

*VIBRATION MONITORING  
FOR THE  
**Petroleum &  
Chemical**  
INDUSTRY*



**WHEN RELIABILITY MATTERS  
CONNECT TO CONFIDENCE**




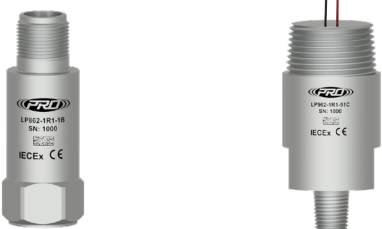
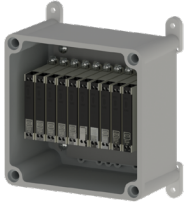
Many petroleum/chemical applications have hazardous environments due to gas, oil, or dust that could create a combustible atmosphere in and around the machines. As a result, vibration monitoring of critical assets provides key performance indicators for petrochemical plants worldwide to maintain employee safety and prevent operational downtime.









### ***What We Offer***

CTC's extensive experience in petrochemical environments has driven the design and manufacture of rugged and reliable vibration monitoring products that stand up to these environmental challenges and includes CTC's best in class warranties. CTC and Pro lines feature products that are certified through CSA, ATEX, and IECEx for Intrinsically Safe (Class 1, Division 1 or Zone 0) and Non-Arcing, Non-Sparking (Class 1, Division 2 or Zone 2) environment.

### ***Common Applications Include***

- Conveyers
- Fans
- Gear boxes
- Motors
- Pumps
- Compressors

<p><b>Sensors</b></p> 	<p><b>Intrinsically safe Low Capacitance Accelerometers:</b> Available in top or side exit connectors, integral cable, or armored integral cable Sensitivity options: 10 mV/g, 50 mV/g, 100 mV/g</p> <p><b>Intrinsically Safe Dual Output Sensors for Acceleration and Temperature:</b> Available in top exit or side exit connector, integral cable, armored integral cable Sensitivity options: 10 mV/g, 100 mV/g Vibration temperature output: 10 mV/C</p>
<p><b>4-20 mA</b></p> 	<p><b>Intrinsically Safe Loop Power Sensors for Velocity or Acceleration</b> Available in top exit connector, integral cable, and armored integral cable options</p>
<p><b>Barriers</b></p> 	<p><b>Intrinsically Safe Barriers</b> Available in single and dual input</p>

<p><b>Sensors</b></p>  	<p><b>Low Capacitance for use in "Non-Arcing, Non-Sparking" Environments</b>                  Available in top exit or side exit connector, integral cable, armored integral cable                  Sensitivity options: 10 mV/g, 50 mV/g, 100 mV/g</p>
 	<p><b>Standard Accelerometer</b>                  Available in top exit 2 pin mini-MIL connector, side exit 2 pin mini-MIL connector, 3 pin side exit connector, 4 pin Mini-MIL side exit connector                  Sensitivity options: 100 mV/g</p>
 	<p><b>Dual Output Sensor, Acceleration and Temperature</b>                  Available in top exit or side exit connector, integral cable, armored integral cable                  Sensitivity options: 10 mV/g, 100 mV/g                  Vibration temperature output: 10 mV/C, 10 mv/C</p>
<p><b>4-20 mA</b></p>  	<p><b>Intrinsically Safe Loop Power Sensors for Velocity or Acceleration</b>                  Available in top exit connector, integral cable, and armored integral cable options</p>

**Sensors**



**Standard Size Accelerometers**

Available in top or side exit connector, integral cable, armored integral cable, 4 pin M12 top connector, 4 pin M12 side connector, magnet mount, and built-in integral stud options  
Sensitivity options: 25 mV/g, 50 mV/g, 100 mV/g

**Compact Size and Small Size Accelerometers**

Available in top or side exit connector, integral cable, and armored integral cable options  
Sensitivity options: 10 mV/g, 100 mV/g

**Triaxial and Biaxial Accelerometers**

Available in standard and 4 pin top or side exit connector, integral cable, armored integral cable  
Sensitivity options: 10 mV/g, 100 mV/g

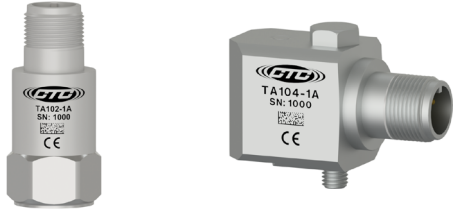

**High Frequency and High G Industrial Accelerometers**

Available in top exit connector, integral cable, and armored integral cable, and high frequency mini-MIL top and side exit options  
Sensitivity options: 10 mV/g

