



Wireless Humidity Sensor

Technical Overview

General Description

The OEM RF Wireless Humidity (RH) Sensor allows you to accurately monitor the relative humidity of the air within a room or enclosure.

Features

- Measures relative humidity with high accuracy.

Principle of Operation

The OEM Wireless Humidity (RH) Sensor measures the relative humidity at the device. The sensor returns RH and temperature values to the sensor monitoring software. The system calculates dewpoint from the data and stores all three data points in the software where the data can be reviewed and exported as a data sheet or graph. Notifications can be set up to alert the user when defined thresholds have been met or exceeded.

OEM Sensor Core Specifications

- Power: 3.0 V coin cell battery
- Communication: RF 900, 868 and 433 MHz
- Antenna: 4" wire antenna
- Operating Temperature: -40° to 85°C (-40° to 185°F)
- Device Range: 250 - 300 ft. non-line-of-sight*
- Only 1 inch by 1 inch

* Actual range may vary depending on environment.

Applications

- Greenhouse humidity monitoring.
- Agriculture environmental monitoring.
- Art gallery and museum environmental monitoring.
- Humidor monitoring.
- General weather and environmental monitoring.

Specifications

Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 μ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Operating Temperature Range	-40°C to +85°C (-40°F to +185°F) **
Optimal Battery Temperature Range (Coin Cell)	+10°C to +60°C (+50°F to +140°F)
Accuracy	\pm 2% under normal conditions (10% - 90% RH)
RH Operating Range	0 – 100% RH
RH Response Time	8 sec (tau 63%)

- * Hardware can not withstand negative voltage. Please take care when connecting a power device.
- ** At temperatures above 100°C, it is possible to lose programmed memory.

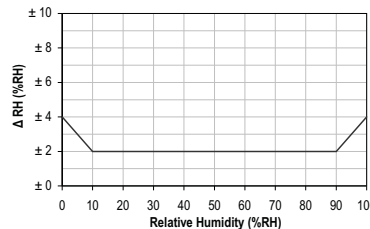


Figure 1: Maximal RH-tolerance at 25°C per sensor type.

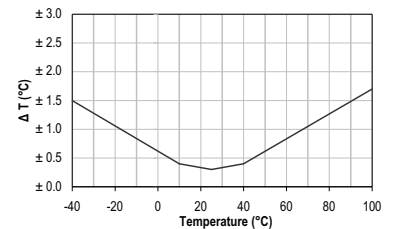


Figure 2: Maximal T-tolerance per sensor type.

For more product information, to get a quote, or to place an order, please contact our sales department at 801-561-5555. Visit us on the web at www.oemsensors.com.

OEMSensors.com | 7304 South Cottonwood, Suite #204 | Midvale, Utah 84047 | 801-561-5555 | www.oemsensors.com