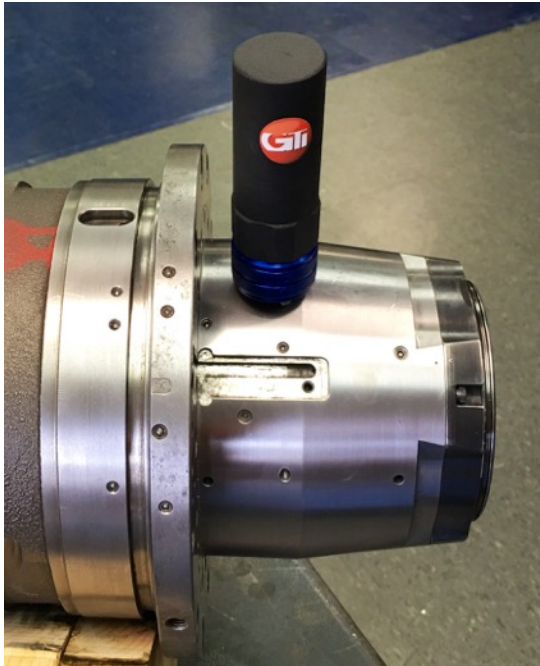


Bluetooth Sensor - Vibration Analysis VibePro-EX



VibePro EX builds upon the great foundation established by VibePro. The EX version includes all of the features found in VibePro plus some new ones only available in this version. The app was written to work with our brand new sensor that communicates with the iPad over Bluetooth.

Accelerometer Features: The main components of the wireless sensor are an accelerometer, signal conditioning electronics, anti-aliasing low pass filter, analog-to-digital converter, processor section, power/wake-up control and a low power radio module. The field replaceable battery is contained in a sealed compartment and the device mounts, via a screw thread (magnet mount provided), directly onto the machine which it is monitoring.

Accelerometer Specifications:

- Measuring Range +/- 20g
- Bluetooth LE (4.0)
- Field replaceable battery, up to 5 year battery life
- Certified for use in hazardous locations
 - Class 1, Div 2 approved

Software Specifications

- 0.03 to 4.1 Hz Resolution – User Setting
- Display/Capture Live: Velocity, Acceleration, and TWF data
- Spectrum Markers
 - RPM
 - Touch
 - Bearing with Multiples
- Windowing

Software Features:

- Single Measurement Reporting
- Hierarchy Data Collection
 - Collect TWF data to capture both acceleration and velocity data
 - Edit measurements live
- Edit Point Settings
 - Sample Rate user setting
 - Number of Samples user setting
 - Bearing Library
 - Velocity and Acceleration ISO Alert and Alarm settings
 - Add machine photos and measurement points
- Hierarchy View
 - Generate measurement reports from the iPad
 - Remote analysis through VibePro-EX Web App

Additional Specifications

Accelerometer Input

Sensor Type: Piezoelectric, ultra low power
Sensitivity (mV/g) : 50, 100, 250, 500, 1000, 2500, 5000
(software configurable setting)
Measurement Range: +/-20g RMS at 50mV/g
Frequency Range (+/-3dB): 0.3 to 10000 Hz
Resonant Frequency: 25kHz
Amplitude Linearity: ±1% typical in passband
Dynamic Range: >70dB

Data Acquisition

ADC: 16-bit SAR
Sampling Rate: 256Hz to 25.6kHz
Anti-Aliasing Filter: Compound analog/digital
Sample Lengths: 256 to 8192
Spectral Line Equivalent: 100 to 3200 Lines

Processing

Processor: Ultra Low Power, 32 bit
Configuration: Over Radio Network
Programming: Firmware Upgrades Over Radio Network

Communications

Network: Bluetooth Low Power radio link
USA, Canada, and International Certifications: FCC/IC
Europe Certifications: R&TTE

Mechanical

Base Enclosure: Stainless Steel
Cover Enclosure: Plastic
Weight: 100g
Dimensions: 33mm diameter x 84mm length
Mounting: Internal 1/4-28 UNF or M6 thread

Environmental

Operating Temperature: -40oC to +85oC
Sealing: IP66
Compliance: CE, RoHS
Hazardous Locations: ATEX II 1G (Pending)
Ex ia IIC T4 Ga -40oC to +85oC (Pending)

Power

Battery Type: Lithium Thionyl Chloride, 3.6V
Battery Monitor: Internal battery monitor and critical battery shutdown
Battery Life: Up to 5 years
Replacement: Field Replaceable