

Model Number  
635A01

## HIGH FREQUENCY INDUSTRIAL ICP® ACCELEROMETER

Revision A  
ECN #: 14823

### Performance

	ENGLISH	SI	
Sensitivity (±5 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )	[2]
Measurement Range	±50 g	±490 m/s <sup>2</sup>	
Frequency Range (±10 %)	68 to 720000 cpm	1.13 to 12000 Hz	
Frequency Range (±3 dB)	32 to 900000 cpm	0.53 to 15000 Hz	
Resonant Frequency	1800 kcpm	30 kHz	[1]
Broadband Resolution (1 to 10000 Hz)	240 µg	2354 µm/sec <sup>2</sup>	[1]
Non-Linearity	±1 %	±1 %	[3]
Transverse Sensitivity	≤5 %	≤5 %	

### Environmental

Overload Limit (Shock)	5000 g pk	49050 m/s <sup>2</sup> pk
Temperature Range	-65 to +250 °F	-54 to +121 °C

### Electrical

Settling Time (within 1% of bias)	≤2 sec	≤2 sec	
Discharge Time Constant	≥0.3 sec	≥0.3 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<150 Ohm	<150 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	8 µg/√Hz	78.5 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise (100 Hz)	2 µg/√Hz	19.6 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise (1 kHz)	1 µg/√Hz	9.81 (µm/sec <sup>2</sup> )/√Hz	[1]
Electrical Isolation	>10 <sup>8</sup> Ohm	>10 <sup>8</sup> Ohm	

### Physical

Size (Diameter x Height)	1.13 in x .82 in	28.7 mm x 20.8 mm	
Weight	3 oz	86 gm	
Mounting	Stud	Stud	
Mounting Thread	1/4-28 Male	Not Applicable	[4]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Side	Side	

**Optional Versions** (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

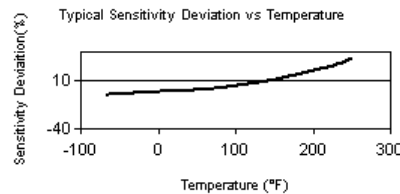
**M** - Metric Mount

### Notes

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [3] Zero-based, least-squares, straight line method.
- [4] 1/4-28 has no equivalent in S.I. units.
- [5] See PCB Declaration of Conformance PS023 for details.

### Supplied Accessories

081A97 Thru bolt 1/4-28 (1)  
ICS-8 NIST-traceable single-axis amplitude response calibration from 600 cpm (10Hz) to upper 10% frequency. (1)



All specifications are at room temperature unless otherwise specified.

In the interest of constant product improvement, we reserve the right to change specifications without notice.

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3425 Walden Avenue  
Depew, NY 14043  
UNITED STATES  
Phone: 716-684-0003  
Fax: 716-684-3823  
E-mail: imi@pcb.com  
Web site: www.imi-sensors.com

