






G150Z GYROSCOPE

Low Noise Analog MEMS Gyro

The G150Z Single Axis Gyro is a compact, low noise, analog MEMS gyroscope. This small, environmentally sealed gyro is rated for 500g shock and 6g RMS vibration. It is available in three rate ranges, 100°/s, 175°/s and 300°/s. It is ideal for stabilization, flight control, high-speed train monitoring, and automotive testing.



-  Low Noise: 0.001°/s/√Hz
-  Excellent Bias Stability: 1.2°/h
-  Analog Output
-  Factory Calibrated: -40°C to 85°C
-  NON-ITAR

Low Noise. High Performance.



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Performance (Available in any of the following rate ranges)

Parameter	Gyro		
Range	$\pm 100^\circ/\text{s}$	$\pm 175^\circ/\text{s}$	$\pm 300^\circ/\text{s}$
ARW / VRW	$0.001^\circ/\text{s}/\sqrt{\text{Hz}}$	$0.0018^\circ/\text{s}/\sqrt{\text{Hz}}$	$0.0022^\circ/\text{s}/\sqrt{\text{Hz}}$
Bias In-Run	$< 0.05^\circ/\text{s}$	$< 0.1^\circ/\text{s}$	$< 0.15^\circ/\text{s}$
Bias Over Temp.	$< 0.1^\circ/\text{s}$	$0.2^\circ/\text{s}$	$0.3^\circ/\text{s}$
Resolution	$0.0005^\circ/\text{s}$	$0.0009^\circ/\text{s}$	$0.001^\circ/\text{s}$
G Sensitivity	$0.01^\circ/\text{s}/\text{g}$	$0.015^\circ/\text{s}/\text{g}$	$0.02^\circ/\text{s}/\text{g}$
Scale Factor Error	$\leq 0.5\%$ (over temperature)		
Alignment	$< 4 \text{ mrad}$		

Environment

Shock	500 g $\frac{1}{2}$ sine 1 ms powered on
Vibration	6 g _{RMS} (20 Hz to 2 kHz)
Operating Temp	-40°C to +85°C
Non-Operating Temp	-55°C to +100°C

Interface

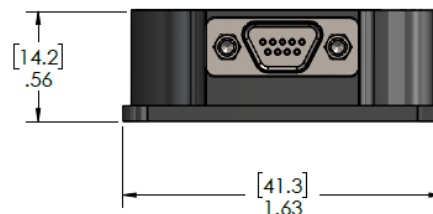
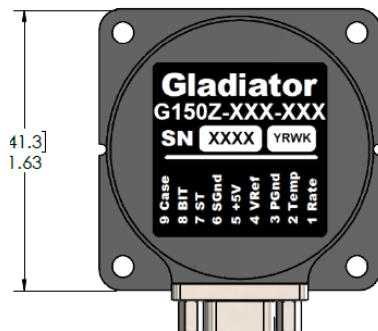
Data Format/Interface	Analog
Temperature Sensor	2.5V $\pm 0.05\text{V}$ DC Nom at 20°C
Start Up Time	$< 0.25 \text{ s}$
Self Test	Built In
Bandwidth	200 Hz

Electrical

Input Voltage	+5 VDC $\pm 5\%$
Input Current	20-25 mA

Mechanical

Mass	28 grams
Size	Metric: 4.13 dia x 1.42 = 19.01 cm ³ US: 1.63 dia x 0.56 = 1.16 in ³



www.gladiatortechnologies.com/g150z

All performance parameters 1 σ
Specification subject to change without notice

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