
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, DC 20549

Form 10-Q

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

For the quarterly period ended June 30, 2011

**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 0-9587

ELECTRO-SENSORS, INC.

(Exact name of registrant as specified in its charter)

Minnesota
(State or other jurisdiction of incorporation or
organization)

41-0943459
(IRS Employer Identification No.)

6111 Blue Circle Drive
Minnetonka, Minnesota 55343-9108
(Address of principal executive offices)

(952) 930-0100
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

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

Indicate by check mark 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.

Large accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer
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

The number of shares outstanding of the registrant's common stock, \$0.10 par value, on August 9, 2011 was 3,389,577.

ELECTRO-SENSORS, INC.
Form 10-Q
For the Period Ended June 30, 2011

TABLE OF CONTENTS

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements:

Condensed Consolidated Balance Sheet – As of June 30, 2011 and December 31, 2010.....	3
Condensed Consolidated Statements of Operations –	
For the Three and Six months ended June 30, 2011 and June 30, 2010.....	4
Condensed Consolidated Statements of Cash Flows –	
For the Six months ended June 30, 2011 and June 30, 2010.....	5
Notes to Condensed Consolidated Financial Statements.....	6

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations...	11
Item 3. Quantitative and Qualitative Disclosures About Market Risk	14
Item 4. Controls and Procedures	14

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.....	15
Item 1A. Risk Factors	15
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	15
Item 3. Defaults Upon Senior Securities	15
Item 4. [Removed and Reserved].....	15
Item 5. Other Information	15
Item 6. Exhibits	15

SIGNATURES	16
-------------------------	----

EXHIBITS	17
-----------------------	----

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

ELECTRO-SENSORS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEET
(in thousands except share and per share amounts)

	<u>June 30,</u> <u>2011</u>	<u>December 31,</u> <u>2010</u>
ASSETS	(unaudited)	
Current assets		
Cash and cash equivalents.....	\$ 490	\$ 583
Treasury bills.....	5,200	5,197
Available for sale securities.....	3,735	2,830
Trade receivables, less allowance for doubtful accounts of \$9	809	577
Inventories.....	1,212	1,057
Income tax receivable.....	0	54
Other current assets.....	<u>83</u>	<u>81</u>
Total current assets.....	<u>11,529</u>	<u>10,379</u>
Property and equipment, net.....	<u>1,155</u>	<u>1,174</u>
Total assets.....	<u>\$ 12,684</u>	<u>\$ 11,553</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable.....	\$ 171	\$ 75
Accrued expenses.....	328	195
Deferred revenue.....	65	70
Accrued income tax.....	<u>51</u>	<u>0</u>
Total current liabilities.....	<u>615</u>	<u>340</u>
Deferred income tax liability.....	1,415	1,078
Commitments and contingencies		
Stockholders' equity		
Common stock par value \$0.10 per share; authorized 10,000,000 shares; issued and outstanding: 3,388,488 and 3,381,999 shares, respectively	339	338
Additional paid-in capital.....	1,558	1,541
Retained earnings.....	6,505	6,565
Accumulated other comprehensive income (unrealized gain on available for sale securities, net of income tax).....	<u>2,252</u>	<u>1,691</u>
Total stockholders' equity.....	<u>10,654</u>	<u>10,135</u>
Total liabilities and stockholders' equity.....	<u>\$ 12,684</u>	<u>\$ 11,553</u>

See accompanying notes to unaudited condensed consolidated financial statements

ELECTRO-SENSORS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands except share and per share amounts)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Net sales	\$ 1,667	\$ 1,700	\$ 3,254	\$ 3,257
Cost of goods sold	<u>680</u>	<u>678</u>	<u>1,317</u>	<u>1,298</u>
Gross profit	<u>987</u>	<u>1,022</u>	<u>1,937</u>	<u>1,959</u>
Operating expenses:				
Selling and marketing	384	344	763	698
General and administrative	242	278	513	588
Research and development	<u>168</u>	<u>161</u>	<u>317</u>	<u>307</u>
Total operating expenses	<u>794</u>	<u>783</u>	<u>1,593</u>	<u>1,593</u>
Operating income	<u>193</u>	<u>239</u>	<u>344</u>	<u>366</u>
Non-operating income:				
Interest income	1	2	4	2
Gain on investment securities	1	0	1	0
Other income	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Total non-operating income	<u>3</u>	<u>4</u>	<u>8</u>	<u>6</u>
Income before income taxes	196	243	352	372
Income taxes	<u>78</u>	<u>97</u>	<u>140</u>	<u>155</u>
Net income	<u>\$ 118</u>	<u>\$ 146</u>	<u>\$ 212</u>	<u>\$ 217</u>
Other comprehensive income (loss):				
Change in unrealized value of investments, net of income tax	\$ (80)	\$ (224)	\$ 561	\$ 176
Total comprehensive income (loss)	<u>\$ 38</u>	<u>\$ (78)</u>	<u>\$ 773</u>	<u>\$ 393</u>
Net Income per Share Data:				
Basic				
Net income per share	\$ 0.03	\$ 0.04	\$ 0.06	\$ 0.06
Weighted average shares	3,388,241	3,380,290	3,386,016	3,380,213
Diluted				
Net income per share	\$ 0.03	\$ 0.04	\$ 0.06	\$ 0.06
Weighted average shares	3,405,468	3,405,070	3,405,358	3,404,993
Dividends paid per share	\$.04	\$.04	\$.08	\$.08

