

Product Data Sheet

SWS Wireless Zone Temperature Sensors

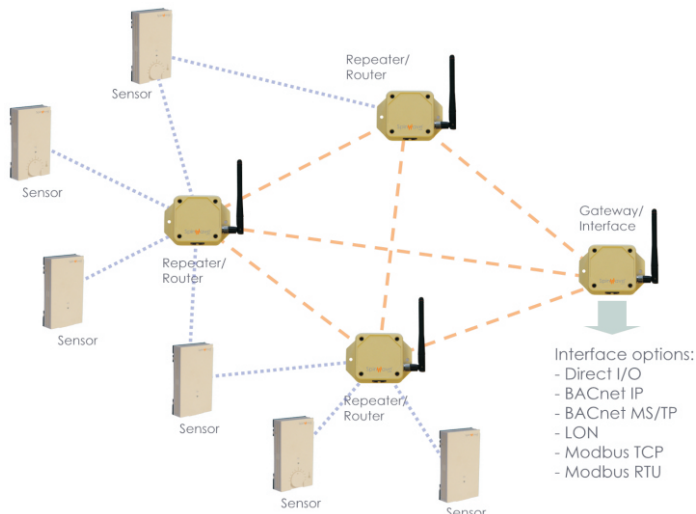


Spinwave Systems' wireless zone temperature sensors are available in three versions:

- Temperature sensor (SWS-T)
- Temperature sensor with override button (SWS-TO)
- Temperature sensor with override button and set point adjustment (SWS-TOS)

Spinwave's wireless temperature sensors can be easily interfaced to any building automation system, by either:

- Mapping sensor's temperature and/or set point to analog outputs and override button status to digital outputs on Spinwave's DDC I/O interface (SWRF-IO)
- Mapping sensor data to pre-configured industry protocol objects (e.g. BACnet objects, LON SNVTs or Modbus registers) on Spinwave's wireless protocol gateways.



Real-World Ready

Ultra-high reliability means that the wireless sensor network (based on IEEE 802.15.4) outsmarts changing RF interferences with self-adapting frequency agility (patent pending).

Sophisticated power management results in long battery life; 3 to 8 years, depending on transmission intervals. Battery health is continuously monitored.

Flexibility Included

Wide range of sensor and mounting options.

Interfaces to virtually any building automation (DDC) system.

Sensors can be battery operated or line powered.

Sensor parameters and DDC channel mapping can be easily changed wirelessly.

Order Information

SWS-T: Wireless zone temperature sensor

SWS-T-EXT: Wireless temperature transceiver for external temperature probe (10k, Type III thermistor, not supplied)

SWS-TO: Wireless zone temperature sensor with override button

SWS-TOS: Wireless zone temperature sensor with override button and set point adjustment

SWBAT: 1.5V Lithium AA batteries (2)

SWPSUP-1: Optional gang box mountable 110VAC/5VDC power supply to power sensor in difficult to service locations

Specifications

Enclosure

- Cover/Knob: Cycology C 2800, white RAL 9010
- Base: Lexan 940, black RAL 9005
- Self-extinguishing, acc. to UL94-V0

Installation

- Wall mount, indoors
- Optimal mounting height: 4.5 ft. (137 cm)

Accuracy

- +/- 0.5°F (+/- 0.28°C)

Operating Conditions

- 32°F to 104°F (0°C to 40°C)
- 5% to 95% R.H. non-condensing

Storage Conditions (Sensor)

- -40°F to 176°F (-20°C to 80°C)
- 5% to 95% R.H. non-condensing

Radio Characteristics

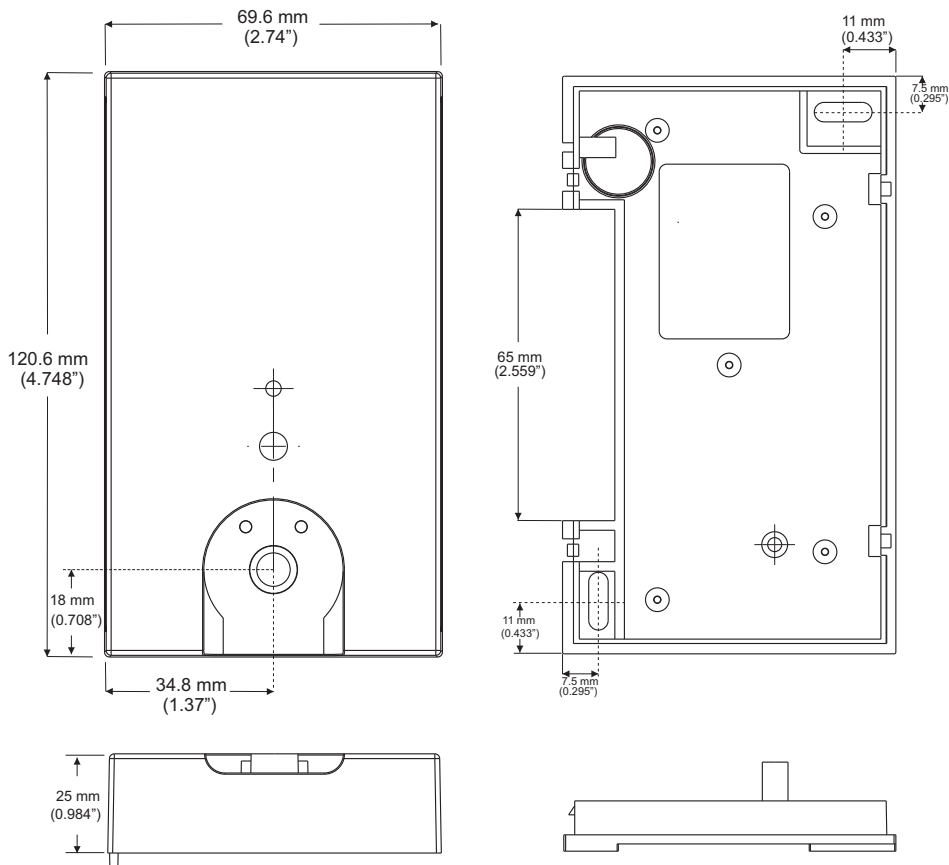
- 2.4GHz, IEEE 802.15.4
- Receiver sensitivity: -94dBm
- Receiver adjacent channel rejection: +/-5MHz, 45/30 dB
- Receiver alternate channel rejection: +/-10MHz, 54/53 dB
- Receiver channel rejection: +/-15MHz, 62/62 dB
- Open field range: up to 700 ft. (230 m)
- In-building range: 120 ft. (40 m) in typical commercial office building; range heavily depends on building material and layout
- Transmission interval: min. 21 seconds, user configurable

Power

- 2 AA lithium batteries, e.g. Energizer® L91, 1.5V, 3000mAh
- Battery life: 3 to 8 years, depending on transmission interval and ambient temperature
- Optional power supply: 110VAC/5VDC

Agency Approvals

- FCC part 15, Class B
- CE



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