance, increased to \$26.3 million in the three months ended September 30, 2019 from \$25.8 million in the three months ended September 30, 2018. Adjusted EBITDA increased to \$78.3 million in the nine months ended September 30, 2019 from \$72.2 million in the nine months ended September 30, 2018.

Please see *Non-GAAP Measures* below in this section of this Quarterly Report for a discussion of the limitations of Adjusted EBITDA (a non-GAAP measure) and a reconciliation of Adjusted EBITDA to net income / (loss), the most comparable measurement in accordance with accounting principles generally accepted in the United States, or GAAP, for the three and nine months ended September 30, 2019 and 2018.

Recent Developments

On October 21, 2019, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired 85% of the issued and outstanding capital stock of PC Open Incorporated, a Washington corporation, doing business as OpenEye. OpenEye provides cloud-managed video surveillance solutions for the commercial market. We believe the acquisition of OpenEye will provide us with a comprehensive suite of interactive cloud-based services spanning video, access control, intrusion and automation for domestic and international commercial enterprises.

In consideration for the purchase of 85% of the issued and outstanding capital stock of OpenEye, we paid \$61.3 million in cash on October 21, 2019, after deducting \$2.8 million related to an agreed holdback. The purchase price is subject to certain post-closing adjustments including the final determination of closing working capital, in accordance with the terms of the stock purchase agreement. An earn-out of up to an additional \$11.0 million is payable if certain calendar 2020 targets are met. The purchase price allocation was not finalized as of the filing date of this Quarterly Report on Form 10-Q.

Other Business Metrics

We regularly monitor a number of financial and operating metrics in order to measure our current performance and estimate our future performance. Our other business metrics may be calculated in a manner different than the way similar business metrics used by other companies are calculated and include the following (dollars in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
SaaS and license revenue	\$ 84,924	\$ 74,292	\$ 247,313	\$ 213,248
Adjusted EBITDA	26,320	25,821	78,287	72,188
	Twelve Months Ended September 30,			
	2019	2018		
SaaS and license revenue renewal rate	94%	94%		

SaaS and License Revenue

We believe that SaaS and license revenue is an indicator of the productivity of our existing service providepartners and their ability to activate and maintain subscribers using our intelligently connected property solutions, our ability to add new service provider partners reselling our solutions, the demand for our intelligently connected property solutions and the pace at which the market for these solutions is growing.

Adjusted EBITDA

Adjusted EBITDA represents our net income / (loss) before interest expense, interest income, other income, net, provision for / (benefit from) income taxes, amortization and depreciation expense, stock-based compensation expense, acquisition-related expense and legal costs and settlement fees incurred in connection with non-ordinary course litigation and other disputes, particularly costs involved in ongoing intellectual property litigation. We do not consider these items to be indicative of our core operating performance. The non-cash items include amortization and depreciation expense and stock-based compensation expense. We do not adjust for ordinary course legal expenses resulting from maintaining and enforcing our intellectual property portfolio and license agreements.

Adjusted EBITDA is a key measure that our management uses to understand and evaluate our core operating performance and trends to generate future operating plans, to make strategic decisions regarding the allocation of capital, and to make investments in initiatives that are focused on cultivating new markets for our solutions. In particular, the exclusion of certain expenses in calculating Adjusted EBITDA facilitates comparisons of our operating performance on a period-to-period basis and, in the case of exclusion of acquisition-related adjustments and certain historical legal expenses, excludes items that we do not consider to be indicative of our core operating performance. Adjusted EBITDA is not a measure calculated in accordance with GAAP and should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. Please see Non-GAAP Measures in this section for a discussion of the limitations of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net income / (loss), the most comparable GAAP measurement, for the three and nine months ended September 30, 2019 and 2018.

SaaS and License Revenue Renewal Rate

We measure our SaaS and license revenue renewal rate on a trailing 12-month basis by dividing (a) the total SaaS and license revenue recognized during the trailing 12-month period from our subscribers on our Alarm.com platform who were subscribers on the first day of the period, by (b) total SaaS and license revenue we would have recognized during the period from those same subscribers assuming no terminations, or service level upgrades or downgrades. The SaaS and license revenue renewal rate represents both residential and commercial properties. Our SaaS and license revenue renewal rate is expressed as an annualized percentage. Our service provider partners, who resell our services to our subscribers, have indicated that they typically have three to five-year service contracts with our subscribers. Our SaaS and license revenue renewal rate is calculated across our entire subscriber base on the Alarm.com platform, including subscribers whose contract with their service provider reached the end of its contractual term during the measurement period, as well as subscribers whose contract with their service provider has not reached the end of its contractual term during the measurement period, and is not intended to estimate the rate at which our subscribers renew their contracts with our service provider partners. We believe that our SaaS and license revenue renewal rate allows us to measure our ability to retain and grow our SaaS and license revenue and serves as an indicator of the lifetime value of our subscriber base.

Leases (Topic 842)

On February 25, 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2016-02, "Leases (Topic 842)" or Topic 842, which requires lessees to recognize operating and financing lease liabilities and corresponding right-of-use assets on the balance sheet. The update also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. In July 2018, the FASB amended the update to allow entities to apply the transition requirements of Topic 842 at the adoption date rather than at the beginning of the earliest comparative period presented. The update must be adopted using a modified retrospective approach. The amendments in this update were effective beginning January 1, 2019.

On January 1, 2019, we adopted Topic 842 by applying the modified retrospective approach to all of our leases in effect as of this date. We used the optional transition method, which required us to record the initial effect of Topic 842 as a cumulative-effect adjustment to retained earnings on January 1, 2019. Additionally, we elected to use the package of practical expedients for the adoption of Topic 842, which allowed us not to reassess: (i) whether any expired or existing contracts are or contain leases, (ii) lease classification for any expired or existing leases, and (iii) whether initial direct costs for any existing leases qualify for capitalization under Topic 842. We also used the hindsight practical expedient when determining the lease term and assessing impairment of right-of-use assets.

The adoption of Topic 842 resulted in the recording of the following amounts on our condensed consolidated balance sheets (in thousands):

Balance Sheet Caption	As of January 1, 2019
Property and equipment, net	\$ 1,057
Operating lease right-of-use assets	28,432
Operating lease liabilities (current)	5,699
Operating lease liabilities (noncurrent)	36,957
Accounts payable, accrued expenses and other current liabilities	(1,548)
Other liabilities	(11,656)
Accumulated deficit	37

The adoption of Topic 842 did not materially impact our condensed consolidated statements of operations, condensed consolidated statement of equity and condensed consolidated statements of cash flows.

Components of Operating Results

Our fiscal year ends on December 31. The key elements of our operating results include:

Revenue

We derive our revenue from three primary sources: the sale of cloud-based SaaS services on our integrated Alarm.com platform, the sale of licenses and services on the Software platform and the sale of hardware products. We sell our platform and hardware solutions to service provider partners that resell our solutions and hardware to residential and commercial property owners, who are the service provider partners' customers.

SaaS and License Revenue. We generate the majority of our SaaS and license revenue primarily from monthly fees charged to our service provider partners sold on a per subscriber basis for access to our cloud-based intelligently connected property platform and related solutions. Our fees per subscriber vary based upon the service plan and features utilized.

We offer multiple service level packages for our platform solutions including a range of solutions and a range of a la carte add-ons for additional features. The fee paid by our service provider partners each month for the delivery of our solutions is based on the combination of packages and add-ons enabled for each subscriber. We utilize tiered pricing plans where our service provider partners may receive prospective pricing discounts driven by volume.

We also generate SaaS and license revenue from the fees paid to us when we license our intellectual property to third parties for use of our patents. In addition, in certain markets our EnergyHub subsidiary sells its demand response service for an annual service fee, with pricing based on the number of subscribers or amount of aggregate electricity demand made available for a utility's or market's control.

Software License Revenue. Our SaaS and license revenue also includes our software license revenue from monthly fees charged to service providers sold on a per subscriber basis for access to our Software platform. The non-hosted software for interactive security, automation and related solutions is typically deployed and operated by the service provider in its own

network operations center. Our agreements for the Software platform solution typically include software and services, such as post-contract customer support, or PCS.

Hardware and Other Revenue. We generate hardware and other revenue primarily from the sale of video cameras and cellular radio modules that provide access to our cloud-based platforms and, to a lesser extent, the sale of other devices, including image sensors and peripherals. We primarily transfer hardware to our customers upon delivery to the customer, which corresponds with the time at which the customer obtains control of the hardware. We record a reserve against revenue for hardware returns based on historical returns.

Hardware and other revenue may also include activation fees charged to some of our service provider partners for activation of a new subscriber account on our platforms, as well as fees paid by service provider partners for our marketing services. The decision whether to charge an activation fee is based in part on the expected number of subscribers to be added by our service provider partners and as a result, many of our largest service provider partners do not pay an activation fee.

Cost of Revenue

Our cost of SaaS and license revenue primarily includes the amounts paid to wireless network providers and, to a lesser extent, the costs of running our network operations centers which are expensed as incurred, as well as patent and royalty costs in connection with technology licensed from third-party providers. Our cost of SaaS and license revenue also includes our cost of software license revenue, which primarily includes the payroll and payroll-related costs of the department dedicated to providing service exclusively to those service providers that host the Software platform. Our cost of hardware and other revenue primarily includes cost of raw materials, tooling and amounts paid to our third-party manufacturer for production and fulfillment of our cellular radio modules and image sensors, and procurement costs for our video cameras, which we purchase from an original equipment manufacturer, and other devices. Our cost of hardware and other revenue also includes royalty costs in connection with technology licensed from third-party providers.

We record the cost of SaaS and license revenue as expenses are incurred, which corresponds to the delivery period of our services to our subscribers. We record the cost of hardware and other revenue when the hardware and other services are delivered to the service provider partner, which occurs when control of the hardware and other services transfers to the service provider partner. Our cost of revenue excludes amortization and depreciation shown in operating expenses.

Recently, the U.S. administration has called for significant changes to U.S. trade policy with respect to China. Beginning in 2018 and throughout 2019, our smart thermostat products have been subject to an additional 25% import duty as a result of these changes. Beginning in May 2019, certain of our video camera products became subject to a 25% import duty. Additionally, beginning in September 2019, certain of our video cameras and sensors became subject to a 15% import duty. Between one third to one half of the finished goods hardware products that we sell to our service provider partners are imported from China and could be subject to increased tariffs. While the additional import duties resulted in an increase to our cost of hardware revenue, these import duties had a modest impact on hardware revenue margins. We continue to monitor the changes in tariffs. If tariffs are increased or are expanded to apply to more of our products, such actions may increase our cost of hardware revenue and reduce our hardware revenue margins in the future.

Operating Expenses

Our operating expenses consist of sales and marketing, general and administrative, research and development and amortization and depreciation expenses. Salaries, bonuses, stock-based compensation, benefits and other personnel related costs are the most significant components of each of these expense categories, excluding amortization and depreciation. We include stock-based compensation expense in connection with the grant of stock options and other forms of equity compensation in the applicable operating expense category based on the respective equity award recipient's function (sales and marketing, general and administrative or research and development). We grew from 866 employees as of September 30, 2018 to 1,043 employees as of September 30, 2019, and we expect to continue to hire new employees to support the projected future growth of our business.

Sales and Marketing Expense. Sales and marketing expense consists primarily of personnel and related expenses for our sales and marketing teams, including salaries, bonuses, stock-based compensation, benefits, travel, and commissions. Our sales and marketing teams engage in sales, account management, service provider partner support, advertising, promotion of our products and services and marketing.

The number of employees in sales and marketing functions increased from 274 as of September 30, 2018 to 340 as of September 30, 2019. We expect to continue to invest in our sales and marketing activities to expand our business both domestically and internationally and, as a result, expect our sales and marketing expense to increase on an absolute dollar basis. We intend to increase the size of our sales force and our service provider partner support team to provide additional support to our existing service provider partner base to drive their productivity in selling our solutions as well as to enroll new service provider partners in North America and in international markets.

General and Administrative Expense. General and administrative expense consists primarily of personnel and related expenses for our administrative, legal, human resources, finance and accounting personnel, including salaries, bonuses, stock-based compensation, benefits and other personnel costs. Additional expenses included in this category are legal costs, including those that are incurred to defend and license our intellectual property, as well as non-personnel costs, such as travel related expenses, rent, subcontracting and professional fees, audit fees, tax services, and insurance expenses. Also included in general and administrative expenses are acquisition-related expenses, which consist primarily of legal, accounting and professional service fees directly related to acquisitions, valuation gains or losses on acquisition-related contingent liabilities.

The number of employees in general and administrative functions increased from 96 as of September 30, 2018 to 121 as of September 30, 2019. Excluding intellectual property litigation and acquisition-related costs, we expect general and administrative costs to increase prospectively as our business grows. This includes cost increases related to accounting, finance, and legal personnel, additional external legal, audit fees and other expenses associated with regulations governing public companies. While somewhat unpredictable, we also expect to continue to incur costs related to litigation involving intellectual property. See the section of this Quarterly Report titled "Legal Proceedings" for additional information regarding litigation matters.

Research and Development Expense. Research and development expense consists primarily of personnel and related expenses for our employees working on our product development and software and device engineering teams, including salaries, bonuses, stock-based compensation, benefits and other personnel costs. Also included are non-personnel costs such as consulting and professional fees paid to third-party development resources.

The number of employees in research and development functions grew from 496 as of September 30, 2018 to 582 as of September 30, 2019. Our research and development efforts are focused on innovating new features and enhancing the functionality of our platforms and the solutions we offer to our service provider partners and subscribers. We will also continue to invest in efforts to extend our platforms to adjacent markets and internationally. We expect research and development expenses to increase on an absolute dollar basis and as a percentage of revenue in the short term to maintain our leadership position in the development of intelligently connected property technology, and continued enhancement of our Enterprise Tools platform for our service provider partners.

Amortization and Depreciation. Amortization and depreciation consists of amortization of intangible assets originating from our acquisitions as well as our internally-developed capitalized software. Our depreciation expense is related to investments in property and equipment. Acquired intangible assets include developed technology, customer related intangibles, trademarks and trade names. We expect in the near term that amortization and depreciation may fluctuate based on our acquisition activity, development of our platforms and capitalized expenditures.

Interest Expense

Interest expense consists of interest expense associated with our credit facility. On October 6, 2017, we entered into \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. The 2017 Facility was used to refinance existing debt and is available to us for general corporate and working capital purposes as permitted under the terms of the 2017 Facility. Interest expense is expected to remain relatively consistent in 2019 as compared to 2018.

Interest Income

Interest income consists of interest income earned on our cash and cash equivalents and our notes receivable.

Other Income, Net

Other income, net primarily consists of gains earned on our notes receivable and conversion of our outstanding notes receivable balance into an equity investment, partially offset by an impairment of one of our investments.

Provision for / (Benefit From) Income Taxes

We are subject to U.S. federal, state and local income taxes as well as foreign income taxes. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. As a result, we recognize tax liabilities based on estimates of whether additional taxes will be due. Our effective tax rates were different from the statutory rate primarily due to the tax windfall benefits from employee stock-based payment transactions, foreign derived intangible income deduction, and research and development tax credits claimed, partially offset by the impact of non-deductible meal and entertainment expenses and state taxes. We recognize excess tax windfall benefits on a discrete basis in the quarter in which it occurs, and we anticipate that our effective tax rate will vary from quarter to quarter depending on our stock price and exercises of stock options under our equity incentive plans each period.

Results of Operations

The following table sets forth our unaudited selected condensed consolidated statements of operations and data as a percentage of revenue for the periods presented (in thousands). Certain previously reported amounts in the condensed consolidated statements of operations for the three and nine months ended September 30, 2018 have been reclassified to conform to our current presentation to reflect interest income separately, which was previously included in other income, net.

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019		2018		2019		2018	
Revenue:								
SaaS and license revenue	\$ 84,924	66 %	\$ 74,292	66 %	\$ 247,313	68 %	\$ 213,248	69 %
Hardware and other revenue	42,956	34	37,556	34	114,562	32	95,844	31
Total revenue	127,880	100	111,848	100	361,875	100	309,092	100
Cost of revenue ⁽¹⁾ :								
Cost of SaaS and license revenue	12,438	10	11,501	11	37,428	10	33,334	11
Cost of hardware and other revenue	35,085	27	30,491	27	93,601	26	73,523	24
Total cost of revenue	47,523	37	41,992	38	131,029	36	106,857	35
Operating expenses:								
Sales and marketing ⁽²⁾	14,533	11	14,128	13	43,392	12	39,562	13
General and administrative ⁽²⁾	18,701	15	43,662	39	51,785	14	77,943	25
Research and development ⁽²⁾	29,461	23	22,869	20	84,375	23	64,767	21
Amortization and depreciation	5,467	4	5,891	5	15,833	5	16,154	5
Total operating expenses	68,162	53	86,550	77	195,385	54	198,426	64
Operating income / (loss)	12,195	10	(16,694)	(15)	35,461	10	3,809	1
Interest expense	(715)	(1)	(736)	(1)	(2,322)	(1)	(2,159)	—
Interest income	2,703	2	661	1	4,317	1	1,442	—
Other income, net	6,380	5	56	—	6,468	2	91	—
Income / (loss) before income taxes	20,563	16	(16,713)	(15)	43,924	12	3,183	1
Provision for / (benefit from) income taxes	2,873	2	(9,061)	(8)	3,428	1	(10,413)	(3)
Net income / (loss)	\$ 17,690	14 %	\$ (7,652)	(7)%	\$ 40,496	11 %	\$ 13,596	4 %

(1) Exclusive of amortization and depreciation shown in operating expenses below.

(2) Operating expenses include stock-based compensation expense as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Stock-based compensation expense data:				
Sales and marketing	\$ 534	\$ 301	\$ 1,385	\$ 855
General and administrative	1,714	1,191	4,762	3,700
Research and development	2,787	1,965	8,574	5,115
Total stock-based compensation expense	\$ 5,035	\$ 3,457	\$ 14,721	\$ 9,670

The following table sets forth the components of cost of revenue as a percentage of revenue:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Components of cost of revenue as a percentage of revenue:				
Cost of SaaS and license revenue as a percentage of SaaS and license revenue	15%	15%	15%	16%
Cost of hardware and other revenue as a percentage of hardware and other revenue	82%	81%	82%	77%
Total cost of revenue as a percentage of total revenue	37%	38%	36%	35%

Comparison of the Three and Nine Months Ended September 30, 2019 to September 30, 2018

The following tables in this section set forth our selected condensed consolidated statements of operations (in thousands), data for the percentage change and data as a percentage of revenue for the periods presented. Certain previously reported amounts in the condensed consolidated statements of operations for the three and nine months ended September 30, 2018 have been reclassified to conform to our current presentation to reflect interest income separately, which was previously included in other income, net.

Revenue

	Three Months Ended September 30,		%	Nine Months Ended September 30,		%
	2019	2018		2019	2018	
Revenue						
SaaS and license revenue	\$ 84,924	\$ 74,292	14%	\$ 247,313	\$ 213,248	16%
Hardware and other revenue	42,956	37,556	14	114,562	95,844	20
Total revenue	<u>\$ 127,880</u>	<u>\$ 111,848</u>	14%	<u>\$ 361,875</u>	<u>\$ 309,092</u>	17%

The \$16.0 million increase in total revenue for the three months ended September 30, 2019 as compared to the same period in the prior year was primarily the result of a \$10.6 million, or 14%, increase in our SaaS and license revenue and a \$5.4 million, or 14%, increase in our hardware and other revenue. Our software license revenue included within SaaS and license revenue increased \$0.3 million to \$10.8 million during the three months ended September 30, 2019 as compared to \$10.5 million during the same period in the prior year. The increase in our Alarm.com segment SaaS and license revenue for the three months ended September 30, 2019 was primarily due to growth in our subscriber base, including the revenue impact from subscribers we added in 2018. To a lesser extent, SaaS and license revenue increased in the period due to an increase in license fees. The increase in hardware and other revenue for the three months ended September 30, 2019 as compared to the same period in the prior year was due to an increase in the volume of video cameras sold. Our Other segment contributed 15% of the increase in SaaS and license revenue for the three months ended September 30, 2019 as compared to the same period in the prior year. The increase in SaaS and license revenue for our Other segment for the three months ended September 30, 2019 as compared to the same period in the prior year was due to an increase in sales of our energy management and demand response solutions and our remote access management solution. Hardware and other revenue for the three months ended September 30, 2019 in our Other segment decreased 24% as compared to the same period in the prior year, primarily due to the timing of sales related to our remote access management solution.

