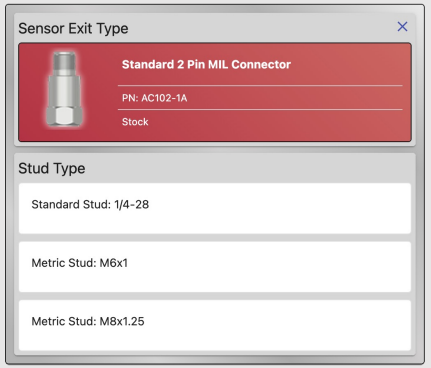
CONNECTION TECHNOLOGY CENTER, INC.

2022 in Review:
A Year of Innovation

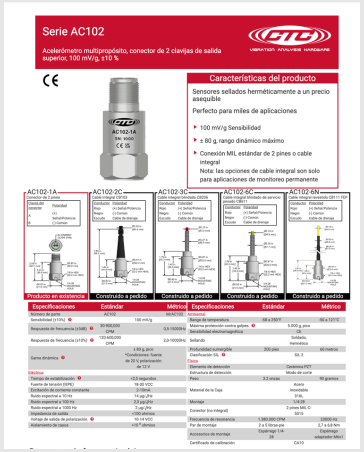
2022 Customer Enhancements

CTC is always grateful to hear from you about how we can improve our product offerings to meet your real-world needs. In 2022, we enhanced several of our products and resources based on customer requests:



M8x1.25 Adapter Studs

Are now available for all top exit sensors at no extra charge. Simply select ¼-28, M6x1, or M8x1.25 on your desired sensor's part creator or type in M8/(Sensor Part Number) into our quoting system.



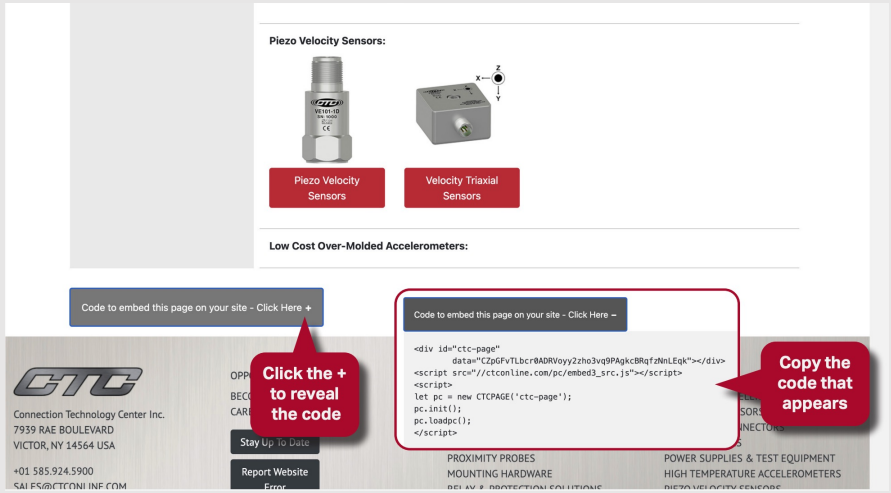
Translatable Datasheets

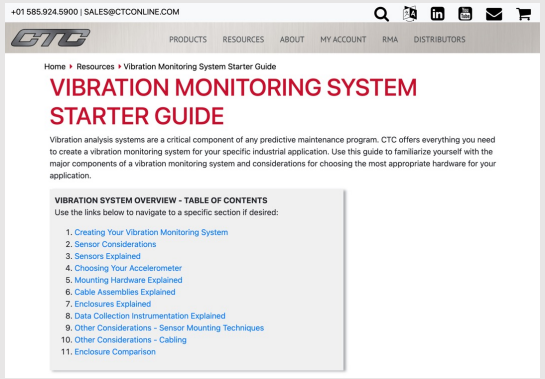
All CTC datasheets now feature a translate option that harnesses the power of Google Translate to create datasheets that can be downloaded or printed in any language.

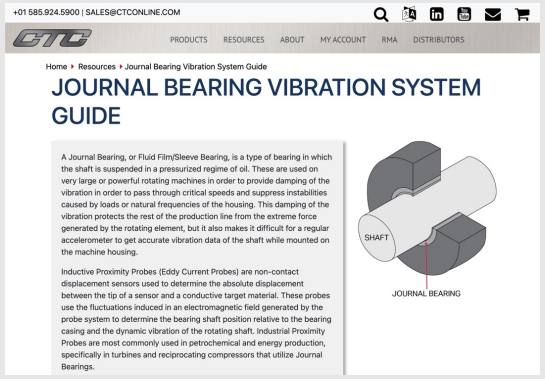
Dynamic, 360° Product Images

Have been added to our Part Creator so that when you build your part you will now see the exact product configuration you've selected.

