

HOBO ZW Series Wireless Sensors

HOBO ZW Series wireless data nodes provide centralized monitoring of energy and environmental conditions in buildings.

Supported Measurements: Air Velocity, AC Current, AC Voltage, Amp Hour, CO₂, Compressed Air Flow, DC Current, DC Voltage, Differential Pressure, Gauge Pressure, Kilowatt Hours, Kilowatts, Power Factor, Pulse Signals, Temperature, Relative Humidity, Dew Point, Volatile Organic Compound, Volt-Amp Reactive, Volt-Amp Reactive Hour, Volt-Amps, Water Flow, Watt Hours, Watts, Volts, Amps, 0-10 VDC, 4-20mA



Key Advantages:

- Provides real-time centralized data collection within a facility
- Scales up to a network of 100 nodes sending data to a single receiver
- Creates self-healing network, using routers, to overcome obstructions in communication paths
- Provides one year battery life @ 15-minute logging intervals
- Provides alarm notifications via email or text messages
- Features powerful software for organizing and viewing data as well as the wireless network

Minimum System Requirements:



Software (included)



Receiver



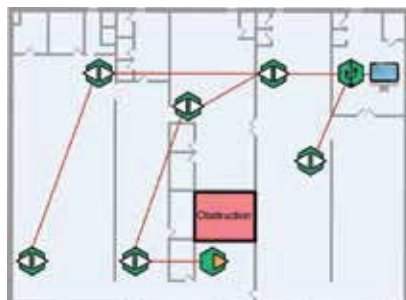
Data node

► For complete information and accessories, please visit: www.onsetcomp.com

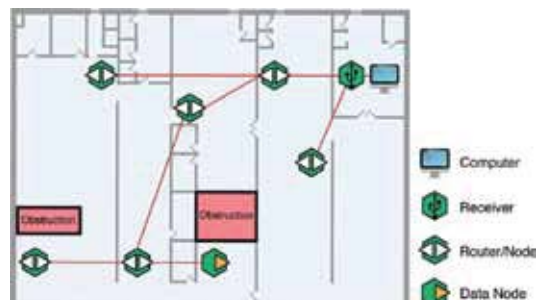
| Part number | ZW-RCVR (Receiver) | ZW-001 (Data node) | ZW-003 (Data node) |
|---------------------------------|---|---|---|
| Price | \$199 | \$169 | \$249 |
| Buffer memory | up to 95k measurements | 5k measurements | 4k measurements |
| Measurements | N/A | Temp | Temp/RH |
| Probe size (diameter) | N/A | N/A | N/A |
| Sample rate | N/A | 1 min to 18 hrs | 1 min to 18 hrs |
| Transmission rate | N/A | 2 min and greater | 2 min and greater |
| Power options (included) | AC Power adapter, Battery Backup, USB power | AC Power Adapter, Battery Backup | AC Power Adapter, Battery Backup |
| Measurement range | N/A | Temp: -40° to 70°C (-40° to 158°F) | Temp: -40° to 70°C (-40° to 158°F) RH: 5 to 95% RH |
| Accuracy | N/A | Temp: ± 0.21°C from 0° to 50°C (± 0.38°F from 32° to 122°F) | Temp: ± 0.21°C from 0° to 50°C (± 0.38°F from 32° to 122°F) RH: ± 2.5% |
| Resolution | N/A | Temp: 0.02°C @ 25°C (0.04°F @ 77°F) | Temp: 0.02°C @ 25°C (0.04°F @ 77°F) RH: 0.03% |
| Range | Approx. 100 m (300 ft.) depending on obstructions or interference | | |
| Dimensions | 96.5 x 108 x 28 mm (3.8 x 4.25x 1.1 in) | | |
| CE compliant | | | |

Self-Healing Technology

HOBO ZW wireless network uses self-healing technology. This ensures that, despite obstructions, data is automatically routed to the receiver through alternate paths without any manual intervention.



Scenario 1.
Typical data flow back to the receiver



Scenario 2.
Self-healing network automatically compensates for new obstruction

Centralized Data Collection

HOBO data nodes, routers, and receiver all work together as a system to provide reliable, accurate real-time information at a single location. Whether you are a warehouse manager looking to keep a close eye on temperature and humidity conditions, a facility manager looking at indoor air quality, or a building energy manager tracking energy use, HOBO data nodes provide reliable data collection without the hassles of manually offloading data.

Network Scalability

HOBO ZW wireless networks are scalable, enabling you to easily add or remove measurement points to your existing network over time. By using routers you can hop data across rooms, partitions, and floor levels, and redirect it to the receiver. This expands the network reach and improves data transfer reliability. The wireless data nodes can be set up in dual mode – data logging and data routing – thereby providing immense flexibility in scaling the network.

| ZW-005 (Data node) | ZW-006 (Data node) | ZW-007 (Data node) | ZW-008 (Data node) | ZW-ROUTER |
|---|--|--|--|-------------------------------------|
| \$299 | \$219 | \$299 | \$219 | \$159 |
| 3k measurements | 3k measurements | 3k measurements | 3k measurements | N/A |
| Ext T/RH, 1 analog port 1 pulse input port | 4 external analog ports | Ext T/RH, 2 analog ports | 2 analog ports 2 pulse input ports | N/A |
| 1cm (0.38 in) | N/A | 1cm (0.38 in) | N/A | N/A |
| 1 min to 18 hrs | 1 min to 18 hrs | 1 min to 18 hrs | 1 min to 18 hrs | N/A |
| 2 min and greater | N/A | 2 min and greater | 2 min and greater | N/A |
| AC Power Adapter, Battery Backup | AC Power Adapter, Battery Backup | AC Power Adapter, Battery Backup | AC Power Adapter, Battery Backup | AC Power Adapter, Battery Backup |
| Temp: -40° to 70°C (-40° to 158°F) RH: 5 to 95% RH Analog: 0 to 2.5 VDC Pulse: 0 to 65,535 pulses per logging interval | Analog channels: 0 to 2.5 VDC; 0 to 5 VDC | Temp: -40° to 70°C (-40° to 158°F) RH: 5 to 95% RH | Analog channels: 0 to 2.5 VDC; 0 to 5 VDC | N/A |
| Temp: ± 0.21°C from 0° to 50° C (± 0.38°F from 32° to 122°F) RH: ± 2.5% Analog: ± 1.544 mV + 2% | Analog: ±1.544 mV plus 2% of reading | Temp: ± 0.21°C from 0° to 50°C (± 0.38°F from 32° to 122°F) RH: ± 2.5% Analog: ± 1.544 mV + 2% | Analog: ± 1.544 mV plus 2% of reading | N/A |
| Temp: 0.02°C @ 25° C (0.04°F @77° F) RH: 0.03% Analog channel: 0.6 mV Pulse Channel: 1 pulse | Analog channel: 0.6 mV | Temp: 0.02°C @ 25°C (0.04°F @77°F) RH: 0.03% Analog channel: 0.6 mV | Analog channel: 0.6 mV Pulse Channel: 1 pulse | N/A |

Yes