OleaWave^{TM} Intelligent Vibration Sensor Platform Data Sheet

Wireless, intelligent multi-sensor data acquisition & computing platform
Available with Raspberry Pi

On-Board Intelligent Sensors

- OleaWave Sensor™
  - 24 GHz Radar Sensor & 9 Axis Motion Sensors
- Performance Specs
  - Range Sensitivity Range ±32 g
  - Frequency Range 10 Hz to 1000 Hz
  - Sampling Rate 25600 Hz
  - Remotely captures vibration and temperature
  - Real-time data acquisition & detections
  - Suitable for motors, pumps, chillers, compressors, fans and turbines

Processing, Programming & Memory

- On-board, high-performance 16 bit data acquisition system
- Processor—Cortex-M4 32-bit ARM (embedded firmware, algorithms & signal processing software)
- Settings—set remotely through included software
- On-board memory

Connectivity

- Wired (micro USB 3.0)
- WiFi (With Raspberry Pi) / Bluetooth Low Energy (BLE) 4.2

Power

- Rechargeable Li-ION battery (up to 40 hours, depending on use conditions)
- Wall adapter (one installed battery & wall adapter delivered with OS-4005)
- OS-4005 runs at 24 GHz less than .09 watt

Physical Attributes

- Dimensions—84mm W x 35mm H x 8.7mm D
- Weight—Approx. 1.0 US ounces (29 grams)

Software and Data Acquisition, Storage & Analysis

- Licensed Software (delivered with OS-4005)
  - On-board Olea customized firmware/software for data acquisition
  - OleaWave^{TM} Remote Monitoring Dashboard
- GUI Software Compatibility—Windows 10, Linux
- Recording Time—Approx. unlimited depending on local memory of processing device
- OleaWave^{TM} Machine Learning Algorithms & Analytic software available

Ask us about our capabilities to deliver device features & custom software to meet your requirements

Note: All specifications are subject to change without notice and to verification at time of purchase.