UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-0

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

For the quarterly period ended March 31, 2013

OR

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

For the transition period from ______ to _____

Commission file number: 0-26056

Image Sensing Systems, Inc.

(Exact name of registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

500 Spruce Tree Centre

1600 University Avenue West St. Paul, MN (Address of principal executive offices)

41-1519168 (I.R.S. Employer Identification No.)

> 55104 (Zip Code)

(651) 603-7700

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

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 \boxtimes No 🗖

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 🗵 No 🗖

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

> Large accelerated filer \Box Accelerated filer \Box Non-accelerated filer \Box Smaller reporting company 🗵 (Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No 🗵 Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at May 1, 2013
Common Stock, \$0.01 par value per share	4,972,495 shares

IMAGE SENSING SYSTEMS, INC.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (unaudited):

Image Sensing Systems, Inc. Condensed Consolidated Balance Sheets (Unaudited) (in thousands)

	March 31, 2013	December 31, 2012
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 7,536	\$ 8,334
Marketable securities	4,501	4,817
Accounts receivable, net of allowance for doubtful accounts of \$768 and \$796, respectively	5,298	6,722
Inventories	4,092	4,485
Prepaid expenses and other current assets	3,470	1,797
Total current assets	24,897	26,155
Property and equipment:		
Furniture and fixtures	456	461
Leasehold improvements	504	471
Equipment	4,409	4,427
	5,369	5,359
Accumulated depreciation	3,644	3,484
	1,725	1,875
Deferred income taxes	4,017	4,017
Intangible assets, net	6,243	6,489
Other assets	300	
TOTAL ASSETS	\$37,182	\$38,536
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 2,518	\$ 2,112
Accrued compensation	899	949
Warranty and other current liabilities	1,194	1,086
Total current liabilities	4,611	4,147
Deferred income taxes	241	241
Other long-term liabilities	158	168
Shareholders' equity: Preferred stock, \$.01 par value; 5,000,000 shares authorized, none issued or outstanding	_	
Common stock, \$.01 par value; 20,000,000 shares authorized, 4,967,800 and 4,966,619 issued and		
outstanding, respectively	49	49
Additional paid-in capital	23,110	23,055
Accumulated other comprehensive income (loss)	(20)	390
Retained earnings	9,033	10,486
Total shareholders' equity	32,172	33,980
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$37,182	\$38,536

Image Sensing Systems, Inc. Condensed Consolidated Statements of Operations (Unaudited) (in thousands, except per share data)

		n Periods Ended rch 31,
	2013	2012
Revenue:		
Product sales	\$ 2,045	\$ 2,909
Royalties	2,569	2,348
	4,614	5,257
Cost of revenue (exclusive of amortization shown below):		
Product sales	1,062	1,314
	1,062	1,314
Gross profit	3,552	3,943
Operating expenses:		
Selling, marketing and product support	2,050	1,849
General and administrative	1,370	1,231
Research and development	1,131	1,270
Investigation matter	1,609	
Amortization of intangible assets	341	408
Restructuring		76
	6,501	4,834
Loss from operations	(2,949)	(891)
Other income, net	2	5
Loss before income taxes	(2,947)	(886)
Income tax benefit	(1,494)	(218)
Net loss	\$ (1,453)	\$ (668)
Net loss per share:		
Basic	\$(0.30)	\$(0.14)
Diluted	(0.30)	(0.14)
Weighted average number of common shares outstanding:		
Basic	4,910	4,854
Diluted	4,910	4,854
	,	

Image Sensing Systems, Inc. Condensed Consolidated Statements of Comprehensive Loss (in thousands)

	Гhree-Month Ма	Perio rch 31	
	2013		2012
Net loss	\$ (1,453)	\$	(668)
Other comprehensive loss:			
Foreign currency translation adjustment	 (410)		521
Comprehensive loss	\$ (1,863)	\$	(147)

Image Sensing Systems, Inc. Condensed Consolidated Statements of Cash Flows (Unaudited) (in thousands)

	Th	ee-Month P March	eriods Ended 31,	
	20	13	20)12
Operating activities: Net loss	\$	(1,453)	\$	(668)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:				
Depreciation		211		142
Amortization		341		408
Stock-based compensation		55		97
Changes in operating assets and liabilities:				
Accounts receivable, net		1,424		2,172
Inventories		393		625
Prepaid expenses and other receivables		(1,673)		22
Accounts payable		406		(1,252)
Accrued liabilities		57		(246)
Net cash provided by (used for) operating activities		(239)		1,300
Investing activities:				
Purchases of marketable securities		(776)		(2,901)
Sales and maturities of marketable securities		1,092		2,183
Purchase of other investments		(300)		
Capitalized software development costs		(157)		
Purchases of property and equipment		(117)		(281)
Net cash used for investing activities		(258)		(999)
Financing activities:				
Proceeds from exercise of stock options				3
Net cash provided by financing activities				3
Effect of exchange rate changes on cash		(301)		206
Increase (decrease) in cash and cash equivalents		(798)		510
Cash and cash equivalents at beginning of period		8,334		5,224
Cash and cash equivalents at end of period	\$	7,536	\$	5,734

IMAGE SENSING SYSTEMS, INC.

Notes to Condensed Consolidated Financial Statements (Unaudited) March 31, 2013

Note A: Basis of Presentation

Image Sensing Systems, Inc. (referred to herein as "we," the "Company," "us" and "our") develops and markets software-based computer enabled detection products for use in traffic, security, police and parking applications. We sell our products primarily to distributors and also receive royalties under a license agreement with a manufacturer/distributor for certain of our products. Our products are used primarily by governmental entities.