See accompanying notes to unaudited condensed consolidated financial statements

ELECTRO-SENSORS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2011	2010
Cash flows from operating activities		
Net income	\$ 212	\$ 217
Adjustments to reconcile net income to net cash from (used in) operating activities:		
Depreciation	28	49
Deferred income taxes	(7)	(12)
Interest accrued on investments	(3)	(2)
(Increase)/decrease in:		
Trade receivables	(232)	8
Inventories	(155)	(53)
Other current assets	(2)	6
Accounts payable	96	47
Accrued expenses	133	108
Deferred revenue	(5)	(3)
Accrued income taxes	105	65
Net cash from operating activities	170	430
Cash flows from (used in) investing activities		
Purchase of treasury bills	(4,300)	(5,048)
Proceeds from the maturity of treasury bills	4,300	4,980
Purchase of property and equipment	(9)	(2)
Net cash used in investing activities	(9)	(70)
Cash flows from (used in) financing activities		
Proceeds from issuance of stock	18	7
Dividends paid	(272)	(270)
Net cash used in financing activities	(254)	(263)
Net increase (decrease) in cash and cash equivalents	(93)	97
Cash and cash equivalents, beginning	583	746
Cash and cash equivalents, ending	\$ 490	\$ 843
Supplemental schedule of non-cash investing and financing activities		
Net change in unrealized gain on investments	\$ 561	\$ 176
Cash paid for income taxes	\$ 52	\$ 35

See accompanying notes to unaudited condensed consolidated financial statements

ELECTRO-SENSORS, INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
FOR THE PERIOD ENDED JUNE 30, 2011
(unaudited)

Note 1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions and regulations of the Securities and Exchange Commission to Form 10-Q. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements.

This report should be read together with the Company's Annual Report on Form 10-K for the year ended December 31, 2010, including the audited financial statements and footnotes therein.

It is the opinion of management that the unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring accruals, necessary to fairly state the financial position and results of operations for the three and six months ended June 30, 2011. The results of interim periods may not be indicative of results to be expected for the year.

Nature of Business

The accompanying condensed consolidated financial statements include the accounts of Electro-Sensors, Inc. and its wholly-owned subsidiaries, ESI Investment Company and Senstar Corporation. Senstar has no operations. Intercompany accounts, transactions and earnings have been eliminated in consolidation. The consolidated entity is referred to as "the Company".

Electro-Sensors, Inc. operates two distinct businesses. The first is the Production Monitoring Division, which manufactures and markets a complete line of speed monitoring and motor control systems for industrial machinery. The division utilizes leading-edge technology to continuously improve its products and make them easier to use. The division's goal is to manufacture the industry-preferred product for every market served. These products are sold through an internal sales staff, manufacturer's representatives, and distributors to a wide variety of manufacturers, original equipment manufacturers and processors who use the products to monitor process machinery operations. The division markets its products to a number of different industries located throughout the United States, Asia, Central America, Canada, and Europe.

The second business is the AutoData Systems Division. The division designs and markets desktop software-based systems that read hand printed characters, checkmarks and bar code information from scanned or faxed forms, in addition to collecting and reporting data from web forms. The division's products are designed to provide capabilities to automate data collection and are sold by internal sales staff to end users, resellers and developers in the United States, Canada, Europe and Asia.

In addition, through its subsidiary ESI Investment Company, the Company periodically makes strategic investments in other businesses and companies, primarily when the Company believes that such investments will facilitate development of technology complementary to the Company's products. Although ESI, through ESI Investment Company, invests in other businesses or companies, ESI does not intend to become an investment company and intends to remain primarily an operating company. The Company's primary investments are 343,267 shares of Rudolph Technologies, Inc. ("Rudolph") and 551,759 shares of PPT Vision Inc ("PPT"). The investments are accounted for using the available-for-sale method. See Note 4 for additional information regarding the Company's investments. The Company's investments in securities are subject to normal market risks.

Revenue recognition of production monitoring equipment

The Company recognizes revenue from the sale of its production monitoring equipment when persuasive evidence of an arrangement exists, the product has been delivered, the fee is fixed and determinable and collection of the resulting receivable is reasonably assured. The Company may offer discounts to its distributors or quantity discounts that are recorded at the time of sale. The Company recognizes revenue on products sold to customers and distributors upon shipment because the contracts do not include post-shipment obligations. In addition to exchanges and warranties, customers have refund rights. Our standard products are used in a wide variety of industries, returns are minimal and insignificant to the consolidated financial statements and are recognized when the returned product is received by the Company. In some situations, the Company receives advance payments from its customers. Revenue associated with these advance payments is deferred until the product is shipped or services performed.

