



OA2630

Outdoor RH/Temperature Sensor, Solar Radiation Shield

The OA2630 is a battery operated spread spectrum wireless outdoor air temperature and humidity sensor with a naturally ventilated 9-Plate Solar Radiation Shield to protect the sensor from precipitation and solar radiation. If needed the distance from the sensor to the receivers can be extended using the RR2552 repeater. 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 tool. Together with the Meshnet900™ receivers and controllers, the wireless sensors can be used with any LonWorks™, BACnet™, MODBUS, DDC system or panel. 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 OA2630 is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, www.workaci.com.





SPECIFICATIONS

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

Sensing Accuracy (Temp/RH) Sensing Ranges: -40°F to 200°F +/-1°F, +/-3% RH (10 to 90% RH)

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

 Open Field Range
 One Mile (line of sight)

 Operating Temperature Range
 14 to 140°F (-10 to 60°C)

 Operating Humidity Range
 5 to 95% RH, non-condensing

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

Product Dimensions (L) 10.75" (W) 8.25" (D) 7.25"

ORDERING

Please select OA2630A as a Wireless Device (A) & one Transmission Interval (B).

A

Wireless Device



OA2630A (Outdoor 3% humidity sensor and temperature sensor with solar radiation shield

---- (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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В

EXAMPLE: OA2630A-300

Wireless outside air 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 OA2630A can be mounted on the side of a wall, wooden post, or a metal pipe with an outside diameter between 1" and 1%". The outdoor sensor works best in a location with a steady breeze. Mount away from fences, trees or other obstructions. If attaching to a building the preferred location would be the north side of the building.

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. Prior to re-attaching the cover, locate and record the wall sensor TXID Number located on a label on the back of the cover. Re-attach the cover securely to prevent rain from entering the case.