Model	Number			
622B00				

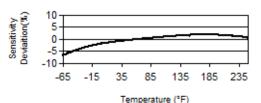
## INDUSTRIAL ICP® ACCELEROMETER

Revision: A ECN #: 51911

022500			
Performance	ENGLISH	SI	
Sensitivity(± 5 %)	10 mV/g	1.02 mV/(m/s²)	[1]
Measurement Range	± 500 g	$\pm 4,900 \text{ m/s}^2$	
Frequency Range(± 5 %)	35 to 360,000 cpm	0.58 to 6,000 Hz	[2]
Frequency Range(± 10 %)	25 to 600,000 cpm	0.42 to 10,000 Hz	[2]
Frequency Range(± 3 dB)	12 to 900,000 cpm	0.2 to 15,000 Hz	[2]
Resonant Frequency	1,980 kcpm	33 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	330 μg	3,234 µm/sec <sup>2</sup>	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	5,000 g pk	49,050 m/s² pk	
Temperature Range	-65 to +250 °F	-54 to +121 ℃	
Temperature Response	See Graph	See Graph	[3]
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time(within 1% of bias)	≤ 8 sec	≤ 8 sec	
Discharge Time Constant	≥ 0.8 sec	≥ 0.8 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(10 Hz)	12 μg/√Hz	118 (µm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(100 Hz)	12 μg/√Hz	118 (µm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(1 kHz)	3.2 µg/√Hz	31.4 (µm/sec <sup>2</sup> )/√Hz	[3]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	
Physical			
Size (Hex x Height)	7/8 in x 2.06 in	22 mm x 52.3 mm	
Weight	3.3 oz	94 gm	[3]
Mounting Thread	1/4-28 Female	No Metric Equivalent	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Тор	Тор	

Typical Sensitivity Deviation vs Temperature







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 Piezotronics, Inc.

## **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.

EX - Hazardous Area Approval- contact factory for specific approvals

M - Metric Mount Supplied Accessory: Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

TO - Temperature Output Temperature Output Range Temperature Scale Factor Electrical Connections(Pin A) Electrical Connections(Pin B) Electrical Connections(Pin C)

+36 to +325 °F 5.56 mV/°F + 32 Acceleration Output Ground Temperature Output

+2 to +163 ℃ +10 mV/°C Acceleration Output Ground Temperature Output

## NOTES:

[1] Conversion Factor  $1g = 9.81 \text{ m/s}^2$ .

[2] The high frequency tolerance is accurate within  $\pm 10\%$  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 or PS061 for details.

## **SUPPLIED ACCESSORIES:**

Model 081A40 Mounting Stud (1)

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

Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

Entered: ND	Engineer: gs	Sales: BAM	Approved: JL	Spec Number:
Date: 07/01/2021	Date: 07/01/2021	Date: 07/01/2021	Date: 07/01/2021	70420



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