

Model Number  
HT622B01

# INDUSTRIAL ICP® ACCELEROMETER

Revision: B  
ECN #: 51355

### Performance

	ENGLISH	SI	
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )	[1]
Measurement Range	± 50 g	± 490 m/s <sup>2</sup>	
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	
Frequency Range(± 3 dB)	12 to 900,000 cpm	0.2 to 15,000 Hz	
Resonant Frequency	1,800 kcpm	30 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	150 µg	1,472 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/s <sup>2</sup> pk	
Temperature Range	-65 to +325 °F	-54 to +163 °C	
Temperature Response	See Graph	See Graph	[3]
Enclosure Rating	IP68	IP68	

### Electrical

Settling Time(within 1% of bias)	≤ 5.0 sec	≤ 5.0 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 10 mA	2 to 10 mA	
Output Impedance	< 700 Ohm	< 700 Ohm	
Output Bias Voltage	8 to 15 VDC	8 to 15 VDC	
Spectral Noise(10 Hz)	12 µg/√Hz	118 (µm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(100 Hz)	3.2 µg/√Hz	31.4 (µm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(1 kHz)	1.2 µg/√Hz	11.8 (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	
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	Top	Top	

### 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. [7]

**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)

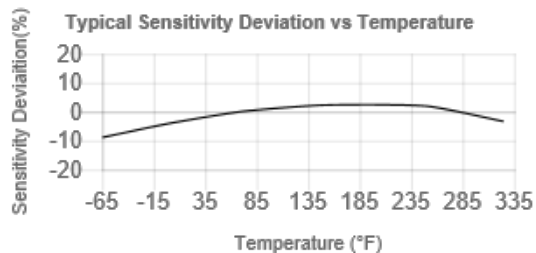
<b>TO</b> - Temperature Output		
Temperature Output Range	+36 to +325 °F	+2 to +163 °C
Temperature Scale Factor	5.56 mV/°F + 32	+10 mV/°C
Electrical Connector	3-Pin	3-Pin
Electrical Connections(Pin A)	Acceleration Output	Acceleration Output
Electrical Connections(Pin B)	Ground	Ground
Electrical Connections(Pin C)	Temperature Output	Temperature Output

### NOTES:

- [1] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [2] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [3] Typical.
- [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.
- [7] ATEX, IECEx & CSA

### 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



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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Entered: LK	Engineer: gs	Sales: EGY	Approved: BAM	Spec Number:
Date: 12/22/2020	Date: 12/22/2020	Date: 12/22/2020	Date: 12/22/2020	69201

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