The accompanying unaudited condensed consolidated financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) for interim financial information and with the instructions to the Quarterly Report on Form 10-Q, which requires the Company to make estimates and assumptions that affect amounts reported. Certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to rules and regulations of the Securities and Exchange Commission (the "SEC"). Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. It is the opinion of management that the unaudited condensed consolidated financial statements include all adjustments consisting of normal recurring accruals considered necessary for a fair presentation. All significant intercompany balances and transactions have been eliminated.

Operating results for the three-month period ended March 31, 2013 are not necessarily indicative of the results that may be expected for the year ending December 31, 2013. The accompanying consolidated financial statements of the Company should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012 as filed with the SEC.

Summary of Significant Accounting Policies

The Company believes that of its significant accounting policies, the following are particularly important to the portrayal of the Company's results of operations and financial position and may require the application of a higher level of judgment by the Company's management and, as a result, are subject to an inherent degree of uncertainty.

Revenue Recognition

We recognize revenue on a sales arrangement when it is realized or realizable and earned, which occurs when all of the following criteria have been met: persuasive evidence of an arrangement exists; delivery and title transfer has occurred or services have been rendered; the sales price is fixed and determinable; collectability is reasonably assured; and all significant obligations to the customer have been fulfilled.

Certain sales may contain multiple elements for revenue recognition purposes. We consider each deliverable that provides value to the customer on a standalone basis as a separable element. Separable elements in these arrangements may include the hardware, software, installation services, training and support. We initially allocate consideration to each separable element using the relative selling price method. Selling prices are determined by us based on either vendor-specific objective evidence ("VSOE") (the actual selling prices of similar products and services sold on a standalone basis) or, in the absence of VSOE, our best estimate of the selling price. Factors considered by us in determining estimated selling prices for applicable elements generally include overall economic conditions, customer demand, costs incurred by us to provide the deliverable, as well as our historical pricing practices. Under these arrangements, revenue associated with each delivered element is recognized in an amount equal to the lesser of the consideration initially allocated to the delivered element or the amount for which payment is not deemed contingent upon future delivery of other elements in the arrangement. Under arrangements where special acceptance protocols exist, installation services and training may not be considered separable. Under those circumstances, revenue for the entire arrangement is recognized upon the completion of installation, training and fulfillment of any other significant obligations specific to the terms of the arrangement. Arrangements that do not contain any separable elements are typically recognized when the products are shipped and title has transferred to the customer.

Revenue from arrangements for services such as maintenance, repair, consulting and technical support are recognized either as the service is performed or ratably over the defined contractual period for service maintenance contracts.

Econolite Control Products, Inc. (Econolite) is our licensee that sells certain of our products in North America, the Caribbean and Latin America. The royalty of approximately 50% of the gross profit on licensed products is recognized when the products are shipped or delivered by Econolite to its customers.

We record provisions against sales revenue for estimated returns and allowances in the period when the related revenue is recorded based on historical sales returns and changes in end user demand.

Revenue is recorded net of taxes collected from customers that are remitted to governmental authorities, with the collected taxes recorded as current liabilities until remitted to the relevant government authority.

Inventories

Inventories are primarily electronic components and finished goods and are valued at the lower of cost or market on the first-in, first-out accounting method.

Income Taxes

We record a tax provision for the anticipated tax consequences of the reported results of operations. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those deferred tax assets and liabilities are expected to be realized or settled. We record a valuation allowance to reduce deferred tax assets to the amount that is believed more likely than not to be realized. We believe it is more likely than not that forecasted income, including income that may be generated as a result of certain tax planning strategies, together with the tax effects of the deferred tax liabilities, will be sufficient to fully recover the remaining net realizable value of our deferred tax assets. In the event that all or part of the net deferred tax assets are determined not to be realizable in the future, an adjustment to the valuation allowance would be charged to earnings in the period such determination is made. In addition, the calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with management's expectations could have a material impact on our financial condition and operating results. We recognize penalties and interest expense related to unrecognized tax benefits in income tax expense.

Goodwill and Intangible Assets

Goodwill represents the excess of acquisition costs over the fair value of the net assets of businesses acquired. Goodwill is not amortized, but instead tested at least annually for impairment. Goodwill is also tested for impairment as changes in circumstances occur indicating that the carrying value may not be recoverable.

Intangible assets with finite lives are amortized on a straight-line basis over the expected period to be benefited by future undiscounted cash flows and reviewed for impairment. Fair values of goodwill and intangible assets are primarily determined using discounted cash flow analyses. At both March 31, 2013 and December 31, 2012, we determined there was no impairment of intangible assets.

The Company capitalizes certain software development costs related to software to be sold, leased, or otherwise marketed. Capitalized software development costs include purchased materials and services and other costs associated with the development of new products and services. Software development costs are expensed as incurred until technological feasibility has been established, at which time future costs incurred are capitalized until the product is available for general release to the public. Based on the Company's product development process, technological feasibility is generally established once product and detailed program designs have been completed, uncertainties related to high-risk development issues have been resolved through coding and testing, and the Company has established that the necessary skills, hardware, and software technology are available for production of the product. Once a software product is available for general release to the public, capitalized development costs associated with that product will begin to be amortized to cost of sales over the product's estimated economic life, using the greater of straight-line or a method that results in cost recognition in future periods that is consistent with the anticipated timing of product revenue recognition.

The Company's capitalized software development costs are subject to an ongoing assessment of recoverability, which is impacted by estimates and assumptions of future revenues and expenses for these software products, as well as other factors such as changes in product technologies. Any portion of unamortized capitalized software development costs that are determined to be in excess of net realizable value will be expensed in the period such a determination is made. The Company reached technological feasibility for certain software products and, as a result, capitalized \$157,000 of software development costs during the quarter ended March 31, 2013. Once the software products are available for release, the capitalized development costs will begin to be amortized to cost of sales over the products' estimated economic life using the greater of straight-line or a method that results in cost recognition in future periods that is consistent with the anticipated time of product revenue recognition.