Software revenue recognition

The Company recognizes revenue upon shipment of its automated data collection software. The product is sold to the end user and risk of loss is transferred, and the Company has no continuing obligations, once its products are delivered to the shipper. To recognize revenue, it must also be probable that the Company will collect the accounts receivable from its customers. AutoData customers pay an annual maintenance fee for software support, which is recognized as deferred revenue on the consolidated balance sheet and is recognized in income, on a monthly basis, over the life of the contract. The Company recognizes hardware shipped with software when persuasive evidence of an arrangement exists, the product has been delivered, the fee is fixed and determinable, and collection of the resulting receivable is reasonably assured.

Available for Sale Securities

ESI Investment Company's portfolio consist of equity securities, primarily common stocks, government debt securities and money market funds. The estimated fair value of publicly traded equity securities (other than those accounted for based upon the equity method of accounting) is based on quoted market prices, and therefore subject to the inherent risk of market fluctuations. Management determines the appropriate classification of securities at the date individual investments are acquired, and evaluates the appropriateness of such classification at each balance sheet date.

Since the Company generally does not make investments in anticipation of short-term fluctuations in market prices, investments in equity securities are classified as available-for-sale (unless accounted for on the equity method of accounting). Available-for-sale securities with readily determinable values are stated at fair value, and unrealized holding gains and losses, net of the related deferred tax effect, are reported as separate component of stockholders' equity.

Realized gains and losses on securities, including losses from declines in value of specific securities determined by management to be other-than-temporary (unless accounted for on the equity method of accounting), are included in the period realized.

Fair Value Measurements

The Company's policies incorporate the guidance for accounting for fair value measurements of financial assets and financial liabilities and for fair value measurements of nonfinancial items that are recognized or disclosed at fair value in the consolidated financial statements on a recurring basis. The Company's policies also incorporate the guidance for fair value measurement related to nonfinancial items that are recognized and disclosed at fair value in the consolidated financial statements on a nonrecurring basis. The guidance establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the asset or liability.

The level in the fair value hierarchy within which a fair measurement in its entirety falls is based on the lowest level input that is significant to the fair value measurement in its entirety.

The carrying value of cash and cash equivalents, treasury bills, investments, trade receivables, accounts payable, and other working capital items approximate fair value at June 30, 2011 and December 31, 2010 due to the short maturity nature of these items.

Income taxes

Deferred income taxes are presented as an asset or liability based on timing differences between financial reporting and tax reporting methods. Deferred income tax assets and liabilities are computed for those differences that have future tax consequences using the currently enacted tax laws and rates that apply to the periods in which they are expected to affect taxable income. Income tax expense is the current tax payable or refundable for the period plus or minus the net change in the deferred tax assets and liabilities, excluding the portion of the deferred liability allocated to other comprehensive income. Deferred tax assets are reduced by a valuation allowance to the extent that realization of the related deferred tax asset is not assured.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Actual results could differ from those estimates. Significant estimates, including the underlying assumptions, consist of economic lives of property and equipment, realizability of accounts receivable, valuation of deferred tax assets/liabilities, valuation of inventory, and valuation of investments. It is at least reasonably possible that these estimates may change in the near term.

Recently Issued Accounting Pronouncements

In June 2011, the Financial Accounting Standards Board (FASB) issued a new standard covering Presentation of Comprehensive Income. The standard requires that all nonowner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both choices, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. The standard is effective retrospectively for fiscal years, and interim periods within those years, beginning after December 15, 2011. We are assessing the impact of the standard on our comprehensive income presentation.

Note 2. Stock-Based Compensation

The Company records compensation expense for employee stock options based on the estimated fair value of the options on the date of grant using the Black-Scholes-Merton ("BSM") model. The Company uses historical data among other factors to estimate the expected price volatility, the expected option life and the expected forfeiture rate. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for the estimated life of the option. At June 30, 2011, the Company had one stock-based employee compensation plan. During the six months ended June 30, 2011, two employees exercised options to purchase a total of 4,500 shares of common stock. There were no options exercised during the six months ended June 30, 2010. There were no options granted in the six months ended June 30, 2011 or 2010.

Note 3. Net Income Per Share

Basic net income per share is computed by dividing net income by the weighted average number of common shares outstanding during the period. Diluted net income per share is computed by dividing net income by the weighted average number of common shares outstanding and common stock equivalents outstanding during the period.

