



# LandMark™60 INS/GPS

## High Performance Inertial Navigation System

The LandMark™60 INS/GPS is our highest performing, lowest noise INS/GPS with VELOX™ Technology, CAN bus output, and RTK input. This robust unit is well suited for flight control, navigation, image & antenna stabilization, and automotive testing.



Low Noise: 0.0016°/s/√Hz



Excellent Inertial Performance: 8 NMPH



VELOX™ High Speed Processing



Factory Calibrated: -50°C to 85°C



NON-ITAR

# Low Noise. High Performance.



# GLADIATOR

TECHNOLOGIES

# LandMark™ 60 INS/GPS

## Performance

Parameter	Gyro	Accel
Range	±490°/s	±15 g
ARW / VRW	0.0016°/s/√Hz	0.028 mg/√Hz
Bias Over Temp.	< 0.03°/s	< 0.5 mg
Resolution	0.01°/s	0.03 mg
Pitch and Roll Angel	±0.1° typical	±0.1° typical
G Sensitivity	0.001°/s/g	0.25 mg/g <sup>2</sup>
Scale Factor Error	≤ 500 ppm	≤ 100 ppm
Alignment	< 0.5 mrad	

## Environment

Shock	500 g ½ sine 1 ms powered on	
Vibration	6 g <sub>RMS</sub> (20 Hz to 2 kHz)	
Temperature	Operating: -50°C to +85°C	Storage: 55°C to +85°C

## INS/GPS Performance

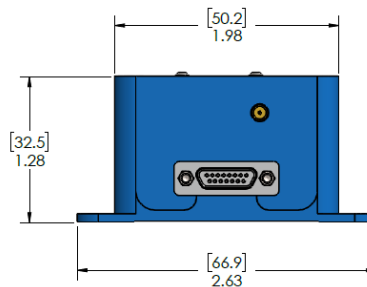
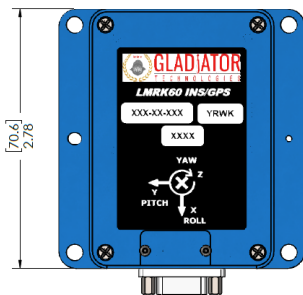
Free Inertial Typical	12 NMPH (< 60 sec duration)	
Heading Accuracy	0.3°	
GNSS Receiver	GPS L1C/A L1oh BEIDOU B1 GALILEO E1B/C	
SBAS	WASS EGNOS QZSS MSAS	2.0 m
Max Navigation Update Rate (GPS)	Up to 8 Hz	
GPS Horizontal Position Accuracy	Autonomous 2.5 m	
Startup Time	< 0.65 sec typical (alignment < 2 minutes)	
Update Rate	100, 200, 600 Hz	
Software	Development Kit Available	

## Electrical

Input Voltage	+7 V to +36 V Max. Input (single sided)	
Power Consumption	900 mW Typical / 1200 mW Maximum	

## Mechanical

Size and Mass	Metric: 5.03 x 3.18 x 7.08 = 113 cm <sup>3</sup> US: 1.98 x 1.25 x 2.78 = 6.88 in <sup>3</sup> 160 grams	
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