Wireless-HUM - Introduction

General Description

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

Features

- Measures relative humidity, temperature and dew point with high accuracy.

Sensors Core Specifications

- Power: Replaceable 2 x AA battery
- Communication: RF 900 MHz
- Dimensions: 4.00” x 2.50” x 1.00”
- Operating Temperature: -7° to 60°C (20° to 140°F)
- Device Range: 250 - 300 ft. non-line-of-sight
- Battery Life: At 1 hour heartbeat setting, battery will last ~ 1-2 years.

Principle of Operation

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

Example Applications

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

For questions or inquiries:
sales@jacelectronics.com
To place an order: orders@jacelectroincs.com
www.jacelectroincs.com

Wireless-HUM – Technical Specifications

Technical Specifications		
Supply Voltage	2.0-3.6VDC	
Current Consumption	0.7µA (sleep mode) 2mA (radio idle/off mode) 2mA (measurement mode)	25mA (radio RX mode) 35mA (radio TX mode)
Operating Temperature Range	-7°C to +60°C (20°F to +140°F)	
Optimal Battery Temperature Range	+10°C to +50°C (+50°F to +122°F)	
Accuracy	±3% under normal conditions (10% - 90% RH)	
RH Operating Range	0 – 100% RH	
RH Response Time	8sec (tau 63%)	
Frequency	900 Mhz	

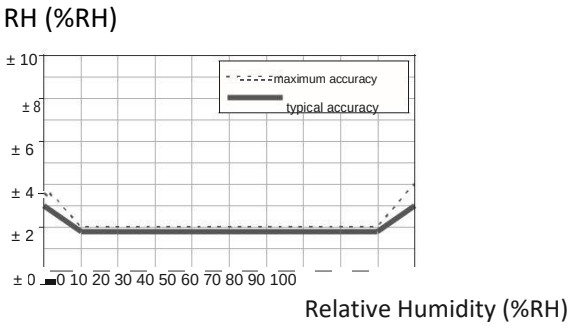

Figure 1. Typical and maximal tolerance at 25°C.

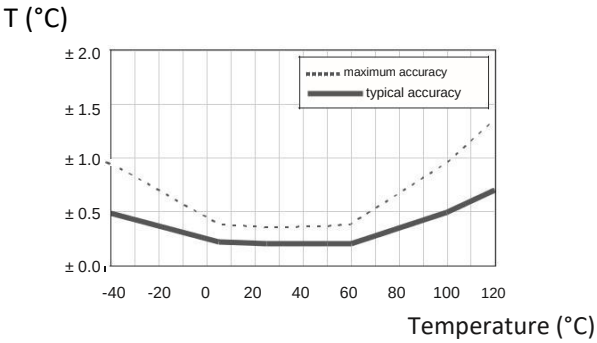

Figure 2. Maximal tolerance for temperature sensor in °C.

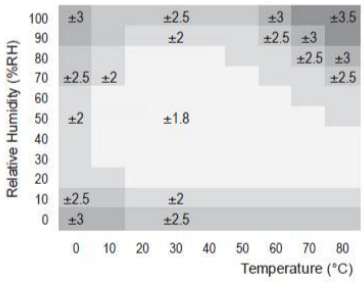

Figure 3. Typical accuracy of RH measurements given in %RH for temperatures between 0 – 80°C.

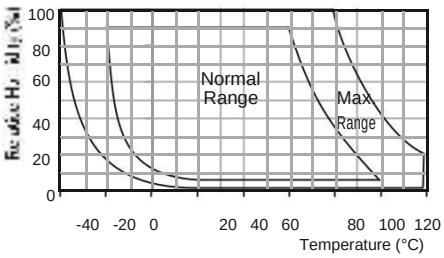

Figure 4. Operating Conditions

For questions or inquiries:
sales@jacelectronics.com
To place an order: orders@jacelectroincs.com
www.jacelectroincs.com

For questions or inquiries:
sales@jacelectronics.com
To place an order: orders@jacelectroincs.com
www.jacelectroincs.com