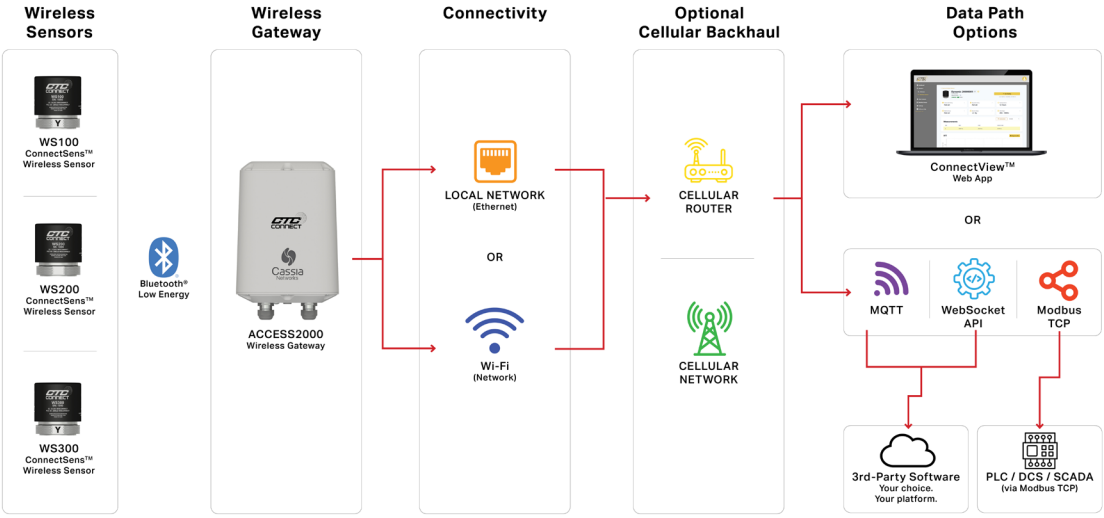
CTC CONNECT

WIRELESS CONDITION MONITORING SOLUTIONS FOR SOFTWARE INTEGRATORS

WIRELESS DATA COLLECTION *DONE DIFFERENTLY*

THE CONNECT ECOSYSTEM



WHAT WE OFFER

CTC Connect is a line of wireless hardware for dynamic vibration signal or overall vibration signal with digital data transmission. CTC Connect products were designed based on inputs from hundreds of wireless hardware users from around the world. The result of our extensive research and collaboration is a wireless ecosystem designed specifically for the needs of software integrators.

The CTC Connect ecosystem offers you the highest quality wireless hardware system on the market, with industry-leading **Bluetooth®** line-of-sight range, and is designed for integration into 3rd-party vibration analysis software. Our complimentary ConnectView Web Application comes preloaded on Connect Wireless Gateways and provides basic vibration monitoring management tools and device management options like sensor configuration, battery level information, and more. When used with 3rd-party vibration analysis software, our wireless sensors and gateway can be harnessed for advanced data analysis that meets your specific needs.

CTC ConnectView Basic Vibration Tools & Device Management Web App

The ConnectView Web App comes preloaded on all Connect Wireless Gateways with no need for additional downloads. All data is stored locally on the gateway and is accessible via your plant's network.

FREE API Integration

Our API allows users to utilize 3rd-party web app or software (such as OEMs or plants requiring customized solutions) to communicate with CTC ConnectSens Wireless Sensors.

Plug and Play Solutions For Reliability Professionals

Our CTC Connect hardware integrates effortlessly with software solutions provided by our vetted and approved partners, ensuring you have everything required for efficient and accurate monitoring.

CTC WIRELESS HARDWARE BENEFITS

- **Up to three years of unattended, autonomous operation**
- **User-replaceable 3.6V 1Ah Lithium Thionyl Chloride Primary battery**
- **Completely tailor your approach:**
  - User-customizable settings to monitor the most important frequency ranges for your application
  - Trigger a reading on demand or at preset intervals

STATE OF THE ART HARDWARE + *1 YEAR WARRANTY*

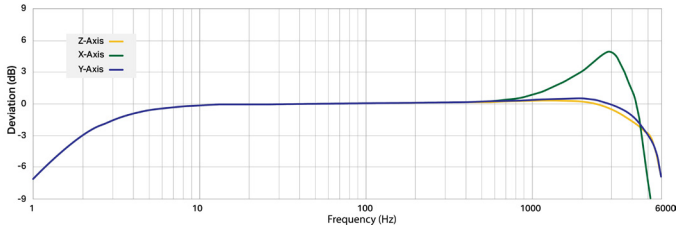
SELECTING YOUR CONNECT HARDWARE

Process Control Monitoring

Overall vibration sensor with temperature output that advertises periodic overall vibration levels (RMS, Peak, or Pk-Pk) over **Bluetooth®** Low Energy 5.2 which can be picked up by a Connect Gateway:

WS100 Series

ConnectSens Wireless Sensor - Triaxial Overall Vibration Signal with Temperature Output



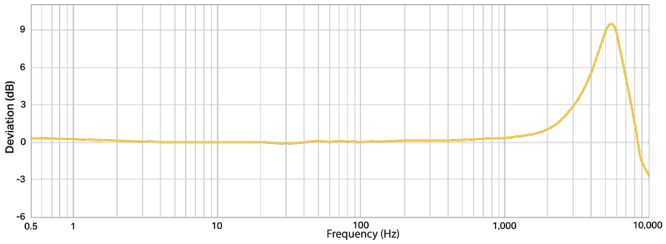
High frequency 2 Hz - 5 kHz only; not reflective of results on other frequency ranges

