



Building Block Type



Single Axis Fiber Optic Gyroscope for Stabilization and Positioning FG 150

FG 150 is a single axis fiber optic gyroscope which is required for stabilization and accurate positioning in a wide of applications such as antenna, aircraft camera, armoured vehicles, AGV, etc. FG 150 offers high quality performance in terms of bias repeatability and scale factor.



Applications

- Armoured Vehicle
- Aircraft Camera
- Auto Guided Vehicle (AGV)
- AHRS Integration

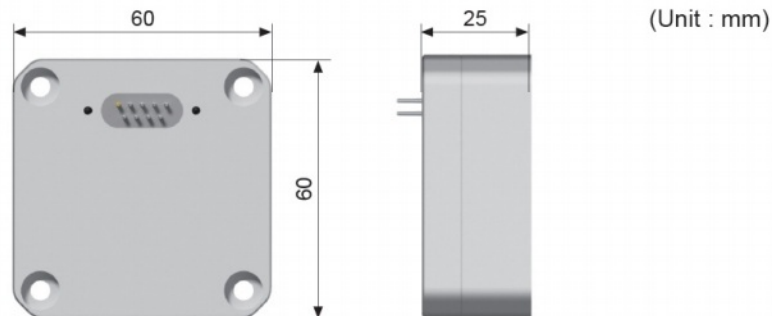
Specifications

Performance	
Rate Sensor	
Technology	Closed-loop FOG
Operating Range	$\pm 490^\circ/\text{sec}$
Bias Repeatability (over temp. range)	$\leq 1.0^\circ/\text{hr}$ (1 σ , RMS)
In-run Bias Stability	0.07 $^\circ/\text{hr}$ (typical, 1 σ)
	$\leq 0.1^\circ/\text{hr}$ (max, 1 σ)
Scale Factor Accuracy	$\leq 1,000$ ppm (1 σ , RMS)
Scale Factor Non-linearity (full rate, 25 $^\circ\text{C}$)	≤ 20 ppm
Angle Random Walk	0.035 $^\circ/\sqrt{\text{hr}}$ (typical, 1 σ)
Axis Misalignment	≤ 10 mRad
Electrical/Mechanical	
Start-up Time	< 0.6 sec
Signal Input/Output	UART(RS-422)
Baud Rate (UART)	Up to 460.8 Kbps
Data Rate	100 / 400 / 600 / 1,000 / 1,600 Hz ¹⁾
Input Voltage	+ 5 V
Power Consumption	1.3 W @ 25 $^\circ\text{C}$ (< 2.4 W, @ - 40 $^\circ\text{C}$)
Dimensions (W x D x H)	60 mm \times 60 mm \times 25 mm (2.3" \times 2.3" \times 0.98", w/o connector)
Weight	165 g (0.36 lbs)
Environment	
Humidity	Up to 95 %
Temperature (operating)	- 40 $^\circ\text{C}$ to +71 $^\circ\text{C}$ (- 40 $^\circ\text{F}$ to 160 $^\circ\text{F}$)
Shock	50 g, 11 msec, Sawtooth (operation)
Vibration (MIL-STD-810G)	7.7 g RMS (20 Hz to 2,000 Hz)

1) Select one data rate

The specification and technical information contained herein are subject to change without notice and are furnished without charge or obligation. They are given and accepted at recipients sole risks.

Case Dimensions



FIBERPRO Headquarters
 FIBERPRO USA
 FIBERPRO CHINA
www.fiberpro.com

Tel : +82-42-360-0030 Fax : +82-42-360-0050
 Tel : +1-408-835-7796
 Tel : +86-27-8663-5497 Fax : +86-27-8663-5701
sales@fiberpro.com