

MODEL 608A11

# Low Cost, Industrial ICP<sup>®</sup> Accelerometer

Small Size Conveniently Installs into Tight Places

- Small Size (9/16 inch footprint); 100 mV/g Sensitivity
- Integral Cable
- Submersible and Chemically Resistant
- Withstands Temperatures to +250 °F (+121 °C)
- 30 to 600k cpm Frequency Range (0.5 to 10k Hz)
- Intrinsically Safe Models Available



Smaller, lower-cost vibration sensors are making permanent installation for on-line monitoring of critical industrial machinery a more attractive undertaking. Whether new to predictive maintenance, or already benefitting from reduced downtime and maintenance costs, many will now find it easier to implement additional measurement points. Model 608A11 industrial ICP<sup>®</sup> accelerometer offers features most requested by Vibration Technologists and Reliability Engineers.

The small size permits installation into confined locations. Durable stainless steel construction and hermetic sealing withstand chemical contamination and submerged installations. The integral cable facilitates easy connection to junction boxes or collection point switch boxes. The 100 mV/g, low-noise signal is accurate through 600k cpm (10k Hz), is isolated from ground noise, and can be transmitted over long distances. Together with its competitive price, Model 608A11 represents one of the best value for sensors in the industry.

As with all equipment from PCB<sup>®</sup>, these sensors are complemented with toll-free applications assistance, 24-hour customer service, and are backed by a no-risk policy that guarantees satisfaction or your money refunded.



**Model 608A11**  
Industrial ICP<sup>®</sup> Accelerometer

 **IMI SENSORS**  
A PCB PIEZOTRONICS DIV.

*Total Customer Satisfaction Guaranteed*



# Specifications

Model		608A11	
Performance		English	SI
Sensitivity	(± 15 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )
Measurement Range		± 50 g	± 490 m/s <sup>2</sup>
Frequency Range	(± 3 dB)	30 to 600k cpm	0.5 to 10k Hz
Resonant Frequency		1320 kcpm	22 kHz
Broadband Resolution	(1 to 10,000 Hz)	350 mg	3434 mm/s <sup>2</sup>
Non-Linearity		± 1%	
Transverse Sensitivity		≤ 7%	

Environmental		
Overload Limit (Shock)	5000 g pk	49,050 m/s <sup>2</sup> pk
Temperature Range	-65 to +250 °F	-54 to +121 °C
Enclosure Rating	IP68	

Electrical			
Settling Time	(within 1% of bias)	≤ 2.0 sec	
Discharge Time Constant		≥ 0.3 sec	
Excitation Voltage		18 to 28 VDC	
Constant Current Excitation		2-20 mA	
Output Impedance		< 150 ohms	
Output Bias Voltage		8 to 12 VDC	
Spectral Noise	(10 Hz)	8 µg/√Hz	78.5 (µm/s <sup>2</sup> )/√Hz
Spectral Noise	(100 Hz)	5 µg/√Hz	49.1 (µm/s <sup>2</sup> )/√Hz
Spectral Noise	(1k Hz)	4 µg/√Hz	39.2 (µm/s <sup>2</sup> )/√Hz
Electrical Isolation	(Case)	>10 <sup>8</sup> ohms	

Mechanical			
Size	(Hex x Height)	9/16 in x 2.5 in	9/16 in x 64 mm
Weight	(with cable)	3.5 oz	99.3 gm
Mounting Thread		1/4-28 Female	1/4-28 Female
Mounting Torque		2 to 5 ft-lb	2.7 to 6.8 N-m
Sensing Element / Geometry		Ceramic Shear	
Housing Material		Stainless Steel	
Electrical Connection / Position		Molded Integral Cable / Top	
Cable Length		10 ft	3 m
Cable Type		042 Polyurethane	

### Optional Versions (specify using prefix letter shown)

M — Metric Mount	Via supplied Model M081A61 Mounting Stud 1/4-28 to M6 x 1
TO — Temperature Output	Adds third cable conductor with +10 mV/°C (5.56 mV/ °F + 32) output signal
EX — Intrinsically Safe	ATEX and CSA Certified

CE These products conform to applicable European Directives for CE marking.



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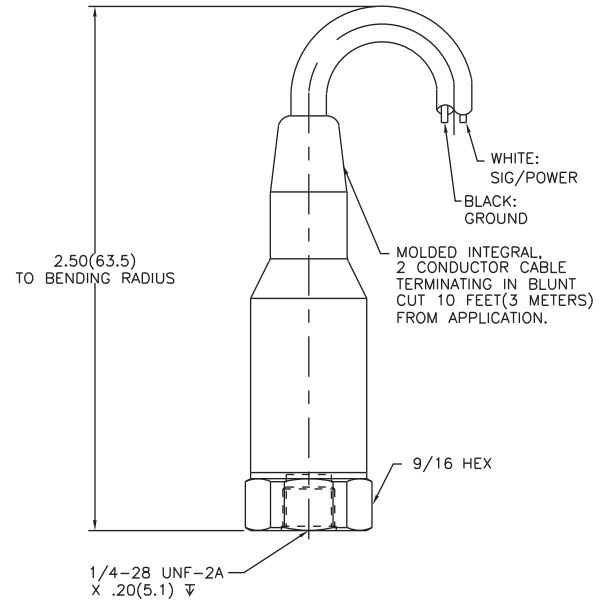
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ISO 9001:2000 CERTIFIED

A2LA ACCREDITED to ISO 17025

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### Available Versions

Model 608A11 — Standard 10 ft (3m) integral cable

Model 608A11/020BZ — 20 ft (6m) integral cable

Model M607A11 — Metric installation (substitutes Model M081A61 mounting stud for 081A40)

### Accessories

(supplied with standard version)

Model 081A40 mounting stud with 1/4-28 thread

Single point NIST traceable calibration at 6000 cpm (100 Hz)

The IMI Sensors Division of PCB® Piezotronics, Inc. specializes in the development, application, and support of industrial vibration sensors, transmitters, meters, and accessories for machinery condition monitoring and predictive maintenance requirements. This product focus, coupled with the strengths and resources of PCB, permits the IMI Sensors Division to offer exceptional customer service, 24-hour technical assistance, and a **Total Customer Satisfaction** guarantee.

Visit [www.imi-sensors.com](http://www.imi-sensors.com) to locate your nearest sales office