

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/√Hz  
ARW

10 kHz  
Output Rate

0.075°/s  
Bias Over Temperature

600Hz  
Bandwidth

0.6  
Cubic Inches

100μs  
Message Delay

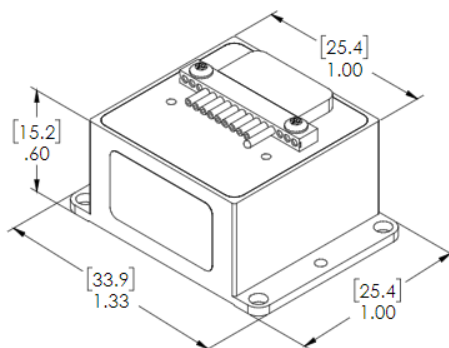
**Low Noise. High Speed.**  
*Inertial Systems and Sensors*



# G300D Gyroscope

Performance		
Range	490°/s	
ARW	0.0017°/s/√Hz / 0.072°/√hr	
Bias In-Run	3.5°/h	
Bias Over Temp.	0.075°/s	
G Sensitivity	< 0.002°/s/g	
Scale Factor Error	≤ 0.05%	
Alignment	0.5 mrad	
Environment		
Shock	1000g ½ sine 1 ms powered on	
Vibration	8gRMS (20 Hz to 2 kHz) random	
Calibrated Temp	-50°C to 85°C	
Non-Operating Temp	-55°C to 85°C	
Interface with VELOX™ and VELOX™ Plus Enhanced Options		
	VELOX™	VELOX™ Plus
Data Interface	RS422/485	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 (user specified)
Digital Message Delay	128 μs	100 μs
Electrical		
Input Voltage	+4.5 V to +5.5 V Max. Input (single sided)	
Power Consumption	250 mW Typical / 400 mW Maximum	
Mechanical		
Mass	19 grams ±1	
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. 4.29.21



**NON ITAR**  
 ECCN 7A994



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