

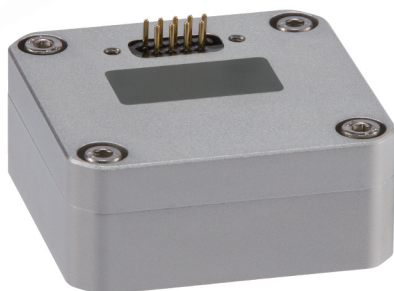


### Building Block Type



# 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

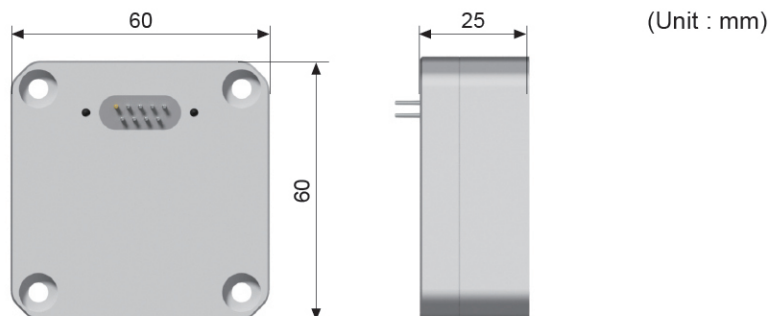
# Specifications

<b>Performance</b>	
<b>Rate Sensor</b>	
Technology	Closed-loop FOG
Operating Range	$\pm 490^\circ/\text{sec}$
Bias Repeatability (over temp. range)	$\leq 1.0^\circ/\text{hr}$ (1 $\sigma$ , RMS)
In-run Bias Stability	0.07 $^\circ/\text{hr}$ (typical, 1 $\sigma$ )
	$\leq 0.1^\circ/\text{hr}$ (max, 1 $\sigma$ )
Scale Factor Accuracy	$\leq 1,000$ ppm (1 $\sigma$ , RMS)
Scale Factor Non-linearity (full rate, 25 $^\circ\text{C}$ )	$\leq 20$ ppm
Angle Random Walk	0.035 $^\circ/\sqrt{\text{hr}}$ (typical, 1 $\sigma$ )
Axis Misalignment	$\leq 10$ mRad
<b>Electrical/Mechanical</b>	
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 <sup>1)</sup>
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)
<b>Environment</b>	
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](http://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](mailto:sales@fiberpro.com)