

## Hardware Specs

- ❁ **Sensor:** Wireless vibration, acoustic emission, temperature and humidity. Wifi enabled (2.4GhZ).
- ❁ **Accelerometer:** MEMS based tri-axial sensor
- ❁ **Security:** Security protocol -TLS 1.2, UL 2900-2-2 , completely encrypted data pipeline
- ❁ **Mounting:** Adhesive, stud or magnet mounted
- ❁ **Sampling Rate:** Rated up to 10kHz
- ❁ **Physical Design:** Explosion proof design meets stringent industry standards including: IECex Ex ia IIC T<sub>4</sub>, ASME Class 1 Div 2, NEMA 250, UL746C, IP69K/IPX7, FCC & IC
- ❁ **Power Supply:** Replaceable CR123A battery with power monitoring. Ultra-low-power mode consumption down to 2 µA . ~ 2 years battery life under normal operating conditions.
- ❁ **Operating Temperature Range:** Sensor can be mounted on a surface with a temperature range of -50 to 115C. The sensor inner hardware is rated for -40 to 75C.
- ❁ **Testing:** Vibration and natural frequency testing passed
- ❁ **Noise Reduction:** Unique skeleton holder ensures noise down to 0.0001%

## Measurement Range

### Vibration sensor

- High performance MEMS based sensor up to +/- 40 g acceleration range
- Range : +-2g, +-4g, +-8g, +-16g, +-24g, +-40g
- Sensitivity: up to 0.001g
- Sampling rate:
  - 8000 samples/sec in (Z)
  - 5000 samples/sec in (X)
  - 5000 samples/sec in (Y)

### Acoustic Emission sensor

- Ultrasonic Range: 100hZ to 80kHz (flat response)
- Magnitude: Up to 118DB

## Certifications



FCC



IC



UL 746C Certified sensor enclosure material



IP68



NEMA250



ASME Class 1 Div. 2



Ex ia IIC T4 (Intrinsically Safe)

**ISO**

**10816-1**

ČSN ISO 10816-1

**ISO**

**10816-3**

Přehledný výtah ČSN ISO 10816-3

**ISO**

**10816-7**

Přehledný výtah ČSN ISO 10816-7