



LandMark™ 60LX IMU

High Performance MEMS IMU

The LandMark™ 60LX IMU is our highest performing six-axis MEMS IMU. Equipped with ultra low noise accelerometers, low noise gyros, VELOX™ processing, and user configurable firmware, the LandMark™ 60LX IMU is an excellent choice for stabilization, navigation, and automotive testing (CAN bus 2.0B interface).



Low Noise: 28 $\mu\text{g}/\text{VHz}$



Excellent Bias Stability: 4°/h



VELOX™ High Speed Processing



Factory Calibrated: -40°C to 85°C



NON-ITAR

Low Noise. High Performance.



GLADIATOR
TECHNOLOGIES

LandMark™ 60LX IMU

Performance

Parameter	Gyro	Accel
Range	$\pm 490^\circ/\text{s}$	$\pm 15 \text{ g}$
ARW / VRW	$0.0016^\circ/\text{s}/\sqrt{\text{Hz}}$	$0.028 \text{ mg}/\sqrt{\text{Hz}}$
Bias In-Run	$4^\circ/\text{h}$	$10 \mu\text{g}$
Bias Over Temp.	$0.03^\circ/\text{s}$	0.5 mg
Resolution	$0.0012^\circ/\text{s}$	$< 0.0018 \text{ mg}$
G Sensitivity	$0.001^\circ/\text{s}/\text{g}$	$0.25 \text{ mg}/\text{g}^2$
Scale Factor Error	$\leq 250 \text{ ppm (over temperature)}$	$\leq 100 \text{ ppm (over temperature)}$
Alignment	$< 0.5 \text{ mrad}$	

Environment

Shock	$600 \text{ g } 1/2 \text{ sine } 1 \text{ ms powered on}$
Vibration	$5.74 \text{ g}_{\text{RMS}} (20 \text{ Hz to } 3 \text{ kHz})$
Operating Temp	$-50^\circ\text{C to } +85^\circ\text{C}$
Non-Operating Temp	$-55^\circ\text{C to } +85^\circ\text{C}$

Interface — with VELOX™ Processing

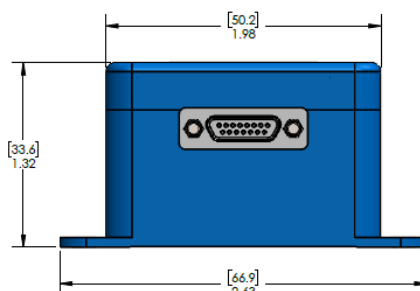
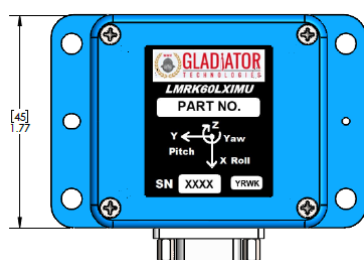
Output Data Rate	Up to 2.5 kHz (User Selectable)
External Sync	Up to 4 kHz (User Selectable)
Start Up Time	$< 0.3 \text{ s}$
Data Format	16/24/32 - Bit
Data Interface	RS-422/RS-485 3 Mbaud & CAN 2.0B at 1 MHz
Bandwidth	250 Hz
Software	Development Kit Available

Electrical

Input Voltage	$+7 \text{ V to } +36 \text{ V Max. Input (single sided)}$
Power Consumption	$550 \text{ mW Typical} / 600 \text{ mW Maximum}$

Mechanical

Mass	125 grams
Size	Metric: $5.0 \times 4.5 \times 3.4 = 76.5 \text{ cm}^3$ US: $1.98 \times 1.77 \times 1.33 = 4.66 \text{ in}^3$



www.gladiatortechnologies.com/landmark60LX

All performance parameters 1σ
 Specification subject to change without notice
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