Note 4. Investments

The cost and estimated fair value of the Company's investments (other than an investment accounted for under the equity method of accounting) are as follows:

	<u>Cost</u>	<u>Gross unrealized gain</u>	<u>Gross unrealized loss</u>	<u>Fair value</u>
June 30, 2011				
Treasury Bills	\$ 5,200,000	\$ 0	\$ 0	\$ 5,200,000
Money Market Funds	171,000	0	0	171,000
Equity Securities	101,000	3,688,000	(54,000)	3,735,000
	<u>5,472,000</u>	<u>3,688,000</u>	<u>(54,000)</u>	<u>9,106,000</u>
Less Cash and Cash Equivalents	171,000	0	0	171,000
Total Investments, June 30, 2011	<u>\$ 5,301,000</u>	<u>\$ 3,688,000</u>	<u>\$ (54,000)</u>	<u>\$ 8,935,000</u>
December 31, 2010				
Treasury Bills	\$ 5,197,000	\$ 0	\$ 0	\$ 5,197,000
Money Market Funds	170,000	0	0	170,000
Equity Securities	101,000	2,783,000	(54,000)	2,830,000
	<u>5,468,000</u>	<u>2,783,000</u>	<u>(54,000)</u>	<u>8,197,000</u>
Less Cash and Cash Equivalents	170,000	0	0	170,000
Total Investments, December 31, 2010	<u>\$ 5,298,000</u>	<u>\$ 2,783,000</u>	<u>\$ (54,000)</u>	<u>\$ 8,027,000</u>

At June 30, 2011, the Company's significant investments in equity securities were 343,267 shares of Rudolph Technologies, Inc. ("Rudolph") and 551,759 shares of PPT Vision, Inc. ("PPT"), both of which are accounted for under the available-for-sale method. At December 31, 2010, the Company's significant investment in equity securities was 343,267 shares of Rudolph Technologies, Inc. ("Rudolph"), accounted for under the available-for-sale method. As of June 30, 2011 and December 31, 2010, the aggregate value of the Company's Rudolph shares as reported on the Nasdaq Stock Exchange was approximately \$3,676,000 and \$2,825,000, respectively, with an approximate cost of \$45,000. As of June 30, 2011, the aggregate value of the Company's PPT shares as reported on the Pink Sheets was approximately \$55,000, with an adjusted basis of \$0.

In addition, the Company owns two Treasury Bills with a total fair market value of \$5,200,000. The first Treasury Bill was purchased on August 11, 2010 at a purchase price of \$899,000 and that matured on July 28, 2011. The Company is in the process of considering options for investing the funds in the future. The second Treasury Bill was purchased on May 20, 2011 at a purchase price of \$4,300,000 and has a maturity date of September 22, 2011. It is the intention of management to hold the Treasury Bills until maturity.

Investment Reported on Equity Method

At December 31, 2010, the Company owned 551,759 shares of PPT Vision, Inc. ("PPT"), which is 1.4% of PPT's outstanding common stock. The fair value of its holdings based on the quoted market price at December 31, 2010 was approximately \$99,000 with an approximate cost of \$2,434,000.

Because the Company owned approximately 1.4% of PPT's outstanding stock and the Company's Secretary owned a controlling interest in PPT, it had been determined that the Company had "significant influence" over the operations of PPT, and as a result its ownership interest should be reported using the equity method of accounting for investments. In the first quarter of 2011, it was determined that the Company no longer has "significant influence" over the operations of PPT and accordingly, the Company is accounting for its investment in PPT as an available-for-sale security. Upon conversion to available-for-sale classification, the Company recorded the stock at its adjusted basis of \$0 which reflected its carrying amount at that date.

Note 5. Fair Value Measurements

The following table provides information on the Company's investment assets measured at fair value on a recurring basis.

	Carrying amount in condensed consolidated balance sheet June 30, 2011	Fair Value June 30, 2011	Fair Value Measurement Using		
			Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents:					
Money Market Funds	\$ 171,000	\$ 171,000	\$ 171,000	\$ -	\$ -
Treasury Bills	\$ 5,200,000	\$ 5,200,000	\$ 5,200,000	\$ -	\$ -
Available-for-sale:					
Equity Securities	\$ 3,735,000	\$ 3,735,000	\$ 3,735,000	\$ -	\$ -

	Carrying amount in condensed consolidated Balance Sheet December 31, 2010	Fair Value December 31, 2010	Fair Value Measurement Using		
			Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents:					
Money Market Funds	\$ 170,000	\$ 170,000	\$ 170,000	\$ -	\$ -
Treasury Bills	\$ 5,197,000	\$ 5,197,000	\$ 5,197,000	\$ -	\$ -
Available-for-sale:					
Equity Securities	\$ 2,830,000	\$ 2,830,000	\$ 2,830,000	\$ -	\$ -

The fair value of the money market funds, treasury bills, and equity securities are based on quoted market prices in an active market. Closing stock prices are readily available from active markets and are used as being representative of fair value. The Company classifies these securities as level 1.

Note 6. Inventories

Inventories used in the determination of cost of goods sold are as follows:

	June 30, 2011	December 31, 2010
Raw Materials	\$ 772,000	\$ 714,000
Work In Process	251,000	186,000
Finished Goods	189,000	157,000
Total Inventories	\$ 1,212,000	\$ 1,057,000

Note 7. Segment Information

The Company has three reportable operating segments based on the nature of its product lines: Production Monitoring, AutoData Systems, and Investments. The Production Monitoring Division manufactures and markets a complete line of production monitoring equipment, in particular speed monitoring and motor control systems for industrial machinery. The AutoData Systems Division designs and markets desktop software-based systems that read hand printed characters, checkmarks, and bar code information from scanned or faxed forms, in addition to collecting and reporting data from web forms. Sales of these systems include software and can include hardware. ESI Investment Company holds investments in marketable and non-marketable securities.