2022 Customer Enhancements







CTC's API

This convenient feature allows you to embed portions of CTC's website directly on to your site, so that your CTC product offerings are always up to date, and your customers can build their products using CTC's convenient part creator. Simply log into your distributor portal account on www.ctconline.com and click the API button to get started.

Vibration System & Journal Bearing Starter Guides

Are your customers new to the world of vibration analysis hardware? We've created two convenient, easy-to-understand starter guides to introduce the principles of vibration analysis and proximity probe hardware systems, which are located at:
https://ctconline.com/resources/vibration-monitoring-system-starter-guide/

https://ctconline.com/resources/journal-bearing-vibration-system-guide/

MEB360 Series & MCB360 Series Accelerometers

The MEB360 & MCB360 Series are CTC's first ever swivel mount, molded accelerometers. The rugged, molded body is made of polyurethane and is IP68 rated.

When mounting to a machine, the convenient 360° swivel feature allows you to easily adjust the placement of the side exit integral cable so that it is correctly situated, which is otherwise very difficult to achieve in permanent mounting situations. The mounting base then locks into place once the sensor is correctly positioned, preventing unintended rotation. The unique design also offers a lower profile and a higher frequency response, all at a lower cost than others on the market.

MEB360 Series
100 mV/g, ±5% and ±15% Sensitivity Options,
30-660,000 CPM (±3 dB) Frequency Response,
with Hatched Strain Relief for Extra Durability

MCB360 Series
10 mV/g, ±5% and ±15% Sensitivity Options,
30-840,000 CPM (±3 dB) Frequency Response,
with Hatched Strain Relief for Extra Durability

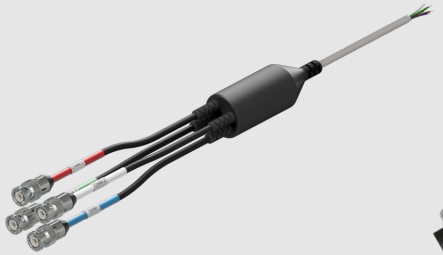
Dual Output Vibration & Temperature Triaxial Sensors + Compatible Hardware

The TXEA331-TA & TXEA333-TA are CTC's first ever dual output vibration and temperature triaxial sensors. These built-in Thermocouple Temperature Sensors have a temperature measurement range from -40 °F to 250 °F (-40 °C to121 °C) and are complete, all-in-one solutions for three axes of vibration measurement with additional temperature output in one sensor. They reduce installation costs and eliminate the need for multiple cables and mounting systems while still offering reliable, high-quality data.

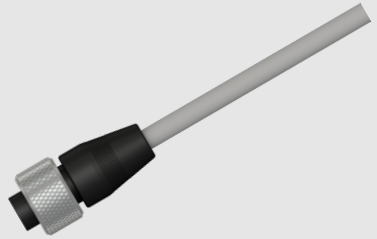
Additionally, CTC's F4DA and A5A connectors combined with CB129 FEP jacketed cable or CB629 armored cable are all designed for use with our dual output vibration & temperature triaxial sensors.

TXEA331-TA
100 mV/g, Premium ±5% Sensitivity, 10 mV/°C

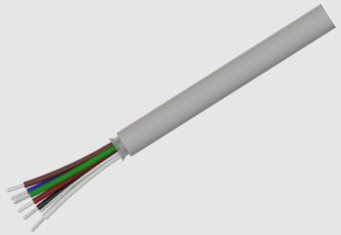
TXEA333-TA
100 mV/g, ±15% Sensitivity, 10 mV/°C



F4DA
4 Channel BNC Plug Connector, Polyurethane Molded



A5A
6 Socket MIL-Style with 5 Live Sockets, Polycarbonate Molded



CB129
6 Conductor Shielded Cable with FEP Jacket

CB629
6 Conductor Shielded Cable with Stainless Steel Armor

Low Frequency Triaxial Sensors

CTC's new Low Frequency Triaxial Sensors are designed for use in slow speed applications such as very slow-rotating rotors, main bearings, gear box inputs, and shafts.

CTC offers Low Frequency Triaxial Sensors for both acceleration and velocity. Each sensor is available in 4 pin mini-MIL connector exit, molded integral cable, and armor integral cable options.

TXFA330 Series
500 mV/g, ±5% or ±15% Sensitivity Options

TXFA330-VE Series
500 mV/in/sec, Piezo Velocity, ±5% or ±15% Sensitivity Options

TXEA330-VE Series
100 mV/in/sec, Piezo Velocity, ±5% or ±15% Sensitivity Options

TXGA330 Series
100 mV/g, ±5% or ±15% Sensitivity Options

M12 Connector Compact Accelerometers

CTC has expanded our compact accelerometer line to include M12 connector exit options. CTC's compact line of accelerometers are wildly popular throughout the vibration analysis industry for the lower profile form factor and premium frequency responses. They are a great solution for a wide variety of applications, especially those with reduced clearance requirements.

