EMCORE Introduces EN-150 Precision Fiber Optic Gyro-Based Inertial Measurement/Navigation Unit at Farnborough Airshow

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ALHAMBRA, Calif., July 16, 2018 (GLOBE NEWSWIRE) -- EMCORE Corporation (NASDAQ:EMKR), a leading provider of advanced *Mixed-Signal Optics* products that provide the foundation for today's high-speed communication network infrastructures and leading-edge defense systems, announced today the introduction of its new EN-150 Inertial Measurement/Navigation Unit for unmanned aerial vehicles, dismounted soldiers and weaponry, platform stabilization and applications where GPS is unavailable. Designed with options for full navigation, or as a higher performance, smaller size replacement for Ring Laser (RLG) Inertial Measurement Units (IMUs), the EMCORE EN-150 is the smallest, most affordable Fiber Optic Gyro (FOG)-based IMU available today at its performance level. The unit is being introduced at the Farnborough International Airshow July 16-20 at the Farnborough Exhibition & Conference Centre, Farnborough, England, Hall 4, Stand #4906.

The EN-150 Inertial Measurement/Navigation Unit expands on EMCORE's IMU product line that also includes the EN-300. Measuring a mere 2.6" in diameter by 2.24" tall with only 11 cubic inches total volume, the EN-150 is a three-axis, closed-loop FOG design that is one-third the volume and size of the competing units. It features the EMCORE's proprietary, solid-state FOG transceiver with next-generation, integrated Field Programmable Gate Array (FPGA) electronics to deliver up to twice the performance of legacy IMUs with increased reliability and lower cost.

The EN-150 can be ordered in performance versions with bias drift as low as 0.5 degree/hr and Angle Random Walk (ARW) of 0.02 degree/rt-hr. This makes it better suited for precise targeting, line-of-sight stabilization and GPS denied navigation than older generation RLG units with bias drift typically between 1 to 5 degree/hr. Bias drift is an important measure of accuracy and precision of the IMU, with lower bias models delivering higher performance overall. The internal signal processing of the EN-150 IMU provides two standard IMU outputs, raw acceleration and rate data at 600Hz, and navigation data at 100Hz that incorporates coning and sculling compensation. The unit also has options for full stand-alone or aided navigation utilizing external sensors such as GPS.

"The EN-150 is the smallest FOG-based IMU available and is a functional replacement for legacy products, offering significantly better performance at a much smaller size," said David Faulkner, EMCORE's Vice President and General Manager of Aerospace & Defense. "This latest addition to our navigation systems product line leverages the technology designed into our EN-300 to deliver the advantages of a FOG IMU at lower cost than RLG units, and at a size previously only achieved with MEMs based sensors."

Dr. K.K. Wong, Senior Director of Fiber Optic Gyro Products for EMCORE, added, "Our new EN-150 provides our customers the flexibility of choosing navigation options that best fit their application, or to simply replace their older technology RLG IMU with a higher performance, smaller size product. The unit's digital interface is fully programmable within EMCORE's factory allowing it to directly replace lower performing units without the expense of changing the customer's interface."

EMCORE's new EN-150 Inertial Measurement/Navigation Unit and the Company's complete line of Fiber Optic Gyro and Inertial Navigation products are being showcased at the Farnborough International Airshow July 16-20 at the Farnborough Exhibition & Conference Centre, Farnborough, England, Hall 4, Stand #4906.

About EMCORE
EMCORE Corporation is a leading provider of advanced *Mixed-Signal Optics* products that provide the foundation for today's high-speed communication network infrastructures and leading-edge defense systems. Our optical chips, components, subsystems and systems enable broadband and wireless providers to continually enhance their network capacity, speed and coverage to advance the free flow of information that empowers the lives of millions of people daily. The *Mixed-Signal Optics* technology at the heart of our broadband transmission products is shared with our fiber optic gyros and military communications links to provide the aerospace and defense markets state-of-the-art systems that keep us safe in an increasingly unpredictable world. EMCORE's performance-leading optical components and systems serve a broad array of applications including cable television, fiber-to-the-premise networks, telecommunications, data centers, wireless infrastructure, satellite RF fiber links, navigation systems and military communications. EMCORE has fully vertically-integrated manufacturing capability through its world-class Indium Phosphide (InP) wafer fabrication facility at our headquarters in Alhambra, California, and is ISO 9001 certified in Alhambra and at our facility in Beijing, China. For more information, please visit www.emcore.com.

Forward-looking statements:
The information provided herein may include 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, as amended. Such statements include statements regarding EMCORE's plans, strategies, business prospects, growth opportunities, changes and trends in our business and expansion into new markets. These forward-looking statements are based on management's current expectations, estimates, forecasts and projections about EMCORE and are subject to risks and uncertainties that could cause actual results and events to differ materially from those stated in the forward-looking statements, including without limitation, the following: (a) the rapidly evolving markets for EMCORE's products and uncertainty regarding the development of these markets; (b) EMCORE's historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) delays and other difficulties in commercializing new products; (d) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (e) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (f) actions by competitors; and (g) other risks and uncertainties discussed under Item 1A - Risk Factors in our Annual Report on Form 10-K for the fiscal year ended September 30, 2017, as updated by our subsequent periodic reports. Forward-looking statements contained in this press release are made only as of the date hereof, and EMCORE undertakes no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

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