The \$52.8 million increase in total revenue for the nine months ended September 30, 2019 as compared to the same period in the prior year was primarily the result of a \$34.1 million, or 16%, increase in our SaaS and license revenue and a \$18.7 million, or 20%, increase in our hardware and other revenue. Our software license revenue included within SaaS and license revenue increased \$2.2 million to \$32.8 million during the nine months ended September 30, 2019 as compared to \$30.6 million during the same period in the prior year. The increase in our Alarm.com segment SaaS and license revenue for the nine months ended September 30, 2019 was primarily due to growth in our subscriber base, including the revenue impact from subscribers we added in 2018. To a lesser extent, SaaS and license revenue increased in the period due to an increase in license fees. The increase in hardware and other revenue for the nine months ended September 30, 2019 as compared to the same period in the prior year was due to an increase in the volume of video cameras sold. Our Other segment contributed 15% of the increase in SaaS and license revenue for the nine months ended September 30, 2019 as compared to the same period in the prior year. The increase in SaaS and license revenue for our Other segment for the nine months ended September 30, 2019 as compared to the same period in the prior year was due to an increase in sales of our energy management and demand response solutions and our remote access management solution. Hardware and other revenue for the nine months ended September 30, 2019 in our Other segment decreased 10% as compared to the same period in the prior year, primarily due to the timing of sales related to our remote access management solution.

Cost of Revenue

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2019	2018	% Change	2019	2018	% Change
Cost of revenue ⁽¹⁾						
Cost of SaaS and license revenue	\$ 12,438	\$ 11,501	8%	\$ 37,428	\$ 33,334	12%
Cost of hardware and other revenue	35,085	30,491	15	93,601	73,523	27
Total cost of revenue	\$ 47,523	\$ 41,992	13%	\$ 131,029	\$ 106,857	23%
<i>% of total revenue</i>	<i>37%</i>	<i>38%</i>		<i>36%</i>	<i>35%</i>	

(1) Excludes amortization and depreciation shown in operating expenses.

The \$5.5 million increase in cost of revenue for the three months ended September 30, 2019 as compared to the same period in the prior year was the result of a \$4.6 million, or 15%, increase in cost of hardware and other revenue and a \$0.9 million, or 8%, increase in cost of SaaS and license revenue. Our cost of software license revenue included within cost of SaaS and license revenue decreased \$0.1 million to \$0.3 million for the three months ended September 30, 2019 as compared to the same period in the prior year. The increase in cost of Alarm.com segment hardware and other revenue related primarily to an increase in the number of hardware units shipped during the three months ended September 30, 2019 as compared to the same period in the prior year. The increase in cost of Alarm.com segment SaaS and license revenue related primarily to the growth in our subscriber base, which drove a corresponding increase in amounts paid to wireless network providers. Cost of hardware and other revenue as a percentage of hardware and other revenue was 82% for the three months ended September 30, 2019 and 81% for the same period in the prior year. Cost of SaaS and license revenue as a percentage of SaaS and license revenue was 15% for each of the three months ended September 30, 2019 and 2018. Cost of software license revenue as a percentage of software license revenue was 3% and 4% for the three months ended September 30, 2019 and 2018, respectively. The increase in cost of hardware and other revenue as a percentage of hardware and other revenue for the three months ended September 30, 2019 as compared to the same period in the prior year is a reflection of the mix of product sales during the periods.

The \$24.2 million increase in cost of revenue for the nine months ended September 30, 2019 as compared to the same period in the prior year was the result of a \$20.1 million, or 27%, increase in cost of hardware and other revenue and a \$4.1 million, or 12%, increase in cost of SaaS and license revenue. Our cost of software license revenue included within cost of SaaS and license revenue decreased \$0.3 million to \$1.0 million for the nine months ended September 30, 2019 as compared to the same period in the prior year. The increase in cost of Alarm.com segment hardware and other revenue related primarily to an increase in the number of hardware units shipped during the nine months ended September 30, 2019 as compared to the same period in the prior year. The increase in cost of Alarm.com segment SaaS and license revenue related primarily to the growth in our subscriber base, which drove a corresponding increase in amounts paid to wireless network providers. Cost of hardware and other revenue as a percentage of hardware and other revenue was 82% for the nine months ended September 30, 2019 and 77% for the same period in the prior year. Cost of SaaS and license revenue as a percentage of SaaS and license revenue was 15% for the nine months ended September 30, 2019 and 16% for the same period in the prior year. Cost of software license revenue as a percentage of software license revenue was 3% and 4% for the nine months ended September 30, 2019 and 2018, respectively. The increase in cost of hardware and other revenue as a percentage of hardware and other revenue for the nine months ended September 30, 2019 as compared to the same period in the prior year is a reflection of the mix of product sales during the periods.

Sales and Marketing Expense

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2019	2018	% Change	2019	2018	% Change
Sales and marketing	\$ 14,533	\$ 14,128	3%	\$ 43,392	\$ 39,562	10%
<i>% of total revenue</i>	<i>11%</i>	<i>13%</i>		<i>12%</i>	<i>13%</i>	

The \$0.4 million increase in sales and marketing expense for the three months ended September 30, 2019 as compared to the same period in the prior year was primarily due to increases in headcount for our sales team and our service provider partner support team to support our growth. As a result, our personnel and related costs for our Alarm.com segment, including salary, benefits, stock-based compensation and travel expenses, increased by \$2.1 million for the three months ended September 30, 2019. Additionally, recruiting costs and costs for external consultants increased by \$0.1 million for the three months ended September 30, 2019 for our Alarm.com segment as compared to the same period in the prior year. These increases were partially offset by a \$1.9 million decrease in our marketing expense for our Alarm.com segment for the three months ended

September 30, 2019 as compared to the same period in the prior year. Sales and marketing expense from our Other segment increased \$0.1 million for the three months ended September 30, 2019 as compared to the same period in the prior year, primarily due to increases in headcount for our sales team.

The \$3.8 million increase in sales and marketing expense for the nine months ended September 30, 2019 as compared to the same period in the prior year was primarily due to increases in headcount for our sales team and service provider partner support team to support our growth. As a result, our personnel and related costs for our Alarm.com segment, including salary, benefits, stock-based compensation and travel expenses, increased by \$5.2 million for the nine months ended September 30, 2019. Additionally, recruiting costs and costs for external consultants increased by \$0.2 million for the nine months ended September 30, 2019 for our Alarm.com segment as compared to the same period in the prior year. These increases were partially offset by a \$2.7 million decrease in our marketing expense for our Alarm.com segment for the nine months ended September 30, 2019 as compared to the same period in the prior year. Sales and marketing expense from our Other segment increased \$0.9 million for the nine months ended September 30, 2019 as compared to the same period in the prior year, primarily due to increases in headcount for our sales team. The number of employees in sales and marketing functions grew from 274 as of September 30, 2018 to 340 as of September 30, 2019. Sales and marketing expense as a percentage of total revenue was 12% and 13% for the nine months ended September 30, 2019 and 2018, respectively.

General and Administrative Expense

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2019	2018	% Change	2019	2018	% Change
General and administrative	\$ 18,701	\$ 43,662	(57)%	\$ 51,785	\$ 77,943	(34)%
<i>% of total revenue</i>	<i>15%</i>	<i>39%</i>		<i>14%</i>	<i>25%</i>	

The \$25.0 million decrease in general and administrative expense for the three months ended September 30, 2019 as compared to the same period in the prior year was primarily due to a \$30.5 million decrease in legal expenses within our Alarm.com segment resulting from a \$28.0 million expense recorded during the three months ended September 30, 2018 for the agreement reached to settle the legal matter alleging violations of the TCPA within our Alarm.com segment. This decrease was partially offset by a \$3.5 million increase in personnel and related costs for our Alarm.com segment due to an increase in employee headcount to support our operational growth and an increase of \$1.1 million in rent expense due in part to additional office space obtained for our corporate headquarters. General and administrative expenses from our Other segment increased by \$0.4 million for the three months ended September 30, 2019 as compared to the same period in the prior year, primarily due to personnel and related costs, including salary, benefits and stock-based compensation.

The \$26.2 million decrease in general and administrative expense for the nine months ended September 30, 2019 as compared to the same period in the prior year was primarily due to a \$31.3 million decrease in legal expenses within our Alarm.com segment resulting from a \$28.0 million expense recorded during the nine months ended September 30, 2018 for the agreement reached to settle the legal matter alleging violations of the TCPA within our Alarm.com segment. Additionally, the decrease in general and administrative expense was due to the reversal of the \$3.3 million reserve previously recorded during the three months ended December 31, 2018, for a promissory note with one of our hardware suppliers within our Alarm.com segment. These decreases were partially offset by a \$5.2 million increase in personnel and related costs for our Alarm.com segment due to an increase in employee headcount to support our operational growth and a \$2.2 million increase in rent expense within the Alarm.com segment due in part to additional office space obtained for our corporate headquarters. General and administrative expenses from our Other segment decreased by \$0.4 million for the nine months ended September 30, 2019 as compared to the same period in the prior year, primarily due to a decrease in expense for external consultants. The number of employees in general and administrative functions increased from 96 as of September 30, 2018 to 121 as of September 30, 2019.

Research and Development Expense

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2019	2018	% Change	2019	2018	% Change
Research and development	\$ 29,461	\$ 22,869	29%	\$ 84,375	\$ 64,767	30%
<i>% of total revenue</i>	<i>23%</i>	<i>20%</i>		<i>23%</i>	<i>21%</i>	

The \$6.6 million increase in research and development expense for the three months ended September 30, 2019 as compared to the same period in the prior year was primarily due to an increase in headcount of employees in research and development functions. Our personnel and related costs for our Alarm.com segment increased by \$4.9 million for the three months ended September 30, 2019 as compared to the same period in the prior year and our expenses for external consultants increased by \$0.3 million. Additionally, the increase in research and development expense is due to \$1.0 million of in-process

research and development we acquired on September 18, 2019. Research and development expense from our Other segment remained relatively consistent for the three months ended September 30, 2019 as compared to the same period in the prior year.

The \$19.6 million increase in research and development expense for the nine months ended September 30, 2019 as compared to the same period in the prior year was primarily due to an increase in headcount of employees in research and development functions. Our personnel and related costs for our Alarm.com segment increased by \$15.5 million for the nine months ended September 30, 2019 as compared to the same period in the prior year and our expenses for external consultants increased by \$0.8 million. Additionally, the increase in research and development expense is due to \$1.0 million of in-process research and development we acquired on September 18, 2019. Research and development expense from our Other segment decreased by \$0.2 million due to a decrease in our expenses for external consultants for the nine months ended September 30, 2019 as compared to the same period in the prior year. The number of employees in research and development functions increased from 496 as of September 30, 2018 to 582 as of September 30, 2019.

Amortization and Depreciation

	Three Months Ended September 30,		% Change	Nine Months Ended September 30,		% Change
	2019	2018		2019	2018	
Amortization and depreciation	\$ 5,467	\$ 5,891	(7)%	\$ 15,833	\$ 16,154	(2)%
<i>% of total revenue</i>	4%	5%		5%	5%	

Amortization and depreciation decreased \$0.4 million and \$0.3 million for the three and nine months ended September 30, 2019, respectively, as compared to the same periods in the prior year, primarily due to certain intangible assets being fully amortized prior to September 30, 2019.

Interest Expense

	Three Months Ended September 30,		% Change	Nine Months Ended September 30,		% Change
	2019	2018		2019	2018	
Interest expense	\$ (715)	\$ (736)	(3)%	\$ (2,322)	\$ (2,159)	8%
<i>% of total revenue</i>	(1)%	(1)%		(1)%	—%	

Interest expense remained relatively consistent for the three months ended September 30, 2019, as compared to the same period in the prior year. Interest expense increased \$0.2 million for the nine months ended September 30, 2019, as compared to the same period in the prior year. The increase in interest expense for the nine months ended September 30, 2019 as compared to the same period in the prior year is primarily due to an increase in the effective interest rate on the 2017 Facility resulting from the increase in the Eurodollar Base Rate, or LIBOR.

Interest Income

	Three Months Ended September 30,		% Change	Nine Months Ended September 30,		% Change
	2019	2018		2019	2018	
Interest income	\$ 2,703	\$ 661	309%	\$ 4,317	\$ 1,442	199%
<i>% of total revenue</i>	2%	1%		1%	—%	

Interest income increased \$2.0 million and \$2.9 million for the three and nine months ended September 30, 2019, respectively, as compared to the same periods in the prior year. The increase in interest income for the three and nine months ended September 30, 2019 as compared to the same periods in the prior year is primarily due to recording interest income of \$1.7 million related to a promissory note with one of our hardware suppliers within our Alarm.com segment.

Other Income, Net

	Three Months Ended September 30,			% Change	Nine Months Ended September 30,			% Change
	2019	2018			2019	2018		
Other income, net	\$ 6,380	\$ 56	11,293%	\$ 6,468	\$ 91	7,008%		
<i>% of total revenue</i>	5%	—%		2%	—%			

Other income, net increased \$6.3 million and \$6.4 million for the three and nine months ended September 30, 2019, respectively, as compared to the same periods in the prior year. The increase in other income, net for the three and nine months ended September 30, 2019 as compared to the same periods in the prior year is primarily due to recording a gain of \$6.9 million related to a promissory note with one of our hardware suppliers within our Alarm.com segment, partially offset by a \$0.6 million impairment of one of our investments.

Provision for / (Benefit from) Income Taxes

	Three Months Ended September 30,			% Change	Nine Months Ended September 30,			% Change
	2019	2018			2019	2018		
Provision for / (benefit from) income taxes	\$ 2,873	\$ (9,061)	(132)%	\$ 3,428	\$ (10,413)	(133)%		
<i>% of total revenue</i>	2%	(8)%		1%	(3)%			

The provision for incomes taxes increased \$11.9 million and \$13.8 million for the three and nine months ended September 30, 2019 as compared to the same period in the prior year. Our effective tax rates were 14.0% and 7.8% for the three and nine months ended September 30, 2019, respectively, as compared to 54.2% and (327.1)% for the same periods in the prior year. The increase in the provision for income taxes was primarily related to decreases in tax windfall benefits, research and development tax credits claimed and the foreign derived intangible income deduction claimed for the three and nine months ended September 30, 2019 as compared to the same periods in the prior year.

Segment Information

We have two reportable segments: Alarm.com and Other. Our Alarm.com segment represents our cloud-based and Software platforms for the intelligently connected property and related solutions that contributed 94% and 93% of our revenue for the three and nine months ended September 30, 2019, respectively, as compared to 93% and 94% for the same periods in the prior year. Our Other segment is focused on researching, developing and offering residential and commercial automation solutions and energy management products and services in adjacent markets. The consolidated subsidiaries that make up our Other segment are in the investment stage and have incurred significant operating expenses relative to their revenue.

Our Alarm.com segment increased from 789 employees as of September 30, 2018 to 959 employees as of September 30, 2019. Our Other segment increased from 77 employees as of September 30, 2018 to 84 employees as of September 30, 2019. Inter-segment revenue includes sales of hardware between our segments.

The following table presents our revenue, inter-segment revenue and operating expenses by segment (in thousands):

**Three Months Ended
September 30,**

	2019			2018		
	SaaS and license revenue	Hardware and other revenue	Operating expenses	SaaS and license revenue	Hardware and other revenue	Operating expenses
Alarm.com	\$ 79,954	\$ 41,016	\$ 63,261	\$ 70,884	\$ 34,642	\$ 82,023
Other	4,970	5,484	4,901	3,408	5,978	4,527
Intersegment Alarm.com	—	(1,287)	—	—	(1,343)	—
Intersegment Other	—	(2,257)	—	—	(1,721)	—
Total	\$ 84,924	\$ 42,956	\$ 68,162	\$ 74,292	\$ 37,556	\$ 86,550

**Nine Months Ended
September 30,**

	2019			2018		
	SaaS and license revenue	Hardware and other revenue	Operating expenses	SaaS and license revenue	Hardware and other revenue	Operating expenses
Alarm.com	\$ 233,459	\$ 107,884	\$ 181,209	\$ 204,622	\$ 88,245	\$ 184,350
Other	13,854	15,810	14,176	8,626	15,143	14,076
Intersegment Alarm.com	—	(3,364)	—	—	(3,585)	—
Intersegment Other	—	(5,768)	—	—	(3,959)	—
Total	\$ 247,313	\$ 114,562	\$ 195,385	\$ 213,248	\$ 95,844	\$ 198,426

Our SaaS and license revenue for the Alarm.com segment included software license revenue of \$10.8 million and \$32.8 million for the three and nine months ended September 30, 2019, respectively, as compared to \$10.5 million and \$30.6 million for the same periods in the prior year. There was no software license revenue recorded for the Other segment during the three and nine months ended September 30, 2019 and 2018.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these condensed consolidated financial statements requires us 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 condensed consolidated financial statements and the reported amounts of revenue, costs and expenses during the reported period. In accordance with GAAP, we base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions, and to the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. During the first quarter of 2019, we adopted ASU 2016-02, "Leases (Topic 842)." See Note 2 to our condensed consolidated financial statements for more information. Except as disclosed in Note 2, there were no other material changes to our use of estimates or other critical accounting policies from those disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC on March 1, 2019, or Annual Report.

Recently Issued Accounting Standards

See Note 2 of our condensed consolidated financial statements for information related to recently issued accounting standards.

Liquidity and Capital Resources

Working Capital

The following table summarizes our cash and cash equivalents, accounts receivable, net and working capital, for the periods indicated (in thousands):

	<u>September 30, 2019</u>	<u>December 31, 2018</u>
Cash and cash equivalents	\$ 164,323	\$ 146,061
Accounts receivable, net	64,897	49,510
Working capital	206,988	152,793

We define working capital as current assets minus current liabilities. Our cash and cash equivalents as of September 30, 2019 are available for working capital purposes. We do not enter into investments for trading purposes, and our investment policy is to invest any excess cash in short term, highly liquid investments that limit the risk of principal loss; therefore, our cash and cash equivalents are held in demand deposit accounts that generate very low returns.

Liquidity and Capital Resources

As of September 30, 2019, we had \$164.3 million in cash and cash equivalents. We consider all highly liquid instruments purchased with an original maturity from the date of purchase of three months or less to be cash equivalents. To date, we have principally financed our operations through cash generated by operating activities and, to a lesser extent, through private and public equity financings.

We believe our existing cash and cash equivalents, together with our 2017 Facility, and our future cash flows from operating activities will be sufficient to meet our anticipated operating cash needs for at least the next 12 months. Over the final three months of fiscal year 2019, we expect our capital expenditure requirements to be approximately \$1.5 million, primarily related to the continued build out of our leased office space as well as purchases of computer software and equipment. On August 30, 2018, we reached an agreement in principle to settle a putative class action lawsuit filed against us and Alarm.com Incorporated in the U.S. District Court for the Northern District of California. The tentative settlement was subject to the negotiation and execution of a definitive settlement agreement and Court approval. On October 25, 2018, we entered into a definitive settlement agreement, or the Settlement Agreement, with the plaintiffs. An initial payment of \$5.0 million was made by us to the settlement administrator on January 2, 2019, and the remaining payment of \$23.0 million was made on September 30, 2019.

