

# 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 64 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	Z-axis: 1.25 Hz - 400 Hz X, Y axis: 1.25 Hz - 250 Hz
Data Sample Rate	2000 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

\* Specifications subject to change without notice.

## 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)

### MEASUREMENT ACCURACY

Acceleration	±0.05 G per G
Temperature	±1°C for Temp ≤ 100°C (212°F) ±1% for Temp > 100°C (212°F)
Realtime Impact Monitoring	+/- 1 G

### 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

### AVAILABLE DATA

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

# WASP2 Wireless System

## Dimensions

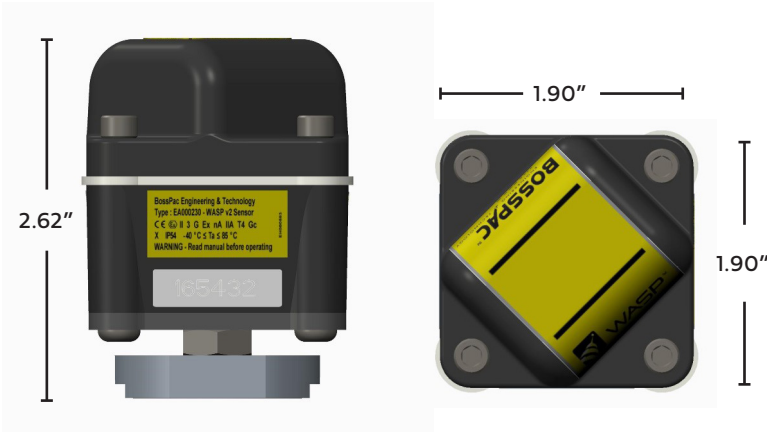
### WASP SENSOR PHYSICAL SPECIFICATIONS

**SIZE**

48 mm x 48 mm x 66mm  
(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



### 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)