

Model Number
601A02

INDUSTRIAL ICP[®] ACCELEROMETER

Revision: D
ECN #: 14824

Performance

	ENGLISH	SI	
Sensitivity (±20 %)	500 mV/g	51 mV/(m/s ²)	[2]
Measurement Range	±10 g	± 98 m/s ²	
Frequency Range (±5 %)	28 to 240000 cpm	0.47 to 4000 Hz	[3]
Frequency Range (±10 %)	20 to 300000 cpm	0.33 to 5000 Hz	
Frequency Range (±3 dB)	10 to 600000 cpm	0.17 to 10000 Hz	
Resonant Frequency	960 kcpm	16 kHz	[1]
Broadband Resolution (1 to 10000 Hz)	35 µg	343 µm/s ²	[1]
Non-Linearity	±1 %	±1 %	[4]
Transverse Sensitivity	≤7 %	≤7 %	

Environmental

Overload Limit (Shock)	5000 g pk	49050 m/s ² pk
Temperature Range	-65 to +250 °F	-54 to +121 °C
Enclosure Rating	IP68	IP68

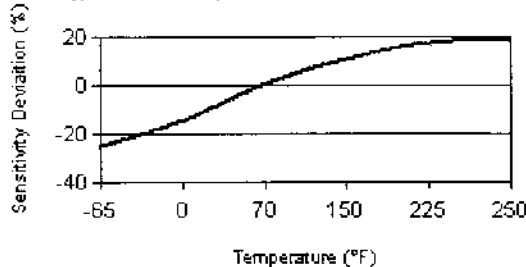
Electrical

Settling Time (within 1% of bias)	≤10 sec	≤10 sec	
Discharge Time Constant	≥1.0 sec	≥1.0 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 ohms	<150 ohms	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	3 µg/√Hz	29.4 (µm/s ²)/√Hz	[1]
Spectral Noise (100 Hz)	0.7 µg/√Hz	6.9 (µm/s ²)/√Hz	[1]
Spectral Noise (1 kHz)	0.5 µg/√Hz	4.9 (µm/s ²)/√Hz	[1]
Electrical Isolation (Case)	>10 ⁸ ohms	>10 ⁸ ohms	

Physical

Size (Hex x Height)	7/8 in x 1.9 in	22.2 mm x 48.3 mm	
Weight	2.8 oz	80 gm	
Mounting Thread	1/4-28 Female	Not Applicable	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m	
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	Top	Top	

Typical Sensitivity Deviation vs Temperature



[6]

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) replaces Model 081A40

NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [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 PS023 for details.

SUPPLIED ACCESSORIES:

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

Entered: <u>W.F.</u>	Engineer: <u>W.F.</u>	Sales: <u>EB7</u>	Approved: <u>W.F.</u>	Spec Number:
Date: <u>6/15/02</u>	Date: <u>6/15/02</u>	Date: <u>6/25/02</u>	Date: <u>6/25/02</u>	6136

IMI SENSORS
A PCB PIEZOTRONICS DIV.
3425 Walden Avenue, Depew, NY 14043

Phone: 800-959-4464
Fax: 716-684-3823
E-Mail: imi@pcb.com