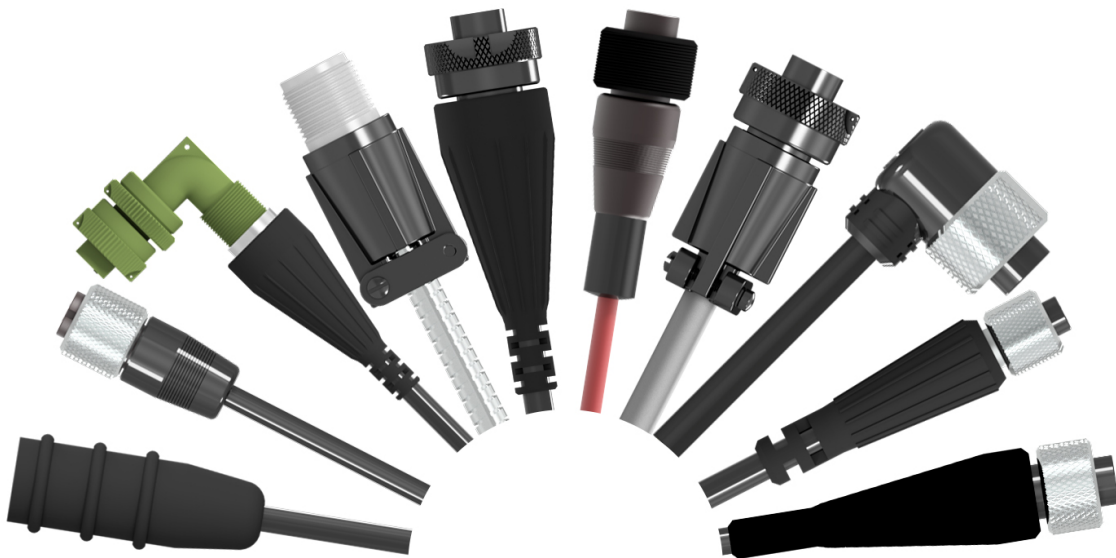
**Low Frequency Accelerometers**

Available in top exit or side exit connector, integral cable, armored integral cable, and 4 pin M12 top or side connector options  
Sensitivity options: 100 mV/g, 250 mV/g, 500 mV/g, 1000 mV/g



<p><b>Sensors</b></p> 	<p><b>Dual Output Accelerometers with Temperature Output</b></p> <p>Available in top or side exit connector, integral cable, armored integral cable, M8 captive bolt, M12 top or side exit connector</p> <p>Sensitivity options: 50 mV/g 100 mV/C, 100 mV/g 10 mv/C , 500 mV/g, 10 mv/C</p> <p>Vibration temperature output options: 10 mV/C, 10 mV/K</p>
<p><b>4-20 mA</b></p> 	<p><b>Loop Power Sensors for Velocity or Acceleration</b></p> <p>Available in top exit, integral cable, and armored integral cable options</p>

CABLES & CONNECTORS



We offer a wide variety of cables and connector options for various durability, chemical, and environmental needs.

Large gains in safety and efficiency may be realized by implementing junction boxes into your condition monitoring program. Multiple sensors may be wired from the machine to the junction boxes for safe, local measurement, monitoring systems. Junction boxes may be used for cable reduction purposes or for switched outputs during manual route data collection of the vibration signals. CTC junction boxes are available in fiberglass, power coated aluminum, or stainless steel and feature well organized sensor management and measurement access in a NEMA or IP rated enclosure.



## 4-20 mA VIBRATION TRANSMITTERS

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Signal transmitters offer a variety of high/low pass filtering options, 4-20mA signal transmission and a BNC output for dynamic vibration measurement.



\*SC300 not hazardous rated

CTC is the world leader in the design and manufacture of industrial accelerometers, piezo velocity transducers, 4-20 mA vibration sensors, and proximity probes as well as all related mounting hardware, cabling, and junction boxes. Our products enable efficient vibration monitoring for predictive maintenance in a wide variety of industries. Industries served include cement, mining, petrochemical, food & beverage, auto, steel, wind, paper & pulp, power generation, water & wastewater treatment, pharmaceutical, hospitals, bottling, and more. Our mission is to offer the widest variety of accelerometers and vibration hardware products, which are compatible with data collectors and online monitoring systems, as well as the tools for installation.



The CTC product line features vibration analysis hardware for heavy industry.

All CTC products are backed by our unconditional, lifetime warranty. If any CTC product should ever fail, we will repair or replace it at no charge.



The PRO line offers 4-20mA vibration monitoring solutions and proximity probes.

All PRO products are backed by a lifetime warranty on materials and workmanship. PRO will repair or replace any of our products as long as the product was not subjected to misuse, neglect, natural disasters, improper installation, or modification.

All stock products qualify for a full refund if returned in new condition within 90 days of shipment. Build to order products qualify for a 50% refund if returned in new condition within 90 days of shipment. Custom products are quoted and built specifically to the requirements of the customer, which may include completely custom product designs or private labeled versions of standard products for OEM customers. Custom products ordered are non-cancellable, non-returnable and non-refundable.