In October 2018, we entered into a subordinate convertible promissory note with one of our hardware suppliers, or the October 2018 Promissory Note, which was amended in November 2018, January 2018 and February 2019 as a result of the hardware supplier's financial restructuring. In March 2019, we entered into a separate secured promissory note with the same hardware supplier, which, together with the October 2018 Promissory Note, we refer to as the Promissory Notes. Under the Promissory Notes, we agreed to provide the hardware supplier loans of up to \$7.4 million, collateralized by all assets owned by the supplier. In March 2019, we paid \$16.4 million to acquire a secured promissory note, or the Acquired Promissory Note, that was originally executed between our hardware supplier and another third-party secured creditor. The Acquired Promissory Note had an outstanding balance of \$26.6 million as of December 31, 2018, including interest. In addition to the \$16.4 million paid in March 2019 for the Acquired Promissory Note, we agreed to pay the third-party secured creditor an additional \$6.0 million, subject to certain contingencies measured as of May 4, 2019. Based on the outcome of those contingencies, we recorded \$6.0 million liability in March 2019 related to the Acquired Promissory Note and paid the \$6.0 million contingent liability during the three months ended September 30, 2019.

On May 6, 2019, we entered into a forbearance agreement with the hardware supplier, or the Forbearance Agreement. Under the Forbearance Agreement, the hardware supplier agreed to pay us the outstanding balance of principal and interest under the Promissory Notes and the Acquired Promissory Note before June 30, 2019. In consideration for the full and timely payments under the Forbearance Agreement, we agreed to temporarily forbear from exercising the remedies available to us with respect to the collateral securing the Promissory Notes and the Acquired Promissory Note. On June 24, 2019, we entered into a Forbearance Extension Agreement with the hardware supplier, under which the hardware supplier agreed to pay us \$7.4 million on or before June 24, 2019. In consideration for the \$7.4 million payment under the Forbearance Extension Agreement, we agreed to temporarily forbear from exercising the remedies available to us with respect to the collateral securing the Promissory Notes and the Acquired Promissory Note until July 10, 2019.

On June 24, 2019, we received a payment of \$7.4 million from the hardware supplier for the partial satisfaction of amounts due under the Promissory Notes and the Acquired Promissory Note. On July 15, 2019, we received an additional payment of \$25.0 million from the supplier and converted the remaining outstanding notes receivable balance into an equity investment in the hardware supplier.

As of September 30, 2019, there was no remaining outstanding balance of the Promissory Notes and the Acquired Promissory Note. As of December 31, 2018, the outstanding balance of the Promissory Notes excluding interest was \$3.3 million and was included in other assets in our condensed consolidated balance sheets prior to any adjustments for impairment.

On September 18, 2019, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired certain assets of an unrelated third party and substantially all of the acquired assets consisted of in-process research and development, or IPR&D. In consideration for the purchase of the IPR&D, we paid \$0.9 million in cash on September 18, 2019, with the remaining \$0.1 million expected to be paid 18 months following the acquisition date, pending any indemnification obligations.

On October 21, 2019, Alarm.com Incorporated acquired 85% of the issued and outstanding capital stock of OpenEye. In consideration for the purchase of 85% of the issued and outstanding capital stock of OpenEye, we paid \$61.3 million in cash on October 21, 2019, after deducting \$2.8 million related to an agreed holdback. The purchase price is subject to certain post-closing adjustments including the final determination of closing working capital, in accordance with the terms of the stock purchase agreement. An earn-out of up to an additional \$11.0 million is payable if certain calendar 2020 targets are met. The purchase price allocation was not finalized as of the filing date of this Quarterly Report on Form 10-Q.

Our future working capital and capital expenditure requirements will depend on many factors, including the rate of our revenue growth, the amount and timing of our investments in human resources and capital equipment, future acquisitions and investments, and the timing and extent of our introduction of new solutions and platform and solution enhancements. To the extent our cash and cash equivalents, together with our 2017 Facility, and cash flows from operating activities are insufficient to fund our future activities, we may need to borrow additional funds through our bank credit arrangements or raise funds from public or private equity or debt financings. If we raise additional funds through the incurrence of indebtedness, such indebtedness would likely have rights that are senior to holders of our equity securities and could contain covenants that restrict our operations. Any additional equity financing would be dilutive to our current stockholders.

Sources of Liquidity

Our 2017 Facility is a revolving credit facility with SVB, as administrative agent, and a syndicate of lenders to finance working capital and certain permitted acquisitions and investments. The 2017 Facility is available to us to refinance existing debt and for general corporate and working capital purposes including acquisitions, and has a current borrowing capacity of \$125.0 million. We have the option to increase the borrowing capacity of the 2017 Facility to \$175.0 million with the consent of the lenders.

As of September 30, 2019, \$64.0 million was outstanding under the 2017 Facility, no letters of credit were outstanding and \$61.0 million remained available for borrowing under the 2017 Facility. The 2017 Facility contains various financial and other covenants that require us to maintain a maximum consolidated leverage ratio and a fixed charge coverage ratio, and limit our capacity to incur other indebtedness, liens, make certain payments including dividends, and enter into other transactions without approval of the lenders. The 2017 Facility is secured by substantially all of our assets, including our intellectual property. As of September 30, 2019, we were in compliance with all covenants under the 2017 Facility. Our outstanding amounts under the 2017 Facility are due at maturity in October 2022. The 2017 Facility is discussed in more detail below under "Debt Obligations."

Dividends

We did not declare or pay dividends during the three and nine months ended September 30, 2019 and 2018. We cannot provide any assurance that we will declare or pay cash dividends on our common stock in the future. We currently anticipate that we will retain all of our future earnings, if any, for use in the operation and expansion of our business and we do not anticipate paying cash dividends in the foreseeable future. Additionally, our ability to pay dividends on our common stock is limited by restrictions under the terms of the agreements governing the 2017 Facility. Payment of future cash dividends, if any, will be at the discretion of the board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

Historical Cash Flows

The following table sets forth our cash flows for the periods indicated (in thousands):

	Nine Months Ended September 30,	
	2019	2018
Cash flows from operating activities	\$ 23,847	\$ 34,978
Cash flows used in investing activities	(5,889)	(9,317)
Cash flows from financing activities	304	2,253

Operating Activities

Cash flows from operating activities have typically been generated from our net income and by changes in our operating assets and liabilities, particularly from accounts receivable and inventory, adjusted for non-cash expense items such as amortization and depreciation, deferred income taxes and stock-based compensation.

For the nine months ended September 30, 2019, cash flows from operating activities were \$23.8 million, compared to \$35.0 million for the same period in the prior year. This \$11.2 million decrease in cash flows from operating activities was due to a \$48.7 million decrease in cash from operating assets and liabilities, partially offset by a \$26.9 million increase in net income and a \$10.6 million increase in non-cash items.

The \$48.7 million decrease in cash from operating assets and liabilities was primarily due to the \$28.0 million expense recorded during the nine months ended September 30, 2018 for the agreement reached to settle the legal matter alleging violations of the TCPA, and such settlement amount was subsequently paid during the nine months ended September 30, 2019. This decrease was partially offset by a \$4.7 million change in prepayments for inventory for the nine months ended September 30, 2019 as compared to the same period in the prior year. The \$10.6 million increase in non-cash items was primarily due to a \$10.6 million change in deferred income taxes, primarily due to the increase in deferred income taxes resulting from the \$28.0 million expense recorded during the nine months ended September 30, 2018 for the agreement reached to settle the legal matter alleging violations of the TCPA. Additionally, the increase in non-cash items was due to a \$5.1 million increase in stock-based compensation resulting from additional grants of stock options and restricted stock units during the nine months ended September 30, 2019, partially offset by a gain of \$6.9 million related to the Promissory Notes and the Acquired Promissory Note with one of our hardware suppliers recorded during the nine months ended September 30, 2019.

Investing Activities

Our investing activities typically include acquisitions, capital expenditures, notes receivable issued to companies with offerings complementary to ours and proceeds from the repayment of those notes receivable. Our capital expenditures have primarily been for general business use, including leasehold improvements as we have expanded our office space to accommodate our growth in headcount, computer equipment used internally, and expansion of our network operations centers.

For the nine months ended September 30, 2019, our cash flows used in investing activities was \$5.9 million as compared to cash flows used in investing activities of \$9.3 million for the same period in the prior year. The \$3.4 million decrease in cash flows used in investing activities was primarily due to \$30.7 million received from one of our hardware suppliers for the amounts due under the Promissory Notes and the Acquired Promissory Note, partially offset by the \$22.4 million paid in 2019 for the Acquired Promissory Note as well as \$3.7 million of additional funding provided to the hardware supplier under the Promissory Notes.

Financing Activities

Cash generated by financing activities includes borrowings under credit facilities and proceeds from the issuance of common stock from employee stock option exercises and from our employee stock purchase plan. Cash used in financing activities typically includes repurchases of common stock and repayments of debt.

For the nine months ended September 30, 2019, cash flows from financing activities was \$0.3 million, compared to \$2.3 million for the same period in the prior year. The \$2.0 million decrease in cash flows from financing activities was primarily due to changes in the issuance of common stock from equity-based plans.

Contractual Obligations

As of September 30, 2019, there were no material changes in our contractual obligations and commitments from those disclosed in the "Management's Discussion and Analysis of Financial Condition and Results of Operation" included in our Annual Report.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. We do not engage in off-balance sheet financing arrangements. In addition, we do not engage in trading activities involving non-exchange traded contracts.

Debt Obligations

On October 6, 2017, we entered into a \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. Upon entry into

the 2017 Facility, we borrowed \$72.0 million, which was used to repay the previously outstanding balance under our previous credit facility. The 2017 Facility matures in October 2022 and includes an option to further increase the borrowing capacity to \$175.0 million with the consent of the lenders. Costs incurred in connection with the 2017 Facility were capitalized and are being amortized as interest expense over the term of the 2017 Facility. The 2017 Facility is secured by substantially all of our assets, including our intellectual property. During the three and nine months ended September 30, 2019 and 2018, we repaid \$1.0 million and \$3.0 million of the outstanding balance of the 2017 Facility, respectively.

The outstanding principal balance on the 2017 Facility accrues interest at a rate equal to, at our option, either (1) LIBOR, plus an applicable margin based on our consolidated leverage ratio, or (2) the highest of (a) the Wall Street Journal prime rate, (b) the Federal Funds rate plus 0.50%, or (c) LIBOR plus 1.00% plus an applicable margin based on our consolidated leverage ratio. For the three and nine months ended September 30, 2019, we elected for the outstanding principal balance to accrue interest at LIBOR plus 1.50%, LIBOR plus 1.75%, LIBOR plus 2.00%, and LIBOR plus 2.50% when our consolidated leverage ratio is less than 1.00:1.00, greater than or equal to 1.00:1.00 but less than 2.00:1.00, greater than or equal to 2.00:1.00 but less than 3.00:1.00 and greater than or equal to 3.00:1.00, respectively. The 2017 Facility also carries an unused line commitment fee of 0.20%. For the nine months ended September 30, 2019, the effective interest rate on the 2017 Facility was 4.61%, as compared to 4.05% for the same period in the prior year.

The carrying value of the 2017 Facility was \$64.0 million and \$67.0 million as of September 30, 2019 and December 31, 2018, respectively. The 2017 Facility includes a variable interest rate that approximates market rates and, as such, we classified the liability as Level 2 within the fair value hierarchy and determined that the carrying amount of the 2017 Facility approximated its fair value as of September 30, 2019 and December 31, 2018. The 2017 Facility contains various financial and other covenants that require us to maintain a maximum consolidated leverage ratio not to exceed 3.50:1.00 and a consolidated fixed charge coverage ratio of at least 1.25:1.00. As of September 30, 2019, we were in compliance with all financial and non-financial covenants and there were no events of default. The 2017 Facility also contains customary conditions to borrowings and events of default and contains various negative covenants, including covenants that restrict our ability to dispose of assets, merge with or acquire other entities, incur indebtedness, incur encumbrances, make certain payments including dividends, make investments or engage in transactions with affiliates without approval of the lenders.

On November 30, 2018, we amended the 2017 Facility to incorporate the parameters that must be met for us to repurchase our outstanding common stock under the stock repurchase program authorized by our board of directors on November 29, 2018.

Non-GAAP Measures

We define Adjusted EBITDA as our net income / (loss) before interest expense, interest income, other income, net, provision for / (benefit from) income taxes, amortization and depreciation, stock-based compensation expense, acquisition-related expense and legal costs and settlement fees incurred in connection with non-ordinary course litigation and other disputes, particularly costs involved in ongoing intellectual property litigation. We do not consider these items to be indicative of our core operating performance. The non-cash items include amortization and depreciation expense, stock-based compensation expense related to stock options and other forms of equity compensation, including, but not limited to, the sale of common stock. We do not adjust for ordinary course legal expenses resulting from maintaining and enforcing our intellectual property portfolio and license agreements. Adjusted EBITDA is not a measure calculated in accordance with GAAP. See the table below for a reconciliation of Adjusted EBITDA to net income / (loss), the most directly comparable financial measure calculated and presented in accordance with GAAP.

We have included Adjusted EBITDA in this report because it is a key measure that our management uses to understand and evaluate our core operating performance and trends, to generate future operating plans, to make strategic decisions regarding the allocation of capital and to make investments in initiatives that are focused on cultivating new markets for our solutions. We also use certain non-GAAP financial measures, including Adjusted EBITDA, as performance measures under our executive bonus plan. Further, we believe the exclusion of certain expenses in calculating Adjusted EBITDA facilitates comparisons of our operating performance on a period-to-period basis and, in the case of exclusion of acquisition-related expense and certain historical legal expenses, excludes items that we do not consider to be indicative of our core operating performance. Accordingly, we believe that Adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and board of directors.

Our use of Adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under GAAP. Some of these limitations are: (a) although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements; (b) Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs; (c) Adjusted EBITDA does not reflect the potentially dilutive impact of equity-based compensation; (d) Adjusted EBITDA does not reflect tax payments that may represent a reduction in cash available to us; and (e) other companies, including companies in our industry, may calculate Adjusted EBITDA or similarly titled measures differently, which reduces its usefulness as a comparative measure.

Because of these and other limitations, you should consider Adjusted EBITDA alongside our other GAAP-based financial performance measures, net income / (loss) and our other GAAP financial results. The following table presents a reconciliation of Adjusted EBITDA to net income / (loss), the most directly comparable GAAP measure, for each of the periods indicated (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Adjusted EBITDA:				
Net income / (loss)	\$ 17,690	\$ (7,652)	\$ 40,496	\$ 13,596
Adjustments:				
Interest expense, interest income and other income, net	(8,368)	19	(8,463)	626
Provision for / (benefit from) income taxes	2,873	(9,061)	3,428	(10,413)
Amortization and depreciation expense	5,467	5,891	15,833	16,154
Stock-based compensation expense	5,035	3,457	14,721	9,670
Acquisition-related expense	1,590	—	1,590	—
Litigation expense	2,033	33,167	10,682	42,555
Total adjustments	8,630	33,473	37,791	58,592
Adjusted EBITDA	\$ 26,320	\$ 25,821	\$ 78,287	\$ 72,188

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates, as well as to a lesser extent, foreign exchange rates and inflation.

Interest Rate Risk

We are primarily exposed to changes in short-term interest rates with respect to our cost of borrowing under our 2017 Facility with SVB. We monitor our cost of borrowing under our various facilities, taking into account our funding requirements, and our expectation for short-term rates in the future. As of September 30, 2019 and December 31, 2018, an increase or decrease in the interest rate on our 2017 Facility with SVB by 100 basis points would increase or decrease our annual interest expense by approximately \$0.6 million and \$0.7 million, respectively.

Foreign Currency Exchange Risk

Because substantially all of our revenue and operating expenses are denominated in U.S. dollars, we do not believe that our exposure to foreign currency exchange risk is material to our business, financial condition or results of operations. If a significant portion of our revenue and operating expenses becomes denominated in currencies other than U.S. dollars, we may not be able to effectively manage this risk, and our business, financial condition and results of operations could be adversely affected by translation and by transactional foreign currency conversions.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the company's management, including its chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2019. Based on the evaluation of our disclosure controls and procedures as of September 30, 2019, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during our fiscal quarter ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

On October 22, 2019, EcoFactor, Inc. filed a patent infringement complaint with the U.S. International Trade Commission asserting four U.S. patents covering smart thermostat technology against a number of defendants, including Alarm.com Incorporated, Alarm.com Holdings, Inc., Ecobee Ltd., Ecobee, Inc., Google, LLC, Daikin Industries, Ltd., Daikin America, Inc., Daikin North America LLC, Schneider Electric USA, Inc., Schneider Electric SE, and Vivint, Inc. We are currently reviewing this matter and have made no determination yet regarding the merits of the case.

On August 24, 2017, Alarm.com Incorporated and its wholly-owned subsidiary ICN Acquisition, LLC, filed a patent infringement complaint against ipDataTel, in the United States District Court for the Eastern District of Texas. The parties subsequently stipulated to transfer the case to the Southern District of Texas. The complaint sought injunctive relief to stop the further sale of the infringing ipDataTel's products and systems, and damages for the infringement of Alarm.com's patents. The parties have entered into a confidential settlement agreement, and on July 19, 2019, the parties filed a Stipulation of Dismissal with the Court, and the matter is now closed. Additionally, all of ipDataTel's petitions for inter partes review were terminated.

On April 25, 2017, Alarm.com Incorporated and its wholly-owned subsidiary ICN Acquisition, LLC, filed a patent infringement complaint against Protect America, Inc., or Protect America, and SecureNet Technologies, LLC, or SecureNet, in the United States District Court for the Eastern District of Virginia. The complaint seeks injunctive relief to stop the further sale of the infringing Protect America and SecureNet products and systems, and damages for the infringement of Alarm.com's patents. The complaint asserts that the technology in the Protect America and SecureNet Alarm Systems products infringe one or more claims of Alarm.com's patents: United States Patent Numbers 7,113,090; 7,633,385; 8,395,494; 8,493,202; 8,612,591; 8,860,804; and 9,141,276. If the litigation is successful, Alarm.com will be entitled to receive monetary damages, injunctive relief, and any other relief, including attorneys' fees. In June 2017, Alarm.com filed an amended complaint against Protect America only and voluntarily dismissed SecureNet from the suit, reserving the right to refile. In September 2017, Alarm.com voluntarily dismissed the amended complaint in the United States District Court of the Eastern District of Virginia and refiled a complaint against Protect America, with substantially the same allegations, in the United States District Court of the Eastern District of Texas. The parties subsequently stipulated to transfer the case to the Western District of Texas. In March 2019, the parties agreed to dismiss U.S. Patent Nos. 7,633,385, 8,395,494, and 8,493,202 from the case without prejudice. Protect America moved to dismiss U.S. Patent No. 9,141,276 based on invalidity, which Alarm.com has opposed. A claim construction hearing was held in May 2019. The Court has not yet scheduled a jury trial.

