



Model Number 624B61	INDUSTRIAL ICP® ACCELEROMETER		Revision: NR ECN #:
Performance	ENGLISH	SI	OPTIONAL VERSIONS
Sensitivity (±5 %)	100 mV/g	10.2 mV/(m/s ²)	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
Measurement Range	±50 g	±490 m/s ²	LB - Low Bias Voltage
Frequency Range (±5 %)	144 to 300000 cpm	2.4 to 5000 Hz	Output Bias Voltage 6 to 8 VDC 6 to 8 VDC
Frequency Range (±10 %)	102 to 420000 cpm	1.7 to 7000 Hz	Excitation Voltage 12 to 28 VDC 12 to 28 VDC
Frequency Range (±3 dB)	48 to 600000 cpm	0.8 to 10000 Hz	Measurement Range ±35 g ±343 m/s ²
Resonant Frequency	1080 kcpm	18 kHz	M - Metric Mount
Broadband Resolution (1 to 10000 Hz)	1000 µg	9810 µm/s ²	Supplied Accessory : Model M081A67 Captive mounting bolt M6 x 1 (1)
Non-Linearity	±1 %	±1 %	TO - Temperature Output
Transverse Sensitivity	≤5 %	≤5 %	Temperature Output Range +36 to +250 °F +2 to +121 °C
Environmental			Temperature Scale Factor 5.56 mV/°F + 32 +10 mV/°C
Overload Limit (Shock)	5000 g pk	49050 m/s ² pk	Electrical Connector Armor Jacketed Cable Armor Jacketed Cable
Temperature Range	-65 to +250 °F	-54 to +121 °C	Electrical Connections (Green) Ground Ground
Temperature Response	See Graph	See Graph	Electrical Connections (Black) Ground Ground
Enclosure Rating	IP68	IP68	Electrical Connections (White) Temperature Output Temperature Output
Electrical			Electrical Connections (Red) Acceleration Output Acceleration Output
Setting Time (within 1% of bias)	≤10 sec	≤10 sec	NOTES:
Discharge Time Constant	≥0.2 sec	≥0.2 sec	[1] Typical.
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	[2] Conversion Factor 1g = 9.81 m/s ² .
Constant Current Excitation	2 to 20 mA	2 to 20 mA	[3] The high frequency tolerance is accurate within ±10% of the specified frequency.
Output Impedance	<100 ohms	<100 ohms	[4] Zero-based, least-squares, straight line method.
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	[5] 1/4-28 has no equivalent in S.I. units.
Spectral Noise (10 Hz)	50 µg/√Hz	491 (µm/s ²)/√Hz	[6] Stainless steel armor jacket over twisted shielded pair.
Spectral Noise (100 Hz)	20 µg/√Hz	196 (µm/s ²)/√Hz	[7] See PCB Declaration of Conformance PS023 for details.
Spectral Noise (1 kHz)	6 µg/√Hz	59 (µm/s ²)/√Hz	
Electrical Isolation (Case)	>10 ⁸ ohms	>10 ⁸ ohms	
Electrical Protection	RFI/ESD	RFI/ESD	
Physical			
Size (Diameter x Height)	1.37 in x .955 in	34.8 mm x 24.3 mm	
Weight (without cable)	4.2 oz	120 gm	
Mounting Thread	1/4-28 Male	Not Applicable	
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m	
Sensing Element	Quartz	Quartz	
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	Side	Side	
Cable Length	10 ft	3.0 m	
Cable Type	Polyurethane	Polyurethane	
	Typical Sensitivity Deviation vs Temperature		
			
<p><i>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.</i></p> <p>ICP® is a registered trademark of PCB Group, Inc.</p>			
<p>SUPPLIED ACCESSORIES: Model 081A67 Captive mounting bolt 1/4-28 x 1.12" (1) Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency (1)</p>			
Entered: <i>MA</i>	Engineer: <i>MA</i>	Sales: <i>EB7</i>	Approved: <i>J.R.</i>
Date: <i>10/1/02</i>	Date: <i>10/1/02</i>	Date: <i>10/7/02</i>	Date: <i>10/7/02</i>
			Spec Number: 20636
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