

Next - Gen

LandMark™ 007X IMU

High Dynamic IMU with VELOX™



The Next-Gen, SX2, LandMark™007X IMU is built for high dynamic applications and offers the latest advancements in MEMS inertial technology. This high speed, six-axis IMU is equipped with low noise sensors, cutting edge VELOX™ processing and user configurable firmware with the most advanced features available. The LandMark™007X IMU comes fully modeled and calibrated over temperature and is the premier MEMS IMU for high dynamic stabilization and precision measurement applications.

0.0017°/s/√Hz
ARW

10 kHz
Output Rate

0.075°/s
Bias Over Temperature

24 gRMS
Vibration

2000°/s
Gyro Rate

200g
Accel Range

MISSION PROVEN

Inertial Sensors and Systems



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LandMark™007X IMU

Inertial Performance	Gyro Axes	Accel Axes	
Range	2000°/s	15 g	>15-200g
ARW / VRW	0.0017°/s/√Hz / 0.072°/vhr	40 μg/√Hz	5.6 mg √Hz
Bias In-Run	3.5°/h	20 μg	5 mg
Bias Over Temp	0.075°/s	< 0.4 mg	20 mg
Scale Factor Error	600 PPM	500 PPM	6,000 PPM
Vibration Rectification Error	1 °/hr/g²rms	1 °/hr/g²rms	

Environment

Shock (Operational)	1000 g ½ sine 1 ms powered on
Vibration (Operational)	24 gRMS (50 Hz to 2 kHz) random
Calibrated Temp	-50°C to 85°C
Storage Temp	-55°C to 85°C
G-Sensitivity	0.03°/s
Reliability 55°C (MTBF)	>110,000

Interface

Interface	VELOX™		VELOX™ Plus
	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	
Max Bandwidth	350 Hz	600 Hz	
Digital Message Delay	155 μs	114 μs	

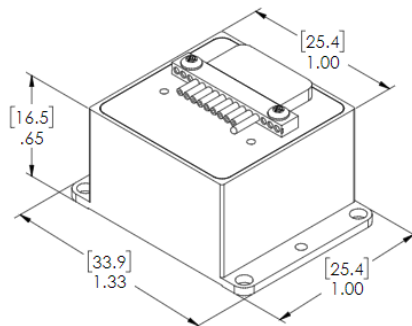
Electrical

Input Voltage	+3.8 V to + 5.5 V Max (single sided)
Power Consumption	280 mW Typical / 450 mW Maximum

Mechanical

Mass	25 grams ±0.5 g
Size	Metric: 2.54 x 2.54x 1.65 = 10.65 cm³ US: 1.0 x 1.0 x 0.65 = 0.65in³

All performance parameters 1σ
Specification subject to change without notice
Rev. 23.10.26



Further Technical
Information Available:

www.gladiatortechologies.com

NON ITAR
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