RW161

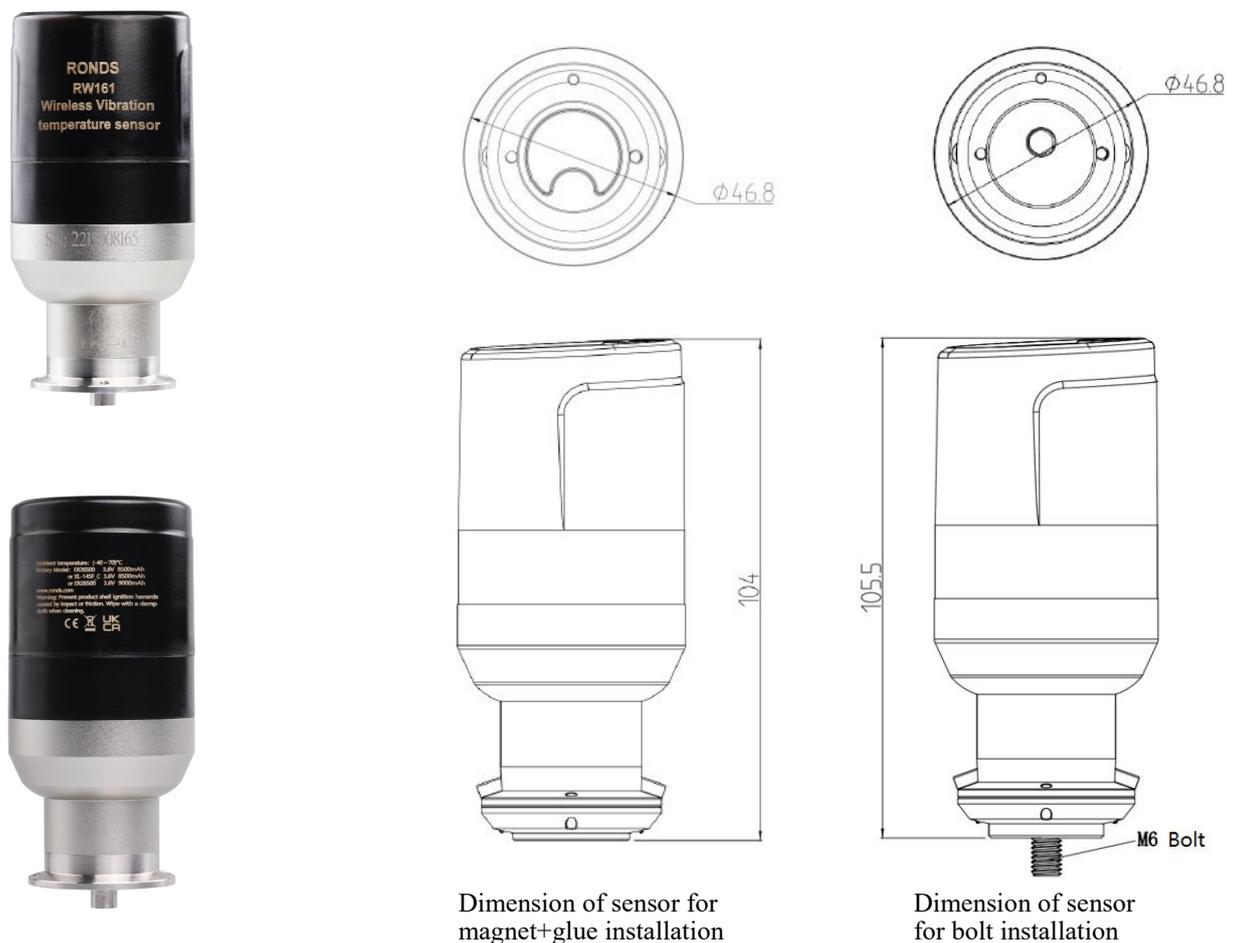## Wireless Vibration and Temperature Sensor

Product Overview

- Single piezoelectric, dual MEMS, three-axis vibration temperature sensor.

- Communication method: LoRa long-distance communication.

- Long battery life (over 3 years).

- Can replace manual inspections. Offer extremely high cost-effectiveness.

- Support waveform collection.

Product Picture and Dimension

Dimension of sensor for magnet+glue installation

Dimension of sensor for bolt installation

RW161

Main Parameters

Wireless Vibration and Temperature Sensor

Parameters	Specification	Remark
Physical		
Dimension	46.8 mm × 104 mm	Diameter × Height, including mounting base
Weight	About 265g	Including mounting base
Casting Material	304L Stainless Steel	
Installation Method	Magnet + glue, mounting base + screw, mounting base + welding	
Ambient Temperature	-40℃ to +70 ℃	
Protection Grade	IP68	
Basic		
Range	2 axial MEMS (X Y directions), ±16g (Peak) 1 axial Piezoelectric (Z direction), ±50g (Peak)	
Frequency Response (±3dB)	X, Y Direction:10Hz to 900Hz Z Direction: 10Hz to 10KHz	
Analysis Frequency	**Piezo**: 500Hz,1kHz,2kHz,5kHz,10kHz **MEMS**: 500Hz,1kHz	
Waveform Collection	**Piezo direction**: Waveform Length: 1K,2K,4K,8K,16K **MEMS direction**: Waveform length:1K,2K,4K,8K	
Spectral Line	400, 800, 1600, 3200, 6400	
Amplitude Linearity	2%	
Alarm Triggered Waveform Collection	Support	
Indicator Collection	Support	

RW161

Wireless Vibration and Temperature Sensor

Main Parameters

Parameters	Specification	Remark
Basic		
Indicator Alarm	Support	
Temperature Measuring Range	-40°C to 125°C	
Temperature Measuring Accuracy	±2 °C (-40°C to 125°C)	
Power		
Power Supply	Lithium-thionyl chloride battery (3.6V 8.5Ah)	
Battery	8.5Ah Lithium-thionyl chloride battery	
Communication		
Communication with Dongle tool	Bluetooth	Version: 5.0
Communication with Data Collector	LoRa	470MHz-510MHz,433-510MHz or 860-930MHz
Transmission Distance	LoRa: No interference, no obstacles 1000m (860MHz to 930MHz), 2000m (470MHz to 510MHz)	
Others		
Certification	UKCA, CE, EX	
Identification	Ex ia IIC T4 Ga (for area 0, 1, 2)	Only for model: RW161-EX, RW161-AS(868MHz),RW161-AS(915MHz)