

WASP2 Wireless System

Vibration, Temperature & Continuous Impact Detection



FEATURES & BENEFITS

- Continuous Impact Monitoring
- High Temperature Rating
- Measure all 3 axis (XYZ)
- Easy installation and may not require equipment shutdown
- Magnetically coupled, >50 lbs pull force
- Up to 99 sensors per NEST receiver.
- System Wide Synchronized Sampling.
- Optional Raw Waveform Logging

APPLICATIONS

- Reciprocating Compressors
- Screw Compressors
- Industrial Fans
- Electric Motors
- Natural Gas / Diesel Engines
- Cooling Towers
- Centrifugal Pumps
- Bearing Housings
- Pulleys and Idlers
- Small Turbines and Rollers
- Top Drives
- Non-Intrusive Temperature Monitoring

INSTRUMENT SPECIFICATIONS

Measured Parameters	Measured Acceleration and Surface Temperature, and calculated Velocity,
Sensor Technology	MEMS Advanced
Output Units	mm/s in/s °C F G
Temperature Measuring Range	-40°C to +175°C (-40°F to 347°F)
Vibration Measuring Range	±32 G
Frequency Response	2.5 - 1000 Hz
Data Sample Rate	4000 Hz
Resolution	1 mG
Wireless Transmission Range	300 m (1000 ft)
Wireless Radio	IEEE 802.15.4E 2.4 GHz ISM band
Mounting Options	Magnet / Threaded / Epoxy / Clamp

ENVIRONMENTAL SPECIFICATIONS

Ambient Temperature	-40°C to +60°C (-40°F to 140°F)
Mounting Point Temperature	-40°C to +175°C (-40°F to 347°F)

HAZARDOUS AREA CERTIFICATIONS

CSA Approval	CSA Class I Division 2, Zones B,C, and D, T4A
ATEX Approval *	ATEX Zone 2, Category 3 under ATEX Directive 94.9 EC

Additional Information

POWER REQUIREMENTS

WASP Power Module 3.6 Volts, Lithium Metal Battery

WASP Battery Life Up to 3 Years (Data transfer and temperature dependent)

SENSOR CAPABILITIES

Axis of Measurement X, Y, Z, RMS, PEAK and 3-axis RSS

Sensor Settings Configurable via wireless radio

Realtime Impact Event Logging +/- 200 G, 100 Hz, 0.1 G Resolution

MEASUREMENT ACCURACY

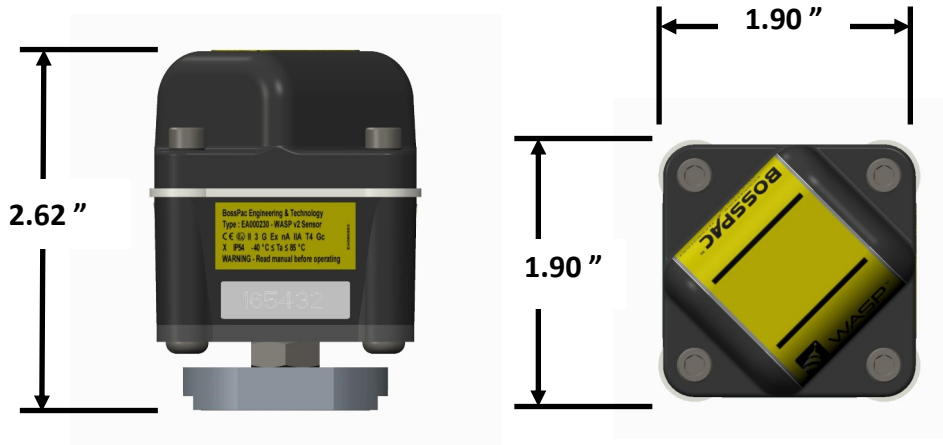
Acceleration	±0.03 G per G
Temperature	±1°C for Temp ≤ 100°C (212°F) ±1% for Temp > 100°C (212°F)
Realtime Impact Monitoring	+/- 1 G

AVAILABLE DATA

Acceleration	RSS, Peak
Velocity	RSS, Peak
Temperature	°C, °F
Battery Voltage	mV

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Vibration, Temperature & Continuous Impact Detection – Dimensions



WASP SENSOR PHYSICAL SPECIFICATIONS

Size	48 mm x 48 mm x 66 mm (1.9 in x 1.9 in x 2.6 in)
Weight	0.20 kg (0.44 lbs)

ORDERING INFORMATION

WASP Sensor w/Magnet mount	EA000233
WASP Sensor w/alternate mount	Contact for desired option

WASP NEST Receiver Reference Information



WASP MANDATORY REQUIREMENT

WASP NEST Receiver	EA000144
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NEST RECEIVER PHYSICAL SPECIFICATIONS

Size	200 mm x 160 mm x 56 mm (8.0 in x 6.3 in x 2.2 in)
Weight	2.68 kg (5.90 lbs)