The accounting policies of the segments are the same as those described in Note 1 of the Notes to Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010. In evaluating segment performance, management focuses on sales and income before taxes. The Company has no inter-segment sales.

The following is financial information relating to the continuing operating segments (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
External sales				
Production monitoring (products)	\$ 1,543	\$ 1,580	\$ 3,060	\$ 3,050
AutoData systems (software and related hardware)	124	120	194	207
Investments	0	0	0	0
Total	\$ 1,667	\$ 1,700	\$ 3,254	\$ 3,257
Net Income/(Loss) before taxes				
Production monitoring (products)	\$ 193	\$ 229	\$ 388	\$ 375
AutoData systems (software and related hardware)	1	12	(40)	(5)
Investments	2	2	4	2
Total	\$ 196	\$ 243	\$ 352	\$ 372

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

CRITICAL ACCOUNTING ESTIMATES

The preparation of our financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make decisions based upon estimates, assumptions, and factors it considers relevant to the circumstances. Such decisions include the selection of applicable accounting principles and the use of judgment in their application, the results of which impact reported amounts and disclosures. Changes in economic conditions or other business circumstances may affect the outcomes of management's estimates and assumptions. An in-depth description of our accounting estimates can be found in the interim financial statements included in this report and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010. No new estimates exist other than those discussed in our Annual Report.

RESULTS OF OPERATIONS

Net Sales

Net sales for the three-month period ended June 30, 2011 decreased \$33,000, or 1.9%, when compared to net sales for the same period in 2010. Net sales for the six-month period ended June 30, 2011 decreased \$3,000, or 0.1%, when compared to net sales for the same period in 2010.

For the three months ended June 30, 2011 compared to the same period in 2010, the Production Monitoring Division had a decrease in net sales of \$37,000, or 2.3%, and the AutoData Systems Division had an increase in net sales of \$4,000, or 3.3%.

For the six months ended June 30, 2011 compared to the same period in 2010, the Production Monitoring Division had an increase in net sales of \$10,000, or 0.3%, and the AutoData Systems Division had a decrease in net sales of \$13,000, or 6.3%.

Net sales were down slightly for the three months ended June 30, 2011 compared to the same period in 2010, but remained up slightly for the six months ended June 30, 2011 compared to the same period in 2010. We are selling more sensors to customers to connect into their control system compared to selling systems containing programmable logic controllers from other manufacturers, as we did in 2010. We are adding sales and marketing resources to increase our ability to meet with customers directly and also through our manufacturer's representatives. Attending additional trade shows and industry association events increased travel and marketing expenses over last year. We expect this to continue to increase this year. The new ION Remote Network I/O Node product is now available for sale and promotion will begin in the third quarter of 2011. The ION Nodes reduce installation costs by networking multiple sensors over a single cable. The product is targeted at medium to large grain and feed facilities and provides customers with a simple method for interfacing sensors to a new or existing control system.

The AutoData Systems Division increase in net sales for the second quarter of 2011 was due in part to the increase in sales of Scannable Office. The Scannable Office upgrade in the first quarter of 2011 to compatibility with Microsoft® Office® 2007/2010 contributed to the increase of sales in the product. Year to date sales continue to be down due to the slowness of the economic recovery, leading to continued reduced capital expenditures at healthcare facilities and government-funded organizations, which account for a large percentage of customers and prospective customers.

Cost of Goods Sold

Our cost of goods sold increased \$2,000, or 0.3%, for the three months ended June 30, 2011 compared to the same period in 2010. For the six-month period ended June 30, 2011, the cost of goods sold increased \$19,000, or 1.5%, compared to the same period in 2010. The increase for the second quarter was primarily a result of increased sales of software and hardware in the AutoData Systems Division. The increase in cost of goods sold for the six-month period ended June 30, 2011 was due to increased sales of hardware in the AutoData Systems Division.

Gross Profit

Gross margin for the three-month period ended June 30, 2011 was 59.2% versus 60.1% for the same period in 2010. For the six-month periods ended June 30, 2011 and 2010, gross margins were 59.5% and 60.1%, respectively. The decrease in the gross margin was due mainly to the increased hardware sales in the AutoData Systems Division. Hardware sold in the AutoData Systems Division is sold at a much lower gross margin than the software.

Operating Expenses

Total operating expenses increased \$11,000, or 1.4%, for the three months ended June 30, 2011 when compared to the same period in 2010. The Production Monitoring Division had an increase of \$6,000, or 0.9% and the AutoData Systems Division had an increase of \$5,000, or 5.2%.