Note B: Fair Value Measurements and Marketable Securities

The guidance for fair value measurements establishes the authoritative definition of fair value, sets out a framework for measuring fair value and outlines the required disclosures regarding fair value measurements. Fair value is the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. We use a three-tier fair value hierarchy based upon observable and non-observable inputs as follows:

- Level 1 observable inputs such as quoted prices in active markets;
- Level 2 inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3 unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Assets and Liabilities that are Measured at Fair Value on a Recurring Basis

The fair value hierarchy requires the use of observable market data when available. In instances in which the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement has been determined based on the lowest level input that is significant to the fair value measurement in its entirety. Our assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset or liability.

Investments are comprised of high-grade municipal bonds, U.S. government securities and commercial paper and are classified as Level 1 or Level 2, depending on trading frequency and volume and our ability to obtain pricing information on an ongoing basis.

The amortized cost which approximates market value of our available-for-sale securities by major security type were as follows (in thousands):

	March 31, 2013					 	
	Le	evel 1	L	evel 2	Lev	vel 3	Fotal
Bank certificates of deposit	\$		\$	2,441	\$		\$ 2,441
U.S. government obligations		954		501			1,455
Corporate obligations		252					252
State and municipal bonds				353			353
	\$	1,206	\$	3,295	\$		\$ 4,501

	December 31, 2012							
	Le	evel 1	L	evel 2	Lev	vel 3		Fotal
Bank certificates of deposit	\$		\$	2,524	\$		\$	2,524
U.S. government obligations		880		504				1,384
Corporate obligations		453						453
State and municipal bonds				456				456
	\$	1,333	\$	3,484	\$		\$	4,817

The Company evaluates impairment at each reporting period for securities where the fair value of the investment is less than its cost. Unrealized gains and losses on the Company's available-for-sale investments are primarily attributable to general changes in interest rates and market conditions. We do not believe the unrealized losses represent other-than-temporary impairments based on our evaluation of available evidence as of March 31, 2013. The aggregate unrealized gain or loss on available-for-sale investments was immaterial as of March 31, 2013 and December 31, 2012.

Classification of available-for-sale investments as current or noncurrent is dependent upon our intended holding period, the security's maturity date, or both. Contractual maturities were less than one year for all available-for-sale investments as of March 31, 2013. There were no available-for-sale investments with gross unrealized losses that had been in a continuous unrealized loss position for more than 12 months as of March 31, 2013 and December 31, 2012.

Proceeds from maturities or sales of available-for-sale securities were \$1.1 million and \$7.3 million for the periods ended March 31, 2013 and December 31, 2012, respectively. Realized gains and losses are determined on the

specific identification method. Realized gains and losses related to sales of available-for-sale securities during the periods ended March 31, 2013 and December 31, 2012 were immaterial and included in other income (expense).

Nonfinancial Assets Measured at Fair Value on a Nonrecurring Basis

Our intangible assets and other long-lived assets are nonfinancial assets that were acquired either as part of a business combination, individually or with a group of other assets. These nonfinancial assets were initially, and have historically been, measured and recognized at amounts equal to the fair value determined as of the date of acquisition.

Periodically, these nonfinancial assets are tested for impairment by comparing their respective carrying values to the estimated fair value of the reporting unit or asset group in which they reside. When evaluating intangible assets for potential impairment, we first compare the carrying value of the asset to the asset's estimated future cash flows (undiscounted and without interest charges). If the estimated undiscounted cash flows are less than the carrying value of the asset, we calculate an impairment loss. The impairment loss calculation compares the carrying value of the asset to the asset's estimated fair value. At both March 31, 2013 and December 31, 2012, we determined there was no impairment of intangible assets.

Financial Instruments not Measured at Fair Value

Certain of our financial instruments are not measured at fair value and are recorded at carrying amounts approximating fair value, based on their short-term nature or variable interest rate. These financial instruments include cash and cash equivalents, accounts receivable, accounts payable and other current assets and liabilities.

Note C: Inventories

Inventories consisted of the following (in thousands):

	March 31, 2013	December 31, 2012
Components	\$ 2,581	\$ 3,001
Finished goods	1,511	1,484
Total	\$ 4,092	\$ 4,485

Note D: Intangible Assets

Intangible assets consisted of the following (dollars in thousands):

		March 31, 2013						
	С	Gross arrying Amount		cumulated ortization	Net Carrying Value		Weighted Average Useful Life (in Years)	
Developed technology	\$	7,490	\$	(3,701)	\$	3,789	4.3	
Trade names		3,267		(1,917)		1,350	5.3	
Other intangible assets		1,742		(795)		947	4.5	
Software development costs		157				157		
Total	\$	12,656	\$	(6,413)	\$	6,243	4.5	

	December 31, 2012						
	Gross Carryin Amount	<i>.</i>		Weighted Average Useful Life (in Years)			
Developed technology	\$ 7,49	0 \$ (3,4	80) \$ 4,010	4.6			
Trade names	3,26	(1,8	53) 1,414	5.8			
Other intangible assets	1,84	0 (7	75) 1,065	5.2			
Total	\$ 12,59	\$ (6,1	08) \$ 6,489	4.9			

Note E: Credit Facilities

We have a revolving line of credit and had term loans with Associated Bank, National Association ("Associated Bank") that were initially entered into as of May 1, 2008. Our current revolving line of credit agreement ("Credit Agreement") with Associated Bank provides up to \$5.0 million of credit. The Credit Agreement expires in May 2014 and bears interest at an annual rate equal to the greater of (a) 4.5% or (b) LIBOR plus 2.75%. Any advances are secured by inventories, accounts receivable and equipment. We are subject to certain financial covenants under the Credit Agreement, including minimum debt service coverage ratios, minimum cash flow coverage ratios and financial measures. At March 31, 2013, we had no borrowings under the Credit Agreement, and we were in compliance with all financial covenants.

