

# Emcore fiber optic sensor



## Overview

EMCORE's state-of-the-art Fiber Optic Gyroscope (FOG) and Ring Laser Gyro (RLG) technology, combined with our Systron Donner line of world-leading quartz MEMS navigation products, achieve higher performance with lower CSWaP than competing units and legacy designs. The key differentiator of EMCORE is its ability to address multiple performance tiers, from tactical to navigation grade, all within a single supplier ecosystem. Our comprehensive product suite serves a broad range of tactical, navigation- t performance Fiber Optic and MEMS Inertial Sensors & Systems. The lasers and components utilize "Genuine ORTEL Technology" which has symbolized the highest. DSP-1760 Fiber Optic Gyro (FOG) Sensor (Non-ITAR) The DSP-1760 FOG is a versatile, solid-state navigation-grade gyro that is available in 1, 2 or 3 axes, encased within an easy-to-integrate an environmentally sealed housing. Providing high bandwidth and low noise, the DSP-1760 gyro offers superior. EMCORE is a trusted supplier of high-quality tactical-grade Quartz MEMS, as well as closed-loop and open-loop FOG products to Tier 1 Primes and global aerospace and defense companies.



## Article Content

EMCORE advances photonic integrated chip (PIC) technology

The technology is based on the groundbreaking integrated optical chip that replaces individual fiber optic components with a silicon waveguide system that results in improved optical

Fiber Optic, MEMS and Ring Laser Gyro Solutions for Navigation ...

EMCORE Navigation Program Highlights EMCORE designs and manufactures the world's highest-performance Fiber Optic Gyro (FOG), Ring Laser Gyro (RLG), and MEMS inertial sensors and

High Performance MEMS Inertial Sensors & Navigation

EMCORE Corporation is a leading designer and manufacturer of high-performance Fiber Optic Gyro (FOG), Ring Laser Gyro (RLG), and MEMS

EG-200 Fiber Optic Gyroscope (FOG)

The EG-200 Fiber Optic Gyro from EMCORE is designed for fast, accurate navigation, gyrocompassing, and low-noise line-of-sight stabilization. Leveraging

Cloud Light Technology

Cloud Light is a manufacturer of optical modules and optical sensors. The company offers products such as data transmission for fiber optic

Fiber Optic, Ring Laser and MEMS Solutions

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Fiber Optic, Ring Laser and MEMS Solutions

EMCORE's Navigation & Inertial Sensing programs have received multiple U.S. patents and have been qualified for many key military programs.

Fiber Optic & MEMS Solutions for Navigation & Inertial Sensing

The tactical performance of the SDI170 IMU is based on EMCORE's mature, proven, dependable and accurate quartz MEMS inertial sensor technology in our SDI500 tactical-grade IMU.

Products

C-100 COMPASS ENGINE Magnetic Sensors and Fluxmeters DSP-3000 FIBER OPTIC GYRO (FOG) (NON-ITAR) IMPROVED SPECIFICATION Gyroscope,

Applications

Design success into your next project with EMCORE's proven precision fiber optic gyro (FOGs), Ring Laser Gyro (RLG) and quartz MEMS solutions for navigation

#### EMCORE Develops Fiber Optic Sensors and Systems

The low-noise, high-stability system incorporates proprietary integrated electronics and optics devices, providing stand-alone aircraft grade navigator

#### Fiber Optic & Ring Laser Gyro, MEMS Inertial Sensors & Navigation

EMCORE Corporation is a leading designer and manufacturer of the world's highest-performance Fiber Optic Gyro (FOG), Ring Laser Gyro (RLG), and MEMS-based inertial sensors and navigation

#### Fiber Optic & MEMS Solutions for Navigation & Inertial Sensing

EMCORE Navigation Program Highlights EMCORE designs and manufactures the world's highest performance Fiber Optic and MEMS Inertial Sensors & Systems. Our single-axis, closed-loop Fiber

#### PIC Technology

While Fiber Optic Gyroscopes (FOGs) and other optical sensors rely on light interference to measure rotation, PIC technology advances this measurement capability by providing highly stable, integrated

#### EMCORE Integrates Photonic Integrated Chip

EMCORE Corporation, the aerospace and defense industry's leading independent provider of inertial navigation solutions, has unveiled a significant

#### DSP-1760 Fiber Optic Gyro (FOG) Sensor (Non-ITAR)

DSP-1760 Fiber Optic Gyro (FOG) Sensor (Non-ITAR) The DSP-1760 FOG is a versatile, solid-state navigation-grade gyro that is available in 1, 2 or 3 axes,

#### Unmanned Aerial Vehicles (UAV)

UAVs operate in dynamic and often unpredictable environments, where precise navigation, stability, and control are essential for mission success.

#### US Fiber Optic Sensor Market Size, Trends & Forecast 2035

US Fiber Optic Sensor Market is predicted to reach 2696 US\$ Million, at a 10.15% CAGR by driving industry size, share, top company analysis, segments research, trends and forecast report

#### EMCORE Introduces New IMUs with PIC Technology

EMCORE has launched a new line of Inertial Measurement Units (IMUs), which includes three high-performance IMUs with tactical-grade photonic

#### Laser, Photodiodes and Receivers from EMCORE

ORTEL (formerly EMCORE) fiber optic components serve a wide variety of applications from transmission of analog signals for video, voice and data to ultra

Emcore LLC

EMCORE has a long history of supplying fiber optic, ring laser gyro, and MEMS products that provide unprecedented miniaturization, high-frequency, dynamic range, and extreme temperature and

FOG & Quartz MEMS Inertial Sensors

EMCORE Corporation is a leading designer and manufacturer of the world's highest-performance Fiber Optic Gyro (FOG), Ring Laser Gyro (RLG), and MEMS-based

EMCORE Corp | Military Aerospace

More Info on EMCORE Corp Designs and manufactures Indium Phosphide (InP) optical chips, components and systems for the broadband and specialty fiber optics market. EMCORE pioneered

EMCORE-Hawkeye TM EG-1300 Lithium-Niobate Fiber Optic

EMCORE's EG-1300 is the clear choice when selecting a precision solid-state gyroscope component for navigational grade applications.

DSP-1760 Fiber Optic Gyro (FOG) Sensor (Non-ITAR)

Providing high bandwidth and low noise, the DSP-1760 gyro offers superior performance in bias stability, scale factor and angle random walk.

## Contact Us

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