AC192-M12A
100 mV/g,
±10% Sensitivity,
Top Exit

AC194-M12A
100 mV/g,
±10% Sensitivity,
Side Exit

AC292-M12A
100 mV/g,
±5% Sensitivity,
Top Exit

AC294-M12A
100 mV/g,
±5% Sensitivity,
Side Exit

Enhanced SC300 Series Signal Conditioners

CTC's SC300 Series Signal Conditioners are ideal for use on any machinery needing 24-hour monitoring. CTC has made several updates to the SC300 Series Signal Conditioner firmware, which is available free of charge when ordering a new Signal Conditioner, or our can be used to program the new features onto an existing SC300 in the field.

More Compatible Temperature Sensors

Our software now includes a new temperature scaling option compatible with CTC's legacy TA100 and current hazardous rated TA900 Series dual output sensors. The following sensors are now compatible with SC300 Series Signal Conditioners: CTC's Standard AC Series, TA200 Series, VT200 Series, TA100 Series, TA900 Series, AC900 Series, VE100 Series, and UEB300 Series Sensors.

Multiple Peak-Hold Refresh Rates

CTC now offers multiple peak-hold refresh rates which allows you to select the best rate based on your specific application.

Customized Output Smoothing

Custom time constant output smoothing allows users to "smooth" out non-repetitive, sudden spikes and other sources of signal noise, offering a cleaner and more steady overall output signal. If a spike over the configured amplitude level but shorter than the configured time constant setting occurs, the spike will be flattened, which reduces the chance of a false trigger on any alarm levels. This saves your team time and money by preventing costly, unnecessary equipment shutdowns.

High Temperature Triaxial Sensors

CTC's high temperature triaxial sensors are ideal for use in industrial environments with temperatures ranging from 250 °F to 325 °F (121 °C to 162 °C), such as dryer sections in paper mills.

The new high temperature Triaxial Sensors monitor three axis of data simultaneously in high temperature areas, saving you on installation costs in areas that may require high temperature resistance hardware.

TXEA331-HT
100 mV/g,
±5% Sensitivity

TXEA333-HT
100 mV/g,
±15% Sensitivity

High Temperature RTD Sensors

CTC's high temperature RTD Sensors are ideal for use in industrial environments with temperatures ranging from 250 °F to 325 °F (121 °C to 162 °C), such as dryer sections in paper mills.

The new high temperature RTD Sensors measure temperature and acceleration in areas with temperatures exceeding what can be handled by a standard accelerometer.

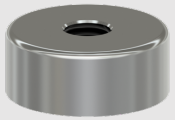
TR207-M12A
100 mV/g,
±10% Sensitivity

TR208-M12A
100 mV/g,
±10% Sensitivity

Coming Soon in 2023!

The CTC Team is already hard at work engineering great new products for you in 2023, including:

LPT200 & LPT300 Series Loop Powered Triaxial Sensors
CTC is proud to introduce Loop Powered Triaxial Sensors. Our LPT Triaxial sensors will offer 4-20 mA output in three axes with a Cartesian orientation. The LPT200 Series will feature velocity output, while the LPT300 Series will feature acceleration output. These sensors are ideal for locations requiring 24-hour alarm monitoring.



Ultra Low Profile Magnets
Our lowest profile magnetic mounting base! Measuring only 0.31 in (7.7 mm) high, these high-strength Neodymium Iron Boron magnets are ideal for machinery with limited clearance where portable measurement is utilized, as well as high frequency portable measurements.

Coming Soon in 2023!

PXE110 & PXE210

CTC will offer compacts version of our current PXE series boxes, designed to hold 1 to 2 PRO Proximity Probe Drivers. Available in fiberglass or stainless steel, these enclosures come in smaller sizes which fit in tighter, space-constrained locations.

SC150 Low Cost Signal Conditioner

CTC will be bringing to market a lower-cost signal conditioner that will be factory configured to 100 mV/g sensor input, 0-2 IPS, RMS, 10 Hz-1000 Hz, 4-20 mA output, with user-selectable inputs of 0-5 VDC or 1-10 VDC, and IEPE Power enabled or disabled. The SC150 Series also provides dynamic data to be collected for analysis with conventional Vibration Data Acquisition systems.

Coming Soon in 2023!

HSC100 Heterodyned Signal Conditioner

CTC's HSC100 Heterodyned Signal Conditioner is designed specifically around CTC's UEA and UEB ultrasound sensors and their primary resonance points (around 35 kHz sub-resonance and 42 kHz ±2 kHz primary resonance).

The HSC100 is designed to take in ultrasound frequency vibration signals, filtering out any low frequency vibration, and downmix them into the standard vibration frequency range. This creates a one-to-one copy of any ultrasound spectrum vibration content (within the device's passband), shifted down 25 kHz into the standard range. This allows ultrasound frequency vibration signals to be measured and analyzed with standard data collectors or data acquisition devices, which otherwise would not have a high enough sampling rate to measure these high frequency signals. Programmable input gain also allows for amplification of the input signal to better distinguish very low amplitude signals.