On June 2, 2015, Vivint, Inc., or Vivint, filed a lawsuit against us in U.S. District Court, District of Utah, alleging that our technology directly and indirectly infringes six patents that Vivint purchased. Vivint is seeking permanent injunctions, enhanced damages and attorneys' fees. We answered the complaint on July 23, 2015. Among other things, we asserted defenses based

on non-infringement and invalidity of the patents in question. On August 19, 2016, the U.S. District Court, District of Utah stayed the litigation pending inter partes review by the U.S. Patent Trial and Appeal Board, or PTAB, of five of the patents in suit. In March 2017, the PTAB issued final written decisions relating to two patents finding all challenged claims unpatentable. In May 2017, the PTAB issued final written decisions relating to the remaining three patents that found certain claims unpatentable, while certain other claims were not found to be unpatentable. Vivint appealed the decisions to the U.S. Court of Appeals for the Federal Circuit, or the Federal Circuit, and we cross-appealed. In July 2018, the Federal Circuit issued orders affirming the PTAB's March 2017 decisions that invalidated all challenged claims of two patents. The U.S. District Court, District of Utah lifted the stay on the litigation on June 26, 2017, with Vivint proceeding with its case on four of the six patents in its complaint. No trial date has been set. In September 2017, the U.S. Patent and Trademark Office, or PTO, ordered ex parte reexaminations of certain claims of two of the remaining patents in suit, at our request. On October 30, 2018 and November 5, 2018, the PTO issued final office actions in the pending reexaminations rejecting all claims being examined as unpatentable over the prior art. Vivint appealed these rejections to the PTAB on March 29, 2019 and April 4, 2019. The U.S. District Court, District of Utah has ordered the litigation regarding the nine claims (from two patents) rejected by the PTO during the reexaminations be stayed until November 15, 2019. On April 3, 2019, the U.S. District Court, District of Utah heard argument on the parties' cross motions for claim construction and Alarm.com's motion for partial summary judgment as to invalidity. Decisions on these motions are pending. On December 20, 2018, the Federal Circuit issued an order regarding the inter partes review of three of the remaining patents in suit that vacated, reversed and remanded the PTAB's ruling with regard to the construction of a term ("communication device identification code") as requested by Alarm.com and affirmed the PTAB's May 2017 rulings invalidating certain of the Vivint patents in all other respects. On July 24, 2019, the PTAB issued further decisions with respect to two of the remaining patents in suit, finding additional claims unpatentable in view of the Federal Circuit's December 20, 2018 decision. Vivint appealed the July 24, 2019 decisions to the Federal Circuit on September 25, 2019.

Should Vivint prevail in proving Alarm.com infringes one or more of its patent claims, we could be required to pay damages of Vivint's lost profits and/or a reasonable royalty for sales of our solution, enjoined from making, using and selling our solution if a license or other right to continue selling such elements is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. While we believe we have valid defenses to Vivint's claims, any of these outcomes could result in a material adverse effect on our business. Even if we were to prevail, this litigation could continue to be costly and time-consuming, divert the attention of our management and key personnel from our business operations and dissuade potential customers from purchasing our solution, which would also materially harm our business. During the course of litigation, we anticipate announcements of the results of hearings and motions, and other interim developments related to the litigation. If securities analysts or investors regard these announcements as negative, the market price of our common stock may decline.

On December 30, 2015, a putative class action lawsuit was filed against us in the U.S. District Court for the Northern District of California, or the Court, alleging violations of the Telephone Consumer Protection Act, or TCPA. The complaint does not allege that Alarm.com itself violated the TCPA, but instead seeks to hold us responsible for the marketing activities of one of our service providers as well as calls made by one of this service provider's sub-dealer agents under principles of agency and vicarious liability. On August 30, 2018, we reached an agreement in principle to settle the case for total cash consideration of \$28.0 million. On October 25, 2018, we entered into a definitive settlement agreement, or Settlement Agreement, and submitted it to the Court for approval. In entering into the definitive settlement agreement, we are making no admission of liability.

Pursuant to the Settlement Agreement, among other things, (1) we agreed to pay total cash consideration of \$28.0 million into a settlement fund, (2) we agreed to implement certain business practice changes to increase awareness of TCPA compliance, (3) each party to the Settlement Agreement agreed to a mutual release of claims relating to any claim or potential claim relating to the marketing activities described in the complaint, and (4) each party covenanted not to sue the other with regard to the released claims. In addition, we agreed to no longer allow the service provider identified in the litigation as purportedly violating the TCPA to continue activating new accounts for Alarm.com products and services following preliminary Court approval of the Settlement Agreement.

On December 19, 2018, the Court granted plaintiffs' motion for preliminary approval of the Settlement Agreement and certified the class for settlement purposes. Pursuant to the Preliminary Approval Order, the administrator provided notice of the settlement to class members, and class members had to file claims, opt out of the settlement or object to the settlement by April 16, 2019. The Final Approval Hearing was held on August 13, 2019, and the Court approved the Settlement Agreement.

We made an initial payment of \$5.0 million to the settlement administrator on January 2, 2019, and the remaining payment of \$23.0 million was made on September 30, 2019. The release of claims includes all alleged damages incurred related to the lawsuit. Any attorneys' fees awarded by the Court and all costs of notice and claims administration will be paid from the settlement fund.

In addition to the matters described above, we may be required to provide indemnification to certain of our service provider partners for certain claims regarding our solutions. For example, we are incurring costs associated with the indemnification of our service provider ADT, LLC in two ongoing patent infringement suits: Applied Capital, Inc. v. The ADT Corporation et al. and Varatec, LLC v. ADT, LLC.

On July 13, 2016, Applied Capital, Inc., or Applied Capital, filed a lawsuit against ADT, LLC, the ADT Corporation, and Icontrol Networks, Inc. in U.S. District Court, the District of New Mexico. *Applied Capital, Inc v. The ADT Corporation et al.*, D. New Mexico Case No. 1-16-cv-00815. Icontrol was dismissed without prejudice on May 22, 2017. Applied Capital alleges that ADT's sales of ADT Pulse directly and indirectly infringes U.S. Patent Nos. 8,378,817 and 9,728,082, which were allegedly purchased by Applied Capital. Applied Capital is seeking damages and attorneys' fees. ADT answered Applied Capital's amended complaint on July 16, 2018. Among other things, ADT has asserted defenses based on non-infringement and invalidity of the patents-in-suit. On April 5, 2019, Applied Capital filed a lawsuit for breach of contract against Rodney Fox, the inventor of the patents-in-suit, in the Second Judicial District Court, County of Bernalillo in New Mexico State Court (No. D-202-CV-2019-02841). Mr. Fox counterclaimed, alleging that he is the rightful owner of the patents-in-suit. Based on the dispute of ownership, on October 15, 2019, ADT filed a motion to stay in this matter pending its resolution. The court issued its claim construction order on August 12, 2019, fact discovery closes on November 12, 2019, and opening expert reports are due on December 12, 2019. The pretrial conference is scheduled for August 5, 2020; however, the trial date has not yet been set.

On March 4, 2019, Varatec, LLC, or Varatec, sued ADT, LLC d/b/a ADT Security Services in U.S. District Court for the Northern District of Illinois/*Varatec, LLC v. ADT, LLC d/b/a ADT Security Services*, N.D. Illinois Case No. 1-19-cv-01543. Varatec alleges that ADT's sales of ADT Pulse directly and indirectly infringe U.S. Patent No. 7,792,256, which was assigned to Varatec. Varatec seeks a permanent injunction, enhanced damages, and attorneys' fees. On May 23, 2019, ADT filed a motion seeking to dismiss the complaint for failure to state a claim, on the basis that the asserted patent fails to claim patent eligible subject matter. On July 3, 2019, third-party Unified Patents Inc. filed a petition seeking inter parties review of the asserted patent by the PTAB. After the completion of briefing of ADT's motion to dismiss, the parties agreed to stay the case pending resolution of the inter partes review, and the court granted the parties' motion on August 14, 2019.

Should either Applied Capital or Varatec prevail on the claims that one or more elements of ADT's products infringe, we could be required to indemnify ADT for damages in the form of a reasonable royalty or ADT could be enjoined from making, using and selling our solution if a license or other right to continue selling our technology is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. The outcome of these legal claims cannot be predicted with certainty.

We may also be a party to litigation and subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

ITEM 1A. RISK FACTORS

Our business is subject to numerous risks. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Quarterly Report on Form 10-Q as well as our other public filings with the Securities and Exchange Commission, or the SEC. Any of the following risks could have a material adverse effect on our business, financial condition, results of operations and prospects and cause the trading price of our common stock to decline.

Risks Related to Our Business and Industry

Our quarterly results of operations have fluctuated and are likely to continue to fluctuate. As a result, we may fail to meet or exceed the expectations of investors or securities analysts, which could cause our stock price to decline.

Our quarterly operating results, including the levels of our revenue, gross margin, cash flow and deferred revenue, may fluctuate as a result of a variety of factors, including revenue related to the product mix that we sell, the relative sales related to our platforms and solutions and other factors which are outside of our control. If our quarterly revenue or results of operations fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Fluctuations in our results of operations may be due to a number of factors, including:

- the portion of our revenue attributable to software as a service, or SaaS, and license versus hardware and other sales;
- our ability to manage the businesses we have acquired, and to integrate and manage any future acquisitions of businesses;
- fluctuations in demand, including due to seasonality, for our platforms and solutions;
- changes in pricing by us in response to competitive pricing actions;
- our ability to increase, retain and incentivize the service provider partners that market, sell, install and support our platforms and solutions;
- the ability of our hardware vendors to continue to manufacture high-quality products and to supply sufficient products to meet our demands;

- the timing and success of introductions of new solutions, products or upgrades by us or our competitors and the entrance of new competitors;
- changes in our business and pricing policies or those of our competitors;
- the ability to accurately forecast revenue as we generally rely upon our service provider partner network to generate new revenue;
- our ability to control costs, including our operating expenses and the costs of the hardware we purchase;
- changes in U.S. trade policies, including new or potential tariffs or penalties on imported products;
- competition, including entry into the industry by new competitors and new offerings by existing competitors;
- issues related to introductions of new or improved products such as shortages of prior generation products or short-term decreased demand for next generation products;
- perceived or actual problems with the security, integrity, reliability, quality or compatibility of our solutions, including those related to security breaches in our systems, our subscribers' systems, unscheduled downtime, or outages;
- the amount and timing of expenditures, including those related to expanding our operations, including through acquisitions, increasing research and development, introducing new solutions or paying litigation expenses;
- the ability to effectively manage growth within existing and new markets domestically and abroad;
- changes in the payment terms for our platforms and solutions;
- collectibility of receivables due from service provider partners and other third parties;
- the strength of regional, national and global economies;
and
- the impact of natural disasters such as earthquakes, hurricanes, fires, power outages, floods and other catastrophic events or man-made problems such as terrorism or global or regional economic, political and social conditions.

Due to the foregoing factors and the other risks discussed in this Quarterly Report on Form 10-Q, you should not rely on quarter-to-quarter comparisons of our results of operations as an indication of our future performance. You should not consider our recent revenue and Adjusted EBITDA growth or results of one quarter as indicative of our future performance. See the *Non-GAAP Measures* section of Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations," for a discussion of the limitations of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net income / (loss), the most comparable GAAP measurement, for the three and nine months ended September 30, 2019 and 2018.

We may not sustain our growth rate and we may not be able to manage any future growth effectively.

We have experienced significant growth and also have substantially expanded our operations in a short period of time. Our revenue increased from \$208.9 million in 2015 to \$420.5 million in 2018 and increased from \$309.1 million for the nine months ended September 30, 2018 to \$361.9 million for the nine months ended September 30, 2019. We do not expect to achieve similar growth rates in future periods. You should not rely on our operating results for any prior quarterly or annual periods as an indication of our future operating performance. If we are unable to maintain expected revenue growth in both absolute dollars and as a percentage of prior period revenue, our financial results could suffer and our stock price could decline.

Our future operating results depend, to a large extent, on our ability to successfully manage our anticipated expansion and growth. To successfully manage our growth and obligations as a public company, we believe we must effectively, among other things:

- maintain our relationships with existing service provider partners and add new service provider partners;
- increase our subscriber base and help our service provider partners maintain and improve their revenue retention rates, while also expanding their cross-sell effectiveness;
- manage our relationships with our hardware vendors and other key suppliers;
- add, train and integrate sales and marketing personnel;
- expand our international operations;
and

- continue to implement and improve our administrative, financial and operational systems, procedures and controls.

We intend to continue to invest in research and development, sales and marketing, and general and administrative functions and other areas to grow our business. We are likely to recognize the costs associated with these increased investments earlier than some of the anticipated benefits and the return on these investments may be lower, or may develop more slowly, than we expect, which could adversely affect our operating results.

If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities or develop new solutions or enhancements to our existing solutions and we may fail to satisfy subscriber and service provider partner requirements, maintain the quality of our solutions, execute on our business plan or respond to competitive pressures, which could result in our financial results suffering and a decline in our stock price.

We have expanded our business rapidly in recent periods. If we fail to manage the expansion of our operations and infrastructure effectively, we may be unable to execute our business plan, maintain high levels of service or address competitive challenges adequately.

We increased our number of full-time employees from 507 as of December 31, 2015 to 1,043 as of September 30, 2019. Our growth has placed, and may continue to place, a significant strain on our managerial, administrative, operational, financial and other resources. We intend to further expand our overall business, service provider partner network, subscriber base, headcount and operations, including by acquiring other businesses. Creating a global organization and managing a geographically dispersed workforce will require substantial management effort and significant additional investment in our infrastructure. We will be required to continue to improve our operational, financial and management controls and our reporting procedures to ensure timely and accurate reporting of our operational and financial results and we may not be able to do so effectively. As such, we may be unable to manage our expenses effectively in the future, which may negatively impact our gross profit or operating expenses in any particular quarter. If we fail to manage our anticipated growth and change in a manner that preserves the key aspects of our corporate culture, the quality of our solutions may suffer, which could negatively affect our brand and reputation and harm our ability to retain and attract service provider partners and consumers.

From time to time, we are involved in legal proceedings where a negative outcome, including an adverse litigation judgment or settlement, could expose us to monetary damages or limit our ability to operate our business, resulting in a material adverse effect on our business, financial condition, cash flows and results of operations.

We are involved and have been involved in the past in legal proceedings from time to time. For example, on June 2, 2015, Vivint filed a lawsuit against us alleging that our technology directly and indirectly infringes six patents purchased by Vivint. On December 30, 2015, a putative class action lawsuit was filed against us, alleging violations of the Telephone Consumer Protection Act, or TCPA. On October 25, 2018, we entered into a definitive settlement agreement, or the Settlement Agreement, with the plaintiffs to settle the class action lawsuit for \$28.0 million. On December 19, 2018, the U.S. District Court for the Northern District of California, or the Court, granted preliminary approval of the Settlement Agreement. The Final Approval Hearing was held on August 13, 2019, and the Court approved the Settlement Agreement. See the section of this Quarterly Report titled "Legal Proceedings" for additional information regarding each of these matters. We may not be able to accurately assess the risks related to any of these suits, and we may be unable to accurately assess our level of exposure as the results of any such litigation, investigations and other legal proceedings are inherently unpredictable and expensive. Any claims against us, whether meritorious or not, could be time consuming, result in costly litigation, damage our reputation, require significant amounts of management time and divert significant resource. Companies in our industry have been subject to claims related to patent infringement, regulatory matters, and product liability, as well as contract and employment-related claims. As a result of patent infringement and other intellectual property proceedings, we have, and may be required to seek in the future, licenses under patents or intellectual property rights owned by third parties, including open-source software and other commercially available software, which can be costly, or cross-license agreements relating to our and third-party intellectual property. The outcome of legal claims and proceedings against us cannot be predicted with certainty, and a negative outcome could result in a material adverse effect on our business, financial condition, cash flows and results of operations.

Our business operates in a regulated industry.

Our business, operations and service provider partners are subject to various U.S. federal, state and local consumer protection laws, licensing regulation and other laws and regulations, and, to a lesser extent, similar Canadian laws and regulations. Our advertising and sales practices and that of our service provider partner network are subject to regulation by the U.S. Federal Trade Commission, or the FTC, in addition to state consumer protection laws. The FTC and the Federal Communications Commission have issued regulations that place restrictions on, among other things, unsolicited automated telephone calls to residential and wireless telephone subscribers by means of automatic telephone dialing systems and the use of prerecorded or artificial voice messages. If our service provider partners were to take actions in violation of these regulations, such as telemarketing to individuals on the "Do Not Call" registry or using automatic telephone dialing systems and prerecorded or artificial voice messages, we could be subject to fines, penalties, private actions or enforcement actions by government regulators. For example, on December 30, 2015, a putative class action lawsuit was filed against us, alleging violations of the TCPA. On December 19, 2018, the Court granted preliminary approval of a Settlement Agreement we entered into with the

plaintiffs to settle the case. In connection with the Settlement Agreement, which was approved on August 13, 2019, we have agreed, among other things, to pay total cash consideration of \$28.0 million into a settlement fund, and to implement certain business practice changes to increase awareness of TCPA compliance. See the section of this Quarterly Report titled "Legal Proceedings" for additional information on this matter. Although we have taken steps to insulate ourselves from any such wrongful conduct by our service provider partners, and to contractually require our service provider partners to comply with these laws and regulations, no assurance can be given that we will not be exposed to liability as result of our service provider partners' conduct. Further, to the extent that any changes in law or regulation further restrict the lead generation activity of our service provider partners, these restrictions could result in a material reduction in subscriber acquisition opportunities, reducing the growth prospects of our business and adversely affecting our financial condition and future cash flows. In addition, most states in which we operate have licensing laws directed specifically toward the monitored security services industry. Our business relies heavily upon cellular telephone service to communicate signals. Cellular telephone companies are currently regulated by both federal and state governments. Changes in laws or regulations could require us to change the way we operate, which could increase costs or otherwise disrupt operations. In addition, failure to comply with any such applicable laws or regulations could result in substantial fines or revocation of our operating permits and licenses, including in geographic areas where our services have substantial penetration, which could adversely affect our business, financial condition, cash flows and results of operations. Further, if these laws and regulations were to change or if we fail to comply with such laws and regulations as they exist today or in the future, our business, financial condition, cash flows and results of operations could be materially and adversely affected.

The markets in which we participate are highly competitive and many companies, including large technology companies, broadband and security service providers and other managed service providers, are actively targeting the home automation, security monitoring, video monitoring and energy management markets. If we are unable to compete effectively with these companies, our sales and profitability could be adversely affected.

We compete in several markets, including security, video, automation, energy management and wellness solutions. The markets in which we participate are highly competitive and competition may intensify in the future.

Our ability to compete depends on a number of factors, including:

- our platforms and solutions' functionality, performance, ease of use, reliability, availability and cost effectiveness relative to that of our competitors' products;
- our success in utilizing new and proprietary technologies to offer solutions and features previously not available in the marketplace;
- our success in identifying new markets, applications and technologies;
- our ability to attract and retain service provider partners;
- our name recognition and reputation;
- our ability to recruit software engineers and sales and marketing personnel; and
- our ability to protect our intellectual property.

Consumers may prefer to purchase from their existing suppliers rather than a new supplier regardless of product performance or features. In the event a consumer decides to evaluate a new home automation, security monitoring, video monitoring, energy management, or wellness solution, the consumer may be more inclined to select one of our competitors whose product offerings are broader than those that we offer.

Our current competitors include providers of other technology platforms for the connected property with interactive security, including Honeywell International Inc., Resideo Technologies Inc., Telular Corporation (acquired by AMETEK, Inc.), SecureNet Technologies, LLC, Alula (formed following the merger of ipDatatel, LLC and Resolution Products, LLC), and United Technologies Corporation, which sell solutions to service providers, cable operators, technology retailers and other residential and commercial automation providers. We also compete with interactive, monitored security solutions sold directly to subscribers by firms like Scout and SimpliSafe. In addition, our service provider partners compete with managed service providers, such as cable television, telephone and broadband companies like Comcast, AT&T Inc. and Charter Communications, Inc., and providers of point products, including Google Inc.'s Nest Labs, Inc. which offers the Nest Secure security system as well as a smart thermostat, the Nest Protect smart smoke detector and video cameras. Amazon.com offers Amazon Home Services security packages with bundled equipment and professional installation, and Amazon Key, a security camera and smart lock integration feature. Ring Inc., owned by Amazon.com, offers a connected video doorbell, video cameras and an integrated security system, Ring Alarm. Samsung's SmartThings offers a security system and a home automation and awareness hub. Arlo Technologies, Inc. offers connected video cameras, a connected video doorbell, and smart security devices. Apple Inc. offers a feature that allows some manufacturers' connected devices and accessories to be controlled through its HomeKit service available in Apple's iOS operating system. Additionally, Canary and other companies offer all in one video monitoring and awareness devices. In

addition, we may compete with other large technology companies that offer control capabilities among their products, applications and services, and have ongoing development efforts to address the broader connected home market.

