



# BENTLY NEVADA ORBIT DCM COMPATIBLE VIBRATION ANALYSIS HARDWARE

CTC is proud to manufacture a wide range of instrumentation compatible with Bently Nevada Orbit Distributed Condition Monitoring (DCM) for use in standard Class 1, Division 2 / Zone 2 environments.

## WHY CHOOSE CTC PRODUCTS?



### FLEXIBILITY

Save money by ordering exactly what you need:

**No Minimum Order Quantities** on any CTC product.

**Customizable Cable Lengths** create any cable and connector assembly at your preferred length using CTC's proprietary online Custom Cable Wizard application.



### SPEED

Did you know CTC has the industry's fastest 10-day standard lead times? Get your products shipped sooner so you never have to plan your maintenance schedule around a lengthy delivery window.



### DURABILITY

Our products are built with strength to endure the harshest industrial environments, and we stand behind the quality of our products with the industry's best warranties.



### UNMATCHED CUSTOMER SERVICE

Get help and answers quickly from our knowledgeable, US-based customer service team - we always answer phone calls and respond to emails promptly.

## ENCLOSURES

**COMING SOON** - CTC's PM150 Series Enclosures are designed specifically to protect Orbit DCM Enclosures from dirt, dust, oil, and water by housing it in a convenient IP67 (NEMA 4X) rated enclosure with factory-supplied DIN rail, power supply and power conduit, and input cord grips.



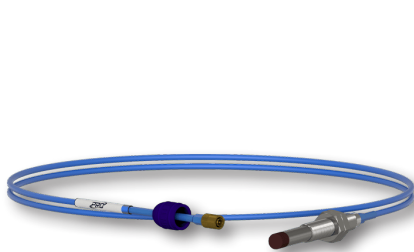
### PM150

- » Fiberglass online system enclosure with 24 sensor inputs
- » UV-resistant polycarbonate viewing window
- » 18.22 x 16.00 x 8.50 in. (463 x 406 x 216 mm)

## PROXIMITY PROBES

PRO Line DP1001, DD1001, and DC1001 8 mm Proximity Probe System can be used for radial vibration (displacement) and speed / Keyphasor™ measurements. The PRO Line 8 mm Proximity Probe System is equivalent to the Bently 3300 XL Series. PRO Proximity Probe Systems can be configured for standard or Class 1, Division 2 locations. To learn more about how PRO Probes can be used in speed applications, read more here:

<https://www.ctconline.com/blog-archive/speed-phase-analysis-hardware-solutions/>



### DP1001

Proximity Probe with  
8 mm Probe Tip  
Diameter



### DD1001

Eddy Current Driver  
for 8 mm PRO Proximity  
Probe Systems



### DC1001

Proximity Probe  
Extension Cable for  
8 mm PRO Proximity  
Probe Systems



## IEPE STANDARD SENSORS

The Orbit DCM accepts standard, two-wire IEPE accelerometers and velocity transducers. It is capable of supporting a frequency range up to 40 kHz. The Orbit DCM can accept inputs from any standard CTC accelerometer or velocity sensor (popularly sold are AC102, AC140, and VE102). It can also be used with CTC's UEB and UEA Series ultrasound sensors up to 40 kHz. For Class 1, Division 2 / Zone 2, AC935 and AC936 are popularly sold.



### AC102

Standard Size, Single-Axis Multipurpose Accelerometer, Top Exit 2 Pin Connector, 100 mV/g,  $\pm 10\%$  Sensitivity, 30-810,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature



### AC140

Low Cost, Miniature Size, Single-Axis Multipurpose Accelerometer, Top Exit 2 Pin Mini-MIL Connector, 100 mV/g,  $\pm 15\%$  Sensitivity, 36-900,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature



### VE102

Standard Size, Piezo Velocity Sensor, Side Exit 2 Pin Connector, 100 mV/in/sec,  $\pm 10\%$  Sensitivity, 90-420,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature



### UEB332

Miniature Size, High Frequency Dynamic Vibration IEPE Ultrasound Sensor, Top Exit 2 Pin Mini-MIL Connector, 100 mV/g,  $\pm 10\%$  Sensitivity, 30-1,320,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature



### UEA332

Miniature Size, High Frequency Dynamic Vibration IEPE Ultrasound Sensor, Side Exit 2 Pin Mini-MIL Connector, 100 mV/g,  $\pm 10\%$  Sensitivity, 60-1,020,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature





### UEB334

Low Cost, Miniature Size, High Frequency Dynamic Vibration IEPE Ultrasound Sensor, Top Exit 2 Pin Mini-MIL Connector, 100 mV/g,  $\pm 15\%$  Sensitivity, 30-840,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature



### UEA334

Low Cost, Miniature Size, High Frequency Dynamic Vibration IEPE Ultrasound Sensor, Side Exit 2 Pin Mini-MIL Connector, 100 mV/g,  $\pm 15\%$  Sensitivity, 60-1,020,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature



### AC935

Nonincendive, CSA North America Class 1, Division 2 and ATEX Zone 2 Approved, Standard Size Accelerometer, Top Exit 2 Pin Connector, 100 mV/g,  $\pm 10\%$  Sensitivity, 30-900,000 CPM Frequency Response ( $\pm 3$  dB), -40 to 250 °F (-40 to 121 °C) Operating Temperature



### AC936

Nonincendive, CSA North America Class 1, Division 2 and ATEX Zone 2 Approved, Standard Size Accelerometer, Side Exit 2 Pin Connector, 100 mV/g,  $\pm 10\%$  Sensitivity, 30-516,000 CPM Frequency Response ( $\pm 3$  dB), -40 to 250 °F (-40 to 121 °C) Operating Temperature



## IEPE TRIAXIAL SENSORS

The Orbit DCM can accommodate triaxial sensors. One triaxial sensor will require three dynamic channels. Popularly sold are the TREA330 and TREA331 for standard applications, or the AC950 for Class 1, Division 2 / Zone 2 applications.



### TREA330

Premium, Miniature Size Triaxial Accelerometer, Side Exit 4 Pin Mini-MIL Connector, Follows Cartesian Phase Coordinate System, 100 mV/g,  $\pm 5\%$  Sensitivity, 30-900,000 CPM Frequency Response ( $\pm 3$  dB), -65 to 250 °F (-54 to 121 °C) Operating Temperature





### TREA331

Low Cost, Miniature Size Triaxial Accelerometer, Side Exit 4 Pin Mini-MIL Connector, Follows Cartesian Phase Coordinate System, 100 mV/g,  $\pm 15\%$  Sensitivity, 30-600,000 CPM Frequency Response ( $\pm 3$  dB), -65 to 250 °F (-54 to 121 °C) Operating Temperature



### AC950

Nonincendive, CSA North America Class 1, Division 2 Approved, Miniature Size Triaxial Accelerometer, Side Exit 4 Pin Mini-MIL Connector, 100 mV/g,  $\pm 10\%$  Sensitivity, 36-600,000 CPM Frequency Response ( $\pm 3$  dB), -58 to 250 °F (-50 to 121 °C) Operating Temperature



## TEMPERATURE SENSORS

CTC offers a wide range of dual output vibration and temperature sensors, including TA202 and TA204 for standard applications, and TA935 and TA936 for Class 1, Division 2 / Zone 2 applications.



### TA202

Dual Output Temperature and Acceleration Sensor, Top Exit 3 Pin Connector, 100 mV/g, 10 mV/°C,  $\pm 10\%$  Sensitivity, 30-810,000 CPM Frequency Response ( $\pm 3$  dB), -40 to 250 °F (-40 to 121 °C) Operating Temperature



### TA204

Dual Output Temperature and Acceleration Sensor, Side Exit 3 Pin Connector, 100 mV/g, 10 mV/°C,  $\pm 10\%$  Sensitivity, 30-600,000 CPM Frequency Response ( $\pm 3$  dB), -40 to 250 °F (-40 to 121 °C) Operating Temperature





### TA935

Nonincendive, CSA North America Class 1, Division 2  
Approved, Dual Output Temperature and Acceleration Sensor,  
Top Exit 3 Pin Connector, 10 mV/g, 10 mV/°C, ±10% Sensitivity,  
30-900,000 CPM Frequency Response (±3 dB), -40 to 250 °F  
(-40 to 121 °C) Operating Temperature



### TA936

Nonincendive, CSA North America Class 1, Division 2  
Approved, Dual Output Temperature and Acceleration  
Sensor, Side Exit 3 Pin Connector, 10 mV/g, 10 mV/°C, ±10%  
Sensitivity, 30-516,000 CPM Frequency Response (±3 dB),  
-40 to 250 °F (-40 to 121 °C) Operating Temperature

