



LandMark™60 IMU

High Performance MEMS IMU

The LandMark™60 IMU is Gladiator Technologies' High Performance six-axis MEMS IMU. Equipped with low noise sensors, VELOX™ processing and user configurable firmware, the LandMark™60 IMU delivers precision measurement at output speeds ideal for stabilization applications.



Low Noise: $0.0016^\circ/\text{s}/\sqrt{\text{Hz}}$



Excellent Bias Stability: $3^\circ/\text{h}$



VELOX™ High Speed Processing



Factory Calibrated: -40°C to 85°C



NON-ITAR

Low Noise. High Performance.



GLADIATOR
TECHNOLOGIES

LandMark™ 60 IMU

Performance (available in any combination of gyro & accel ranges)

Parameter	Gyro		Accel	
Range	±250°/s	±490°/s	±6 g	±15 g
ARW / VRW	0.0016°/s/√Hz	0.002°/s/√Hz	0.04 mg/√Hz	0.05 mg/√Hz
Bias In-Run	3°/h	5°/h	0.025 mg	0.03 mg
Bias Over Temp.	< 90°/h	< 90°/h	< 1 mg	< 1.5 mg
Resolution	0.0008°/s	0.0014°/s	0.025 mg	0.03 mg
G Sensitivity	0.001°/s/g	0.001°/s/g	0.25 mg/g ²	0.25 mg/g ²
Scale Factor Error	≤ 500 ppm (over temperature)			
Alignment	< 0.5 mrad			

Environment

Shock	600 g ½ sine 1 ms powered on
Vibration	5.74 g _{RMS} (20 Hz to 3 kHz)
Operating Temp	-50°C to +85°C
Non-Operating Temp	-55°C to +85°C

Interface — with VELOX™ Processing

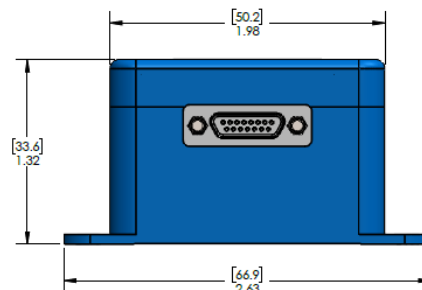
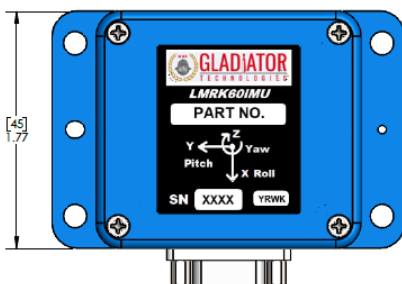
Output Data Rate	Up to 5 kHz (User Selectable)
External Sync	Up to 6 kHz (User Selectable)
Start Up Time	< 0.3 s
Data Format	16/24/32 - Bit
Data Interface	RS-422/RS-485 3 Mbaud & CAN 2.0B at 1 MHz
Bandwidth	250 Hz
Software	Development Kit Available

Electrical

Input Voltage	+7 V to +36 V Max. Input (single sided)
Power Consumption	500 mW Typical / 550 mW Maximum

Mechanical

Mass	115 grams
Size	Metric: 5.0 x 4.5 x 3.4 = 76 cm ³ US: 1.98 x 1.77 x 1.33 = 4.66 in ³



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