Note F: Warranties

We generally provide a standard two-year warranty on product sales. Reserves to honor warranty claims are estimated and recorded at the time of sale based on historical claim information and are analyzed and adjusted periodically based on claim trends.

Warranty liability and related activity consisted of the following (in thousands):

	Three-Month Periods Ended March 31,					
	2013			2012		
Beginning balance	\$	520	\$	423		
Warranty provisions		48		35		
Warranty claims		(137)		(24)		
Adjustments to preexisting warranties		(12)		(32)		
Ending balance	\$	419	\$	402		

Note G: Stock-Based Compensation

We compensate officers, directors and key employees with stock-based compensation under two stock plans approved by our shareholders and administered under the supervision of our Board of Directors. Stock option awards are granted at exercise prices equal to the closing price of our stock the day before the date of grant. Generally, options vest proportionally over periods of three to five years from the dates of the grant, beginning one year from the date of grant, and have a contractual term of six to ten years. Compensation expense, net of estimated forfeitures, is recognized ratably over the vesting period. Stock-based compensation expense included in selling, general and administrative expense for the three-month periods ended March 31, 2013 and 2012 was \$55,000 and \$97,000, respectively. At March 31, 2013, a total of 208,250 shares were available for grant under these plans.

Stock Options

A summary of the option activity for the first three months of 2013 is as follows:

	Number of Shares	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Options outstanding at				
December 31, 2012	398,893	\$ 7.95	5.6	\$ 13,080
Granted		\$		\$
Exercised		\$		\$
Forfeited or expired	(59,310)	\$ 10.14		\$
Options outstanding at				
March 31, 2013	339,583	\$ 7.57	5.6	\$ 2,240
Options exercisable at				
March 31, 2013	125,083	\$ 9.80	3.2	\$ 2,240

There were no options exercised in the three-month period ended March 31, 2013. The total intrinsic value of options exercised was \$10,500 during the three-month period ended March 31, 2012. As of March 31, 2013, there was \$362,000 of total unrecognized compensation cost related to non-vested stock options. The weighted average period over which the compensation cost is expected to be recognized is 2.9 years

Stock Awards

We issue stock awards as a portion of the annual retainer for each director on a quarterly basis. The stock awards are fully vested at the time of issuance. Compensation expense related to stock awards is determined on the grantdate based on the publicly quoted fair market value of our common stock and is charged to earnings on the grantdate. During the quarter ended March 31, 2013, there were 3,543 stock awards issued with a weighted-average grant date fair value of \$5.29.

Note H: Earnings per Common Share

Basic earnings per share are computed by dividing net earnings by the daily weighted average number of common shares outstanding during the applicable periods. Diluted earnings per share include the potentially dilutive effect of common shares issued in connection with outstanding stock-based compensation options and grants using the treasury stock method. Under the treasury stock method, shares associated with certain stock options have been excluded from the diluted weighted average shares outstanding. As a result, stock options to acquire 397,000 and 451,000 weighted common shares have been excluded from the diluted weighted shares outstanding for the three-month periods ended March 31, 2013 and March 31, 2012, respectively. The potentially dilutive effect of common shares issued in connection with outstanding stock options is determined based on net income. A reconciliation of these amounts is as follows:

	Three-Month Periods Ended March 31,			nded
		2013		2012
Numerator:				
Net loss	\$	(1,453)	\$	(668)
Denominator:				
Weighted average common shares outstanding (net of 57,000				
contingent shares in escrow)		4,910		4,854
Dilutive potential common shares				
Shares used in diluted net loss per common share calculations		4,910		4,854
Basic net loss per common share	\$	(0.30)	\$	(0.14)
Diluted net loss per common share	\$	(0.30)	\$	(0.14)

Note I: Segment Information

The Company's Chief Executive Officer and management regularly review financial information for the Company's three discrete operating segments. Based on similarities in the economic characteristics, nature of products and services, production processes, type or class of customer served, method of distribution and regulatory environments, the operating segments have been aggregated for financial statement purposes and categorized into three reportable segments: Autoscope, RTMS and CitySync. Autoscope is our machine-vision product line, and revenue consists of royalties (all of which are received from Econolite), as well as a portion of international product sales. RTMS is our radar product line. CitySync is our ANPR product line. All segment revenues are derived from external customers.

Operating expenses and total assets are not allocated to the segments for internal reporting purposes. Due to the amended manufacturing and distribution agreement with Econolite and the related changes in how we manage our business, we may reevaluate our segment definitions in the future.

The following tables set forth selected unaudited financial information for each of our reportable segments (in thousands):

		For	the t	hree mon	ths end	led March	31, 20	13
	Aut	Autoscope RTMS CitySync Total					Total	
Revenue	\$	2,942	\$	773	\$	899	\$	4,614
Gross profit		2,734		323		495		3,552
Amortization of intangible assets				123		218		341
Intangible assets				1,464		4,779		6,243
		For the three months ended March 31, 2012						
	Aut	toscope		RTMS	(CitySync		Total
Revenue	\$	2,887	\$	783	\$	1,587	\$	5,257
Gross profit		2,586		413		944		3,943
Amortization of intangible assets				192		216		408
Intangible assets and goodwill				3.394		7,495		10,889

Note J: Other Assets

In January 2013, we acquired a minority interest in the shares of common stock of Municipal Parking Services, Inc. (MPS) for an aggregate purchase price of \$300,000. The investment is accounted for under the cost method and is included in Other Assets on our condensed consolidated balance sheets. In April 2013, the Chief Executive Officer of MPS was appointed to our Board of Directors.

