



## DH2630

### *Wireless Humidity, Temperature Duct Sensor Option*

The DH2630 is a battery operated spread spectrum wireless duct mounted humidity (and temperature) sensor. The sensor is encapsulated in a 9.7" long plastic probe and is available with humidity only (DH2630A) and humidity and temperature (DH2630B and DH2630C). 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 DH2630 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](http://www.workaci.com).



**SPECIFICATIONS**

|                                    |   |                               |                      |
|------------------------------------|---|-------------------------------|----------------------|
| <b>Input Voltage</b>               | Battery: One type 3.0V LiMNO2 1400 mAh (Duracell DL123A)  |                               |                      |
| <b>Sensing Accuracy (Temp/RH)</b>  | Sensing Ranges: -40°F to 200°F                            | Accuracy: +/- 1°F             |                      |
| <b>Transmitter Characteristics</b> | Operating Frequency: 902-928 MHz                          | Receiver Sensitivity: -110dBm | Output Power: 11 dBm |
| <b>Open Field Range</b>            | One mile (line of sight)                                  |                               |                      |
| <b>Operating Temperature Range</b> | 14 to 140°F (-10 to 60°C)                                 |                               |                      |
| <b>Operating Humidity Range</b>    | 5 to 95% RH, non-condensing                               |                               |                      |
| <b>Data Transmission Interval</b>  | 75 seconds (standard), 300 seconds (optional)             |                               |                      |
| <b>Product Dimensions</b>          | Enclosure: (L) 4.50" (W) 2.00" (D) 2.75" Probe: (L) 9.70" |                               |                      |

**ORDERING**

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

| A Wireless Device   | B Intervals  |
|---|--|
| <input type="radio"/> <b>DH2630A</b> (Duct mounted 3% humidity sensor with a 9.7" sensing probe)                                    | <input type="radio"/> <b>----</b> (Every 75 Seconds) |
| <input type="radio"/> <b>DH2630B</b> (Duct mounted 3% humidity sensor and temperature sensor) (-40°F to 200°F) (9.7" sensing probe) | <input type="radio"/> <b>300</b> (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.

| A                | B |
|------------------|---|
| EXAMPLE: DH2630A |   |

Wireless 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.

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.

Locate the sensor at the straight section of the duct and away from heating, cooling or humidifying elements. Cut a 1/4" diameter hole in the side of the duct. Mount the bracket to the duct, inserting the gasket between the sensor and duct before attaching with screws. With the sensor protrusion pointing away, rotate the mounting lever clockwise to the right. Insert the sensor head into the bracket aligning the protrusions on the mounting plate with the grooves in the mounting bracket on the duct. Secure the sensor by rotating the lever 45° counter-clockwise.

Since the sensor is located at the tip of the probe, consideration should be made to place the tip of the probe in the middle of the airflow. Locate and record the duct sensor TXID numbers located on a label on the inside of the enclosure cover. The cover of the sensor can be removed by pushing the locking tap on the side of the housing. When the sensor housing has been secured to the air duct, install the battery. Installing the battery will activate the sensor. To install the cover, insert the case tabs into the case and snap the cover into the locking tab.