



# SST5630

# Wireless Remote/Strap-on Temperature Sensors

The mesh network SST5630 is a battery operated spread spectrum wireless remote/strap-on temperature sensor. The sensor is encapsulated in a 0.25″ O.D. 304 stainless steel probe (2″ probe length) for single point pipe temperature monitoring. The Meshnet900™ 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 site survey tools. Together with the Meshnet900™ receivers and controllers, these wireless sensors can be used with any LonWorks™, BACnet™, MODBUS communication protocols, or DDC system. The maximum radio transmission distance is dependent on building architecture and layout. The maximum open air transmission distance is one mile. In a typical commercial building with steel I-beam construction, concrete floors with reinforcing rods, and metal stud walls, it can be expected that transmissions will penetrate vertically one floor above and below the location of the sensor and horizontally through 200 to 500 feet of walls, furniture and air.

The SST5630 is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog or can be found on ACI's web site, www.workaci.com.

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## **SPECIFICATIONS**

Input Voltage Battery: One type 3.0V LiMNO2 1400 mAH (Duracell DL123A)

**Temperature Sensor/Accuracy** Sensing Ranges: -300 to 300°F Accuracy: +/- 3°F

Transmitter Characteristics Operating Frequency: 902-928 MHz, Transmitter Power: 11 dB Receiver Sensitivity: -110 dBm

Open Field Range One Mile (line of sight)

**Data Transmission Interval** 75 seconds (standard), 300 seconds (optional)

Operating Temperature Range 14 to 140°F (0 to 60°C)
Operating Humidity Range 5 to 95%, non-condensing

Wire Length 10 feet (3.1m)

**Product Dimensions** (L) 4.53" x (W) 2.56" (H) 2.17" Probe: (DIA) 0.25"

#### **ORDERING**

Please select one Wireless Device (A) & one Transmission Interval (B).

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#### Wireless Device



#### Intervals

SST5630AE (Wireless Strap-On Temperature Sensor) (NEMA 4X Enclosure)

O ---- (Every 75 Seconds)

300 (Every 300 Seconds)

### **BUILD PART NUMBER**

After completing (A) & (B) from the above table, fill in the Part Number Table below. An "example" part number is offered.

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EXAMPLE: SST5630AE

Wireless remote/strap-on sensors should be installed within 200 to 500 feet of the receiver. RR2552 signal repeaters can be installed as needed to increase transmission distance between sensors and receivers.

To select the proper sensor location, first install and power the receiver. Insert the battery into the sensor, being sure to observe polarity. The Meshnet900™ 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. The Data-Link LED will continue to blink once for every successful data transmission. The data transmission rate, normally 75-second intervals, is programmed into the sensor. To manually initiate a data transmission, press the push button switch located by the negative terminal of the battery.

The sensor probe should be mounted under any insulation in direct contact with the pipe using metal pipe straps. For proper measurement of temperature, thermal conductive compound should be used in between the sensor probe and the pipe. The installation should be wrapped with insulation to reduce the effect of ambient air. The plastic housing of the sensor can either be mounted on the pipe with metal pipe strap or wall mounted.

Locate and record the sensor TXID numbers located on a label on the inside of the enclosure cover. 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. Then attach the cover of the sensor by installing the four screws.