



LandMark™ 005 IMU

with VELOX™



The Next-Gen, SX2, LandMark™005 IMU offers **the latest advancements in MEMS inertial technology**. This high speed, three-axis IMU is equipped with low noise sensors, cutting edge VELOX™ processing and user configurable firmware with the most advanced features available. The LandMark™005 IMU comes fully modeled and calibrated over temperature and is **the premier MEMS IMU 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

<29μs
Message Delay

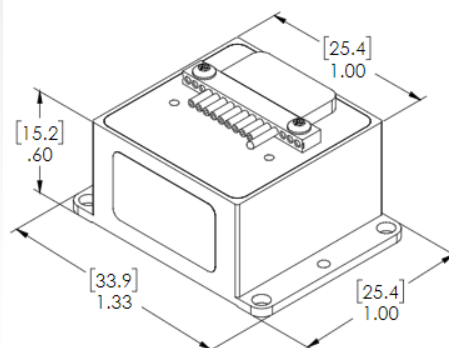
Low Noise. High Speed.
Inertial Systems and Sensors



LandMark™005 IMU

Performance		
Parameter	Gyro	Accel
Range	490°/s	15g
ARW/VRW	0.0017°/s/√Hz - 0.072°/√hr	0.04 mg/√Hz / 0.017 m/s/√hr
Bias Stability	3.5°/h	0.020 mg
Bias Over Temp.	0.075°/s	0.4mg
G Sensitivity	0.01°/s/g	1mg/g ²
Scale Factor Error	≤ 0.05%	
Alignment	0.5 mrad	
Environment		
Shock	1000g ½ sine 1 ms powered on	
Vibration	8 gRMS (50vHz 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	69 μs	29μs
Electrical		
Input Voltage	+3.8V 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 ³ US: 1.0 x 1.0 x 0.6 = 0.6in ³	

All performance parameters typical value
 Specification subject to change without notice
 Rev. 5.31.22



Further Technical
 Information Available:
gladiortechologies.com



NON ITAR
 ECCN 7A994

