Model	Numbe
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#### 603C01

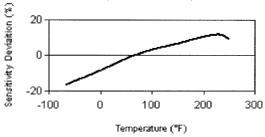
# **INDUSTRIAL ICP® ACCELEROMETER**

Revision: H

ECN #: 25657

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	100 mV/g	<u>3I</u> 10.2 mV/(m/s²)	[2]
Measurement Range	± 50 g	` ,	[4]
Frequency Range(± 3 dB)	± 50 g 30 to 600,000 cpm	± 490 m/s²	[3]
Resonant Frequency	1500 kcpm	0.5 to 10,000 Hz 25 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	350 kcpiii	25 kHz 3434 µm/s²	[1]
Non-Linearity	±1%	•	[4]
Transverse Sensitivity	±1% ≤7%	±1% ≤7%	[4]
Environmental	≥ 7 70	S / %	
Overload Limit(Shock)	E000 ~ =1:	40.050 (-2)	
Temperature Range	5000 g pk -65 to +250 °F	49,050 m/s² pk	
Temperature Response		-54 to +121 °C	[4]
Enclosure Rating	See Graph IP68	See Graph	[1]
Electrical	1800	IP68	
Settling Time(within 1% of bias)	≤ 2.0 sec	≤ 2.0 sec	
Discharge Time Constant	≥ 0.3 sec	≥ 2.0 sec ≥ 0.3 sec	
Excitation Voltage	18 to 28 VDC	2 0.3 Sec 18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<150 ohm	<150 ohm	
Output Impedance Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	8 µg/√Hz	8 to 12 VDC 78.5 (µm/s²)/√Hz	[1]
Spectral Noise(100 Hz)	o μg/√Hz 5 μg/√Hz	78.5 (μm/s²)/√Hz 49.1 (μm/s²)/√Hz	[1]
Spectral Noise(100 Hz)	5 μg/√Hz 4 μg/√Hz	49.1 (μπ/s²)/√Hz 39.2 (μm/s²)/√Hz	[1]
Electrical Isolation(Case)	4 μg/νπ2 >10 <sup>8</sup> ohm	39.2 (μπ/s²//νπ2 >10 <sup>8</sup> ohm	111
Physical	, >10° onm	>10° onm	
Size (Hex x Height)	11/16 in x 1.65 in	10 10 0	
Weight	1.8 oz	18 mm x 42.2 mm	
Mounting Thread	1.6 02 1/4-28 Female	51 gm	[5]
1 *	2 to 5 ft-lb	No Metric Equivalent 2.7 to 6.8 N-m	[5]
Mounting Torque Sensing Element	Z to 5 11-lb Ceramic		
Sensing Element Sensing Geometry	Shear	Ceramic 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			
Liectrical Confection Fosition	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.

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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.

## EX - ATEX or ATEX and CSA Hazardous Area Approval

Hazardous Area Approval
Hazardous Area Approval
Hazardous Area Approval
Hazardous Area Approval
Hazardous Area Approval

EEx ia IIC T4, -40°C≤Ta≤121°C, II 1 G
CI I, Div I, Groups A, B, C, D; CI II, Div I, Groups
E, F, G; CI III, Div I
Exia IIC T4, AExia IIC, T4

Hazardous Area Approval

CI I, Div 2, Groups A, B, C, D; ExnL IIC T4,

AExnA IIC T4

AExnA IIC T4

Hazardous Area Approval EEx nL IIC T4, -40°C≤Ta≤121°C, II 3 G

#### M - Metric Mount

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

### TO - Temperature Output

Temperature Output Range	+36 to +250 °F	+2 to +121 °C	
Temperature Scale Factor	5.56 mV/°F + 32	+10 mV/°C	
Electrical Connector	3-Pin MIL-C-5015		
Electrical Connections(Pin A)	Acceleration Output		
Electrical Connections(Pin B)	Ground		
Electrical Connections(Pin C)	Temperature Output		
Size - Height	1.86 in	47.2	
Weight	2.0 oz	56.7	

## NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [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 or PS060 for details.

#### SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud

Model ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

Entered:	Engineer:	Sales: (V)	Approved: N 🧲	Spec Number:
Date: 1 29-07	Date: i/3/107	Date: //3/07	Date: 1316	13145



Phone: 800-959-4464 Fax: 716-684-3823 E-Mail: imi@pcb.com