



HOW TO PILOT A WIRELESS CONDITION MONITORING PROGRAM

Launching a wireless condition monitoring program can be a game-changer for predictive maintenance and asset reliability, but only if it's done right. The first challenge? Selecting the right wireless equipment from a reputable provider.

1 CHOOSE A PROVIDER WITH TRANSPARENT HARDWARE SPECS

When evaluating a wireless condition monitoring system, don't get distracted by flashy software demos if the hardware details are hard to find. If a provider focuses solely on software features and buries or omits hardware specifications, that's a red flag. Your monitoring program is only as good as the data it's built on, and that data comes from the sensors. Without reliable, high-quality hardware, even the most sophisticated software is essentially useless.

Look for a provider that publishes clear, comprehensive technical documentation, including sensor specifications, installation guidelines, battery life expectations, etc. Transparency at this stage will save you headaches later.

WS100 Series
ConnectSens™ Wireless Overall Triaxial
Vibration Sensor with Temperature Output

Product Features

- 2100 ft (640 m) line of sight range
- Up to four years of autonomous operation
- RMS, Peak, Peak-to-Peak in acceleration or velocity

Built to Order

Component Specifications

Specifications below reflect sensor use in conjunction with a CTC ConnectBridge™ gateway. If a ConnectBridge™ gateway is not used, specifications may vary. CTC does not provide technical support for direct integration of the sensor without a ConnectBridge™ gateway.

<p>Frequency Range</p> <p>Resonant Frequency</p> <p>Reading Duration (All Axes)</p> <p>Automatic Reading Interval</p> <p>Dynamic Range</p> <p>Data Output Format</p> <p>Output Unit</p> <p>Sample Resolution</p> <p>Temperature Measurement Range</p> <p>Temperature Output Measurement Unit</p> <p>Power Source</p> <p>Battery Life</p>	<p>Factory configurable frequency bands</p> <p>5.5 kHz</p> <p>500 ms</p> <p>Factory configurable in hours from 1-24</p> <p>Factory configurable: +8 g, +16 g, +32 g, +64 g</p> <p>Overall vibration in Peak, RMS, & Peak-to-Peak</p> <p>Factory Configurable: acceleration (g/s) or velocity (IPS)</p> <p>16 bits</p> <p>-40 to 80 °C</p> <p>°C</p> <p>Field replaceable 3.6V 1 Ah lithium battery pack (35 gram lithium)</p> <p>4 years based on 2 readings taken per day at 20 °C</p>	<p>Operating Temperature Range</p> <p>Maximum Shock Protection (Powered)</p> <p>Maximum Shock Protection (Unpowered)</p> <p>Sealing</p> <p>Ingress Protection</p> <p>Operating Distance</p> <p>Wireless Protocol</p> <p>Sensing Structure</p> <p>Weight</p> <p>Case Material</p> <p>Mounting Thread</p> <p>Mounting Torque</p> <p>Mounting Hardware Supplied</p> <p>EMC Compliance</p> <p>Calibration Certificate</p> <p>SIL Rating</p>
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CTC provides detailed and transparent datasheets and documentation for all hardware

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DON'T LET ANYONE TELL YOU WIRELESS IS THE ONLY ANSWER

Wireless technology opens up exciting possibilities, but it's not a one-size-fits-all solution. If you talk to a salesperson who tells you there's no longer a place for wired sensors in the market, that's another red flag.

That reality is wired and wireless solutions serve different purposes, and both have their place in a well-rounded condition monitoring strategy. Wired sensors often offer higher data resolution, continuous streaming, and long-term reliability in high-vibration or high-temperature environments. They're also ideal for locations with existing infrastructure or where power is readily available.

Wireless sensors excel in hard-to-reach or rotating assets, temporary installations, and where running cable isn't practical, but no single technology is perfect for every scenario.

A trustworthy provider will help you understand where wireless fits, and where it doesn't. The goal isn't to force a square peg into a round hole - it's to build a condition monitoring system that works for *your* equipment, *your* budget, and *your* reliability goals.



CTC offers both ConnectSens™ wireless sensors (top) and wired accelerometers (bottom) so you can choose what works best for your specific application

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PUT THE PLATFORM TO THE TEST

Before you deploy at scale, you need complete confidence in the system. That means testing both the hardware and the software in your real-world environment, without time pressure or hidden costs.

THE CTC CONNECT DIFFERENCE

At CTC, we bring over 30 years of experience as a trusted vibration hardware manufacturer. Our reputation was built on delivering the industry's most rugged, reliable, and precise wired sensors, and we've applied the same level of engineering excellence to our wireless solutions.

CTC Connect isn't just a new product line, it's the natural evolution of decades of vibration monitoring expertise. We understand what it takes to build sensors that survive and thrive in the harshest industrial environments, and we've carried that knowledge into every component of our wireless platform, from sensor design to gateway architecture.

All of our product specifications, manuals, and software documentation are available on our website for complete transparency, with no login or contact forms required. Additionally, a personalized demonstration can be arranged free of charge by contacting sales@ctconline.com.

WSK SERIES STARTER PACKS

Our WSK Series Starter Packs are more than just a trial, they're a true performance evaluation tool. The starter pack includes a fully-functional wireless gateway, your selection of two sensors, and related mounting hardware. The gateway comes with the CTC ConnectView™ Web App preinstalled, and there are no recurring feeds or expiration dates. You can test at your own pace, on your own equipment, with the full features you'd use in deployment.

Whether you're validating signal strength, comparing data quality, or simply learning how the system integrates into your workflow, we encourage you to push our sensors to their limits. When you're ready to expand, our team will be ready to support your transition to full-scale deployment with no surprises and no pressure.



CTC's WSK Series Starter Pack is customized with your choice of two ConnectSens™ Wireless Sensors