



# MRM60 IMU

## High Performance Analog MEMS IMU

The MRM60 is a six-axis, analog IMU featuring low noise gyros and accelerometers. This IMU is designed for applications in stabilization, motion monitoring, navigation, and other applications requiring a high performance IMU with analog output



-  Low Noise:  $<0.0016^\circ/\text{s}/\sqrt{\text{Hz}}$
-  Excellent Bias Stability:  $3^\circ/\text{Hour}$
-  Analog Output:  $\pm 2.5 \text{ V}$  or  $\pm 5 \text{ V}$
-  Factory Calibrated:  $-50^\circ\text{C}$  to  $85^\circ\text{C}$
-  NON-ITAR

# Low Noise. High Performance.



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## Performance (available in any combination of gyro & accel ranges)

Parameter	Gyro		Accel	
	Range	±250°/s	±490°/s	±6 g
ARW / VRW	0.0016°/s/√Hz	0.0016°/s/√Hz	0.04 mg/√Hz	0.05 mg/√Hz
Bias In-Run	3°/h	5°/h	0.025 mg	0.03 mg
Bias Over Temp.	< 90°/h	< 90°/h	< 1.0 mg	< 1.5 mg
Resolution	< 0.001°/s	< 0.001°/s	0.03 mg	0.03 mg
G Sensitivity	0.001°/s/g	0.001°/s/g	0.25 mg/g <sup>2</sup>	0.25 mg/g <sup>2</sup>
Scale Factor Error	≤ 500 ppm (over temperature)			
Alignment	< 0.5 mrad			

## Environment

Shock	600 g ½ sine 1 msec powered on
Vibration	8 g <sub>RMS</sub> (20 Hz to 3 kHz)
Operating Temp	-50°C to +85°C
Non-Operating Temp	-55°C to +85°C

## Interface

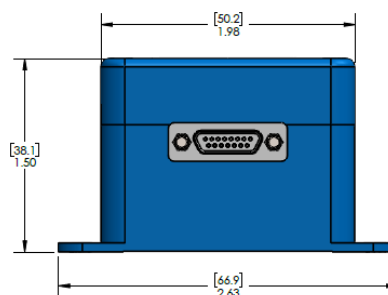
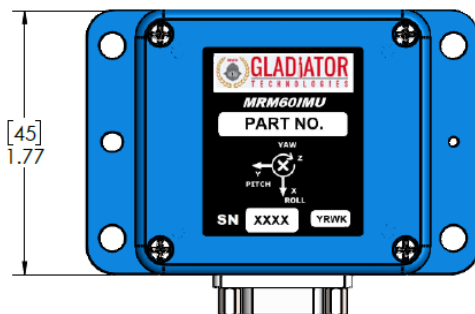
Analog Signals	100 Model ±5 volts full scale, 200 Model ±2.5 volts full scale
Temp Sensors	Internal
Start Up Time	< 0.25 sec
Self Test	Logic 1 = 3 V to 5 V at Pin 9
Data Interface	Analog
Bandwidth	250 Hz

## Electrical

Input Voltage	+7 V to +36 V Max. Input (single sided)
Power Consumption	900 mW Typical / 1000 mW Maximum

## Mechanical

Mass	≤ 120 grams
Size	Metric: 5 x 4.5 x 3.85 = 87 cm <sup>3</sup> US: 1.975 x 1.77 x 1.515 = 5.3 in <sup>3</sup>



[www.gladiatortechnologies.com/mrm60](http://www.gladiatortechnologies.com/mrm60)

All performance parameters 1σ  
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