Note K: Commitments and Contingencies

Litigation

We are involved from time to time in various legal proceedings arising in the ordinary course of our business, including primarily commercial, product liability, employment and intellectual property claims. In accordance with generally accepted accounting principles in the United States, we record a liability in our Consolidated Financial Statements with respect to any of these matters when it is both probable that a liability has been incurred and the amount of the liability can be reasonably estimated. With respect to currently pending legal proceedings, we have not established an estimated range of reasonably possible additional losses either because we believe that we have valid defenses to claims asserted against us or the proceeding has not advanced to a stage of discovery that would enable us to establish an estimate. We currently do not expect the outcome of these matters to have a material effect on our consolidated results of operations, financial position or cash flows. Litigation, however, is inherently unpredictable, and it is possible that the ultimate outcome of one or more claims asserted against us could adversely impact our results of operations, financial position or cash flows. We expense legal costs as incurred.

Investigation Matter

As previously disclosed, Polish authorities are conducting an investigation into violations of Polish law related to tenders in the City of Łodź, Poland. In December 2012, the regional prosecutor charged two employees of Image Sensing Systems Europe Limited SP.Z.O.O., our Polish subsidiary ("ISS Poland"),with, among other things, criminal violations of Polish tender and corruption law related to a project in Łodź. Neither the Company nor any of our subsidiaries has been charged with any offense. A Special Subcommittee of our Audit Committee comprised solely of independent directors has retained independent counsel and accounting advisors to conduct an investigation focusing on possible violations of Company policy, internal controls, and laws, including the Foreign Corrupt Practices Act, the U.K. Anti-Bribery Act and Polish law. This investigation is ongoing, and we have voluntarily disclosed this matter to the Securities and Exchange Commission and the Department of Justice.

We are cooperating with the Polish prosecutor and intend to cooperate with any other governmental investigation into these matters. We have taken remedial actions, including ending the employment of the two Polish employees, and we are assessing and implementing enhancements to our internal policies, procedures and controls. We cannot predict the outcome of this matter at this time or whether it will have a material adverse impact on our business prospects, financial condition, operating results or cash flows.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

General. We provide software based computer enabled detection ("CED") products and solutions that use advanced signal processing software algorithms to detect and monitor objects in a designated field of view. Our technology analyzes signals from a sophisticated sensor and passes the information along to management systems, controllers or directly to users. Our core products, the Autoscope® Video Vehicle Detection System, RTMS® Radar Detection System, and CitySync Automatic Number Plate Recognition ("ANPR") System, operate using our proprietary application software in conjunction with video cameras or radar and commonly available electronic components. Our systems are used by traffic managers primarily to improve the flow of vehicle traffic and to enhance safety at intersections, main thoroughfares, freeways and tunnels and by parking and toll managers and law enforcement officials to read license plates for various safety, security, access and enforcement ANPR applications.

Autoscope and RTMS systems are sold to distributors and end users of traffic management products in North America, the Caribbean and Latin America by Econolite Control Products, Inc. ("Econolite"), our exclusive licensee in these regions. We sell CitySync systems to distributors and end users in North America. We sell all of our systems to distributors and end users in Europe and Asia through our European and Hong Kong subsidiaries, respectively. The majority of our sales are to end users that are funded by government agencies responsible for traffic management or traffic law enforcement.

Trends and Challenges in Our Business

We believe the expected growth in our business can be attributed primarily to the following global trends:

- worsening traffic caused by increased numbers of vehicles in metropolitan areas without corresponding expansions of road infrastructure and the need to automate safety, security and access applications for automobiles and trucks, which has increased demand for our products;
- advances in information technology, which have made our products easier to market and implement;
- the continued funding allocations for centralized traffic management services and automated enforcement schemes, which has increased the ability of our primary end users to implement our products; and
- general increases in the cost-effectiveness of electronics, which make our products more affordable for end users.

We believe our continued growth primarily depends upon:

- continued adoption and governmental funding of intelligent transportation systems ("ITS") and other automated applications for traffic control, safety and enforcement in developed countries;
- a propensity by traffic engineers to implement lower cost technology-based solutions rather than civil engineering solutions such as widening roadways;
- countries in the developing world adopting above-ground detection technology, such as video or radar, instead of in-pavement loop technology to manage traffic;
- the use of CED to provide solutions to security/surveillance and environmental issues associated with increasing automobile use in metropolitan areas; and
- our ability to develop new products, such as hybrid CED devices incorporating, for example, radar and video technologies, that provide increasingly accurate information and enhance the end users' ability to cost-effectively manage traffic, security/surveillance and environmental issues.

Because the majority of our end users are governmental entities, we are faced with challenges related to potential delays in purchase decisions by those entities and changes in budgetary constraints. These contingencies could result in significant fluctuations in our revenue between periods. The ongoing difficult economic environment in Europe

and the United States is further adding to the unpredictability of purchase decisions, creating more delays than usual and decreasing governmental budgets, and it is likely to continue to negatively affect our revenue.

Key Financial Terms and Metrics

Revenue. We derive revenue from two sources: (1) royalties received from Econolite for its sales of the Autoscope and RTMS systems in North America, the Caribbean and Latin America and (2) revenue received from our direct sales of CitySync systems in North America, the Caribbean and Latin America and all of our systems in Europe and Asia. We calculate the royalties using a profit sharing model where the gross profits on sales of product made through Econolite are shared equally with Econolite. This royalty arrangement has the benefit of decreasing our cost of revenues and our selling, marketing and product support expenses because these costs and expenses are borne primarily by Econolite. Although this royalty model has a positive impact on our gross margin, it also negatively impacts our total revenue, which would be higher if all the sales made by Econolite were made directly by us. The royalty arrangement is exclusive under a long-term agreement.

