

Model Number  
605B01

# INDUSTRIAL ICP<sup>®</sup> ACCELEROMETER

Revision: NR  
ECN #:

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity (± 20 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )	[2]
Measurement Range	± 50 g	± 490 m/s <sup>2</sup>	
Frequency Range (± 3 dB)	30 to 300000 cpm	.5 to 5000 Hz	[3]
Resonant Frequency	600 kcpm	10 kHz	[1]
Broadband Resolution (1 to 10,000 Hz)	350 µg	3434 µm/s <sup>2</sup>	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
<b>Environmental</b>			
Overload Limit (Shock)	5000 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	
Enclosure Rating	IP68	IP68	
<b>Electrical</b>			
Settling Time (within 1% of bias)	≤ 2.0 sec	≤ 2.0 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 ohms	<150 ohms	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	8 µg/√Hz	78.5 (µm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise (100 Hz)	5 µg/√Hz	49.1 (µm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise (1 kHz)	4 µg/√Hz	39.2 (µm/s <sup>2</sup> )/√Hz	[1]
Electrical Isolation (Case)	>10 <sup>8</sup> ohms	>10 <sup>8</sup> ohms	
<b>Physical</b>			
Size (Diameter x Height)	1.38 in x 1.00 in	34.9 mm x 25.4 mm	
Weight (without cable)	3.9 oz	110.6 gm	
Mounting Thread	1/4-28 UNF	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	3-Pin MIL-C-5015	3-Pin MIL-C-5015	
Electrical Connection Position	Side	Side	
Electrical Connections (Pin A)	X axis	X axis	
Electrical Connections (Pin B)	Z axis	Z axis	
Electrical Connections (Pin C)	Ground	Ground	

**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 M081A68 Captive mounting bolt M6 x 1 (1) replaces Model 081A68

**NOTES:**

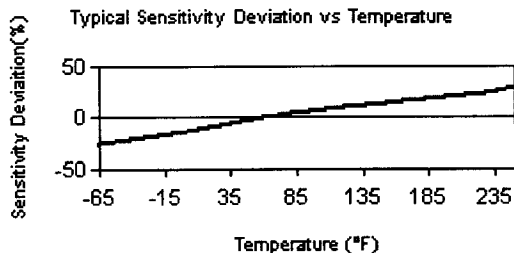
- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.
- [6] See PCB Declaration of Conformance PS023 for details.

**SUPPLIED ACCESSORIES:**

Model 081A68 Captive mounting bolt 1/4-28 x .90" (1)  
Model ACS-2T NIST Traceable Single Point Calibration at 100 Hz for Each Axis (1)

**Industrial ICP<sup>®</sup> Accelerometer**

Entered: <i>MCS</i>	Engineer: <i>MCS</i>	Sales: <i>JD</i>	Approved: <i>NT</i>	Spec Number:
Date: 7/21/03	Date: 7/21/03	Date: 7-25-03	Date: 7/21/03	23462



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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