

Industrial Sensor Solutions



SHINKAWA

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About us...

SEC of America specializes in the design and manufacture of an extensive range of vibration sensors, associated monitoring systems and accessories.

Our product range includes vibration sensors or industrial accelerometers with either AC outputs for use with data collectors, or 4-20mA outputs for direct use with PLCs for the important task of monitoring vibration levels of plant and machinery in a predictive maintenance role across most industries. Intrinsically safe AC and 4-20mA versions are now available with ATEX and IEC Ex certification for approved use in Group I (mining) and Group II (Petrochemical).

We also supply multi-sensor switch boxes, vibration sensor modules, portable vibration meters, accessories for sensors, vibration condition monitoring protection systems and custom-built vibration sensors.

SEC of America is committed to providing our customer with quality products and services and recognizes the importance of constantly striving to exceed expectations. We focus on building good working relationships with our customers, suppliers and employees as we believe this is key to the long-term success of the company.

Vibration Sensors - Top entry, AC versions - Series CM300



The **CM300 Series** of industrial accelerometers are piezoelectric devices offering a standard 100 mV/g AC output (others available).

The **CM300T Series** are dual output industrial accelerometers offering a vibration (100mV/g) and temperature output.

They typically operate over a temperature range of -67 to 284°F (-55 to 140°C) and cover a frequency response over 2 Hz to 10 kHz.



Vibration Sensors - Side entry, AC versions - Series CM300S



The **CM300S Series** of industrial accelerometers are side entry devices offering a standard 100 mV/g AC output (Others available).

Robustly constructed with a welded stainless steel housing, a choice of fixing threads and studs are available.



AC, 4-20mA and Dual outputs

Vibration Sensors - Top entry, 4-20mA versions - Series CM600



The **CM600 Series** of industrial accelerometers are piezoelectric devices offering a 4-20mA output for PLC/DCS/BMS connection.

They are robustly constructed with a welded stainless steel housing, have a choice of top entry cable or connector with various mechanical threads and studs arrangements for fixing of the sensor.

They typically operate over a temperature range of -13 to 194°F (-25 to 90°C) and cover a frequency response over 2 Hz to 10 kHz.



The **CM600 Series** of industrial accelerometers are piezoelectric devices offering a dual output of 4-20mA output proportional to velocity and an AC 'g' for data collection.

The **CM600 Series** of industrial accelerometers offer a dual output measuring both vibration and temperature.

The **CM600 Series** of industrial accelerometers offer a 4-20mA output proportional to 'g'.

Vibration Sensors - Other versions



The CM104 Series

3 wire, 100mV/g industrial accelerometers

The CM105 Series

High Temperature industrial accelerometers

The CM130 Series

Compact AC industrial accelerometers

The CM140 Series

Charge Output industrial accelerometers

The CM160 Series

Velocity Output industrial accelerometers

The CM170 Series

Slim Profile industrial accelerometers

The CM109 Triaxial Series

Three axes X, Y, Z accelerometers

Detailed information datasheets for each sensor are available.

ATEX approved Sensors...

Vibration Sensors - Intrinsically safe, AC versions - Series HS-100I



The **HS-100I and HS-100SI Series** of industrial accelerometers are AC versions which are ATEX and IEC Ex certified for use in Group I and Group II potentially explosive environments. They typically operate over a temperature range of -67 to 284°F (-55 to 140°C) and cover a frequency response over 2 Hz to 10 kHz.

The **HS-105I Series** of industrial accelerometers can operate in high temperature conditions up to 482°F (250°C) and have an inline charge amplifier which is positioned outside the high temperature environment.



Vibration Sensors - 4-20mA versions - Series HS-420I



The **HS-420I and HS-422I Series** are industrial accelerometers with 4-20mA outputs having ATEX, IEC Ex certification and Australian approval. The 420IT and 422IT offer dual outputs of vibration and temperature.

Robustly constructed with a welded stainless steel housing, a choice of fixing threads and studs are available.



Detailed information datasheets for each sensor are available.

www.lenox.ind.br



Monitoring the sensor outputs...

Connection & Switch Boxes - Series CM-SE/CE/BE



We manufacture a range of Switch and Connection Boxes for use with our comprehensive series of industrial accelerometers.

CM-SE Series - A cost-effective switching unit capable of accepting 2 to 150 accelerometers. Available in a variety of different housings, including stainless steel and GRP.

The **CM-BE Series** offers a low-cost option for Sensor Connection Boxes. Simple-to-use, the CM-BE boxes are ideal for connecting up to 4 ways, via the BNC, with all commercially available portable data collector to take vibration readings.



Sensor Modules - Modular Protection Systems - Series VM-X



The VM-X Series of Sensor Modules

A family of DIN rail mounted modules for use with our vibration sensors. These can be used as a single channel system or formed into a multi-channel plant protection system with pre-set trip alarms and controls. A wireless option VM-X900 is also available.

Several modules are available all performing different tasks such as Power Supply, Converter, Signal Processing, Sensor Interface, Alarm Trips, Displays, etc. allowing a multi-function system to be created.



Sensor - monitor, connect & mounting

Vibration/Temperature Monitoring Kits



CM-620 & CM-630 Vibration/Temperature Meters

The recently launched **CM-620** Vibration Monitoring Kit is a portable, battery-operated instrument, and comes with a hand-held probe making it an ideal entry-level unit for use around the factory.

The new **CM-630** has all the facilities of the CM-620 with the addition of a non-contact temperature measuring sensor aided by a laser locator beam.

It is designed for maintenance engineers to use to monitor vibration levels and spot temperature on important plant and machinery.

Kit includes Vibration/Temperature Meter, Hand-held Probe, Cable, Magnetic Mount, Mains Charger, In-car Charger, Instruction Manual.



Sensor Cable - Cable assemblies, Connection brackets



To help you make connection with your sensors to all commercially available data collectors, we supply a wide choice of cable assemblies, mating connectors, connection brackets, etc.



Sensor Mounting - threaded and magnetic studs



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