For the six months ended June 30, 2011 when compared to the same period in 2010, total operating expenses were unchanged. The Production Monitoring Division had a decrease of \$10,000, or 0.7%, offset by an increase in the AutoData Systems Division of \$10,000, or 5.3%.

Selling and marketing costs increased \$40,000, or 11.6%, for the three months ended June 30, 2011 when compared to the same period in 2010. For the six months ended June 30, 2011, selling and marketing costs increased \$65,000, or 9.3%, when compared to the same period in 2010. Of the increase for the three months ended June 30, 2011, the Production Monitoring Division had an increase of \$37,000, or 11.9%, and the AutoData Systems Division had an increase of \$3,000, or 9.4%. Of the increase for the six months ended June 30, 2011, the Production Monitoring Division had an increase of \$62,000, or 9.8%, and the AutoData Systems Division had an increase of \$3,000, or 4.6%. For the three months ended June 30, 2011, the increase in selling and marketing costs of the Production Monitoring Division resulted from increased commission expense due to increased sales and the addition of a Canadian outside manufacturer's representative, and increased travel expenses (due to additional tradeshow and international trips) and trade show expenses due to additional regional, local and national shows. For the six months ended June 30, 2011, the increase in selling and marketing costs of the Production Monitoring Division was due to higher wages and bonuses (resulting from changes in our compensation package), increased commission expense due to increased sales and the addition of a Canadian outside manufacturer's representative, and higher travel expenses (due to additional tradeshow and international trips) and trade show expenses due to additional regional, local and national shows, offset by decreases in advertising and marketing expenses due to the timing and selection of publications for ads placed. While marketing efforts continue to be directed to our core industries, we are also expanding international marketing. For the three months ended June 30, 2011, the increase in selling and marketing costs of the AutoData Systems Division resulted from increased commission expense due to increased sales and increased wages relating to additional hours paid to our part-time sales person. During the six months ended June 30, 2011, the AutoData Systems Division had an increase in wages due to additional hours paid to our part-time sales person and the purchase of an internet security certificate.

General and administrative costs decreased \$36,000, or 12.9%, for the three months ended June 30, 2011 compared to the same period in 2010. For the six months ended June 30, 2011, general and administrative costs decreased \$75,000, or 12.8%, when compared to the same period in 2010. Of the decrease for the three months ended June 30, 2010, the Production Monitoring Division had a decrease of \$35,000, or 13.4%, and the AutoData Systems Division had a decrease of \$1,000, or 5.9%. Of the decrease for the six months ended June 30, 2011, the Production Monitoring Division had a decrease of \$73,000, or 13.2%, and the AutoData Systems Division had a decrease of \$2,000, or 5.6%. For the three months ended June 30, 2011, the decrease in general and administrative costs from the Production Monitoring Division resulted from a decrease in depreciation expense on software and related hardware, wages and benefits (due to an open position that will not be filled), and professional services due to a negotiated contract, offset by an increase in repairs and maintenance and stock handling costs (due to the XBRL requirement). For the six months ended June 30, 2011, the increase in general and administrative expenses from the Production Monitoring Division was due to decreases in ISO (international production quality standards) certification and audit expense, depreciation expense on software and related hardware, wages and benefits (due to an open position that will not be filled), and professional services due to a negotiated contract, offset by an increase repairs and maintenance and stock handling costs (due to the XBRL requirement). For the three months ended June 30, 2011, the decrease in the AutoData System Division resulted from a decrease in professional services due to a negotiated contract. For the six months ended June 30, 2011, the decrease in the AutoData System Division resulted from decreases in professional services due to a negotiated contract, offset by an increase in repairs and maintenance and stock handling costs (due to the XBRL requirement).

Research and development costs increased \$7,000, or 4.3%, for the three months ended June 30, 2011 compared to the same period in 2010. For the six months ended June 30, 2011, research and development costs increased \$10,000, or 3.3%, when compared to the same period in 2010. Of the increase for the three months ended June 30, 2011, the Production Monitoring Division contributed an increase of \$4,000, or 3.5%, and the AutoData Systems Division had an increase of \$3,000, or 6.4%. Of the increase for the six months ended June 30, 2011, the Production Monitoring Division had an increase of \$1,000, or 0.5%, and the AutoData Systems Division had an increase of \$9,000, or 10.1%. For the three months ended June 30, 2011, the increase in the Production Monitoring Division was due to an increase in salaries and wages and lab materials for parts used in new products, offset by decreases in travel (service calls in 2010 that were not required in 2011), prototypes and contract engineering (due to development and installation of the Electro-Sentry system). For the three months ended June 30, 2011, the increase in the AutoData System Division was due to an increase in wages and benefits. For the six months ended June 30, 2011, the increase in the AutoData Systems Division resulted from an increase in wages and benefits and computer supplies, due to the purchase of software upgrades.

Non-Operating Income

Non-operating income decreased by \$1,000, or 25.0%, for the three-month period ended June 30, 2011 compared to the same period for 2010. For the six months ended June 30, 2011, non-operating income increased \$2,000, or 33.3%, when compared to the same period in 2010. The decrease for the three-month period ended June 30, 2011 was due to a decrease in interest income. The increase for the six-month period ended June 30, 2011 was due to an increase in interest income.

