

Call our friendly team on +44 (0)1243 558270 Tempcon Instrumentation Ford Lane Business Park Ford West Sussex BN18 OUZ, UK www.tempcon.co.uk



# HOBOnet Wireless Temperature Sensor (Lithium Battery Powered) - 6ft Probe Cable

### **Product Images**



## **Short Description**

The HOBOnet Wireless Temperature Sensor provides a cost-effective and scalable solution for web-enabled monitoring of air temperature. HOBOnet wireless sensors communicate data directly to a HOBO RX Station or pass data through other wireless sensors back to the central station. They are preconfigured and ready to deploy, and data is accessed through HOBOlink cloud-based software platform.

### Description

#### Sensor Features

- Measurement range of -40° to 100°C (-40° to 212°F)
- High accuracy: ± 0.2°C ( ± 0.36°F)
- Stainless-steel sensor tip

#### **Wireless Features**

- 868 MHz wireless mesh self-healing technology
- 450 to 600 metre (1,500 to 2,000 feet) wireless range and up to five hops
- Up to 50 wireless sensors or 336 data channels per HOBO RX station
- Simple button-push to join the HOBOnet wireless network
- Onboard memory to ensure no data loss
- Powered by 2 user-replaceable rechargeable lithium AA batteries (included).

**Note:** A complete system requires a HOBO MicroRX Station, which has an integrated HOBOnet Wireless Manager, and a HOBOnet Wireless Sensor. HOBOnet Wireless Repeater (RXW-RPTR-B-868) can be added to extend the range of both system options).

1-foot probe cable option also available (SKU: RXW-TMB-1-868)

# **Additional Information**

Country of Manufacture	United States	
Country of Manufacture	United States	
Brand	Onset HOBO	
Measurements	Soil Temperature, Temperature, Water Temperature Building Monitoring, Building Performance, Environmental (Indoor), Environmental (Outdoor), Field	
Typical applications	Research, HVAC, Weather Monitoring	
Onset Product Series	RX	
	For full specifications for this product, please see the User Manual found under the Resources tab. Sensor	
	Measurement Range	-40° to 100°C (-40° to 212°F)
	Accuracy	±0.25°C from -40° to 0°C (±0.45°F from -40° to 32°F) ±0.20°C from 0° to 70°C (±0.36°F from 32° to 158°F) ±0.25°C from 70° to 100°C (±0.45°F from 158° to 212°F)
	Resolution	0.02°C (0.036°F)
	Drift	<0.01°C (0.018°F) per year
	Response Time (typical, to 90% of change)	2 minutes, 30 seconds in air moving 1 m/sec
	Wireless Mote	
	Operating Temperature Range	-40° to 70°C (-40° to 158°F)
	Radio Power	12.6 mW (+11 dBm) non-adjustable
	Transmission Range	Reliable connection to 457.2 m (1,500 ft) line of sight at 1.8 m (6 ft) high Reliable connection to 609.6 m (2,000 ft) line of sight at 3 m (10 ft) high
	Wireless Data Standard	IEEE 802.15.4
	Radio Operating Frequencies	RXW-TMB-x-900: 904–924 MHz RXW-TMB-x-868: 866.5 MHz RXW-TMB-x-921: 921 MHz RXW-TMB-x-922: 916–924 MHz
Explanation	Modulation Employed	OQPSK (Offset Quadrature Phase Shift Keying)
1 · · · · ·	Data Rate	Up to 250 kbps, non-adjustable
	Duty Cycle	<1%
	Maximum Number of Motes	Up to 50 wireless sensors or 336 data channels per one HOBO RX station
	Logging Rate	1 minute to 18 hours
	Number of Data Channels	2
	Battery Type	Two AA 1.5 V lithium batteries
	Battery Life	1 year, typical use
	Memory	16 MB
	Dimensions	Sensor: 5.3 x 33 mm (0.2 x 1.3 inches) Cable length: 0.3 m (1 ft), RXW-TMB-1-xxx; 1.8 m (6 ft), RXW- TMB-6-xxx Mote: 16.2 x 8.59 x 4.14 cm (6.38 x 3.38 x 1.63 inches)
	Weight	Sensor and cable: 7.6 g (0.27 oz), RXW-TMB-1-xxx; 35.2 g (1.24 oz), RXW-TMB-6-xxx Mote: 223 g (7.87 oz)
	Materials	Sensor: Stainless steel waterproof tip Mote: PCPBT, silicone rubber seal
	Environmental Rating	Sensor and cable: Immersion in water up to 50°C (122°F) for 1 year Mote: IP67, NEMA 6
Contents	• HOBOnet Wireless Temperature Sensor • Lithium batteries • Zip ties	
Ideal For	Professional, Agronomy	
Power	Battery only	