LandMark™ 007 IMU

High Dynamic IMU with VELOX™

The Next-Gen, SX2, LandMark™007 IMU is built for high dynamic applications and offers the latest advancements in MEMS inertial technology. This high speed, three-axis IMU is equipped with low noise sensors, cutting edge VELOX™ processing and user configurable firmware with the most advanced features available. The LandMark™007 IMU comes fully modeled and calibrated over temperature and is the premier MEMS IMU for high dynamic stabilization and precision measurement applications.

0.0017°/s/√Hz ARW	10 kHz Output Rate
0.075°/s Bias Over Temperature	600Hz Bandwidth
2000°/s Gyro Rate	98g Accel Range

Low Noise. High Speed.

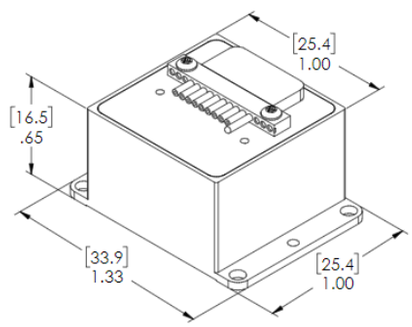
Inertial Systems and Sensors

MMV GLADIATOR TECHNOLOGIES

LandMark™007 IMU

Performance		
Parameter	Gyro	Accel
Range	2000°/s	98g
ARW	0.0017°/s/√Hz / 0.072°/√Hr	5 mg √Hz
Bias In-Run	3.5°/h	5 mg
Bias Over Temp.	0.075°/s	60 mg
G Sensitivity	0.01°/s/g	1 mg/g^2
Scale Factor Error	≤ 0.05% (over temperature)	6000 PPM
Alignment	0.5 mrad	5 mrad
Environment		
Shock	1000 g ½ sine 1 ms powered on	
Vibration	8 g_{RMS} (50 Hz to 2 kHz) random	
Calibrated Temp	-50°C to 85°C	
Non-Operating Temp	-55°C to 85°C	
Interface with VELOX™ and VELOX™ Plus Enhanced Options		
	VELOX™	VELOX™ Plus
Data Interface	RS422/485 16/24/32 Bit	
Data Rate	8 kHz	10 kHz
External Sync	8 kHz	10 kHz
Max Baud Rate	3.0 Mbaud	7.5 Mbaud (user specified)
Max Bandwidth	350 Hz	600 Hz
Digital Message Delay	155 µs	114 µs
Electrical		
Input Voltage	+3.8V to +5.5 V Max. Input (single sided)	
Power Consumption	280 mW Typical / 450 mW Maximum	
Mechanical		
Mass	25 grams ±1	
Size	Metric: 2.54 x 2.54x 1.65 = 10.65 cm^3 US: 1.0 x 1.0 x 0.65 = 0.65in^3	

All performance parameters 1σ
Specification subject to change without notice
Rev. 5.31.22



Further Technical Information Available:

gladiatortechnologies.com

NON ITAR
ECCN 7A994

MMV
GLADIATOR
TECHNOLOGIES