



# LandMark™65 IMU

High Dynamic MEMS IMU

The LandMark™65 IMU is Gladiator Technologies' High Dynamic, High Performance six-axis MEMS IMU. Equipped with low noise sensors, VELOX™ processing and user configurable firmware., this IMU is designed to perform in high dynamic environments up to 2000°/s, 40 g, high shock and high vibration.



-  Low Noise: 0.002°/s/√Hz
-  Excellent Bias Stability: 7°/h
-  VELOX™ High Speed Processing
-  Factory Calibrated: -50°C to 85°C
-  NON-ITAR

Low Noise. High Performance.



# LandMark™ 65 IMU

## Performance

Parameter	Gyro	Accel
Range	±2000°/s	±40 g
ARW / VRW	0.002°/s/√Hz	0.035 mg/√Hz
Bias In-Run	7°/h	0.01 mg
Bias Over Temp.	< 0.03°/s	0.5 mg ,1.0 mg max
Resolution	0.005°/s	0.0064 mg
G Sensitivity	0.003°/s/g	0.4 mg/g <sup>2</sup>
Scale Factor Error	≤ 1000 PPM (over temperature)	
Alignment	< 0.5 mrad	

## Environment

Shock	1000 g ½ sine 0.5 msec, unpowered
Vibration	15 g <sub>RMS</sub> (50 Hz to 2 kHz)
Operating Temp	-50°C to +85°C
Non-Operating Temp	-55°C to +85°C

## Interface — with VELOX™ Processing

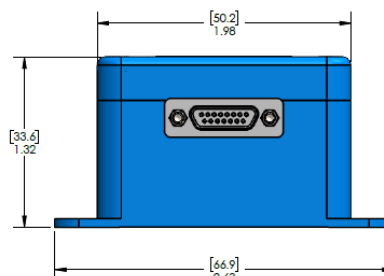
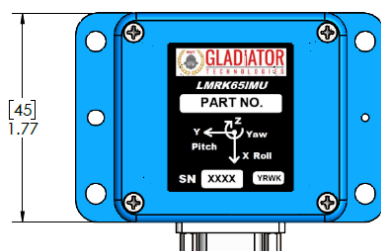
Update Rate	Up to 2.5 kHz (User Selectable)
External Sync	Up to 4 kHz (User Selectable)
Start Up Time	< 350 ms
Data Format	16/24/32 - Bit
Data Interface	RS-422/RS-485 6 Mbaud & CAN 2.0B at 1 MHz
Bandwidth	250 Hz
Software	Development Kit Available

## Electrical

Input Voltage	+7 V to +36 V Max. Input (single sided)
Power Consumption	500 mW Typical / 600 mW Maximum

## Mechanical

Mass	≤ 115 grams
Size	Metric: 5.0 x 4.5 x 3.4 = 76.5 cm <sup>3</sup> US: 1.98 x 1.77 x 1.33 = 4.66 in <sup>3</sup>



[www.gladiatortechnologies.com/landmark65](http://www.gladiatortechnologies.com/landmark65)

All performance parameters 1σ  
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