

SSH2636C & D Wireless Humidity and Temperature Sensor



General Description

The SSH2636 is a battery operated spread spectrum wireless humidity and temperature sensor housed in a rugged enclosure.

Trs Systems Series 2000 wireless sensors utilize reliable Spread Spectrum Mesh Network Radio technology. They can be installed easily in minutes eliminating hundreds of feet of wire and saving installation cost while reducing installation labor risks.

The sensor Data-Link LED confirms the data transmission was received by the receiver for fast and reliable positioning of the sensor during installation. *There is no need for special wireless installation equipment or tool.*

Together with the Trs Systems Series 2000 receivers and controllers, the Trs Systems wireless sensors can be used with any LON, BacNet, MODbus, or DDC control system or panel.

The maximum radio transmission distance is dependent on building type. The maximum open-air transmission distance is one mile. In a typical commercial building with steel I-beam construction, concrete floors with reinforcing rod, and metal stud walls, it can be expected that transmissions will penetrate vertically through floors and horizontally through 200 to 500 feet of walls, furniture and air.

Ordering Information

<u>Model</u>	<u>Description</u>
SSH2636C	Wireless humidity (2%) sensor
SSH2636D	Wireless humidity (2%) and temperature sensor

Features

- 0-100% RH measurement
- 32 F to 104 F
- +/- 2% accuracy (30-80% RH)
- +/- 1 degree F
- Advanced RH sensor technology
- NO calibration required
- Excellent long term stability, response time and reset rate
- Battery powered sensors
- Wireless – easy to install & relocate
- Long battery life (3 years)
- Low battery LED + remote low battery alarm notification
- Reliable Spread Spectrum Mesh Network radio technology

Specifications

Input Voltage:

- Battery (1) - Type 3.0V LiMNO2 1400 mAH (e.g. Duracell DL123A)

Dimensions:

- 1-3/4" X 3-1/8" X 5-3/4"

Operating Conditions:

- Temperature 32 F to 104 F
- Humidity 0 to 100% RH non-condensing

Sensing Accuracy:

- +/- 1 degree F
- +/- 2% RH (30 to 80% RH)

Open Field Range:

- One mile line of sight

Transmitter Characteristics:

- Transmit Frequency
 - 2.4 GHz
- Transmitter Power - 11dB
- FCC certified

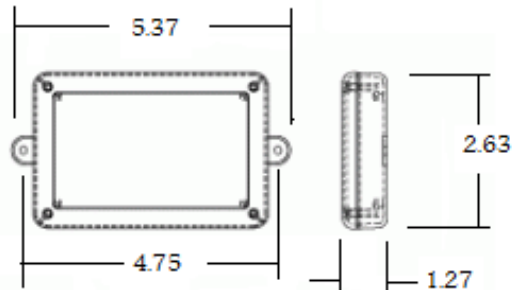


Figure 1 - Enclosure

Installation

Wireless wall sensors should be installed within 200 to 500 feet of the receiver. RR2552 signal repeaters can be installed as to increase transmission distance between sensors and receivers.

⚠ CAUTION

Observe battery polarity when installing battery.

To select the proper sensor location first install and power the receiver. Observing polarity insert the battery into the sensor to activate it. The mesh networked Series 2000 system does not require any additional wireless equipment to determine the proper location of the sensors.

While the sensor is attempting to connect to the receiver the Data-Link LED will blink rapidly 8-10 times every 10 seconds. Once a connection has been established the Data-Link LED will blink once to indicate the data transmission has been received successfully. The Data-Link LED will continue to blink once for every data transmission. The data transmission rate is programmed into the sensor (normally 1 minute intervals). To manually initiate a data transmission press the push button switch located by the negative terminal of the battery.

Once the sensor location has been determined mount the sensor on an inside wall approximately 4.5 ft. from the floor (or in the specified location) to allow exposure to the average zone temperature using two #8 screws, Velcro™ or double sided tape.

⚠ CAUTION

Sensors, Repeaters and receivers should **NOT** be installed in the following areas:

- Inside metal enclosure/panel
- Inside or immediately next to elevator shaft/elevator banks
- In front of or immediately next to large trees or a large body of water

Transmission distance and performance will be drastically reduced.

Locate and record the wall sensor ID Number located on a label inside the sensor prior to mounting.

Do not mount the sensors on an outside wall, on a wall containing water pipes or near air ducts. Avoid locations that are exposed to discharge air from registers or radiation from lights, appliances, or the sun.

The sensor has a Low Battery LED that will start to blink continuously when the battery voltage is low. A low battery signal is also sent to the receiver for remote indication that the battery should be replaced. If the battery is not replaced in approximately 2 months the battery voltage will become so low that the Low Battery and Data-Link LEDs will not blink. Replace the battery and the Data-Link LED will start blinking while the sensor is re-establishing communications with the receiver.

⚠ CAUTION

Do not use this product in any safety related applications where human life may be affected.

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