

Next - Gen



# G300D

## Triaxial Gyroscope with VELOX™



The Next-Gen, SX2, G300D Gyroscope offers **the latest advancements in inertial technology**. This high speed, three-axis MEMS gyro is equipped with low noise sensors, cutting edge VELOX™ processing and user configurable firmware with the most advanced features available. The G300D comes fully modeled and calibrated over temperature and is **the premier MEMS gyroscope for stabilization and precision measurement applications**.

0.0017°/s/ $\sqrt{\text{Hz}}$   
ARW

10 kHz  
Output Rate

0.075°/s  
Bias Over Temperature

600Hz  
Bandwidth

0.6  
Cubic Inches

20 $\mu\text{s}$   
Message Delay

**Low Noise. High Speed.**  
*Inertial Systems and Sensors*

 **GLADIATOR**  
TECHNOLOGIES

# G300D Gyroscope

## Performance

Range	490°/s
ARW	0.0017°/s/√Hz / 0.072°/√Hr
Bias In-Run	3.5°/h
Bias Over Temperature	0.075°/s
Scale Factor Error	500 ppm

## Environment

Shock (Operational)	1000g's ½ sine 1 msec powered
Vibration (Operational)	8 gRMS (50 Hz to 2 kHz)
Calibrated Temp	-50°C to 85°C
Storage Temp	-55°C to 85°C
G Sensitivity	< 0.01°/s/g
Reliability 55°C (MTBF)	>170,000 Hrs

## Interface

	VELOX™	VELOX™ Plus
Data Interface	RS-422/485	16/24/32 Bit
Data Rate	8 kHz	10 kHz
External Sync	8 kHz	10 kHz
Max Baud Rate	3.0 Mbaud	7.5 Mbaud (user specified)
Max Bandwidth	350 Hz	600 Hz
Digital Message Delay	57 µs	20 µs

## Electrical

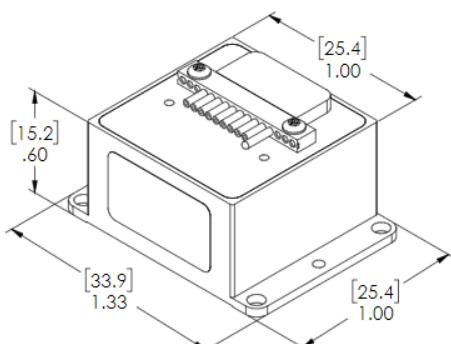
Input Voltage	+3.8 V to + 5.5 V Max (single sided)
Power Consumption	200 mW Typical / 250 mW Maximum

## Mechanical

Mass	19 grams
Size	Metric: 2.54 x 2.54 x 1.52 = 9.81 cm <sup>3</sup> US: 1.0 x 1.0 x 0.6 = 0.6in <sup>3</sup>

All performance parameters typical value  
 Specification subject to change without notice  
 Rev. 23.09.12

Further Technical  
 Information Available:  
[sales@gladiatortechologies.com](mailto:sales@gladiatortechologies.com)



**NON ITAR**  
**ECCN 7A994**



Gladiator Technologies  
 30329 Center St  
 Snoqualmie, WA 98065, USA

425.363.4180  
[www.gladiatortechologies.com](http://www.gladiatortechologies.com)  
[sales@gladiatortechologies.com](mailto:sales@gladiatortechologies.com)