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# INDUSTRIAL ICP® ACCELEROMETER

Revision: NR

ECN #: 42839

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Performance	ENGLISH	SI	
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s²)	[2]
Measurement Range	± 50 g	± 490 m/s <sup>2</sup>	
Frequency Range(± 5 %)	72 to 240,000 cpm	1.2 to 4000 Hz	
Frequency Range(± 3 dB)	30 to 780,000 cpm	0.5 to 13,000 Hz	
Resonant Frequency	1620 kcpm	27 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	350 µg	3434 µm/sec <sup>2</sup>	[1]
Non-Linearity	± 1 %	± 1 %	[3]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]
Enclosure Rating	IP67	IP67	
Electrical			
Settling Time(within 1% of bias)	≤ 2 sec	≤ 2 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 Ohm	<150 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	8 μg/√Hz	78.5 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(100 Hz)	5 μg/√Hz	49.1 (μm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(1 kHz)	4 μg/√Hz	39.2 (µm/sec <sup>2</sup> )/√Hz	[1]
Electrical Isolation(Case)	>10 <sup>8</sup> Ohm	>10 <sup>8</sup> Ohm	
Physical			
Size (Diameter x Height)	5/8 in x 1.0 in	15.9 mm x 25.4 mm	
Weight(without cable)	1.18 oz	33.5 gm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Molded Integral Cable	Molded Integral Cable	
Electrical Connection Position	Side	Side	
Cable Type	Polyurethane	Polyurethane	[4]
1			

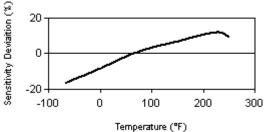
#### **OPTIONAL VERSIONS**

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

#### NOTES:

- [1] Typical.
  [2] Conversion Factor 1g = 9.81 m/s².
  [3] Zero-based, least-squares, straight line method.
  [4] Stainless steel armor jacket over twisted shielded pair.

## Typical Sensitivity Deviation vs Temperature



### SUPPLIED ACCESSORIES:

Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency (1)

Entered: AP	Engineer: jg	Sales: HJB	Approved: BAM	Spec Number:
Date: 5/21/2014	Date: 5/21/2014	Date: 5/21/2014	Date: 5/21/2014	58772

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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