RELIABILITY 360®

(TYPE 89)

2-CHANNEL ULTRASOUND SENSOR SPECIFICATIONS

Sensor & Gateway

Features

- Industrial Grade 2-Channel Ultrasound Vibration Sensor
- Resonant frequency Fres = 37 [kHz] +/- 1 [kHz]
- Measuring range 20 to 100 [dBµVRMS]
- Resolution 0.5 [dBµVRMS]
- Multiple sensor readings per day
- 2 Mile Line-of-Sight Range with On-Board Antenna
- Superior Line-of-Sight Range of up to 28 Miles with High-Gain Antennas
- Wireless Mesh Networking using DigiMesh®
- Validates and Retries Lost Communication Packets

Sensor Environmental and Regulatory Qualifications

- Temperature Operation Range -20°C to +70°C (-4°F to 158°F)
- Frequency Range Bandwidth 1.56Hz-6.4kHz
- IP 65 Rating
- RoHS Compliant

Sensor Data

- Recommended Cable Length: 30m/ 100ft.
- Recommended Tightening Torque: 2 [N.m]/ 17.7 [ibf.in]
- Band-pass Frequency: +/- 2 [kHz] centered on Fres
- Detector Type: RMS
- Output Range: 4 to 20 [mA]
- Sensitivity: 0.2 [mA/dBµVRMS]
- Batteries - 6AA (L91)
- DC External Power from 6-32VDC
- Housing: Stainless Steel
- Connector Plate: Aluminum
- Holster: Nitrile Butadiene Rubber
- Connector: M8-4 pin- Male

Gateway
Actual Size: 11.5"H (with antennae) x 4.1"W x 4.25"D

Sensor
Actual Size: 1.42"W x 3.23"H

Specifications

- Wireless Frequency 900MHz or 868MHz
- 128bit AES encryption
- Sensor Height: 3.23"
- Sensor Weight: 126g
- Gateway: 11.5"H (with antennae) x 4.1"W x 4.25"D
- Gateway Weighs 3 lbs

APPLICATION

Monitors a wide-range of rotating machinery, including but not limited to:

Motors, Pumps, Fans | Gearboxes | Turbines | Rollers & Bearings | HVAC Systems

Software

Dashboard

- Easy to understand decibel charts
- Sensor automatic scaling to decibel range detected
- Easy to configure notification features designed to reduce alert fatigue

Customization

- Easily map your equipment with your terminology
- Dynamic auto-scaling measuring range 20 to 100 [dBµVRMS]
- Resonant Frequency Fres = 37 [kHz] +/- 1 [kHz]
- Resolution 0.5 [dBµVRMS]
- Configurable alerts for high or low decibel readings
- Trending of decibel readings over time