

Model Number <b>631A80</b>	<b>INDUSTRIAL ICP® ACCELEROMETER</b>		Revision: A ECN #: 16001	
<b>Performance</b>	<b>ENGLISH</b>	<b>SI</b>	<b>OPTIONAL VERSIONS</b> Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.  <b>M</b> - Metric Mount Supplied Accessory : Model M081A76 Captive Mounting Bolt (M5 X .8) (1) replaces Model 081A76	
Sensitivity (±5 %)	10 mV/g	1.02 mV/(m/s <sup>2</sup> )		[2]
Measurement Range	±500 g	±4905 m/s <sup>2</sup>		
Frequency Range (±10 %)	68 to 840000 cpm	1.13 to 14000 Hz		
Frequency Range (±3 dB)	32 to 960000 cpm	0.53 to 16000 Hz		
Resonant Frequency	1800 kcpm	30 kHz		
Broadband Resolution (1 to 10000 Hz)	450 µg	4415 µm/s <sup>2</sup>		[1]
Non-Linearity	±1 %	±1 %		[3]
Transverse Sensitivity	≤5 %	≤5 %		
<b>Environmental</b>				
Overload Limit (Shock)	5000 g pk	49050 m/s <sup>2</sup> pk		
Temperature Range	-65 to +250 °F	-54 to +121 °C		
Temperature Response	See Graph	See Graph		
Enclosure Rating	IP68	IP68		
<b>Electrical</b>			<b>NOTES:</b> [1] Typical value. [2] Conversion Factor 1g = 9.81 m/s <sup>2</sup> . [3] Zero-based, least-squares, straight line method. [4] 10-32 has no equivalent in S.I. units. [5] See PCB Declaration of Conformance PS023 for details.	
Settling Time (within 1% of bias)	≤3 sec	≤3 sec		
Discharge Time Constant	≥0.4 sec	≥0.4 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)	25 µg/√Hz	245 (µm/s <sup>2</sup> )/√Hz		[1]
Spectral Noise (100 Hz)	10 µg/√Hz	98.1 (µm/s <sup>2</sup> )/√Hz		[1]
Spectral Noise (1 kHz)	5 µg/√Hz	49.1 (µm/s <sup>2</sup> )/√Hz		[1]
Electrical Isolation (Case)	>10 <sup>8</sup> ohms	>10 <sup>8</sup> ohms		
<b>Physical</b>			<b>SUPPLIED ACCESSORIES:</b> Model 081A76 Captive Mounting Bolt (10-32 THD X .98 LONG) (1) Model ICS-8 NIST-traceable single-axis amplitude response calibration from 600 cpm (10Hz) to upper 10% frequency. (1)	
Size (Diameter x Height)	.990 in x .810 in	25.2 mm x 20.6 mm		
Weight	2.12 oz	60 gm		
Mounting Thread	10-32 Male	Not Applicable		[4]
Mounting Torque	25 to 30 in-lb	2.8 to 3.4 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	2-Pin		
Electrical Connection Position	Side	Side		
	Typical Sensitivity Deviation vs Temperature 			
<b>CE</b> [5]				
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. ICP® is a registered trademark of PCB Group, Inc.				
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Entered: <i>ma</i>	Engineer: <i>ma</i>	Sales: <i>ES1</i>	Approved: <i>UT</i>	
Date: <i>4/3/02</i>	Date: <i>4/3/02</i>	Date: <i>4/3/02</i>	Date: <i>4/24/02</i>	
			Spec Number: <b>16449</b>	