

FOG50

Fiber Optic Gyroscope

Single axis fiber optic gyroscope, 50x50x36.5mm



Overview

AOA Tech cutting-edge Fiber Optic Gyroscope, a revolutionary navigation solution designed to meet the demands of modern applications requiring precise orientation and motion sensing. Utilizing advanced fiber optic technology, our gyroscope offers unparalleled accuracy and reliability, empowering users with the confidence to navigate complex environments with ease.

Features

- **High Precision:** our fiber optic gyroscope boasts exceptional precision in measuring angular velocity and orientation, delivering reliable data for critical navigation tasks.
- **Fast Response Time:** With rapid response capabilities, our gyroscope delivers real-time feedback, enabling swift adjustments and precise control in dynamic situations where timing is critical.
- **Wide Temperature Range:** the fibre optic gyro operates effectively across a broad temperature spectrum, providing reliable navigation data regardless of environmental conditions. Innovative fiber optic ring design resists temperature changes and magnetic fields.
- **Low Power Consumption:** Designed with energy efficiency, our fiber optic gyro minimizes power consumption. Single power supply (+5V) simplifies system design.

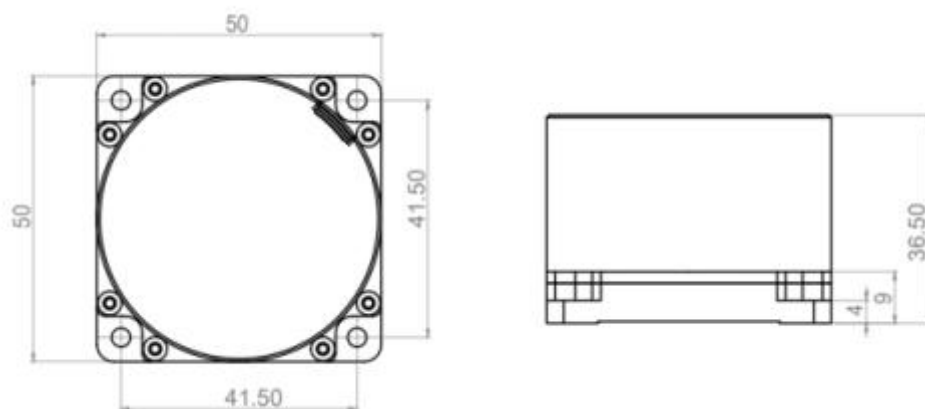
Application

- Aviation and Aerospace
- Marine and Underwater Navigation
- Land-Based Vehicles
- Oil and Gas Exploration
- Robotics and Autonomous Systems
- Industrial Automation

Technical Specifications

Parameter	FOG50A	FOG50B	FOG50C
Dynamic range (°/s)	±500	±500	±500
Zero bias stability (°/h)	≤0.30	≤0.20	≤0.10
Zero bias repeatability (°/h)	≤0.20	≤0.20	≤0.10
Scale factor nonlinearity (ppm)	≤20	≤20	≤20
Scale factor repeatability (ppm)	≤20	≤20	≤20
Total temperature scale factor repeatability (ppm)	≤1000	≤300	≤200
Magnetic field sensitivity (°/h/Gs)	-	-	≤0.05
Size (mm)	50x50x36.5		
Weight (g)	130 ± 10		
Bandwidth (Hz)	≥200		
Working temperature (°C)	-40~+60		

Structure diagram



For further information, please visit our website <https://www.aoatech.com>

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