Cost of Revenue. There is no cost of revenue related to royalties, as virtually all manufacturing, warranty and related costs are incurred by Econolite. Cost of revenue related to product sales consists primarily of the amount charged by our third party contractors to manufacture hardware platforms, which is influenced mainly by the cost of electronic components. The cost of revenue also includes logistics costs, estimated expenses for product warranties, restructuring costs and inventory reserves. The key metric that we follow is achieving certain gross margin percentages on product sales by geographic region and to a lesser extent by product line.

Operating Expenses. Our operating expenses fall into three primary categories: (1) selling, marketing and product support; (2) general and administrative; and (3) research and development. Selling, marketing and product support expenses consist of various costs related to sales and support of our products, including salaries, benefits and commissions paid to our personnel; commissions paid to third parties; travel, trade show and advertising costs; second-tier technical support for Econolite; and general product support, where applicable. General and administrative expenses consist of certain corporate and administrative functions that support the development and sales of our products and provide an infrastructure to support future growth. General and administrative expenses reflect management, supervisory and staff salaries and benefits, legal and auditing fees, travel, rent and costs associated with being a public company, such as board of director fees, listing fees and annual reporting expenses. Research and development expenses consist mainly of salaries and benefits for our engineers and third party costs for consulting and prototyping. We measure all operating expenses against our annually approved budget, which is developed with achieving a certain operating margin as a key focus. Also included in operating expenses are direct costs regarding the investigation relating to ISS Poland, impairment charges, restructuring costs and non-cash expense for intangible asset amortization.

Non-GAAP Operating Measure. We use non-GAAP net income to analyze our business. Non-GAAP net income excludes the impact, net of tax, of the investigation matter, restructuring charges and amortizing the intangible assets and expenses related to acquisitions, including earn-out adjustments. Non-GAAP net income also excludes the impact, net of tax, of restructuring and goodwill impairment charges. Management believes that this non-GAAP operating measure, when shown in conjunction with GAAP measures, facilitates the comparison of our current operating results to historical operating results. We use this non-GAAP information to evaluate short-term and long-term operating trends in our core operations. Further, we believe that this non-GAAP measure improves management's and investors' ability to compare our financial performance with other companies in the technology industry. Non-GAAP information is not prepared in accordance with GAAP and should not be considered a substitute for or an alternative to GAAP financial measures and may not be computed the same as similarly titled measures used by other companies.

Reconciliations of GAAP net loss to non-GAAP net loss are as follows (dollars in thousands, except per share amounts):

	Three-Month Periods Ended March 31,			
	2013 2012			2012
GAAP net loss Adjustments to reconcile to non-GAAP net loss	\$	(1,453)	\$	(668)
Investigation matter		1,609		
Amortization of intangible assets		341		408
Restructuring Impact on income taxes of amortization, restructuring and				76
investigative matter		(1,157)		(143)
Non-GAAP net loss	\$	(660)	\$	(327)
GAAP diluted loss per share	\$	(0.30)	\$	(0.14)
Non-GAAP diluted loss per share		(0.13)		(0.07)

Seasonality. Our quarterly revenues and operating results have varied significantly in the past due to the seasonality of our business. Our first quarter generally is the weakest due to weather conditions that make roadway construction more difficult in parts of North America, Europe and northern Asia. We expect such seasonality to continue for the foreseeable future. Additionally, our international revenues have a significant large project component, resulting in a varying revenue stream. Accordingly, we believe that quarter-to-quarter comparisons of our financial results should not be relied upon as an indication of our future performance. No assurance can be given that we will be able to achieve or maintain profitability on a quarterly or annual basis in the future.

Segments. We currently operate in three reportable segments: Autoscope, RTMS and CitySync. Autoscope is our machine-vision product line, and revenue consists of royalties (all of which are received from Econolite), as well as a portion of international sales. RTMS is our radar product line, and revenue consists of royalties (all of which are received from Econolite), as well as a portion of international sales. CitySync is our ANPR product line. All segment revenues are derived from external customers. As a result of business model changes and modifications in how we manage our business, we may reevaluate our segment definitions in the future.

Financial information by reportable segment for the three-month periods ended March 31, 2013 and 2012 is summarized as follows (in thousands):

		For th	ne th	ree month	ıs end	ed March 3	1, 20	13
	Aut	oscope		RTMS	(CitySync		Total
Revenue	\$	2,942	\$	773	\$	899	\$	4,614
Gross profit		2,734		323		495		3,552
Amortization of intangible assets				123		218		341
Intangible assets				1,464		4,779		6,243
	For the three months ended March 31, 2012							
	Aut	oscope		RTMS		CitySync		Total
Revenue	\$	2,887	\$	783	\$	1,587	\$	5,257
Gross profit		2,586		413		944		3,943
Amortization of intangible assets				192		216		408
				1/2		210		100

Results of Operations

The following table sets forth, for the periods indicated, certain statements of operations data as a percent of total revenue and gross margin on product sales and royalties as a percentage of product sales and royalties, respectively.