Many of our competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, technical, sales, marketing, distribution and other resources than we have. We expect to encounter new competitors as we enter new markets as well as increased competition, both domestically and internationally, from other established and emerging home automation, security monitoring, video monitoring and automation, wellness, and energy management companies as well as large technology companies. In addition, there may be new technologies that are introduced that reduce demand for our solutions or make them obsolete. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties and rapidly acquire significant market share. Increased competition could also result in price reductions and loss of market share, any of which could result in lower revenue and negatively affect our ability to grow our business.

Aggressive business tactics by our competitors may reduce our revenue.

Increased competition in the markets in which we compete may result in aggressive business tactics by our competitors, including:

- selling at a discount;
- offering products similar to our platforms and solutions on a bundled basis at no charge;
- announcing competing products combined with extensive marketing efforts;
- providing financing incentives to consumers; and
- asserting intellectual property rights irrespective of the validity of the claims.

Our service provider partners may switch and offer the products and services of competing companies, which would adversely affect our sales and profitability. Competition from other companies may also adversely affect our negotiations with service provider partners and suppliers, including, in some cases, requiring us to lower our prices. Opportunities to take market share using innovative products, services and sales approaches may also attract new entrants to the field. We may not be able to compete successfully with the offerings and sales tactics of other companies, which could result in the loss of service provider partners offering our platforms and solutions and, as a result, our revenue and profitability could be adversely affected.

If we fail to compete successfully against our current and future competitors, or if our current or future competitors employ aggressive business tactics, including those described above, demand for our platforms and solutions could decline, we could experience cancellations of our services to consumers, or we could be required to reduce our prices or increase our expenses.

The proper and efficient functioning of our network operations centers and data back-up systems is central to our solutions.

Our solutions operate with a hosted architecture and we update our solutions regularly while our solutions are operating. If our solutions and/or upgrades fail to operate properly, our solutions could stop functioning for a period of time, which could put our users at risk. Our ability to keep our business operating is highly dependent on the proper and efficient operation of our network operations centers and data back-up systems. Although our network operations centers have back-up computer and power systems, if there is a catastrophic event, natural disaster, terrorist attack, security breach or other extraordinary event, we may be unable to provide our subscribers with uninterrupted monitoring service or may be unable to adequately protect confidential information and data from unauthorized access or loss. Furthermore, because data back-up systems are susceptible to malfunctions and interruptions (including those due to equipment damage, power outages, human error, computer viruses, computer hacking, data corruption and a range of other hardware, software and network problems), we cannot guarantee that we will not experience data back-up failures in the future. A significant or large-scale, security breach, malfunction or interruption of our network operations centers or data back-up systems could adversely affect our ability to keep our operations running efficiently or could result in unauthorized access to or loss of data. If such an event results in unauthorized access to or loss of service provider partner, subscriber, employee or other personally identifiable data subject to data privacy and security laws and regulations, then it could result in substantial fines by U.S. federal and state authorities, foreign data privacy authorities in the European Union, or the EU, Canada, and other countries, and/or private claims by companies or individuals. If a malfunction or security breach results in a wider or sustained disruption, it could have a material adverse effect on our reputation, business, financial condition, cash flows or results of operations.

We sell security and life safety solutions and if our solutions fail for any reason, we could be subject to liability and our business could suffer.

We sell security and life safety solutions, which are designed to secure the safety of our subscribers and their residences or commercial properties. If these solutions fail for any reason, including due to defects in our software, a carrier outage, a failure of our network operations centers, a failure on the part of one of our service provider partners or user error, we could be subject to liability for such failures and our business could suffer.

Our platforms and solutions may contain undetected defects in the software, infrastructure, third-party components or processes. If our platforms or solutions suffer from defects, we could experience harm to our branded reputation, claims by our subscribers or service provider partners or lost revenue during the period required to address the cause of the defects. We may find defects in new, acquired or upgraded solutions, resulting in loss of, or delay in, market acceptance of our platforms and solutions, which could harm our business, financial condition, cash flows or results of operations.

Since solutions that enable our platforms are installed by our service provider partners, if they do not install or maintain such solutions correctly, our platforms and solutions may not function properly. If the improper installation or maintenance of our platforms and solutions leads to service or equipment failures after introduction of, or an upgrade to, our platforms or a solution, we could experience harm to our branded reputation, claims by our subscribers or service provider partners or lost revenue during the period required to address the cause of the problem. Further, we rely on our service provider partners to provide the primary source of support and ongoing service to our subscribers and, if our service provider partners fail to provide an adequate level of support and services to our subscribers, it could have a material adverse effect on our reputation, business, financial condition, cash flows or results of operations.

Any defect in, or disruption to, our platforms and solutions could cause consumers not to purchase additional solutions from us, prevent potential consumers from purchasing our platforms and solutions or harm our reputation. Although our contracts with our service provider partners limit our liability to our service provider partners for these defects, disruptions or errors, we nonetheless could be subject to litigation for actual or alleged losses to our service provider partners or our subscribers, which may require us to spend significant time and money in litigation or arbitration, or to pay significant settlements or damages. Defending a lawsuit, regardless of its merit, could be costly, divert management's attention and affect our ability to obtain or maintain liability insurance on acceptable terms and could harm our business. Although we currently maintain some warranty reserves, we cannot assure you that these warranty reserves will be sufficient to cover future liabilities.

Failure to maintain the security of our information and technology networks, including information relating to our service provider partners, subscribers and employees, could adversely affect us.

We are dependent on information technology networks and systems, including the Internet, to process, transmit and store electronic information and, in the normal course of our business, we collect and retain certain information pertaining to our service provider partners, subscribers and employees, including credit card information for many of our service provider partners and certain of our subscribers. If security breaches in connection with the delivery of our solutions allow unauthorized third parties to access any of this data or obtain control of our subscribers' systems, our reputation, business, financial condition, cash flows and results of operations could be harmed.

The legal, regulatory and contractual environment surrounding information security, privacy and credit card fraud is constantly evolving and companies that collect and retain such information are under increasing attack by cyber-criminals around the world. Further, as the regulatory focus on privacy issues continues to increase and worldwide laws and regulations concerning the protection of personal information expand and become more complex, these potential risks to our business will intensify. A significant actual or potential theft, loss, fraudulent use or misuse of service provider partner, subscriber, employee or other personally identifiable data, whether by third parties or as a result of employee malfeasance or otherwise, non-compliance with our contractual or other legal obligations regarding such data or a violation of our privacy and security policies with respect to such data could result in loss of confidential information, damage to our reputation, early termination of our service provider partner contracts, litigation, regulatory investigations or actions and other liabilities or actions against us, including significant fines by U.S. federal and state authorities, foreign data privacy authorities in the EU, Canada, and other countries and private claims by companies and individuals for violation of data privacy and security regulations. Moreover, to the extent that any such exposure leads to credit card fraud or identity theft, we may experience a general decline in consumer confidence in our business, which may lead to an increase in attrition rates or may make it more difficult to attract new subscribers. If any one of these risks materializes our business, financial condition, cash flows or results of operations could be materially and adversely affected.

If our security measures are breached, including any breaches caused by cyber-attacks, our reputation may be damaged, we may be exposed to significant liabilities under U.S. and foreign laws, and our business and results of operations may be adversely affected.

Cyber-attacks from computer hackers and cyber criminals and other malicious Internet-based activity continue to increase generally, and perpetrators of cyber-attacks may be able to develop and deploy viruses, worms, ransomware, malware, DNS

attacks, wireless network attacks, attacks on our cloud networks, phishing attempts, distributed denial of service attacks and other advanced persistent threats or malicious software programs that attack our products and services, our networks and network endpoints or otherwise exploit any security vulnerabilities of our products, services and networks. Techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target. As a result, we may be unable to anticipate these techniques or to implement adequate preventative measures. We cannot be certain that advances in cyber-capabilities or other developments will not compromise or breach the technology protecting the networks that access our platforms and solutions, and we can make no assurance that we will be able to detect, prevent, timely and adequately address or mitigate the negative effects of cyber-attacks or other security breaches.

Security breaches of, or sustained attacks against, our networks and infrastructure could create system disruptions and shutdowns that could result in disruptions to our operations or unauthorized access to or loss of our data. If such an event results in unauthorized access to or loss of any data subject to data privacy and security laws and regulations, then we could be subject to substantial fines by U.S. federal and state authorities, foreign data privacy authorities in the EU, Canada, and other countries, and private claims by companies or individuals. A system disruption, shutdown, or loss of data may result in adverse publicity and therefore adversely affect the market's perception of the security and reliability of our services. A cyber-attack may cause additional costs, such as investigative and remediation costs, and the costs of providing individuals and/or data owners with notice of the breach, legal fees and the costs of any additional fraud detection activities required by law, a court or a third-party. Additionally, some of our customer contracts require us to indemnify customers from damages they may incur as a result of a breach of our networks and systems. There can be no assurance that the limitation of liability provisions in our contracts for a security breach would be enforceable or would otherwise protect us from any such liabilities or damages with respect to any particular claim. While we maintain general liability insurance coverage and coverage for technology errors or omissions, we cannot assure you that such coverage will be available in sufficient amounts to cover one or more large claims related to a breach, will continue to be available on acceptable terms or at all. If any one of these risks materializes our business, financial condition, cash flows or results of operations could be materially and adversely affected.

We rely on our service provider partner network to acquire additional subscribers, and the inability of our service provider partners to attract additional subscribers or retain their current subscribers could adversely affect our operating results.

Substantially all of our revenue is generated through the sales of our platforms and solutions by our service provider partners, who incorporate our solutions in certain of the products and packages they sell to their customers, and our service provider partners are responsible for subscriber acquisition, as well as providing customer service and technical support for our platforms and solutions to the subscribers. We provide our service provider partners with specific training and programs to assist them in selling and providing support for our platforms and solutions, but we cannot assure that these steps will be effective. In addition, we rely on our service provider partners to sell our platforms and solutions into new markets in the intelligent and connected property space. If our service provider partners are unsuccessful in marketing, selling and supporting our platforms and solutions, our operating results could be adversely affected.

In order for us to maintain our current revenue sources and grow our revenues, we must effectively manage and grow relationships with our service provider partners. Recruiting and retaining qualified service provider partners and training them in our technology and solutions requires significant time and resources. If we fail to maintain existing service provider partners or develop relationships with new service provider partners, our revenue and operating results would be adversely affected. In addition, to execute on our strategy to expand our sales internationally, we must develop relationships with service provider partners that sell into these markets.

Any of our service provider partners may choose to offer a product from one of our competitors instead of our platforms and solutions, elect to develop their own competing solutions or simply discontinue their operations with us. For example, we entered into a license agreement in November 2013 with Vivint Inc., or Vivint, pursuant to which we granted a license to use the intellectual property associated with our connected home solutions. Under the terms of this arrangement, Vivint has transitioned from selling our solutions directly to its customers to selling its own home automation product to its new customers. We now generate revenue from a monthly fee charged to Vivint on a per customer basis from sales of this service provider partner's product; however, these monthly fees are less on a per customer basis than fees we receive from our SaaS solutions. Therefore, we receive less revenue on a per customer basis from Vivint compared to our SaaS subscriber base, which may result in a lower revenue growth rate. We must also work to expand our network of service provider partners to ensure that we have sufficient geographic coverage and technical expertise to address new markets and technologies. While it is difficult to estimate the total number of available service provider partners in our markets, there are a finite number of service provider partners that are able to perform the types of technical installations required for our platforms and solutions. In the event that we saturate the available service provider pool, or if market or other forces cause the available pool of service providers to decline, it may be increasingly difficult to grow our business. If we are unable to expand our network of service provider partners, our business could be harmed.

As the consumers' product and service options grow, it is important that we enhance our service provider partner footprint by broadening the expertise of our service provider partners, working with larger and more sophisticated service provider partners and expanding the mainstream solutions our service provider partners offer. If we do not succeed in this effort, our

current and potential future service provider partners may be unable or unwilling to broaden their offerings to include our connected property solutions, resulting in harm to our business.

We receive a substantial portion of our revenue from a limited number of service provide partners, and the loss of, or a significant reduction in, orders from one or more of our major service provider partners would result in decreased revenue and profitability.

Our success is highly dependent upon establishing and maintaining successful relationships with a variety of service provider partners. We market and sell our platforms and solutions through a channel assisted sales model and we derive substantially all of our revenue from these service provider partners. We generally enter into agreements with our service provider partners outlining the terms of our relationship, including service provider pricing commitments, installation, maintenance and support requirements, and our sales registration process for registering potential sales to subscribers. These contracts typically have an initial term of one year, with subsequent renewal terms of one year, and are terminable at the end of the initial term or renewal terms without cause upon written notice to the other party. In some cases, these contracts provide the service provider partner with the right to terminate prior to the expiration of the term without cause upon 30 days written notice, or, in the case of certain termination events, the right to terminate the contract immediately. While we have developed a network of over 8,000 service provider partners to sell, install and support our platforms and solutions, we receive a substantial portion of our revenue from a limited number of channel partners and significant customers. During the years ended December 31, 2018, 2017 and 2016, our 10 largest revenue service provider partners accounted for 57%, 60% and 60% of our revenue. Monitronics International, Inc., rebranded and now doing business as Brinks Home Security, represented greater than 10% but not more than 15% of our revenue in 2016 and 2017. ADT LLC represented greater than 15% but not more than 20% of our revenue in 2017 and 2018.

Brinks Home Security disclosed in its Annual Report on Form 10-K for the year ended December 31, 2018 that it received a going concern qualification in connection with its external audit for the year ended December 31, 2018, which was an event of default under the terms of its existing indebtedness, and that it was analyzing and considering a possible restructuring and other strategic alternatives, including a potential bankruptcy filing. It further disclosed on a Current Report on Form 8-K filed on July 5, 2019 that, as of June 30, 2019, Brinks Home Security, along with certain of its domestic subsidiaries, filed voluntary petitions for relief under chapter 11 of title 11 of the United States Code, or the Chapter 11 Cases, as well as a joint partial prepackaged plan of reorganization of Brinks Home Security and certain of its domestic subsidiaries, or the Plan, with the United States Bankruptcy Court for the Southern District of Texas, or the Bankruptcy Court. We were listed as an unsecured creditor with an unimpaired trade claim in the Plan. On August 13, 2019, Brinks Home Security further disclosed on a Current Report on Form 8-K that on August 7, 2019, the Bankruptcy Court confirmed the Plan, as modified by the confirmation order of the Bankruptcy Court. In connection with the Chapter 11 Cases, on July 3, 2019, Brinks Home Security entered into a secured superpriority and priming debtor-in-possession revolving credit facility, or DIP Facility, with certain lenders and other financial parties thereto. On September 3, 2019, Brinks Home Security further disclosed on a Current Report on Form 8-K that on August 30, 2019, the conditions to the effectiveness of the Plan were satisfied and Brinks Home Security emerged from chapter 11 of title 11 of the United States Code after completing a series of transactions through which Brinks Home Security and its former parent, Ascent Capital Group, Inc. merged, with Brinks Home Security as the surviving corporation. Brinks Home Security further disclosed that on August 30, 2019, the DIP Facility was terminated and replaced with a \$145.0 million senior secured revolving credit facility, or the New Revolving Credit Facility, and \$150.0 million in new senior secured term loans, or the New Term Loan Facility, and together with the New Revolving Credit Facility the New Exit Credit Facilities. Under the New Exit Credit Facilities, Brinks Home Security has access to \$295.0 million, which includes \$150.0 million in term loans under the New Term Loan Facility and up to \$145.0 million under the New Revolving Credit Facility. As of the date of this report, we have not received any further information regarding this matter. We expect to continue to receive payments in the ordinary course of business; however, if Brinks Home Security is unable to meet its payment obligations to us, our revenue and profitability may be adversely affected.

We anticipate that we will continue to be dependent upon a limited number of serviceprovider partners for a significant portion of our revenue for the foreseeable future and, in some cases, a portion of our revenue attributable to individual service provider partners may increase in the future. The loss of one or more key service provider partners, a reduction in sales through any major service provider partners or the inability or unwillingness of any of our major service provider partners to pay for our platforms and solutions would reduce our revenue and could impair our profitability.

Substantially all of the revenues associated with the non-hosted software platform, or Software platform, are from a single customer and the loss of this customer could harm our operating results.

In March 2017, we acquired certain assets related to the Connect business unit of Icontrol Networks, Inc., or Icontrol, and all of the outstanding equity interests of the two subsidiaries through which Icontrol conducted its Piper business, which we refer to in this report as the Acquisition. Historically, ADT LLC, or ADT, has accounted for substantially all of the revenue of the Connect business unit. While we amended our master service agreement with ADT to cover services provided with respect to the Software platform, we cannot assure you that we will be able to meet the conditions set forth in the amended agreement or that ADT will use the Software platform for its new customers or keep its existing customers on the Software platform. In addition, even if ADT continues to use the Software platform, we cannot assure you that the revenue from ADT or new accounts added by ADT will reach or exceed historical levels in any future period. We may not be able to offset any unanticipated decline in revenue from ADT with revenues from new customers or other existing customers. Because the Software platform relies on ADT for

substantially all of its revenue, any negative developments in ADT's business, or any decrease in revenue from or loss of ADT as a customer could harm our business, financial condition, cash flows and results of operations.

We have relatively limited visibility regarding the consumers that ultimately purchase our solutions, and we often rely on information from third-party service providers to help us manage our business. If these service providers fail to provide timely or accurate information, our ability to quickly react to market changes and effectively manage our business may be harmed.

We sell our solutions through service provider partners. These service provider partners work with consumers to design, install, update and maintain their connected home and commercial installations and manage the relationship with our subscribers. While we are able to track orders from service provider partners and have access to certain information about the configurations of their Alarm.com systems that we receive through our platforms, we also rely on service provider partners to provide us with information about consumer behavior, product and system feedback, consumer demographics and buying patterns. We use this channel sell-through data, along with other metrics, to forecast our revenue, assess consumer demand for our solution, develop new solutions, adjust pricing and make other strategic business decisions. Channel sell-through data is subject to limitations due to collection methods and the third-party nature of the data and thus may not be complete or accurate. If we do not receive consumer information on a timely or accurate basis, or if we do not properly interpret this information, our ability to quickly react to market changes and effectively manage our business may be harmed.

Consumers may choose to adopt point products that provide control of discrete functions rather than adopting our connected property platforms. If we are unable to increase market awareness of the benefits of our unified solutions, our revenue may not continue to grow, or it may decline.

Many vendors have emerged, and may continue to emerge, to provide point products with advanced functionality for use in connected properties, such as a video doorbell or thermostat that can be controlled by an application on a smartphone. We expect more and more consumer electronic and consumer appliance products to be network-aware and connected — each very likely to have its own smart device (phone or tablet) application. Consumers may be attracted to the relatively low costs of these point products and the ability to expand their connected property control solution over time with minimal upfront costs, despite some of the disadvantages of this approach, may reduce demand for our connected property solutions. If so, our service provider partners may switch and offer the point products and services of competing companies, which would adversely affect our sales and profitability. If a significant number of consumers in our target market choose to adopt point products rather than our connected property solutions, then our business, financial condition, cash flows and results of operations will be harmed, and we may not be able to achieve sustained growth or our business may decline.

Mergers or other strategic transactions involving our competitors could weaken our competitive position, which could adversely affect our ability to compete effectively and harm our results of operations.

Our industry is highly fragmented, and we believe it is likely that some of our existing competitors will consolidate or be acquired. In addition, some of our competitors may enter into new alliances with each other or may establish or strengthen cooperative relationships with systems integrators, third-party consulting firms or other parties. Any such consolidation, acquisition, alliance or cooperative relationship could adversely affect our ability to compete effectively and lead to pricing pressure and our loss of market share and could result in a competitor with greater financial, technical, marketing, service and other resources, all of which could harm our business, financial condition, cash flows and results of operations.

