

**Model Number**  
603M 113

# INDUSTRIAL ACCELEROMETER

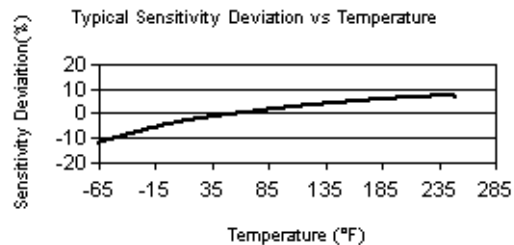
Revision: D  
ECN #: 51669

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )	[1]
Measurement Range(12 VDC)	± 50 g	± 490 m/s <sup>2</sup>	[2]
Measurement Range(5 VDC)	± 15 g	± 147 m/s <sup>2</sup>	[2]
Frequency Range(± 3 dB)	96 to 600,000 cpm	1.6 to 10,000 Hz	[3]
Resonant Frequency	1,500 kcpm	25 kHz	[2]
Broadband Resolution(1 to 10,000 Hz)	1.5 mg	15 mm/s <sup>2</sup>	[2]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	

Environmental	ENGLISH	SI	
Overload Limit(Shock)	5,000 g pk	49,050 m/s <sup>2</sup> pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[2]
Enclosure Rating	IP68	IP68	

Electrical	ENGLISH	SI	
Settling Time(within 1% of bias)	≤ 5.0 sec	≤ 5.0 sec	
Discharge Time Constant	≥ 0.1 sec	≥ 0.1 sec	
Excitation Voltage	5 to 12 VDC	5 to 12 VDC	
Output Impedance	< 100 Ohm	< 100 Ohm	
Output Bias Voltage	2.5 to 6.0 VDC	2.5 to 6.0 VDC	
Spectral Noise(10 Hz)	18 µg/√Hz	176.6 (µm/sec <sup>2</sup> )/√Hz	[2]
Spectral Noise(100 Hz)	4 µg/√Hz	39.2 (µm/sec <sup>2</sup> )/√Hz	[2]
Spectral Noise(1 kHz)	2 µg/√Hz	19.6 (µm/sec <sup>2</sup> )/√Hz	[2]
Electrical Isolation(Case)	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	

Physical	ENGLISH	SI	
Size (Hex x Height)	11/16 in x 1.86 in	18 mm x 47.2 mm	
Weight	2.0 oz	56.7 gm	
Mounting Thread	1/4-28 Female	No Metric Equivalent	[5]
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	3-Pin MIL-C-5015	3-Pin MIL-C-5015	
Electrical Connection Position	Top	Top	
Electrical Connections(Pin A)	Pos (+) Power	Pos (+) Power	
Electrical Connections(Pin B)	Ground	Ground	
Electrical Connections(Pin C)	Signal	Signal	



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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### OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

**M** - Metric Mount  
Supplied Accessory: Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

### NOTES:

- [1] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [2] Typical.
- [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] See PCB Declaration of Conformance PS107 for details.

### SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud  
Model ICS-2 NIST-traceable single-point amplitude response calibration at 6000 cpm (100 Hz) for each axis (1)

Entered: ND	Engineer: gs	Sales: JL	Approved: BAM	Spec Number:
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Phone: 800-959-4464  
Fax: 716-684-3823  
E-Mail: imi@pcb.com

3425 Walden Avenue, Depew, NY 14043