	Three-Month I Ended Marc	Quarter Over Quarter	
	2013	2012	Change
Product sales	44.3%	55.3%	(29.7) %
Royalties	55.7	44.7	9.4
Total revenue	100.0	100.0	(12.2)
Gross profit – product sales	48.1	54.8	(38.4)
Gross profit – royalties	100.0	100.0	9.4
Selling, marketing and product support	44.4	35.2	10.9
General and administrative	29.7	23.4	11.3
Research and development	24.5	24.2	(10.9)
Investigation matter	34.9		
Amortization of intangible assets	7.4	7.8	(16.4)
Restructuring charges		1.4	
Loss from operations	(63.9)	(16.9)	231.0
Income tax benefit	(32.4)	(4.1)	585.3
Net loss	(31.5)	(12.7)	117.5

Total revenue decreased to \$4.6 million in the three month period ended March 31, 2013 from \$5.3 million in the same period in 2012, a decrease of 12.2%. Royalty income increased to \$2.6 million in the first quarter of 2013 from \$2.3 million in the same period in 2012, an increase of 9.4%. The increase in royalty income was mainly due to an increase in sales volume. Product sales decreased to \$2.0 million in the first quarter of 2013 from \$2.9 million in the same period in 2012, a decrease of 29.7%. The decrease in product sales was mainly due to lower sales volume in Europe.

Revenue for the RTMS segment was flat at \$773,000 in the three months ended March 31, 2013 and \$783,000 in the three months ended March 31, 2012. Revenue for the Autoscope segment was flat at \$2.9 million in each of the three months ended March 31, 2013 and 2012. Revenue for the CitySync segment decreased to \$899,000 in the three months ended March 31, 2013 from \$1.6 million in the same period in 2012, a decrease of 43.4%. The decrease in revenue for the CitySync segment is due to lower sales volume in Europe and North America.

Gross margins for product sales decreased to 48.1% in the three months ended March 31, 2013 from 54.8% in the same period in 2012. Margins were lower as a result of product mix and lower volumes. Generally, lower sales volumes of CitySync products will reduce gross margins because of fixed manufacturing costs for these products. Gross margins on royalty income remained consistent at 100% in each of the three month periods ended March 31, 2013 and 2012. We anticipate that gross margins for our product sales will be higher in 2013 as compared to 2012, while we expect royalty gross margins will remain at 100%.

Selling, marketing and product support expense increased to \$2.1 million or 44.4% of total revenue in the first three months of 2013 from \$1.8 million or 35.2% of total revenue in the first three months of 2012. Our selling, marketing and product support expense increased mainly due to investment in additional sales and marketing resources. We anticipate that selling, marketing and product support expense will increase in terms of dollar amount in 2013 as compared to 2012.

General and administrative expense increased to \$1.4 million or 29.7% of total revenue in the first quarter of 2013, from \$1.2 million or 23.4% of total revenue in the same period in 2012. General and administrative expenses increased in 2013 mainly due to severance costs related to the separation of our former head of our European operations. We anticipate that general and administrative expenses will increase in dollar amount and decrease as a percentage of revenue in 2013 compared to 2012.

Research and development expense decreased to \$1.1 million or 24.5% of total revenue in the first quarter of 2013, down from \$1.3 million or 24.2% of total revenue for the same period in 2012. We anticipate that research and development expense will increase in terms of dollar amount in 2013 as compared to 2012.

The Company has incurred legal and other professional fees related to the investigation and remediation actions described in Note K of our Notes to the Condensed Consolidated Financial Statements set forth elsewhere in this Quarterly Report on Form 10-Q. The Company's direct costs related to the investigation were approximately \$1.6 million for the three months ended March 31, 2013. The Company is unable to determine the likely outcome or range of loss, if any, from the investigation, or predict with certainty the timeline for resolution of the investigation.

Amortization of intangibles expense was \$341,000 in the three months ended March 31, 2013 compared to \$408,000 million in the same period in 2012 and reflects the amortization of intangible assets acquired in acquisitions. Assuming there are no changes to our intangible assets, we anticipate amortization expense will be approximately \$1.4 million for all of 2013.

In the period ended March 31, 2012, we recognized restructuring expense of \$76,000 related mainly to employee severance.

Other income was \$2,000 in the first quarter of 2013, primarily consisting of interest income, as compared to \$5,000 in the first quarter of 2012.

Income tax benefit of \$1.5 million, or 50.7% of our pretax loss, was recorded for the three months ended March 31, 2013, compared to an income tax benefit of \$218,000, or 24.6% of pretax income, for the three months ended March 31, 2012. The income tax rate increased in 2013 mainly due to the impact the investigation costs had on the results of the first quarter. We expect the effective rate in 2013 to be below 35%.

Liquidity and Capital Resources

At March 31, 2013, we had \$7.5 million in cash and cash equivalents and \$4.5 million in short-term investments, compared to \$8.3 million in cash and cash equivalents and \$4.8 million in short-term investments at December 31, 2012. Our investment objectives are to preserve principal, maintain liquidity, and achieve the best available return consistent with our primary objectives of safety and liquidity.

Net cash used in operating activities was \$239,000 in the first three months of 2013, compared to cash provided by operating activities of \$1.3 million in the same period in 2012. The primary reason for the decrease in cash was the loss for the quarter offset in part by the collection of outstanding receivables and conversion of inventory. We anticipate that average receivable collection days in 2013 will be similar to 2012 and that it will not have a material impact on our liquidity.

Net cash used in investing activities was \$258,000 for the first quarter of 2013, compared to cash used in investing activities of \$1.0 million in the first quarter of 2012. Our planned additions of property and equipment are discretionary, and we do not expect them to exceed historical levels in 2013.

We have a revolving line of credit and had term loans with Associated Bank, National Association ("Associated Bank") that were initially entered into as of May 1, 2008. Our current revolving line of credit agreement ("Credit Agreement") with Associated Bank provides up to \$5.0 million of credit. The Credit Agreement expires in May 2014 and bears interest at an annual rate equal to the greater of (a) 4.5% or (b) LIBOR plus 2.75%. Any advances are secured by inventories, accounts receivable and equipment. We are subject to certain financial covenants under the Credit Agreement, including minimum debt service coverage ratios, minimum cash flow coverage ratios and financial measures. At March 31, 2013, we had no borrowings under the Credit Agreement, and we were in compliance with all financial covenants.

