

Model Number

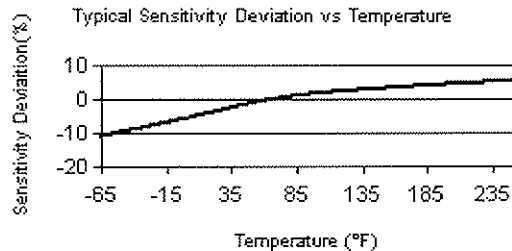
626B11

## INDUSTRIAL ICP® ACCELEROMETER

Revision: A

ECN #: 25838

Performance	ENGLISH	SI	
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )	[2]
Measurement Range	± 50 g	± 490 m/s <sup>2</sup>	
Frequency Range(± 5 %)	30 to 300,000 cpm	0.5 to 5000 Hz	[3]
Frequency Range(± 10 %)	22 to 420,000 cpm	0.37 to 7000 Hz	
Frequency Range(± 3 dB)	12 to 600,000 cpm	0.2 to 10,000 Hz	
Resonant Frequency	1380 kcpm	23 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	100 µg	981 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	[1]
Enclosure Rating	IP68	IP68	
<b>Electrical</b>			
Settling Time(within 1% of bias)	≤ 5.0 sec	≤ 5.0 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	<100 ohm	<100 ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(1 Hz)	15 µg/√Hz	147.2 (µm/s <sup>2</sup> )/√Hz	
Spectral Noise(10 Hz)	4.0 µg/√Hz	39.2 (µm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise(100 Hz)	1.5 µg/√Hz	14.7 (µm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise(1 kHz)	0.7 µg/√Hz	6.9 (µm/s <sup>2</sup> )/√Hz	[1]
Electrical Isolation(Case)	>10 <sup>8</sup> ohm	>10 <sup>8</sup> ohm	
Electrical Protection	RFI/ESD	RFI/ESD	
<b>Physical</b>			
Size (Hex)	1 3/16 in	30.2 mm	
Size (Height)(with cable bend)	4.3 in	109 mm	
Weight(without cable)	5.3 oz	150 gm	
Mounting Thread	1/4-28 UNF	1/4-28 UNF	[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	Molded Integral Cable	Molded Integral Cable	
Electrical Connection Position	Top	Top	
Electrical Connections(Blue)	Ground	Ground	
Electrical Connections(Red)	Acceleration Output	Acceleration Output	
Cable Length	10 ft	3 m	[6]
Cable Type	Polyurethane	Polyurethane	



[7]

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/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] Twisted shielded pair.  
[7] See PCB Declaration of Conformance PS023 for details.

## SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud (1)  
Model 085A31 Protective Thermal Jacket (1)  
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency

Entered:	Engineer:	Sales:	Approved:	Spec Number:
Date: 2-13-07	Date: 2/14/07	Date: 2/14/07	Date: 2/14/07	22528

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