



by Walker Wireless



## WiFi Wireless Vibration Sensor (802.11 interface to your existing WiFi network)

### Wirelessly Monitor Vibration Data with this Ultra Low Power Battery-Operated Digital Sensor

ConceptOne is a revolutionary new technology in remote sensor monitoring from the Company that has provided unique, cost effective solutions for over twenty-one years. ConceptOne leverages existing WiFi networks to enable the monitoring of vibration data with an easy to install system.

The ConceptOne Ultra Low Power (ULP) WiFi Vibration Sensor is a battery operated digital vibration sensor with a built-in microprocessor controlled 2.4 GHz IEEE 802.11b ULP radio to transmit the x and y vibration data across your existing WiFi network. Once every 30 seconds, the unit will sample the separate x and y components of the internal accelerometer for 1.3 seconds. Every 4 minutes, the sensor will transmit the highest x and y samples observed from the last 8 samples.

This extremely small sensor, measures only 2.0" x 2.5" x 1.0" (including mounting flange) and weighs only one ounce.

#### Main Features

- 12 mw 2.4 GHz 802.11b ULP Wireless Radio
- Communicates with most standard Access Points
- Samples 4096 separate x and y components of vibration up to 1600 Hz for 1.3 seconds every 30 seconds
- Transmits the highest x and y values observed since the previous transmission every 4 minutes.
- Battery Life: Typical 1 year at 4 minute transmission intervals on a single AA cell. Optional dual battery model available.
- Battery Type: 3.6 V Lithium ½ AA. User replaceable.
- Unique Serial Number to identify specific sensor locations
- Supports WEP128, WPA, WPA2-PSK (AES)
- Static IP Address or Set Through DHCP
- Sensor Data Sent via UDP Packets
- Small Data Packets (<70 bytes)
- Configured via USB cable
- Integrated Mounting Flange for easy installation
- CRC-16-16 Error Checked Radio Data for accuracy

#### Key Advantages

- Our complete wireless network costs less than just the electrical wiring for other systems.
- You can leverage the investment in your existing WiFi Infrastructure
- Small size, low weight, fast and easy installation.
- Install sensor nodes without regard for other repeaters and receivers.
- One Year Warranty

#### Accelerometer Specifications

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|------------------------|-----------------------|
| • Accelerometer Type   | Micro Machined +/- 3G |
| • Baseline Sensitivity | +/- 3 milli G         |
| • Bandwidth            | 1600 Hz               |
| • Resonant Frequency   | 5500 Hz               |