We believe that cash and cash equivalents on hand at March 31, 2013, along with the availability of funds under our revolving line of credit and cash provided by operating activities, will satisfy our projected working capital needs, investing activities, and other cash requirements for the foreseeable future.

Off-Balance Sheet Arrangements

We do not participate in transactions or have relationships or other arrangements with an unconsolidated entity, including special purpose and similar entities, or other off-balance sheet arrangements.

Critical Accounting Policies

Our significant accounting policies are described in Note 1 to the Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2012. The accounting policies used in preparing our interim Condensed Consolidated Financial Statements as of and for the three months ended March 31, 2013 set forth elsewhere in this Quarterly Report on Form 10-Q are the same as those described in our Annual Report on Form 10-K.

Cautionary Statement:

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, and Section 21E of the Securities Exchange of 1934, as amended. Forward-looking statements represent our expectations or beliefs concerning future events and can be identified by the use of forward-looking words such as "expects," "believes," "may," "will," "should," "intends," "plans," "estimates," or "anticipates" or other comparable terminology. Forward-looking statements are subject to risks and uncertainties that may cause our actual results to differ materially from the results described in the forward-looking statements. Factors that might cause such differences include, but are not limited to:

- historical dependence on a single product for most of our revenue;
- budget constraints by governmental entities that purchase our products, including constraints caused by declining tax revenue;
- continuing ability of our licensee to pay royalties owed;
- the mix of and margin on the products we sell;
- dependence on third parties for manufacturing and marketing our products;
- dependence on single-source suppliers to meet manufacturing needs;
- our increased international presence;
- failure to secure adequate protection for our intellectual property rights;
- development of a competing product by another business using the underlying technology included in the patent we had licensed from the University of Minnesota, which expired in 2006;
- our inability to develop new applications and product enhancements;
- unanticipated delays, costs and expenses inherent in the development and marketing of new products, including ANPR products;
- our inability to respond to low-cost local competitors in Asia and elsewhere;
- our inability to properly manage a growth in revenue and/or production requirements;
- the influence over our voting stock by affiliates;
- our inability to hire and retain key scientific and technical personnel;
- the effects of legal matters in which we may become involved
- our inability to achieve and maintain effective internal controls;
- our inability to successfully integrate acquisitions;

- political and economic instability, including continuing volatility in the economic environment of the European Union;
- our inability to comply with international regulatory restrictions over hazardous substances and electronic waste; and
- conditions beyond our control such as war, terrorist attacks, health epidemics and economic recession.

We caution that the forward-looking statements made in this report or in other announcements made by us are further qualified by the risk factors set forth in Item 1A. to our Annual Report on Form 10-K for the fiscal year ended December 31, 2012.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Our foreign sales and results of operations are subject to the impact of foreign currency fluctuations. From time to time, we enter into currency hedges to attempt to lower our exposure to translation gains and losses as well as to limit the impact of foreign currency translation upon the consolidation of our foreign subsidiaries. A 10% adverse change in foreign currency rates, if we have not hedged, could have a material effect on our results of operations or financial position. Our current greatest exposure for a negative material impact to our operations is a rising Canadian Dollar versus the U.S. Dollar.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the Exchange Act)). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting

During the fiscal quarter covered by this report, there has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

Some of the risk factors to which we and our business are subject are described in the section entitled "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2012. The risks and uncertainties described in our Annual Report are not the only risks we face. Additional risks and uncertainties not presently known to us or that our management currently deems immaterial also may impair our business operations. If any of the risks described were to occur, our business, financial condition, operating results and cash flows could be materially adversely affected.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3.	Defaults Upon Senior Securities
None.	
Item 4.	Mine Safety Disclosures.
None.	
Item 5.	Other Information
None.	
Item 6.	Exhibits

The following exhibits are filed as part of this quarterly report on Form 10-Q for the quarterly period ended March 31, 2013:

Exhibit Number	Description
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following financial information from the Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, formatted in XBRL (Extensible Business Reporting Language), (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Operations, (iii) the Condensed Consolidated Statements of Cash Flows, and (iv) the Notes to Condensed Consolidated Financial Statements.

SIGNATURES

In accordance with 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.

Image Sensing Systems, Inc.

Dated: May 8, 2013

Dated: May 8, 2013

By:/s/ Kris B. Tufto

Kris B. Tufto President and Chief Executive Officer (principal executive officer)

By:/s/ Gregory R. L. Smith

Gregory R. L. Smith Chief Financial Officer (principal financial and accounting officer)

EXHIBIT INDEX

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CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Kris B. Tufto, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Image Sensing Systems, Inc. for its fiscal quarter ended March 31, 2013;

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: May 8, 2013

/s/ Kris B. Tufto

Name: Kris B. Tufto Title: President and Chief Executive Officer

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Gregory R.L. Smith, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Image Sensing Systems, Inc. for its fiscal quarter ended March 31, 2013;

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: May 8, 2013

/s/ Gregory R. L. Smith

Name: Gregory R. L. Smith Title: Chief Financial Officer

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Image Sensing Systems, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2013, as filed with the Securities and Exchange Commission (the "Report"), I, Kris B. Tufto, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Kris B. Tufto

Kris B. Tufto President and Chief Executive Officer May 8, 2013

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Image Sensing Systems, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2013, as filed with the Securities and Exchange Commission (the "Report"), I, Gregory R.L. Smith, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Gregory R. L. Smith

Gregory R. L. Smith Chief Financial Officer May 8, 2013