

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: $28 \mu\text{g}/\sqrt{\text{Hz}}$



Excellent Bias Stability: $4^\circ / \text{h}$



VELOX™ High Speed Processing



Factory Calibrated: -40°C to 85°



NON-ITAR

LandMark™60LX IMU

Performance

Parameter	Gyro	Accel
Range	$\pm 490^\circ /s$	$\pm 15g$
ARW/VRW	$0.0016^\circ /s/\sqrt{Hz}$	$0.028mg/\sqrt{Hz}$
BiasIn-Run	$4^\circ /h$	$10\mu g$
BiasOverTemp.	$0.03^\circ /s$	$0.5mg$
Resolution	$0.0012^\circ /s$	$<0.0018mg$
GSensitivity	$0.001^\circ /s/g$	$0.25mg/g^2$
ScaleFactorError	$\leq 250ppm(\text{overtemperature})$	$\leq 100ppm(\text{overtemperature})$
Alignment	$<0.5mrad$	

Environment

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

Interface — with VELOX™ Processing

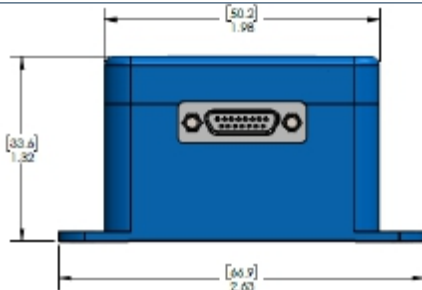
OutputDataRate	Upto $2.5kHz$ (UserSelectable)
ExternalSync	Upto $4kHz$ (UserSelectable)
StartUpTime	$<0.3s$
DataFormat	16/24/32-Bit
DataInterface	RS-422/RS-485 3Mbaud & CAN 2.0B at 1MHz
Bandwidth	250Hz
Software	DevelopmentKit Available

Electrical

InputVoltage	$+7V \text{ to } +36V$ Max. Input (singlesided)
PowerConsumption	550mW Typical / 600mW Maximum

Mechanical

Mass	125grams
Size	33 Metric: $5.0 \times 4.5 \times 3.4 = 76.5 \text{ cm}$ US: $1.98 \times 1.77 \times 1.33 = 4.66 \text{ in}$



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