



# ICP® Accelerometers & Cables for Route-Based Predictive Maintenance

Designed to optimize manpower utilized on walk-around monitoring routes.



## Highlights

- Directly compatible with most commercially-available vibration data collectors and FFT analyzers that supply excitation power to ICP® sensors.
- Shock protection of 5000 g+ guards against damage due to accidental overloads during sensor mounting and removal.
- Flat and curved surface rare earth magnets, mounting pads and quick-connect mounting bases/studs available for simplified sensor installation.

When monitoring vibration with a route-based program, time is money. Vibration analysts need portable machinery that can be set up quickly and can provide accurate data in a wide variety of applications.

IMI Sensors offers a complement of vibration sensors ideal for walk-around vibration monitoring with integral cable options, integral magnet options and high frequency options. The accelerometers provide monitoring solutions to prevent unexpected failures and downtime of critical equipment and assets.





## ICP® Accelerometers

### ICP® Accelerometer for General Purpose Measurements (Model 622B01)

Model 622B01 is a 100 mV/g ( $\pm 5\%$ ) accelerometer with a measurement range up to  $\pm 50$  g and a frequency range ( $\pm 3$  dB) of 0.2 to 15,000 Hz. (This sensor is also available with a dual output option [Model TO622B01] that simultaneously measures both vibration and temperature.) The sensor could be paired with a flat or curved surface magnet with a 1.0" diameter (Models 080A121 and 080A131 respectively) and a configurable length, 2-conductor polyurethane cable with 2-socket MIL connector to BNC plug (Model 052BRXXXAC). This accelerometer is ideal for general-purpose walk-around vibration monitoring applications with a tight sensitivity tolerance and full NIST-traceable calibration data that encompasses an extensive frequency range.



### ICP® Accelerometer with Integral Magnet and Integral Cable (Model 607M123/YYYCC)

Model 607M123/YYYCC is a 100 mV/g ( $\pm 5\%$ ) accelerometer with a measurement range up to  $\pm 50$  g and a frequency range ( $\pm 3$  dB) of 0.5 to 13,000 Hz. The sensor includes an integral armored polyurethane cable and an integral flat surface magnet. Custom configuration of the cable length and connector type is offered. The inclusion of both an integral cable and integral magnet allows for efficient attach/disconnect of sensor, which can save considerable manpower over stud mounting.



### ICP® Accelerometer for Very High Frequency Measurements (Model 621C40)

Model 621C40 is a 10 mV/g ( $\pm 10\%$ ) accelerometer with a measurement range up to  $\pm 500$  g and a frequency range ( $\pm 3$  dB) of 1.6 to 30,000 Hz. The sensor is available in a kit (Model 600A12A) that includes a flat surface magnet with a 3/8" hex and 5-40 threaded hole (Model 080A157) and 5ft miniature, lightweight, black coaxial cable with vinyl insulation jacket and 5-44 plug to BNC plug (Model 018C05). The flat frequency response of 30,000 Hz, regardless of whether stud-mounted or magnetically-mounted, makes Model 621C40 ideal for route-based measurements on high speed turbomachinery and gearboxes.



### ICP® Accelerometer for Triaxial Measurements in Hazardous Areas (Model EX629A11A/006CC)

Model EX629A11A/006CC is a hazardous area approved 100 mV/g ( $\pm 10\%$ ) triaxial accelerometer with a measurement range up to  $\pm 50$  g and a frequency range ( $\pm 3$  dB) of 2 to 10,000 Hz on the Z axis and 2 to 7,000 Hz on the X and Y axes. The sensor could be paired with a flat or curved surface magnet with a 1.5" diameter (Models 080M469 or 080M475 respectively). The sensor includes an integral 6ft coiled polyurethane cable. Custom configuration of the connector type is offered. The ability to take measurements on three axes at one time and then transmit the output signal through a configurable terminating connector allow for increased data collection speed and easy integration with a wide variety of multi-channel data collectors and analyzers.





## Cables for Use with Portable Data Collectors

Single Axis Cables			
Model Number	Description		
	Cable	Sensor Connector	Terminating Connector
050LQ006HX	Coiled, two-conductor, polyurethane jacket (6ft length)	2-pin MIL with strain relief	5-pin Turck®
050FV006CV	Coiled, two-conductor, polyurethane jacket (6ft length)	2-pin MIL lockable environmental boot	25-pin
050CF006CV	Coiled, two-conductor, polyurethane jacket (6ft length)	2-pin MIL	25-pin
050BQXXXHX	Coiled, two-conductor, polyurethane jacket (configurable length)	2-socket right angle connector	5-pin Turck®
050ACXXXHX	Coiled, two-conductor, polyurethane jacket (configurable length)	BNC plug	5-pin Turck®
052FVXXXCV	Two-conductor, polyurethane jacket (configurable length)	2-pin MIL lockable environmental boot	25-pin
052BQXXXHX	Two-conductor, polyurethane jacket (configurable length)	2-socket right angle connector	5-pin Turck®
052FVXXXHX	Two-conductor, polyurethane jacket (configurable length)	2-pin MIL lockable environmental boot	5-pin Turck®

Quick Connect Cables			
Model Number	Description		
	Cable	Sensor Connector	Terminating Connector
052LVXXXHX	Two-conductor, polyurethane jacket cable (configurable length)	3-socket, quick-disconnect jack	5-pin Turck®
052LVXXXCV	Two-conductor, polyurethane jacket cable (configurable length)	3-socket, quick-disconnect jack	25-pin CSI pinout

Triaxial Cables			
Model Number	Description		
	Cable	Sensor Connector	Terminating Connector
059ANXXXHX	Four-conductor, polyurethane jacket cable (configurable length)	4-socket bayonet	5-pin Turck®
059M66	Four-conductor, polyurethane jacket cable (6ft length)	5-pin Brad Harrison	5-pin Turck®



**HX Connector**



**BQ Connector**



**AC Connector**



**LQ Connector**



**CF Connector**



**LV Connector**



**FV Connector**



**CN Connector**



**AN Connector**



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# **IMI SENSORS** A PCB PIEZOTRONICS DIV.

**Corporate Headquarters** 3425 Walden Avenue Depew, NY 14043-2495 USA

**Toll-free in the USA** 800-959-4464 ■ **24-hour SensorLine<sup>SM</sup>** 716-684-0003

**Fax** 716-684-3823 ■ **Email** [imi@pcb.com](mailto:imi@pcb.com) ■ **Website** [www.imi-sensors.com](http://www.imi-sensors.com)

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