Interest income decreased \$1,000, or 50.0%, when comparing the three months ended June 30, 2011 to the same period in 2010. For the six months ended June 30, 2011, interest income increased \$2,000, or 100.0%, when compared to the same period in 2010. The changes in interest income were due to the interest recognized on Treasury Bills when comparing the three and six month periods ended June 30, 2011 to the same periods in 2010.

Income Before Income Taxes

Income before income taxes was \$196,000 for the three months ended June 30, 2011, representing a decrease in income before income taxes of \$47,000, or 19.3%, when compared to income before income taxes of \$243,000 for the three months ended June 30, 2010. Income before income taxes was \$352,000 for the six months ended June 30, 2011, representing a decrease in income before income taxes of \$20,000, or 5.4%, when compared to income before income taxes of \$372,000 for the six months ended June 30, 2010.

The Production Monitoring Division had income before income taxes of \$193,000 for the three months ended June 30, 2011 compared to \$229,000 for the same period in 2010, a decrease of \$36,000, or 15.7%. This decrease in income before income taxes was mainly due to a decrease in sales. For the six months ended June 30, 2011, the Production Monitoring Division had income before income taxes of \$388,000 compared to income before income taxes of \$375,000 for the same period in 2010, an increase of \$13,000, or 3.5%. This increase in income before income taxes was mainly due to a decrease in operating expenses.

The AutoData Systems Division had income before income taxes of \$1,000 for the three months ended June 30, 2011 compared to income before income taxes of \$12,000 for same period in 2010, a decrease of \$11,000, or 91.7%. This decrease in income before income taxes was due primarily to a decrease in gross margin. For the six months ended June 30, 2011, AutoData Systems had a loss before income taxes of \$40,000 compared to a loss before income taxes of \$5,000 for the same period in 2010, an increase in the loss of \$35,000, or 700.0%. This increase in loss before income taxes was due primarily to a decrease in sales and gross margin.

ESI Investment Company had income before taxes of \$2,000 for the three-month period ended June 30, 2011, which is unchanged from the income before taxes of \$2,000 for the three-month period ended June 30, 2010. ESI Investment Company had income before taxes of \$4,000 for the six-month period ended June 30, 2011 compared to income before income taxes of \$2,000 for the same period in 2010, an increase of \$2,000, or 100.0%. This increase was a result of the interest earned on Treasury Bills in 2011 as compared to 2010 (See "Non-Operating Income"). However, ESI Investment Company does have approximately \$3,631,000 in unrealized gain on the Rudolph Technologies, Inc. investment that is reported in Other Comprehensive Income (See Note 4 "Investments" in the notes to the accompanying condensed consolidated financial statements).

LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents were \$490,000 at June 30, 2011, \$583,000 at December 31, 2010, and \$843,000 at June 30, 2010.

Cash provided by operating activities was \$170,000 and \$430,000 for the six months ended June 30, 2011 and 2010, respectively. Cash from operating activities decreased \$260,000 for the six-months ended June 30, 2011 when compared to the same period in 2010 mostly due to a \$240,000 decrease in trade receivables and a \$102,000 decrease in inventories, offset by an increase of \$49,000 in accounts payable and an increase of \$40,000 in accrued income taxes. The net change in trade receivables was due to an increase in the balance of \$232,000 at June 30, 2011 compared to the prior year decrease in the balance of \$8,000 at June 30, 2010. The increase in accounts receivable was due to the timing of sales. The net change in inventories was due to an increase in the balance of \$155,000 at June 30, 2011 compared to the prior year increase in the balance of \$53,000 at June 30, 2010. The net change in accounts payable was due to an increase in the balance of \$96,000 at June 30, 2011 compared to the prior year increase in the balance of \$47,000 at June 30, 2010. The increase in inventory and accounts payable was due to the purchase of raw materials for new products that will be released during the third quarter of 2011. The net change in accrued income taxes was due to an increase in the balance of \$105,000 at June 30, 2011 compared to the prior year increase in the balance of \$65,000 at June 30, 2010.

Cash used in investing activities was \$9,000 and \$70,000 for the six-month periods ended June 30, 2011 and 2010, respectively. The significant decrease in cash used by investing activities was due to net purchases of Treasury Bills with maturity dates of more than three months, with a net purchase of \$0 in 2011, compared to net purchases of \$68,000 during 2010. During the six-month period ended June 30, 2011, the Company purchased \$4,300,000 in Treasury Bills and had \$4,300,000 in Treasury Bills mature. During the six-month period ended June 30, 2010, the Company purchased \$5,048,000 in Treasury Bills and had \$4,980,000 in Treasury Bills mature.

