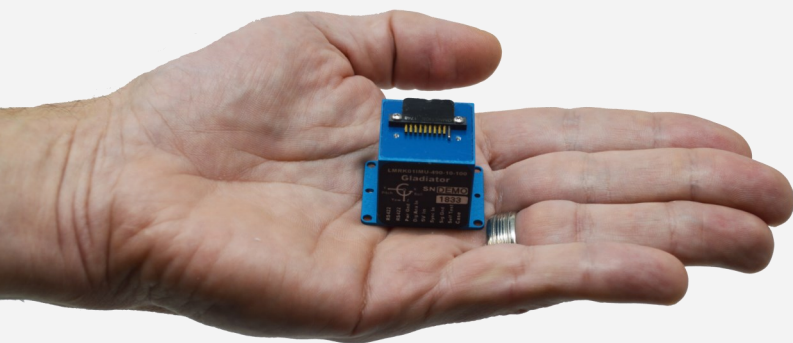


LandMark™01 IMU

Low Cost MEMS IMU

The LandMark™01 IMU is Gladiator Technologies' most affordable, low noise, six-axis MEMS IMU. Equipped with VELOX™ Processing, the LandMark™01's low cost, small size, and performance make it ideal for applications in stabilization, low cost navigation, and flight testing.



-  Low Noise: 0.0035°/s/√Hz
-  10°/h Bias Stability
-  VELOX™ High Speed Processing
-  Factory Calibrated: -50°C to 85°C
-  NON-ITAR

Low Noise. High Performance.



LandMark™01 IMU

Performance		
Parameter	Gyro	Accel
Range	±490°/s	±15 g
ARW / VRW	0.0035°/s/√Hz	0.09 mg/√Hz
Bias In-Run	10°/h	0.055 mg
Bias Over Temp.	< 0.1°/s	< 1.5 mg
Resolution	0.001°/s	0.035 mg
G Sensitivity	0.002°/s/g	1.5 mg/g ²
Scale Factor Error	≤ 0.075%	≤ 0.07%
Alignment	< 1 mrad	
Environment		
Shock	500 g ½ sine 1 ms powered on	
Vibration	8 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		
Update Rate	Up to 2.5 kHz	
External Sync	Up to 5 kHz	
Start Up Time	< 0.3 sec	
Data Format	16/24/32 - Bit	
Data Interface	RS-422/RS-485	
Bandwidth	350 Hz	
Software	Development Kit Available	
Electrical		
Input Voltage	+3.8 V to +5.5 V Max. Input (single sided)	
Power Consumption	200 mW Typical / 270 mW Maximum	
Mechanical		
Mass	≤ 40 grams	
Size	Metric: 2.54 x 2.54 x 2.43 = 15.7 cm ³ US: 1.00 x 1.00 x 0.96 = 0.96 in ³	