We are dependent on our connected property solutions, and the lack of continued market acceptance of our connected property solutions would result in lower revenue.

Our connected property solutions account for substantially all of our revenue and will continue to do so for the foreseeable future. As a result, our revenue could be reduced by:

- any decline in demand for our connected property solutions;
- the failure of our connected property solutions to achieve continued market acceptance;
- the introduction of products and technologies that serve as a replacement or substitute for, or represent an improvement over, our connected property solutions;
- technological innovations or new communications standards that our connected property solutions do not address; and
- our inability to release enhanced versions of our connected property solutions on a timely basis.

We are vulnerable to fluctuations in demand for Internet-connected devices in general and interactive security systems in particular. If the market for connected home and commercial solutions grows more slowly than anticipated or if demand for connected home and commercial solutions does not grow as quickly as anticipated, whether as a result of competition, product obsolescence, technological change, unfavorable economic conditions, uncertain geopolitical environments, budgetary

constraints of our consumers or other factors, we may not be able to continue to increase our revenue and earnings and our stock price would decline.

A significant decline in our SaaS and license revenue renewal rate would have an adverse effect on our business, financial condition, cash flows and results of operations.

We generally bill our service provider partners based on the number of subscribers they have on our platforms and the features being utilized by subscribers on a monthly basis in advance. Subscribers could elect to terminate our services in any given month. If our efforts and our service provider partners' efforts to satisfy our existing subscribers are not successful, we may not be able to retain them or sell additional functionality to them and, as a result, our revenue and ability to grow could be adversely affected. We track our SaaS and license revenue renewal rate on an annualized basis, as reflected in the section of this Quarterly Report titled "Management's Discussion and Analysis of Financial Condition and Results of Operations — Other Business Metrics — SaaS and License Revenue Renewal Rate." However, our service provider partners, who resell our services to our subscribers, have indicated that they typically have three to five-year service contracts with our subscribers. Our SaaS and license revenue renewal rate is calculated across our entire subscriber base, including subscribers whose contract with their service provider reached the end of its contractual term during the measurement period, as well as subscribers whose contract with their service provider has not reached the end of its contractual term during the measurement period, and is not intended to estimate the rate at which our subscribers renew their contracts with our service provider partners. As a result, we may not be able to accurately predict future trends in renewals and the resulting churn. Subscribers may choose not to renew their contracts for many reasons, including the belief that our service is not required for their needs or is otherwise not cost-effective, a desire to reduce discretionary spending, or a belief that our competitors' services provide better value. Additionally, our subscribers may not renew for reasons entirely out of our control, such as moving a residence or the dissolution of their business, which is particularly common for small to mid-sized businesses. A significant increase in our churn would have an adverse effect on our business, financial condition, cash flows or results of operations.

If we are unable to develop new solutions, sell our platforms and solutions into new markets or further penetrate our existing markets, our revenue may not grow as expected.

Our ability to increase sales will depend, in large part, on our ability to enhance and improve our platforms and solutions, introduce new solutions in a timely manner, sell into new markets and further penetrate our existing markets. The success of any enhancement or new solution or service depends on several factors, including the timely completion, introduction and market acceptance of enhanced or new solutions, the ability to maintain and develop relationships with service providers, the ability to attract, retain and effectively train sales and marketing personnel and the effectiveness of our marketing programs. Any new product or service we develop or acquire may not be introduced in a timely or cost-effective manner, and may not achieve the broad market acceptance necessary to generate significant revenue. Any new markets into which we attempt to sell our platforms and solutions, including new vertical markets and new countries or regions, may not be receptive. Our ability to further penetrate our existing markets depends on the quality of our platforms and solutions and our ability to design our platforms and solutions to meet consumer demand.

We benefit from integration of our solutions with third-party platform providers. If these developers choose not to partner with us, or are acquired by our competitors, our business and results of operations may be harmed.

Our solutions are incorporated into the hardware of our third-party platform providers. For example, our hardware platform partners produce control devices that deliver our platform services to subscribers. It may be necessary in the future to renegotiate agreements relating to various aspects of these solutions or other third-party solutions. The inability to easily integrate with, or any defects in, any third-party solutions could result in increased costs, or in delays in new product releases or updates to our existing solutions until such issues have been resolved, which could have a material adverse effect on our business, financial condition, cash flows, results of operations and future prospects and could damage our reputation. In addition, if these third-party solution providers choose not to partner with us, choose to integrate their solutions with our competitors' platforms, or are unable or unwilling to update their solutions, our business, financial condition, cash flows and results of operations could be harmed. Further, if third-party solution providers that we partner with or that we would benefit from partnering with are acquired by our competitors, they may choose not to offer their solutions on our platforms, which could adversely affect our business, financial condition, cash flows and results of operations.

We rely on wireless carriers to provide access to wireless networks through which we provide our wireless alarm, notification and intelligent automation services, and any interruption of such access would impair our business.

We rely on wireless carriers to provide access to wireless networks for machine-to-machine data transmissions, which are an integral part of our services. Our wireless carriers may suspend wireless service to expand, maintain or improve their networks, or may discontinue or sunset older wireless networks as new technology evolves. Any suspension or other interruption of services would adversely affect our ability to provide our services to our service provider partners and subscribers and may adversely affect our reputation. In addition, the inability to provide uninterrupted services, maintain our existing contracts with our wireless carriers or enter into new contracts with such wireless carriers could have a material adverse effect on our business, financial condition, cash flows and results of operations.

If we are unable to adapt to technological change, including maintaining compatibility with a wide range of devices, our ability to remain competitive could be impaired.

The market for connected home and commercial solutions is characterized by rapid technological change, frequent introductions of new products and evolving industry standards. Our ability to attract new subscribers and increase revenue from existing subscribers will depend in significant part on our ability to anticipate changes in industry standards, to continue to enhance our existing solutions or introduce new solutions on a timely basis to keep pace with technological developments, and to maintain compatibility with a wide range of connected devices in residential and commercial properties. We may change aspects of our platforms and may utilize open source technology in the future, which may cause difficulties including compatibility, stability and time to market. The success of this or any enhanced or new product or solution will depend on several factors, including the timely completion and market acceptance of the enhanced or new product or solution. Similarly, if any of our competitors implement new technologies before we are able to implement them, those competitors may be able to provide more effective products than ours, possibly at lower prices. Any delay or failure in the introduction of new or enhanced solutions could harm our business, financial condition, cash flows and results of operations.

The technology we employ may become obsolete, and we may need to incur significant capital expenditures to update our technology.

Our industry is characterized by rapid technological innovation. Our platforms and solutions interact with the hardware and software technology of systems and devices located at our subscribers' properties and we depend upon cellular, broadband and other telecommunications providers to provide communication paths to our subscribers in a timely and efficient manner. We may be required to implement new technologies or adapt existing technologies in response to changing market conditions, consumer preferences or industry standards, which could require significant capital expenditures. The discontinuation of cellular communication technology, cellular networks or other services by telecommunications service providers can affect our services and require our subscribers to upgrade to alternative and potentially more expensive, technologies. For example, certain cellular carriers have announced their intention to shut down their 3G and CDMA wireless networks by the end of 2022. We intend to work with our service providers to develop a transition plan over the next three years to convert or upgrade the equipment of end user accounts reliant upon 3G or CDMA networks, and we expect to incur incremental costs over the next three years related to the planned 3G and CDMA network shutdown. If our service providers are not able to convert or upgrade the equipment of their customers who are currently using 3G or CDMA network technology, then those accounts may be terminated with us when such networks are no longer available.

It is also possible that one or more of our competitors could develop a significant technical advantage that allows them to provide additional or superior quality products or services, or to lower their price for similar products or services, which could put us at a competitive disadvantage. Our inability to adapt to changing technologies, market conditions or consumer preferences in a timely manner could materially and adversely affect our business, financial condition, cash flows or results of operations.

We depend on our suppliers, and the loss of any key supplier could materially and adversely affect our business, financial condition, cash flows and results of operations.

Our hardware products depend on the quality of components that we procure from third-party suppliers. Reliance on suppliers, as well as industry supply conditions, generally involves several risks, including the possibility of defective parts, which can adversely affect the reliability and reputation of our platforms and solutions, and a shortage of components and reduced control over delivery schedules and increases in component costs, which can adversely affect our profitability. We have several large hardware suppliers from which we procure hardware on a purchase order basis, including one supplier that supplied products and components in an amount equal to 21% of our hardware and other revenue for the three and nine months ended September 30, 2019. If these suppliers are unable to continue to provide a timely and reliable supply, we could experience interruptions in delivery of our platforms and solutions to our service provider partners, which could have a material adverse effect on our business, financial condition, cash flows and results of operations. If we were required to find alternative sources of supply, qualification of alternative suppliers and the establishment of reliable supplies could result in delays and a possible loss of sales, which could have a material adverse effect on our business, financial condition, cash flows and results of operations.

From time to time we provide advance payments or loans to our vendors to, for example, secure procurement of long lead time parts or to provide bridge financing to ensure continuity of operations. We provided such advance payments and loan financing to one of our key hardware suppliers that is currently undergoing a financial restructuring whose products generated between 15% and 25% of our hardware and other revenue over the last twelve months. See Note 8 to our condensed consolidated financial statements for more information regarding this matter.

Growth of our business will depend on market awareness and a strong brand, and any failure to develop, maintain, protect and enhance our brand would hurt our ability to retain or attract subscribers.

We believe that building and maintaining market awareness, brand recognition and goodwill in a cost-effective manner is important to our overall success in achieving widespread acceptance of our existing and future solutions and is an important element in attracting new service provider partners and subscribers. An important part of our business strategy is to increase service provider and consumer awareness of our brand and to provide marketing leadership, services and support to our service provider partner network. This will depend largely on our ability to continue to provide high-quality solutions, and we may not be able to do so effectively. While we may choose to engage in a broader marketing campaign to further promote our brand, this effort may not be successful. Our efforts in developing our brand may be hindered by the marketing efforts of our competitors and our reliance on our service provider partners and strategic partners to promote our brand. If we are unable to cost-effectively maintain and increase awareness of our brand, our business, financial condition, cash flows and results of operations could be harmed.

We operate in the emerging and evolving connected property market, which may develop more slowly or differently than we expect. If the connected property market does not grow as we expect, or if we cannot expand our platforms and solutions to meet the demands of this market, our revenue may decline, fail to grow or fail to grow at an accelerated rate, and we may incur operating losses.

The market for solutions that bring objects and systems not typically connected to the Internet, such as home automation, security monitoring, video monitoring, energy management and wellness solutions, into an Internet-like structure is in an early stage of development, and it is uncertain how rapidly or how consistently this market will develop and the degree to which our platforms and solutions will be accepted into the markets in which we operate. Some consumers may be reluctant or unwilling to use our platforms and solutions for a number of reasons, including satisfaction with traditional solutions, concerns about additional costs, concerns about data privacy and lack of awareness of the benefits of our platforms and solutions. Our ability to expand the sales of our platforms and solutions into new markets depends on several factors, including the awareness of our platforms and solutions, the timely completion, introduction and market acceptance of our platforms and solutions, the ability to attract, retain and effectively train sales and marketing personnel, the ability to develop relationships with service providers, the effectiveness of our marketing programs, the costs of our platforms and solutions and the success of our competitors. If we are unsuccessful in developing and marketing our platforms and solutions into new markets, or if consumers do not perceive or value the benefits of our platforms and solutions, the market for our platforms and solutions might not continue to develop or might develop more slowly than we expect, either of which would harm our revenue and growth prospects.

Risks of liability from our operations are significant.

The nature of the solutions we provide, including our interactive security solutions, potentially exposes us to greater risks of liability for employee acts or omissions, or technology or system failure than may be inherent in other businesses. Substantially all of our service provider partner agreements contain provisions limiting our liability to service provider partners and our subscribers in an attempt to reduce this risk. However, in the event of litigation with respect to these matters, we cannot assure you that these limitations will be enforced, and the costs of such litigation could have a material adverse effect on us. In addition, there can be no assurance that we are adequately insured for these risks. Certain of our insurance policies and the laws of some states may limit or prohibit insurance coverage for punitive or certain other types of damages or liability arising from gross negligence.

Our strategy includes pursuing acquisitions, and our potential inability to successfully integrate newly-acquired technologies, assets or businesses may harm our financial results. Future acquisitions of technologies, assets or businesses, which are paid for partially or entirely through the issuance of stock or stock rights, could dilute the ownership of our existing stockholders.

We believe part of our growth will continue to be driven by acquisitions of other companies or their technologies, assets and businesses. On March 8, 2017, we acquired Icontrol's Connect and Piper business units, and on October 21, 2019, we acquired 85% of the issued and outstanding shares of capital stock of PC Open Incorporated, doing business as OpenEye. We have acquired other businesses in the past. For example, we acquired EnergyHub, Inc. in 2013, we acquired the assets of Horizon Analog, Inc. and Secure-i, Inc., in December 2014, we acquired the assets of HiValley Technology Inc. in March 2015, and we acquired certain assets of ObjectVideo, Inc. in January 2017. These acquisitions and any other acquisitions we may complete in the future will give rise to certain risks, including:

- incurring higher than anticipated capital expenditures and operating expenses;
- failing to assimilate and integrate the operations and personnel or failing to retain the key personnel of the acquired company or business;
- failing to retain customers, service providers and other third-party business partners seeking to terminate or renegotiate their relationships with us;

- failing to integrate the acquired technologies, or incurring significant expense to integrate acquired technologies into our platforms and solutions;
- disrupting our ongoing business;
- encountering complexities associated with managing a larger, more complex and growing business;
- diverting our management's attention and other company resources;
- failing to maintain uniform standards, controls and policies;
- incurring significant accounting charges;
- impairing relationships with employees, service providerpartners or subscribers;
- finding that the acquired technology, asset or business does not further our business strategy, that we overpaid for the technology, asset or business or that we may be required to write off acquired assets or investments partially or entirely;
- failing to realize the expected synergies of the transaction;
- being exposed to unforeseen liabilities and contingencies that were not identified prior to acquiring the company; and
- being unable to generate sufficient revenue and profits from acquisitions to offset the associated acquisition costs.

Fully integrating an acquired technology, asset or business into our operations may take a significant amount of time. We may not be successful in overcoming these risks or any other problems encountered with acquisitions. To the extent we do not successfully avoid or overcome the risks or problems related to any such acquisitions, or fail to manage the acquired business or execute our integration and growth strategy in an efficient and effective manner, our business, financial condition, cash flows and results of operations could be harmed. Acquisitions also could impact our financial position and capital requirements, or could cause fluctuations in our quarterly and annual results of operations. Acquisitions could include significant goodwill and intangible assets, which may result in future impairment charges that would reduce our stated earnings. We may incur significant costs in our efforts to engage in strategic transactions and these expenditures may not result in successful acquisitions.

We expect that the consideration we might pay for any future acquisitions of technologies, assets or businesses could include stock, rights to purchase stock, cash or some combination of the foregoing. If we issue stock or rights to purchase stock in connection with future acquisitions, net income pr share and then-existing holders of our common stock may experience dilution.

We may pursue business opportunities that diverge from our current business model, which may cause our business to suffer.

We may pursue business opportunities that diverge from our current business model, including expanding our platforms and solutions and investing in new and unproven technologies. We can offer no assurance that any such new business opportunities will prove to be successful. Among other negative effects, our pursuit of such business opportunities could reduce operating margins and require more working capital, subject us to additional federal state, and local laws and regulations, materially and adversely affect our business, financial condition, cash flows or results of operations.

Evolving government and industry regulation and changes in applicable laws relating to the Internet and data privacy may increase our expenditures related to compliance efforts or otherwise limit the solutions we can offer, which may harm our business and adversely affect our financial condition.

As Internet commerce continues to evolve, federal, state or foreign agencies have adopted and could in the future adopt regulations covering issues such as user privacy and content. We are particularly sensitive to these risks because the Internet is a critical component of our SaaS business model. In addition, taxation of products or services provided over the Internet or other charges imposed by government agencies or by private organizations for accessing the Internet may be imposed. Any regulation imposing greater fees for Internet use or restricting information exchange over the Internet could result in a decline in the use of the Internet and the viability of Internet-based services, which could harm our business.

Our platforms and solutions enable us to collect, manage and store a wide range of data related to our subscribers' interactive security, intelligent automation, video monitoring, energy management and wellness systems. A valuable component of our platforms and solutions is our ability to analyze this data to present the user with actionable business intelligence. We obtain our data from a variety of sources, including our service provider partners, our subscribers and third-party providers. We cannot assure you that the data we require for our proprietary data sets will be available from these sources in the future or that the cost of such data will not increase. The United States federal government and various state governments have adopted or proposed limitations on the collection, distribution, storage and use of personal information. Several foreign jurisdictions,

including the European Union and the United Kingdom, have adopted legislation (including directives or regulations) that is more rigorous governing data collection and storage than in the United States.

On June 28, 2018, the State of California enacted the California Consumer Privacy Act of 2018, or CCPA, which is scheduled to take effect on January 1, 2020. The CCPA governs the collection, sale and use of California residents' personal information, and it will have significant impacts on businesses' handling of personal information and existing privacy policies and procedures. The CCPA, as well as data privacy laws that have been proposed in other states, may limit our ability to use, process and store certain data, which may decrease adoption of our platforms and solutions, increase our costs for compliance, and harm our business, financial condition, cash flows and results of operations. In addition, the CCPA may subject us to regulatory fines by the State of California, individual claims, and increased commercial liabilities.

The United States and the European Union, or EU, have a cooperative program for transferring personal data, referred to as the Privacy Shield, that went into effect on August 1, 2016. We have self-certified our compliance with the Privacy Shield framework since September 2016, and we use Model Contracts to transfer personal data from the EU to the United States in compliance with the European Commission's Directive on Data Protection. However, the validity of these data transfer mechanisms is continually being challenged in EU courts and by the EU Parliament. Further uncertainty may result if the United Kingdom, or UK, and the EU are unable to finalize an agreement on a transition period during which EU law would continue to apply to the UK beyond the UK's potential withdrawal from the EU, currently anticipated to occur on January 31, 2020. As a result of these ongoing challenges, there will continue to be significant regulatory uncertainty surrounding the validity of data transfers from the EU and the UK to the United States.

The EU issued a new General Data Protection Regulation, or GDPR, that went into effect on May 25, 2018. Prior to May 25, 2018, we updated existing privacy and data security measures to comply with GDPR. As guidance on compliance with GDPR from the EU data protection authorities evolves over time, our privacy or data security measures may be deemed or perceived to be in noncompliance with current or future laws and regulations, which may subject us to litigation, regulatory investigations or other liabilities. Further, in the event of a breach of personal information that we hold, we may be subject to governmental fines, individual claims, remediation expenses and/or harm to our reputation. Moreover, if future laws and regulations limit our ability to use and share this data or our ability to store, process and share data over the Internet, demand for our platforms and solutions could decrease, our costs could increase, and our business, financial condition, cash flows and results of operations could be harmed.

In April 2018, we introduced a solution for certain service provider partners who may be subject to the Health Insurance Portability and Accountability Act of 1996, and its implementing regulations, or HIPAA, which regulates the use and disclosure of Protected Health Information, or PHI. As a result, we are subject to HIPAA when PHI is accessed, created, maintained or transmitted through our solution by these service provider partners. We have implemented additional privacy and security policies and procedures, as well as administrative, physical and technical safeguards to enable our solution to be HIPAA compliant. Additionally, HIPAA compliance has required us to put in place certain agreements with contracting partners and to appoint a Privacy Officer and Security Officer. If our privacy and security policies or other safeguards for PHI are deemed to be in noncompliance by the United States Department of Health and Human Services, or HHS, we may be subject to litigation, regulatory investigations or other liabilities. Further, in the event of a breach of PHI that we hold, we may be subject to governmental fines, individual claims under state privacy laws governing personal health information, remediation expenses and/or harm to our reputation. Furthermore, if future changes to HIPAA or state privacy laws governing PHI expand the definition of PHI or put more restrictions on our ability to use, process and store PHI, then HIPAA compliance for our solutions as currently constituted may be costly both financially and in terms of administrative resources. Ongoing compliance efforts may take substantial time and require the assistance of external resources, such as attorneys, information technology, and/or other consultants and advisors.