Dynamic Data Capture

All-in-one wireless vibration sensors with built-in temperature outputs:

WS200 Series

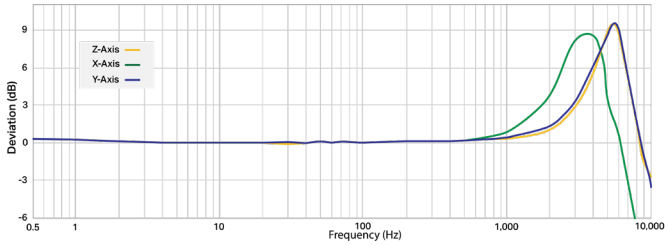
ConnectSens Wireless Sensor - Single Axis Dynamic Vibration Signal Capture with Temperature Output



25.6 kHz sampling frequency is required to utilize full bandwidth shown

WS300 Series

ConnectSens Wireless Sensor - Triaxial Dynamic Vibration Signal Capture with Temperature Output



25.6 kHz sampling frequency is required to utilize full bandwidth shown

SENSOR SPECIFICATION HIGHLIGHTS*

Specification	WS100 Series	WS200 Series	WS300 Series
Number of Axes Measured	Triaxial Measurement	Single-Axis Measurement	Triaxial Measurement
Resonant Frequency	5.5 kHz	5.5 kHz	5.5 kHz
Reading Duration	500 ms	Dependent on Number of Samples & Sensor Configuration Settings	Dependent on Number of Samples & Sensor Configuration Settings
Reading Interval	Factory-Configurable in Hours From 1 - 24	User-Configurable in Hours From 0 - 24 †	User-Configurable in Hours From 0 - 24 †
Battery Life	1 - 4 years ‡	1 - 4 years‡	1 - 4 years ‡
Output Format	Overall Vibration in Peak, RMS, and Pk-Pk	Dynamic Vibration Waveform Samples	Dynamic Vibration Waveform Samples
Temperature Range	-40 - 80 °C §	-40 - 80 °C §	-40 - 80 °C §

* Specifications are only accurate when used with a CTC Connect Gateways. If using an alternative method to receive your sensor signal, differences may occur in your actual line of sight range, battery life, and other specifications.

† With a value of 0, the sensor will take a reading triggered through the Connect Gateway (manual reading or user-configured intervals under 1 hour). If a new hourly rate is desired, this can also be configured through the gateway.

‡ Achievable battery life depends on environmental conditions, configuration options, and sensor use. CTC recommends replacing the battery every four years, regardless of remaining battery life reported by the Web App, due to effects of battery degradation over time. If operating above 50 °C, replace the battery in half that time.

§ Operation above 80 °C will cause intermittent readings, accelerate sensor failure, and void warranty coverage.

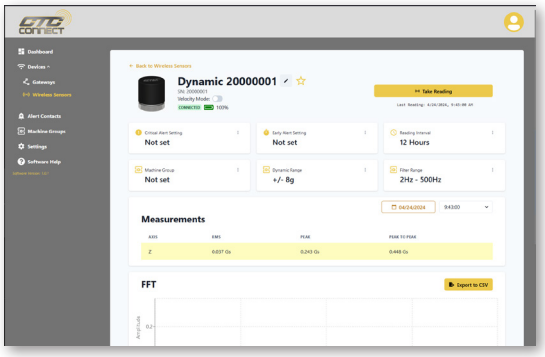
STATE OF THE ART HARDWARE + *1 YEAR WARRANTY*

GATEWAY AND WEB APPLICATION

ACCESS2000 Long-Range Gateway
All Connect-compatible devices can be used with ACCESS2000 Gateways. The gateway serves as the link between CTC ConnectSens wireless sensors and your preferred data analysis platform, including the CTC ConnectView Web App. It can send and receive data between ConnectSens hardware and a TCP/IP network over Wi-Fi or Ethernet, operating as both a wireless network controller and a digital gateway. It can service 30 sensor inputs* - mix and match WS100, WS200, and WS300 sensors.

ACCESS2000 is housed in a durable, IP66-rated ABS enclosure and can be powered via DC input or Power over Ethernet. Choose from ACCESS2000-LITE with 4 GB onboard memory (ideal for software integrators) or ACCESS2000 with 64 GB of onboard storage. Stored readings can be downloaded and imported into the CTC ConnectView Web App or third-party vibration analysis software, giving users flexibility in how they access and manage data while maintaining seamless integration within the broader Connect Wireless Ecosystem.

**Each ACCES2000 is capable of discovering more than 30 dynamic sensors; however, each gateway is only capable of maintaining 30 active BLE connections at once. Sensors beyond this will be in advertising mode until there is time to service them. CTC recommends 1 ACCESS2000 per 30 dynamic sensors for maximum validated and supported system performance.*



ConnectView™ Web App
CTC's complimentary ConnectView Web App is a user-friendly platform that comes preloaded on Connect Gateways. The web app offers basic vibration tools and device management functionality, including:

- Configure WS200 and WS300 Series Sensor *(Please note, WS100 is factory configurable only)*
- Nickname sensors
- Set critical and early alert values which can be viewed through the ConnectView Web App
- Create machine groups
- View battery life
- Request readings on demand *(WS200 & WS300 only)*
- View basic vibration data:
  - WS100 - View overall vibration amplitude data in RMS, Peak, and Peak to Peak
  - W200 & WS300 - View Time Waveform and FFT data

The web app is designed to be integrated with 3rd-party vibration analysis software for advanced analysis functions and is not intended to provide in-depth analysis features.

THE CTC CONNECT DIFFERENCE

Own Your Data

No Recurring Fees

Transparent Specifications

Proudly Made in the USA

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