

Model Number  
**621B41**

# INDUSTRIAL ICP® ACCELEROMETER

Revision: A  
ECN #: 14104

## DYNAMIC PERFORMANCE

	ENGLISH	SI	
Sensitivity (±5%)	100 mV/g	10,2 mV/(m/s <sup>2</sup> )	[1]
Measurement Range	±50 g	±490 m/s <sup>2</sup>	
Frequency Range: (±5%)	144 - 600,000 cpm	144 - 600 000 cpm	[2] [3]
(±10%)	102 - 900,000 cpm	102 - 900 000 cpm	
(±3 dB)	48 - 1,200,000 cpm	48 - 1 200 000 cpm	
Mounted Resonant Frequency	2,100 kcpm	2 100 kcpm	[4]
Amplitude Linearity	±1%	±1%	[5]
Transverse Sensitivity	≤5%	≤5%	

## ENVIRONMENTAL

Shock Limit	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	[4]

## ELECTRICAL

Settling Time (within 1% of bias)	≤5.0 sec	≤5,0 sec	
Discharge Time Constant	≥0.2 sec	≥0,2 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current	2 to 20 mA	2 to 20 mA	
Output Impedance	<150 ohms	<150 ohms	
Output Bias	8 to 12 VDC	8 to 12 VDC	
Broadband Electrical Noise (1-10 kHz)	100 µg	981 µm/s <sup>2</sup>	[4]
Spectral Noise: (10 Hz)	30 µg/√Hz	294 (µm/s <sup>2</sup> )/√Hz	[4]
(100 Hz)	10 µg/√Hz	98,1 (µm/s <sup>2</sup> )/√Hz	[4]
(1 kHz)	5 µg/√Hz	49,5 (µm/s <sup>2</sup> )/√Hz	[4]
Base Isolation	>10 <sup>9</sup> ohms	>10 <sup>9</sup> ohms	

## MECHANICAL

Size (hex x height)	11/16 x 1.03 in	17,5 x 26,2 mm	
Weight	1.06 oz	30 gm	
Mounting Thread (female)	10-32	Not Applicable	[6]
Mounting Torque	10 to 20 in-lb	1,13 to 2,26 N-m	
Sensing Element/Geometry	Ceramic/Shear	Ceramic/Shear	
Case Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Connector Type/Position	Coaxial 10-32/Top	Coaxial 10-32/Top	

## 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.

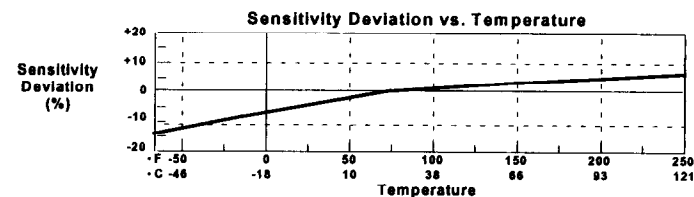
- M – Metric**  
**Supplied Accessories**  
Model M081B05 Mounting Stud *replaces* Model 081A39 Mounting Stud

## NOTES:

- [1] Conversion Factor 1g = 9,81 m/s<sup>2</sup>.  
[2] 1 Hz = 60 cpm (cycles per minute).  
[3] The high frequency tolerance is accurate within ±10% of the specified frequency.  
[4] Typical value.  
[5] Zero-based, least-squares, straight line method.  
[6] 10-32 has no equivalent in S.I. units.

## SUPPLIED ACCESSORIES:

- Model 081A39 Mounting Stud (1)  
Calibration Certificate (600 to 600,000 cpm)



All specifications are at room temperature unless otherwise specified.

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

Form DD030 Rev.E 2/20/98

Drawn: <i>[Signature]</i>	Engineer: <i>[Signature]</i>	Sales: <i>[Signature]</i>	Approved: <i>N.F.</i>	Spec Number:
Date: <i>10/3/01</i>	Date: <i>10/3/01</i>	Date: <i>10-9-01</i>	Date: <i>10/5/01</i>	<b>10345</b>

**PCB PIEZOTRONICS**  
IMM DIVISION

3425 Walden Avenue, Depew, NY 14043

800-959-4464

Fax (716) 684-3823

E-Mail: [imisales@pcb.com](mailto:imisales@pcb.com)