We rely on the performance of our senior management and highly skilled personnel, and if we are unable to attract, retain and motivate well-qualified employees, our business and results of operations could be harmed.

We believe our success has depended, and continues to depend, on the efforts and talents of senior management and key personnel, including Stephen Trundle, our Chief Executive Officer, and our senior information technology managers. Our future success depends on our continuing ability to attract, develop, motivate and retain highly qualified and skilled employees. Qualified individuals are in high demand, and we may incur significant costs to attract them. In addition, the loss of any of our senior management or key personnel could interrupt our ability to execute our business plan, as such individuals may be difficult to replace. If we do not succeed in attracting well-qualified employees or retaining and motivating existing employees, our business and results of operations could be harmed.

We provide minimum service level commitments to certain of our service provider partners, and our failure to meet them could cause us to issue credits for future services or pay penalties, which could harm our results of operations.

Certain of our service provider partner agreements currently, and may in the future, provide minimum service level commitments regarding items such as uptime, functionality or performance. If we are unable to meet the stated service level commitments for these service provider partners or suffer extended periods of service unavailability, we are or may be contractually obligated to provide these service provider partners with credits for future services, provide services at no cost or pay other penalties, which could adversely impact our revenue. We do not currently have any reserves on our balance sheet for these commitments.

We have indemnity obligations to certain of our service provider partners for certain expenses and liabilities, which could force us to incur substantial costs.

We have indemnity obligations to certain of our service provider partners for certain claims regarding our platforms and solutions, including security breach, product recall, epidemic failure, and product liability claims. As a result, in the case of any such claims against these service provider partners, we could be required to indemnify them for losses resulting from such claims or to refund amounts they have paid to us. We expect that some of our service provider partners may seek indemnification from us in the event that such claims are brought against them. In addition, we may elect to indemnify service provider partners where we have no contractual obligation to do so and we will evaluate each such request on a case-by-case basis. If a service provider partner elects to invest resources in enforcing a claim for indemnification against us, we could incur significant costs disputing it. If we do not succeed in disputing it, we could face substantial liability.

The Acquisition subjects us to significant additional liabilities for which we will not be indemnified.

In connection with the Acquisition, we assumed certain historic liabilities of the Connect and Piper business units, including pre-closing liabilities relating to current and former employees of the Connect and Piper business units, pre-closing compliance by the Connect and Piper business units with applicable laws and pre-closing performance by the Connect and Piper business units of the assumed contracts. In addition, we assumed any liabilities that may arise from certain pending intellectual property litigation. In addition to the known liabilities we assumed, there could be unasserted claims or assessments that we failed or were unable to discover or identify in the course of performing due diligence investigations and there may be liabilities that are neither probable nor estimable at this time which may become probable and estimable in the future. Further, while the terms of the Acquisition transaction documents provide for us to be indemnified for breaches of certain representations and warranties made about the Connect and Piper business units, the liabilities that arise may not entitle us to contractual indemnification or our contractual indemnification may not be effective. Any such liabilities, individually or in the aggregate, could have a material adverse effect on our business and our prospects.

We may not be able to secure additional financing on favorable terms, or at all, to meet our future capital needs.

In the future, we may require additional capital to respond to business opportunities, challenges, acquisitions or unforeseen circumstances and may determine to engage in equity or debt financings or enter into credit facilities for other reasons. In the future, we may not be able to timely secure debt or equity financing on favorable terms or at all. Any debt financing obtained by us in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. If we raise additional funds through further issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow or support our business and to respond to business challenges could be limited.

Goodwill and other identifiable intangible assets represent a significant portion of our total assets, and we may never realize the full value of our intangible assets.

As of September 30, 2019, we had \$132.4 million of goodwill and identifiable intangible assets. Goodwill and other identifiable intangible assets are recorded at fair value on the date of acquisition. We review such assets for impairment at least annually. Impairment may result from, among other things, deterioration in performance, adverse market conditions, adverse changes in applicable laws or regulations, including changes that restrict the activities of or affect the solutions we offer, challenges to the validity of certain registered intellectual property, reduced sales of certain products or services incorporating registered intellectual property, increased attrition and a variety of other factors. The amount of any quantified impairment must be expensed immediately as a charge to results of operations. Depending on future circumstances, it is possible that we may never realize the full value of our intangible assets. Any future determination of impairment of goodwill or other identifiable intangible assets could have a material adverse effect on our financial position and results of operations.

Comprehensive tax reform bills could adversely affect our business and financial condition.

The U.S. government has enacted comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base) and (iv) a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate. Notwithstanding the reduction in the corporate income tax rate, the overall impact of this tax reform is uncertain, and our business and financial condition could be adversely affected.

We may be subject to additional tax liabilities, which would harm our results of operations.

We are subject to income, sales, use, value added and other taxes in the United States and other countries in which we conduct business, which laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect sales, use, value added or other taxes on our sales may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, and we may be required to collect such taxes in the future. Significant judgment is required in determining our worldwide provision for income taxes. These determinations are highly complex and require detailed analysis of the available information and applicable statutes and regulatory materials. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be different from our historical tax practices, provisions and accruals. If we receive an adverse ruling as a result of an audit, or we unilaterally determine that we have misinterpreted provisions of the tax regulations to which we are subject, our tax provision, results of operations or cash flows could be harmed. In addition, liabilities associated with taxes are often subject to an extended or indefinite statute of limitations period. Therefore, we may be subject to additional tax liability (including penalties and interest) for a particular year for extended periods of time.

Our business is subject to the risks of earthquakes, hurricanes, fires, power outages, floods and other catastrophic events, and to interruption by man-made problems such as terrorism or global or regional economic, political and social conditions.

A significant natural disaster, such as an earthquake, hurricane, fire, flood, or a significant power outage could harm our business, financial condition, cash flows and results of operations. Natural disasters could affect our hardware vendors, our wireless carriers or our network operations centers. Further, if a natural disaster occurs in a region from which we derive a significant portion of our revenue, such as metropolitan areas in North America, consumers in that region may delay or forego purchases of our platforms and solutions from service providers in the region, which may harm our results of operations for a particular period. In addition, terrorist acts or acts of war could cause disruptions in our business or the business of our hardware vendors, service providers, subscribers or the economy as a whole. More generally, these geopolitical, social and economic conditions could result in increased volatility in worldwide financial markets and economies that could harm our sales. Given our concentration of sales during the second and third quarters, any disruption in the business of our hardware vendors, service provider partners or subscribers that impacts sales during the second or third quarter of each year could have a greater impact on our annual results. All of the aforementioned risks may be augmented if the disaster recovery plans for us, our service provider partners and our suppliers prove to be inadequate. To the extent that any of the above results in delays or cancellations of orders, or delays in the manufacture, deployment or shipment of our platforms and solutions, our business, financial condition, cash flows and results of operations would be harmed.

Downturns in general economic and market conditions and reductions in spending may reduce demand for our platforms and solutions, which could harm our revenue, results of operations and cash flows.

Our revenue, results of operations and cash flows depend on the overall demand for our platforms and solutions. Concerns about the systemic impact of a potential widespread recession, energy costs, geopolitical issues, the availability and cost of credit and the global housing and mortgage markets have contributed to increased market volatility, decreased consumer confidence and diminished growth expectations in the U.S. economy and abroad. The current unstable general economic and market conditions have been characterized by a dramatic decline in consumer discretionary spending and have disproportionately affected providers of solutions that represent discretionary purchases. While the decline in consumer spending has recently moderated, these economic conditions could still lead to continued declines in consumer spending over the foreseeable future, and may have resulted in a resetting of consumer spending habits that may make it unlikely that such spending will return to prior levels for the foreseeable future.

During weak economic times, the available pool of service providers may decline as the prospects for home building and home renovation projects diminish, which may have a corresponding impact on our growth prospects. In addition, there is an increased risk during these periods that an increased percentage of our service provider partners will file for bankruptcy protection, which may harm our reputation, revenue, profitability and results of operations. In addition, we may determine that the cost of pursuing any claim may outweigh the recovery potential of such claim. Likewise, consumer bankruptcies can detrimentally affect the business stability of our service provider partners. Prolonged economic slowdowns and reductions in new home construction and renovation projects may result in diminished sales of our platforms and solutions. Further worsening,

broadening or protracted extension of the economic downturn could have a negative impact on our business, revenue, results of operations and cash flows.

Failure to comply with laws and regulations could harm our business.

We conduct our business in the United States and are expanding internationally in various other countries. We are subject to regulation by various federal, state, local and foreign governmental agencies, including, but not limited to, agencies responsible for monitoring and enforcing employment and labor laws, workplace safety, product safety, environmental laws, consumer protection laws, antitrust laws, federal securities laws and tax laws and regulations.

We are subject to the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. Travel Act, and possibly other anti-bribery laws, including those that comply with the Organization for Economic Cooperation and Development, or OECD, Convention on Combating Bribery of Foreign Public Officials in International Business Transactions and other international conventions. Anti-corruption laws are interpreted broadly and prohibit our company from authorizing, offering, or providing directly or indirectly improper payments or benefits to recipients in the public or private-sector. Certain laws could also prohibit us from soliciting or accepting bribes or kickbacks. Our company has direct government interactions and in several cases uses third-party representatives, including dealers, for regulatory compliance, sales and other purposes in a variety of countries. These factors increase our anti-corruption risk profile. We can be held liable for the corrupt activities of our employees, representatives, contractors, partners and agents, even if we did not explicitly authorize such activity. Although we have implemented policies and procedures designed to ensure compliance with anti-corruption laws, there can be no assurance that all of our employees, representatives, contractors, partners, and agents will comply with these laws and policies.

We are also subject to data privacy and security laws, anti-money laundering laws (such as the USA PATRIOT Act), and import/export laws and regulations in the United States and in other jurisdictions.

Our global operations require us to import from and export to several countries, which geographically stretches our compliance obligations. Our platforms and solutions are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. Exports of our platforms and solutions must be made in compliance with these laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges; fines, which may be imposed on us and responsible employees or managers; and, in extreme cases, the incarceration of responsible employees or managers. In addition, if our service provider partners fail to obtain appropriate import, export or re-export licenses or authorizations, we may also be adversely affected through reputational harm and penalties. Obtaining the necessary authorizations, including any required license, for a particular sale may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. In addition, changes in our platforms or solutions or changes in applicable export or import laws and regulations may create delays in the introduction and sale of our platforms and solutions in international markets, prevent our service provider partners with international operations from deploying our platforms and solutions or, in some cases, prevent the export or import of our platforms and solutions to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our platforms and solutions, or in our decreased ability to export or sell our platforms and solutions to existing or potential service provider partners with international operations. Any decreased use of our platforms and solutions or limitation on our ability to export or sell our platforms and solutions would likely adversely affect our business, financial condition, cash flows and results of operations.

In addition, our software contains encryption technologies, certain types of which are subject to U.S. and foreign export control regulations and, in some foreign countries, restrictions on importation and/or use. Any failure on our part to comply with encryption or other applicable export control requirements could result in financial penalties or other sanctions under the U.S. export regulations, including restrictions on future export activities, which could harm our business and operating results. Regulatory restrictions could impair our access to technologies needed to improve our platforms and solutions and may also limit or reduce the demand for our platforms and solutions outside of the United States.

Furthermore, U.S. export control laws and economic sanctions programs prohibit the shipment of certain products and services to countries, governments and persons that are subject to U.S. economic embargoes and trade sanctions. Even though we take precautions to prevent our platforms and solutions from being shipped or provided to U.S. sanctions targets, our platforms and solutions could be shipped to those targets or provided by third-parties despite such precautions. Any such shipment could have negative consequences, including government investigations, penalties and reputational harm. Furthermore, any new embargo or sanctions program, or any change in the countries, governments, persons or activities targeted by such programs, could result in decreased use of our platforms and solutions, or in our decreased ability to export or sell our platforms and solutions to existing or potential service provider partners, which would likely adversely affect our business, financial condition, cash flows and results of operations.

Changes in laws that apply to us could result in increased regulatory requirements and compliance costs which could harm our business, financial condition, cash flows and results of operations. In certain jurisdictions, regulatory requirements may be more stringent than in the United States. Noncompliance with applicable regulations or requirements could subject us to whistleblower complaints, investigations, sanctions, settlements, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties or injunctions, suspension or debarment from contracting with certain governments or other customers, the loss of export privileges, multi-jurisdictional liability, reputational harm, and other collateral consequences. If any governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition, cash flows and results of operations could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and an increase in defense costs and other professional fees. Enforcement actions and sanctions could further harm our business, financial condition, cash flows and results of operations.

If the U.S. insurance industry were to change its practice of providing incentives to homeowners for the use of alarm monitoring services, we could experience a reduction in new subscriber growth or an increase in our subscriber attrition rate.

It has been common practice in the U.S. insurance industry to provide a reduction in rates for policies written on residences that have monitored alarm systems. There can be no assurance that insurance companies will continue to offer these rate reductions. If these incentives were reduced or eliminated, new homeowners who otherwise may not feel the need for alarm monitoring services would be removed from our potential subscriber pool, which could hinder the growth of our business, and existing subscribers may choose to disconnect or not renew their service contracts, which could increase our attrition rates. In either case, our results of operations and growth prospects could be adversely affected.

We face many risks associated with our international business operations and our plans to expand internationally, which could harm our business, financial condition, cash flows and results of operations.

We anticipate that our efforts to operate and continue to expand our business internationally will entail additional costs and risks as we establish our international offerings and develop relationships with service provider partners to market, sell, install, and support our platforms, solutions and brand in other countries. Revenue in countries outside of North America accounted for 2% of our total revenue for each of the nine months ended September 30, 2019 and 2018. We have limited experience in selling our platforms and solutions in international markets outside of North America or in conforming to the local cultures, standards, or policies necessary to successfully compete in those markets, and we may be required to invest significant resources in order to do so. We may not succeed in these efforts or achieve our consumer acquisition, service provider expansion or other goals. In some international markets, consumer preferences and buying behaviors may be different, and we may use business or pricing models that are different from our traditional model to provide our platforms and solutions to consumers in those markets or we may be unsuccessful in implementing the appropriate business model. Our revenue from new foreign markets may not exceed the costs of establishing, marketing, and maintaining our international offerings. In addition, the current instability in the eurozone could have many adverse consequences on our international expansion, including sovereign default, liquidity and capital pressures on eurozone financial institutions, reducing the availability of credit and increasing the risk of financial sector failures and the risk of one or more eurozone member states leaving the euro, resulting in the possibility of capital and exchange controls and uncertainty about the impact of contracts and currency exchange rates.

In addition, conducting expanded international operations subjects us to additional risks that we do not generally face in our North American markets. These risks include:

- localization of our solutions, including the addition of foreign languages and adaptation to new local practices, as well as certification and other regulatory requirements;
- lack of experience in other geographic markets;
- strong local competitors;
- the cost and burden of complying with, lack of familiarity with, and unexpected changes in, foreign legal and regulatory requirements, including the development of policies and procedures for different countries when requirements under privacy regulations in such countries may conflict or be inconsistent with one another;
- difficulties in managing and staffing international operations;
- increased costs due to new or potential tariffs, penalties, trade restrictions and other trade barriers;
- fluctuations in currency exchange rates or restrictions on foreign currency;
- potentially adverse tax consequences, including the complexities of transfer pricing, value added or other tax systems, double taxation and restrictions and/or taxes on the repatriation of earnings;

- dependence on third parties, including commercial partners with whom we do not have extensive experience;
- increased financial accounting and reporting burdens and complexities;
- political, social, and economic instability, terrorist attacks, and security concerns in general; and
- reduced or varied protection for intellectual property rights in some countries.

Operating in international markets also requires significant management attention and financial resources. The investment and additional resources required to establish operations and manage growth in other countries may not produce desired levels of revenue or profitability.

Our software contains encryption technologies, certain types of which are subject to U.S. and foreign export control regulations and, in some foreign countries, restrictions on importation and/or use. Any failure on our part to comply with encryption or other applicable export control requirements could result in financial penalties or other sanctions under the U.S. export regulations, including restrictions on future export activities, which could harm our business and operating results. Regulatory restrictions could impair our access to technologies needed to improve our platforms and solutions and may also limit or reduce the demand for our platforms and solutions outside of the United States.

Enhanced United States tax, tariff, import/export restrictions, or other trade barriers may have an adverse impact on global economic conditions, financial markets and our business.

There is currently significant uncertainty about the future relationship between the United States and various other countries, including China, the European Union, Canada, and Mexico, with respect to trade policies, treaties, tariffs and customs duties, and taxes. Recently, the U.S. administration has called for significant changes to U.S. trade policy with respect to China. Beginning in 2018 and throughout 2019, our smart thermostat products have been subject to an additional 25% import duty as a result of this dispute. Additionally, we were notified by U.S. Customs and Border Protection on April 19, 2019 that certain camera products we import from China were reclassified into a product category, known as List 3, that was subject to an additional 10% import duty. We are appealing this action, but have begun paying the additional import duty while the appeal process is underway. If we are unsuccessful in our appeal, and if we are not able to pass on the increased cost to our customers, our margin on such products would decrease. On May 10, 2019, the President increased the additional import duty on List 3 products to 25%, and has since proposed a further increase of this rate to 30% in the coming months. Certain of our video camera products are included in the List 3 category. The President has also imposed a 15% import duty on other Chinese imports, known as List 4, with additional duties on certain products (List 4A) effective September 1, 2019 and the remainder (List 4B) effective December 15, 2019. We are addressing the risks related to these imposed and announced tariffs, which have affected, or have the potential to affect, at least some of our imports from China.

Between one third to one half of the finished goods hardware products that we sell to our customers are imported from China and could be subject to increased tariffs. Other Alarm.com finished goods hardware products that are not manufactured in China may contain subcomponents made in China that could also be subject to increased tariffs. While the additional import duties resulted in an increase to our cost of hardware revenue, these import duties had a modest impact on hardware revenue margins. If tariffs, trade restrictions, or trade barriers are expanded or interpreted by a court or governmental agency to apply to more of our products, then our exposure on future taxes and duties on such imported products and components could be significant and could have a material impact on our financial results. If our products are deemed to be subject to additional duties and taxes as determined by a court or governmental agency, we may suffer additional hardware revenue margin erosion or be required to raise our prices on certain imported products. There can be no assurance that we will not experience a disruption in our business or harm to our financial condition related to these or other changes in trade practices, and any changes to our operations or our sourcing strategy in order to mitigate any such tariff costs could be complicated, time-consuming, and costly. Furthermore, our business may be adversely affected by retaliatory trade measures taken by China and other countries, which could materially harm our business, financial condition and results of operations. Trade barriers, or the perception that any of them could be imposed, may have a negative effect on global economic conditions and the stability of global financial markets, and may significantly reduce global trade and, in particular, trade between these nations and the United States. Any of these factors could have a material adverse effect on our business, financial condition and results of operations.

The incurrence of debt may impact our financial position and subject us to additional financial and operating restrictions.

On October 6, 2017, we entered into a \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with Silicon Valley Bank, or SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. Upon entry into the 2017 Facility, we borrowed \$72.0 million, which was used to repay the previously outstanding balance under our previous credit facility. The outstanding balance of the 2017 Facility was \$64.0 million as of September 30, 2019. On November 30, 2018, we amended the 2017 Facility to incorporate the parameters that must be met for us to repurchase our outstanding common stock under the stock repurchase program authorized by our board of directors on November 29, 2018.

