

# SENTYRE™ - Specifications



## Wireless, Self Powered Accelerometer

### Physical Characteristics

Size: 2.5" x 3.0" (6.4 x 7.6 cm)

Volume: 5.5 in<sup>3</sup> (90.1 cm<sup>3</sup>)

Weight: < 6 ounces / 160 grams

Mounting Thread: 1/4"- 28 female or magnet

Power: Battery - 1/6 D-cell (0.5 in<sup>3</sup>)

Operating Temperature (designed to): -40C to +85C

### Features Overview

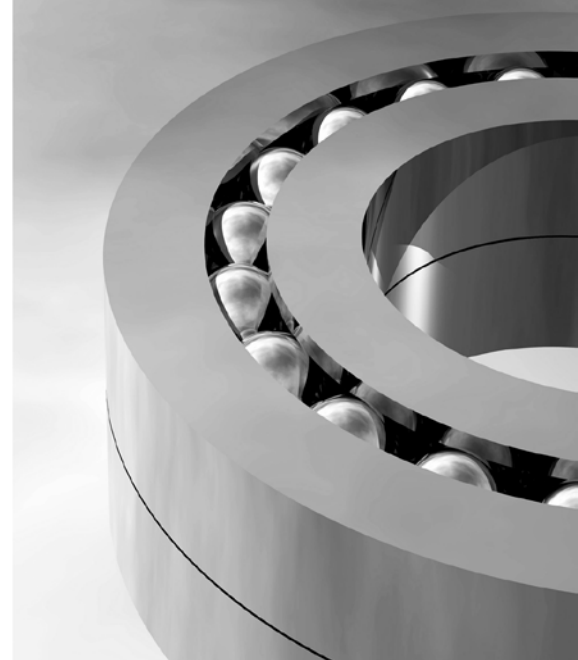
- Near Continuous Vibration Monitoring
- Low Power Operation
- Dynamic Waveform Acquisition
- Long Term Application; up to 3yr. Battery Life

### Typical Use Case

- 4 - 2048 sample waveforms per day
- 96 second data report interval
- 800 Line FFT

### Over the Air Updates & Configuration

- On-Demand Data Requests
- Firmware Updates Detailed Description



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## Detailed Description

- Robust 2.4 GHz Wireless Mesh Network
- Self-contained sensor, radio, processor, and battery
- Sampling rates: (sps) 1875, 3750, 7500, 15k, 30k
- Waveform sample length: up to 2048 samples
- A/D resolution: 16 bits effective
- A/D SNR: 96 dB
- Frequency Response: 20Hz to 8,000Hz (+/- 3 dB)
- Dynamic Range: 46dB (0.02-4g)

## Network Connectivity

### Data Interface

- Open XML output
- Simple Integration with OEM and third party data analysis systems.
- Impact CBMi
- Impact-RLW Systems Configuration Manager

### Physical

- Robust wireless mesh network, 2.4GHz (802.15.4), self-forming, self-healing
- Wireless manager easily integrates with standard IP networks.

### Dynamic Measurements

- Sampling rates (sps): 1875, 3750, 7500, 15k, 30k sps – user configurable
- Waveform sample length: 256, 512, 1024, or 2048 samples
- Waveform – configurable collect/report interval, alert/alarm driven, On-Demand Request
- Additional Processing Including FFTs