Cash used in financing activities was \$254,000 and \$263,000 for the six months ended June 30, 2011 and 2010, respectively. During the six-month periods ended June 30, 2011 and 2010, the Company paid aggregate dividends of \$272,000 and \$270,000, respectively. During the six-month periods ended June 30, 2011 and 2010, we had \$7,000 in stock purchases under the Employee Stock Purchase Plan for each year. During the six-month period ended June 30, 2011, we had two employees exercise stock options in the amount of \$11,000. There were no options exercised during 2010.

Our ongoing cash requirements will be primarily for capital expenditures, research and development in both the Production Monitoring and AutoData Systems divisions, and working capital. Management believes that cash on hand and any cash provided by operations will be sufficient to meet our cash requirements through at least the next 12 months.

Our primary investments are 343,267 shares of Rudolph Technologies, Inc. (“Rudolph”), listed on the Nasdaq stock market and 551,759 shares of PPT Vision, Inc (PPT), listed on the Pink Sheets. The Rudolph and PPT investments were valued at \$3,676,000 and \$55,000, respectively, as June 30, 2011. The investments are accounted for using the available-for-sale method. The investments are subject to fluctuations in market price and could have a negative effect on our liquidity, if the market price declines.

Off-balance Sheet Arrangements

As of June 30, 2011, the Company had no off-balance sheet arrangements or transactions.

FORWARD-LOOKING STATEMENTS

This Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements regarding our expectations, beliefs, intentions or strategies regarding the future. Forward-looking statements include, but are not limited to, statements relating to our marketing efforts or our efforts to accelerate growth; our expectation of continued increased travel and marketing expenses; statements relating to management’s beliefs with respect to the economic recovery; our beliefs with respect to the impact of certain factors on our operating results; our intention to hold our Treasury Bills until maturity; management’s intention that we not become an investment company; our expected use of cash on hand; our cash requirements; and the sufficiency of our cash flows. Any statement that is not based solely upon historical facts, including strategies for the future and the outcome of events that have not yet occurred, is considered a forward-looking statement.

All forward-looking statements in this document are based on information available to us as of the date hereof, and we assume no obligation to update any such forward-looking statements, other than as required by law. It is important to note that our actual results could differ materially from those in such forward-looking statements. The forward-looking statements we make in this Quarterly Report are subject to certain risks and uncertainties that could cause future results to differ materially from our recent results or those projected in the forward-looking statements, including the accuracy of management’s assumptions with respect to industry trends, fluctuations in industry conditions, the impact of the global economy, the uncertainty of the impact of the recently-enacted healthcare reform, the accuracy of management’s assumptions regarding expenses and our cash needs and those listed under the heading “Cautionary Statements” under “Item 1—Business,” in our Annual Report on Form 10-K for the year ended December 31, 2010.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not Applicable.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of the Company’s management, the Company’s principal executive officer and principal financial officer have concluded that the Company’s disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (“Exchange Act”) were effective as of June 30, 2011 to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms and (ii) accumulated and communicated to the Company’s management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company’s internal control over financial reporting during the second quarter of 2011, which were identified in connection with management’s evaluation required by paragraph (d) of Rules 13a-15 and 15d-15 under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings - None.

Item 1A. Risk Factors - Not Applicable.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds - None.

Item 3. Defaults Upon Senior Securities - None.

Item 4. [Removed and Reserved]

Item 5. Other Information - None.

Item 6. Exhibits

(a) Exhibits - See Exhibit Index following signature page.

SIGNATURES

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.

Electro-Sensors, Inc.

August 12, 2011

/s/ Bradley D. Slye

Bradley D. Slye
Chief Executive Officer and Chief Financial Officer

EXHIBIT INDEX
ELECTRO-SENSORS, INC.
FORM 10-Q FOR QUARTER ENDED JUNE 30, 2011

Exhibit	Description
31.1	Certification of CEO and CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following financial information from Electro-Sensors, Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2011, formatted in eXtensible Business Reporting Language (XBRL): (i) Condensed Consolidated Balance Sheet as of June 30, 2011 and December 31, 2010, (ii) Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2011 and June 30, 2010, (iii) Condensed Consolidated Statements of Cash Flows for the three and six months ended June 30, 2011 and June 30, 2010, and (iv) Notes to Condensed Consolidated Financial Statements.*

*Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files in Exhibit 101 to this Quarterly Report on Form 10-Q shall not be deemed to be "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and shall not be deemed part of a registration statement, prospectus or other document filed under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filings.

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

I, Bradley D. Slye, certify that:

1. I have reviewed this report on Form 10-Q of Electro-Sensors 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. I am 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 my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me 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 my 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 my 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. I have disclosed, based on my 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.

August 12, 2011

/s/ Bradley D. Slye
Bradley D. Slye
Chief Executive Officer and Chief Financial Officer

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

In connection with the Quarterly Report of Electro-Sensors, Inc. (the “Company”) on Form 10-Q for the quarter ended June 30, 2011 as filed with the Securities and Exchange Commission (the “Report”), I, Bradley D. Slye, Chief Executive Officer and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §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.

August 12, 2011

/s/ Bradley D. Slye
Bradley D. Slye
Chief Executive Officer and Chief Financial Officer