Our overall leverage and certain covenants and obligations contained in the related documentation could adversely affect our financial health and business and future operations by, among other things:

- making it more difficult to satisfy our obligations, including under the terms of the 2017 Facility;
- limiting our ability to refinance our debt on terms acceptable to us or at all;
- limiting our flexibility to plan for and adjust to changing business and market conditions and increasing our vulnerability to general adverse economic and industry conditions;
- limiting our ability to use our available cash flow to fund future acquisitions, working capital, business activities, and other general corporate requirements; and
- limiting our ability to obtain additional financing for working capital, to fund growth or for general corporate purposes, even when necessary to maintain adequate liquidity.

Furthermore, substantially all of our assets, including our intellectual property, secure the 2017 Facility. If an event of default under the credit agreement occurs and is continuing, SVB may request the acceleration of the related debt and foreclose on the underlying security interests.

In addition, our 2017 Facility restricts our ability to make dividend payments and requires us to maintain certain leverage ratios, which may restrict our ability to invest in future growth. Any of the foregoing could have a material adverse effect on our business, financial condition, cash flows or results of operations.

The LIBOR calculation method may change and LIBOR is expected to be phased out after 2021.

Our 2017 Facility permits interest on the outstanding principal balance to be calculated based on LIBOR, plus an applicable margin based on our consolidated leverage ratio. On July 27, 2017, the U.K. Financial Conduct Authority, or the FCA, announced that it will no longer require banks to submit rates for the calculation of LIBOR after 2021. In the meantime, actions by the FCA, other regulators or law enforcement agencies may result in changes to the method by which LIBOR is calculated. At this time, it is not possible to predict the effect of any such changes or any other reforms to LIBOR that may be enacted in the United Kingdom or elsewhere.

Our financial results may be adversely affected by changes in accounting principles applicable to us.

Our accounting policies are critical to the manner in which we present our results of operations and financial condition. Many of these policies are highly complex and involve many assumptions, estimates and judgments. A change in accounting standards or practices, in particular with respect to revenue recognition, could harm our operating results and may even affect our reporting of transactions completed before the change is effective. GAAP rules are subject to interpretation by the Financial Accounting Standards Board, or FASB, the SEC and other various bodies formed to promulgate and interpret appropriate accounting principles. For example, we adopted Accounting Standards Update No. 2016-02, "Leases (Topic 842)" or Topic 842, effective January 1, 2019, which requires lessees to recognize operating and financing lease liabilities and corresponding right-of-use assets on the balance sheet. See Note 2 to our condensed consolidated financial statements for additional information about the impact of this accounting standard and other new accounting pronouncements. Implementation of new accounting standards could have a significant effect on our financial results, and any difficulties in implementing these pronouncements could cause us to fail to meet our financial reporting obligations, which could result in regulatory discipline and harm investors' confidence in us.

Our accounting is becoming more complex, and relies upon estimates or judgments relating to our critical accounting policies. If our accounting is erroneous or based on assumptions that change or prove to be incorrect, our operating results could fall below the expectations of securities analysts and investors, resulting in a decline in our stock price.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes, and also to comply with many complex requirements and standards. We devote substantial resources to compliance with accounting requirements and we base our estimates on our best judgment, historical experience, information derived from third parties, and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. However, various factors are causing our accounting to become complex. For example, as a result of our acquisition of the Connect business unit of Icontrol, we now recognize revenue relating to the delivery of software relating to the Software platform under different revenue recognition standards than those that apply to delivery of our services under the Alarm.com platforms. Ongoing evolution of our business, and any future acquisitions, may compound these complexities. Our operating results may be adversely affected if we make accounting errors or our judgments prove to be wrong, assumptions change or actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of securities analysts and investors or guidance we may have provided, resulting in a decline in our stock price and potential legal claims. Significant judgments, assumptions and estimates used in preparing our condensed consolidated financial statements include those related to revenue recognition, stock-based compensation, business combinations, and income taxes.

Risks Related to Our Intellectual Property

If we fail to protect our intellectual property and proprietary rights adequately, our business could be harmed.

We believe that our proprietary technology is essential to establishing and maintaining our leadership position. We seek to protect our intellectual property through trade secrets, copyrights, confidentiality, non-compete and nondisclosure agreements, patents, trademarks, domain names and other measures, some of which afford only limited protection. We also rely on patent, trademark, trade secret and copyright laws to protect our intellectual property. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our technology or to obtain and use information that we regard as proprietary. Our means of protecting our proprietary rights may not be adequate or our competitors may independently develop similar or superior technology, or design around our intellectual property. In addition, the laws of some foreign countries do not protect our proprietary rights to as great an extent as the laws of the United States. Intellectual property protections may also be unavailable, limited or difficult to enforce in some countries, which could make it easier for competitors to capture market share. Our failure or inability to adequately protect our intellectual property and proprietary rights could harm our business, financial condition, cash flows and results of operations.

To prevent substantial unauthorized use of our intellectual property rights, it may be necessary to prosecute actions for infringement and/or misappropriation of our proprietary rights against third parties. See the section of this Quarterly Report titled "Legal Proceedings" for additional information on related intellectual property litigation matters. Any such action could result in significant costs and diversion of our resources and management's attention, and we cannot assure you that we will be successful in such action. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce their intellectual property rights than we do. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property.

An assertion by a third party that we are infringing its intellectual property could subject us to costly and time-consuming litigation or expensive licenses that could harm our business and results of operations.

The industries in which we compete are characterized by the existence of a large number of patents, copyrights, trademarks and trade secrets, and by frequent litigation based on allegations of infringement or other violations of intellectual property rights. We have been involved with patent litigation suits in the past and we may be involved with and subject to similar litigation in the future to defend our intellectual property position. For example, on June 2, 2015, Vivint filed a lawsuit against us in U.S. District Court, District of Utah, alleging that our technology directly and indirectly infringes six patents that Vivint purchased. Vivint is seeking permanent injunctions, enhanced damages and attorneys' fees. See the section of this Quarterly Report titled "Legal Proceedings" for additional information on this matter. Should Vivint prevail on its claims that one or more elements of our solution infringe one or more of its patents, we could be required to pay damages of Vivint's lost profits and/or a reasonable royalty for sales of our solution, enjoined from making, using, and selling our solution if a license or other right to continue selling such elements is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. While we believe we have valid defenses to Vivint's claims, any of these outcomes could result in a material adverse effect on our business. Even if we were to prevail, this litigation could continue to be costly and time-consuming, divert the attention of our management and key personnel from our business operations and dissuade potential customers from purchasing our solution, which would also materially harm our business. During the course of litigation, we anticipate announcements of the results of hearings and motions, and other interim developments related to the litigation. If securities analysts or investors regard these announcements as negative, the market price of our common stock may decline.

We might not prevail in any intellectual property infringement litigation given the complex technical issues and inherent uncertainties in such litigation and our service provider partner contracts may require us to indemnify them against certain liabilities they may incur as a result of our infringement of any third party intellectual property. Defending such claims, regardless of their merit, could be time-consuming and distracting to management, result in costly litigation or settlement, cause development delays or require us to enter into royalty or licensing agreements. In addition, we currently have a limited portfolio of issued patents compared to our larger competitors, and therefore may not be able to effectively utilize our intellectual property portfolio to assert defenses or counterclaims in response to patent infringement claims or litigation brought against us by third parties. Further, litigation may involve patent holding companies or other adverse patent owners who have no relevant products or revenues and against which our potential patents provide no deterrence, and many other potential litigants have the capability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims that may be brought against them. Given that our platforms and solutions integrate with many aspects of a property, the risk that our platforms and solutions may be subject to these allegations is exacerbated. As we seek to extend our platforms and solutions, we could be constrained by the intellectual property rights of others. If our platforms and solutions exceed the scope of in-bound licenses or violate any third party proprietary rights, we could be required to withdraw those solutions from the market, re-develop those solutions or seek to obtain licenses from third parties, which might not be available on reasonable terms or at all. Any efforts to re-develop our platforms and solutions, obtain licenses from third parties on favorable terms or license a substitute technology might not be successful and, in any case, might substantially increase our costs and harm our business, financial condition, cash flows and results of operations. If we were compelled to withdraw any of our platforms and solutions from the market, our business, financial condition, cash flows and results of operations could be harmed.

We have indemnity obligations to certain of our service provider partners for certain expenses and liabilities resulting from intellectual property infringement claims regarding our platforms and solutions, which could force us to incur substantial costs.

We have indemnity obligations to certain of our service provider partners for intellectual property infringement claims regarding our platforms and solutions. As a result, in the case of infringement claims against these service provider partners, we could be required to indemnify them for losses resulting from such claims or to refund amounts they have paid to us. We expect that some of our service provider partners may seek indemnification from us in connection with infringement claims brought against them. In addition, we may elect to indemnify service provider partners where we have no contractual obligation to indemnify them and we will evaluate each such request on a case-by-case basis. If a service provider partner elects to invest resources in enforcing a claim for indemnification against us, we could incur significant costs disputing it. If we do not succeed in disputing it, we could face substantial liability. See the section of this Quarterly Report titled "Legal Proceedings" for additional information.

The use of open source software in our platforms and solutions may expose us to additional risks and harm our intellectual property.

Some of our platforms and solutions use or incorporate software that is subject to one or more open source licenses and we may incorporate open source software in the future. Open source software is typically freely accessible, usable and modifiable. Certain open source software licenses require a user who intends to distribute the open source software as a component of the user's software to disclose publicly part or all of the source code to the user's software. In addition, certain open source software licenses require the user of such software to make any derivative works of the open source code available to others on potentially unfavorable terms to us or at no cost.

The terms of many open source licenses to which we are subject have not been interpreted by U.S. or foreign courts, and accordingly there is a risk that those licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to commercialize our platforms and solutions. In that event, we could be required to seek licenses from third parties in order to continue offering our platforms and solutions, to re-develop our platforms and solutions, to discontinue sales of our platforms and solutions or to release our proprietary software code under the terms of an open source license, any of which could harm our business. Further, given the nature of open source software, it may be more likely that third parties might assert copyright and other intellectual property infringement claims against us based on our use of these open source software programs. Litigation could be costly for us to defend, have a negative effect on our business, financial condition, cash flows and results of operations or require us to devote additional research and development resources to change our solutions.

Although we are not aware of any use of open source software in our platforms and solutions that would require us to disclose all or a portion of the source code underlying our core solutions, it is possible that such use may have inadvertently occurred in deploying our platforms and solutions. Additionally, if a third party software provider has incorporated certain types of open source software into software we license from such third party for our platforms and solutions without our knowledge, we could, under certain circumstances, be required to disclose the source code to our platforms and solutions. This could harm our intellectual property position as well as our business, financial condition, cash flows and results of operations.

Risks Related to Ownership of Our Common Stock

The market price of our common stock has been and will likely continue to be volatile.

The market price of our common stock may be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. Since shares of our common stock were sold in our initial public offering in June 2015 at a price of \$14.00 per share, our stock price has ranged from an intraday low of \$10.26 to an intraday high of \$71.50 through September 30, 2019. The market price of our common stock may decline regardless of our operating performance, resulting in the potential for substantial losses for our stockholders, and may fluctuate significantly in response to numerous factors, many of which are beyond our control, including the factors listed below and other factors described in this "Risk Factors" section:

- actual or anticipated fluctuations in our financial condition and operating results;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- failure of securities analysts to initiate or maintain coverage of our company, changes in financial estimates by any securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- ratings changes by any securities analysts who follow our company;
- variance in our financial performance from expectations of securities analysts;
- announcements by us or our competitors of significant business developments, technical innovations, acquisitions or new solutions;
- changes in the prices of our platforms and solutions;
- changes in our projected operating and financial results;
- changes in laws or regulations applicable to our platforms and solutions or marketing techniques, or our industry in general;
- our involvement in any litigation, including any lawsuits threatened or filed against us;
- repurchases of our common stock under the stock repurchase program authorized by our board of directors or our sale of our common stock or other securities in the future;
- changes in senior management or key personnel;
- trading volume of our common stock;
- changes in the anticipated future size and growth rate of our market; and
- general economic, regulatory and market conditions in the United States and abroad.

The stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry fluctuations, as well as general economic, political, regulatory and market conditions, may negatively impact the market price of our common stock. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

Sales of a substantial number of shares of our common stock in the public market could cause our market price to decline.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales, particularly sales by our directors, executive officers, and significant stockholders, may have on the prevailing market price of our common stock.

Additionally, the shares of common stock subject to outstanding options under our equity incentive plans and the shares reserved for future issuance under our equity incentive plans, as well as shares issuable upon vesting of restricted stock awards, will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. Moreover, some holders of shares of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or our stockholders. We have also registered shares of common stock that we may issue under our employee equity incentive plans. Accordingly, these shares may be able to be sold freely in the public market upon issuance as permitted by any applicable vesting requirements.

Our actual operating results may differ significantly from any guidance provided.

Our guidance, including forward-looking statements, is prepared by management and is qualified by, and subject to, a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Many of these uncertainties and contingencies are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We generally state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed but are not intended to represent that actual results could not fall outside of the suggested ranges.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. In particular, guidance relating to the anticipated results of operations of an acquired business is inherently more speculative in nature than other guidance as management will, necessarily, be less familiar with the business, procedures and operations of the acquired business. Accordingly, any guidance with respect to our projected financial performance, in particular with respect to our projected post-Acquisition financial performance, is necessarily only an estimate of what management believes is realizable as of the date the guidance is given. Actual results will vary from the guidance and the variations may be material. Investors should also recognize that the reliability of any forecasted financial data will diminish the farther in the future that the data is forecasted.

Actual operating results may be different from our guidance, and such differences may be adverse and material. In light of the foregoing, investors are urged to put the guidance in context and not to place undue reliance on it. In addition, the market price of our common stock may reflect various market assumptions as to the accuracy of our guidance. If our actual results of operations fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially.

We are obligated to develop and maintain a system of effective internal controls over financial reporting. These internal controls may be determined to be not effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We have been and are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting on an annual basis. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal controls are effective and would be required to disclose any material weaknesses identified in Management's Report on Internal Control over Financial Reporting. While we have established certain procedures and control over our financial reporting processes, we cannot assure you that these efforts will prevent restatements of our financial statements in the future.

Our independent registered public accounting firm is also required, pursuant to Section 404 of the Sarbanes-Oxley Act, to report on the effectiveness of our internal control over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. For future reporting periods, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. We may not be able to remediate any future material weaknesses, or to complete our evaluation, testing and any required remediation in a timely fashion.

If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion that our internal controls over financial reporting are effective, investors could lose confidence in the accuracy and completeness of our financial reports, which could cause the price of our common stock to decline, and we could be subject to sanctions or investigations by regulatory authorities, including the SEC and Nasdaq. Failure to remediate any material weakness in our internal control over financial reporting, or to maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our share price and trading volume could decline.

The trading market for our common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If our financial performance fails to meet analyst estimates or one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

We do not intend to pay dividends for the foreseeable future and, as a result, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors and subject to the restrictions on paying dividends in our 2017 Facility and any future indebtedness. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Concentration of ownership among our current directors, executive officers and their affiliates may limit an investor's ability to influence significant corporate decisions.

As of September 30, 2019, our directors and executive officers, together with their affiliates, beneficially own a significant percentage of our outstanding capital stock. As a result, these stockholders, acting together, will have substantial influence over the outcome of matters submitted to our stockholders for approval, including the election of directors and approval of significant corporate transactions, such as a merger or other sale of our company or its assets. This concentration of ownership could delay, defer or prevent a change in control of the company, merger, consolidation, takeover or other business combination, which in turn could adversely affect the market price of our common stock.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our amended and restated certificate of incorporation and bylaws may have the effect of delaying or preventing a change in control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our board of directors to issue preferred stock, without further stockholder action and with voting liquidation, dividend and other rights superior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent, and limit the ability of our stockholders to call special meetings;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for director nominees;
- establish that our board of directors is divided into three classes, with directors in each class serving three-year staggered terms;
- require the approval of holders of two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our bylaws or amend or repeal the provisions of our certificate of incorporation regarding the election and removal of directors and the ability of stockholders to take action by written consent or call a special meeting;
- prohibit cumulative voting in the election of directors; and
- provide that vacancies on our board of directors may be filled only by the vote of a majority of directors then in office, even though less than a quorum.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any "interested" stockholder for a period of three years following the date on which the stockholder became an "interested" stockholder. Any of the foregoing provisions could limit the price that investors might be

willing to pay in the future for shares of our common stock, and they could deter potential acquirers of our company, thereby reducing the likelihood that you would receive a premium for your common stock in an acquisition.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our amended and restated certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws or (4) any action asserting a claim governed by the internal affairs doctrine. Notwithstanding the foregoing, this choice of forum provision will not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended, or any other claim for which the federal courts have exclusive jurisdiction. Our amended and restated certificate of incorporation provides that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing provision. The forum selection clause in our amended and restated certificate of incorporation may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Recent Sales of Unregistered Equity Securities

None.

(b) Use of Proceeds

None.

(c) Issuer Purchases of Equity Securities

The following table contains information relating to the repurchases of our common stock made by us in the quarter ended September 30, 2019:

Period	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Purchased as a Part of a Publicly Announced Program ⁽²⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
July 1 to July 31, 2019	—	\$ —	—	\$ 75,000,000
August 1 to August 31, 2019	—	—	—	75,000,000
September 1 to September 30, 2019	—	—	—	75,000,000
Total	—	\$ —	—	

(1) Represents shares of unvested common stock that were repurchased by us from certain former employees upon termination of employment in accordance with the terms of the applicable employee's stock option agreement. We repurchased the shares from the former employee at the original exercise price.

(2) On November 29, 2018, our board of directors authorized a stock repurchase program, under which we are authorized to purchase up to an aggregate of \$75.0 million of our outstanding common stock from time to time on the open market or in privately negotiated transactions, block trades, tender offers and by any combination of the foregoing, in accordance with federal securities laws, during the two-year period ending November 29, 2020.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

The following is a list of exhibits filed as part of this Quarterly Report on Form 10-Q. Where so indicated by footnote, exhibits that were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated.

Exhibit Number	Description
<u>3.1⁽¹⁾</u>	<u>Amended and Restated Certificate of Incorporation of Alarm.com Holdings, Inc.</u>
<u>3.2⁽²⁾</u>	<u>Amended and Restated Bylaws of Alarm.com Holdings, Inc.</u>
<u>31.1*</u>	<u>Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
<u>31.2*</u>	<u>Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
<u>32.1**</u>	<u>Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File - the cover page interactive data is embedded within the Inline XBRL document or included within the Exhibit 101 attachments

(1) Previously filed as Exhibit 3.1 to the registrant's Current Report on Form 8-K (File No. 001-37461), filed with the Securities and Exchange Commission on July 2, 2015, and incorporated herein by reference.

(2) Previously filed as Exhibit 3.2 to the registrant's Current Report on Form 8-K (File No. 001-37461), filed with the Securities and Exchange Commission on July 2, 2015, and incorporated herein by reference.

* Filed herewith.

** This certification is being furnished solely to accompany this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing of the registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Alarm.com Holdings, Inc.

Date: November 5, 2019

By: /s/ Steve Valenzuela

Steve Valenzuela

Chief Financial Officer

(On behalf of the registrant and in his capacity as Principal Financial Officer and Principal Accounting Officer)

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Stephen Trundle, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alarm.com Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 5, 2019

/s/ Stephen Trundle

Stephen Trundle

President and Chief Executive Officer

(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Steve Valenzuela, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alarm.com Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 5, 2019

/s/ Steve Valenzuela

Steve Valenzuela

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Stephen Trundle, President and Chief Executive Officer of Alarm.com Holdings, Inc. (the "Company") and Steve Valenzuela, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

- (1) The Company's Quarterly Report on Form 10-Q for the period ended September 30, 2019, to which this Certification is attached as Exhibit 32.1 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and
- (2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 5th day of November, 2019.

/s/ Stephen Trundle

Stephen Trundle

President and Chief Executive Officer

(Principal Executive Officer)

/s/ Steve Valenzuela

Steve Valenzuela

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Alarm.com Holdings, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.