



# A40 ACCELEROMETER

## Single Axis Accelerometer

The Gladiator Technologies' A40 MEMS Accelerometer is a small, ultra-low noise, single axis accelerometer. This robust accel is designed to handle 500g shock and 5.74gRMS vibration in an EMI resistant housing.



Low Noise: 0.065 mg/√Hz



Excellent Bias Repeatability: 1.5 mg



Analog Output



Factory Calibrated: -40°C to 85°C



NON-ITAR

# Low Noise. High Performance.

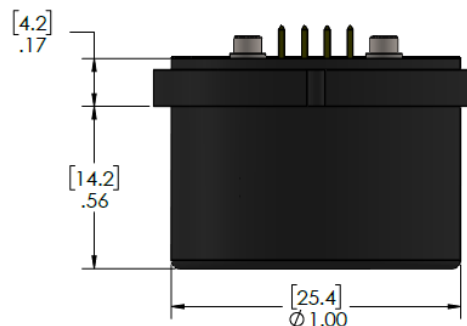
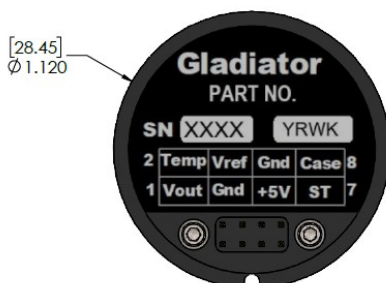


# GLADIATOR

TECHNOLOGIES

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Performance			
Parameter	Accelerometer		
Range	±6 g	±10 g	±15 g
VRW	0.065 mg/vHz	0.002 mg/vHz	0.035 mg/vHz
Bias In-Run	0.045 mg	0.05 mg	0.1 mg
Temperature Sensitivity	< 275 ppm	< 275 ppm	< 275 ppm
Resolution/Threshold 1Hz	0.05 mg	0.06 mg	0.07 mg
Vibration Rectification	1 mg/g <sup>2</sup> rms	0.15 mg/g <sup>2</sup> rms	0.2 mg/g <sup>2</sup> rms
Self Test	0.15g ± 0.08		
Scale Factor Stability	< 1,000 ppm		
Alignment	< 5 mrad		
Environment			
Shock	500 g ½ sine 1 msec powered on		
Vibration	5.74g <sub>RMS</sub> (20 Hz to 3 kHz)		
Operating Temp	-40°C to +85°C		
Non-Operating Temp	-55°C to +100°C		
Interface			
Data Interface	Analog 2.5 Vdc		
Start Up Time	< 0.25 s		
Bandwidth	140 Hz		
Temperature Sensor	Internal +2.5 Vdc		
Electrical			
Input Voltage	+4.75 V to +5.25 V Max. Input (single sided)		
Current Consumption	12 mA Maximum		
Mechanical			
Mass	≤ 15 grams		
Size	Metric: 2.54 dia x 1.84= 9.32 cm <sup>3</sup> US: 1.0 dia x 0.7 = 0.8 in <sup>3</sup>		



All performance parameters 1σ  
Specification subject to change without notice  
Rev. 07.29.20

