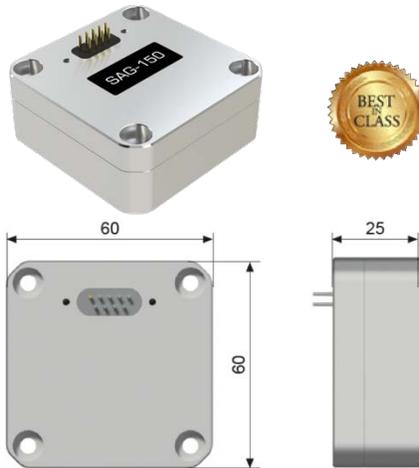


SAG-150

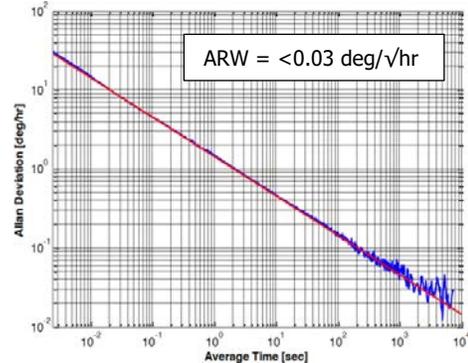
**SINGLE-AXIS
GYROSCOPE**



The **Inertial Labs SAG-150** is a Single-axis high performance Gyroscope, developed for different platforms Guidance & Navigation and Electro-Optical Systems, Gimbals, Line-Of-Site and Pan & Tilt Platforms stabilization and pointing applications. **SAG-150** utilizes advanced performance, tactical-plus-grade FOG gyroscope, of which size, power consumption, reliability and performance are ideal for accomplishing complex tasks requiring accurate stabilization of assorted platforms. Robust technology with proven reliability in the field, Inertial Labs Gyroscope solutions consistently deliver performance in all environments. Developed for use in particularly harsh environments, the **SAG-150** gyroscope can withstand extreme shock and vibration in accordance with MIL-STD-810 ground mobile use. Additionally, they are fully digitized (RS-422 interface), include Built-In-Test (BIT) functionalities and have no moving parts. Key advantages of the Inertial Labs **SAG-150** Gyroscope:



- Ultra Low Noise
- Low Latency
- Wide Bandwidth
- High Data Rate
- Low Bias Drift
- Low VRE
- High MTBF
- Affordable Price
- ITAR-free



SAG-150 is factory calibrated over operational temperature range with very low non-orthogonality and misalignment between sensitive elements, QA/QC tested and supplied with individual Calibration and Acceptance Test Certificates.

Performance Specifications

Parameter	Units	Value
Output signals		Angular rates, Temperature, Synchronization output
Color of enclosure		Silver
Data update rate	Hz	2000 (4000 is optional)
Start-up time	sec	0.5
Latency	msec	<1
Performance		
Number of Axis		1
Measurement range	deg/sec	± 490
Bandwidth (-3dB)	Hz	1000
Data update rate	Hz	2000 (4000 is optional)
Bias in-run stability (Allan Variance)	deg/hr	0.05
Bias instability & repeatability over temp. range, 1σ	deg/hr	<1
SF accuracy (over temperature range, 1σ)	ppm	100
SF non-linearity	ppm	20 ppm
Noise. Angular Random Walk (ARW)	deg/ $\sqrt{\text{hr}}$	0.03
Axis misalignment	mrad	<1
Environment		
Mechanical shock & Vibration		MIL-STD-810F/514.5/I
Operating temperature	deg C	-40 to +75
Storage temperature	deg C	-50 to +85
MTBF (G_M @ +65degC, operational)	hours	100,000
Sealing		IP-67
Electrical		
Supply voltage	V DC	5
Power consumption	Watts	1.3
Output Interface	-	RS-422
Output data format	-	Binary
EMC/EMI/ESD		MIL-STD-461G
Mechanical		
Size	mm	60 x 60 x 25
Weight	grams	165