

# INDUSTRIAL ICP® ACCELEROMETER

Revision: D  
ECN #: 29661

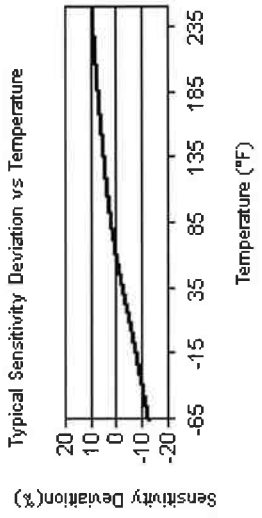
Model Number  
**623C00**

ENGLISH	SI
<b>Performance</b>	
Sensitivity(± 5 %)	1.0 mV/(m/s <sup>2</sup> )
Measurement Range	± 4905 m/s <sup>2</sup>
Frequency Range(± 5 %)	2.4 to 8000 Hz
Frequency Range(± 10 %)	1.7 to 10,000 Hz
Frequency Range(± 3 dB)	0.8 to 15,000 Hz
Resonant Frequency	40 kHz
Broadband Resolution(1 to 10,000 Hz)	2943 μm/s <sup>2</sup>
Non-Linearity	± 1 %
Transverse Sensitivity	± 5 %
<b>Environmental</b>	
Overload Limit(Shock)	49,050 m/s <sup>2</sup> pk
Temperature Range	-54 to +121 °C
Temperature Response	See Graph
Enclosure Rating	IP68
<b>Electrical</b>	
Settling Time(within 1% of bias)	≤ 3.0 sec
Discharge Time Constant	≥ 0.2 sec
Excitation Voltage	18 to 28 VDC
Constant Current Excitation	2 to 20 mA
Output Impedance	<100 ohm
Output Bias Voltage	8 to 12 VDC
Spectral Noise(10 Hz)	117 (μm/s <sup>2</sup> )/√Hz
Spectral Noise(100 Hz)	44 (μm/s <sup>2</sup> )/√Hz
Spectral Noise(1 kHz)	26.5 (μm/s <sup>2</sup> )/√Hz
Electrical Protection	RFI/ESD
Electrical Isolation(Case)	>10 <sup>8</sup> ohm
<b>Physical</b>	
Size (Hex x Height)	17.5 mm x 50 mm
Weight	51 gm
Mounting Thread	Not Applicable
Mounting Torque	2.7 to 6.8 N-m
Sensing Element	Ceramic
Sensing Geometry	Shear
Housing Material	Stainless Steel
Sealing	Welded Hermetic
Electrical Connector	2-Pin MIL-C-5015
Electrical Connection Position	Top

OPTIONAL VERSIONS	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.	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
<b>CS</b> - Canadian Standards Association Approved Intrinsically Safe Hazardous Area Approval	CI I, Div 1, Groups A, B, C, D; CI II, Div 1, Groups E, F, G; CI III, II, Div 1, Groups E, F, G; CI III, Div 1
Hazardous Area Approval	Exia IIC T4, AExia IIC, T4
Hazardous Area Approval	CI I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4
<b>EX</b> - ATEX, CSA, or ATEX and CSA Hazardous Area Approval	EEEx ia IIC T4, -54°C≤Tas121° C, II 1 G
Hazardous Area Approval	EEEx ia IIC T4, -54°C≤Tas121° C, II 1 G
<b>LB</b> - Low Bias Voltage	
Output Bias Voltage	6 to 8 VDC
Excitation Voltage	12 to 28 VDC
Measurement Range	± 3434 m/s <sup>2</sup>
<b>M</b> - 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] 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



Entered: PLS	Engineer: JEC	Sales: NF	Approved: NF	Spec Number:
Date: 11/10/08	Date: 11/10/08	Date: 11/10/08	Date: 11/7/08	7981

**IMI SENSORS**  
 A PCB PIEZOTRONICS DIV.  
 3425 Walden Avenue, Depew, NY 14043  
 Phone: 800-959-4464  
 Fax: 716-684-3823  
 E-Mail: imi@pcb.com

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.

