

# WIRELESS HUMIDITY SENSOR WITH EXTERNAL ANTENNA AND PROBE SENSOR



## INFORMATION

|           |           |
|-----------|-----------|
| Format    | Coin Cell |
| Frequency | 868 MHz   |

Xemote ultra low-power wireless humidity sensors use a digital humidity sensor that provides excellent measurement accuracy at very low power. This sensor is perfect for monitoring the relative humidity of the air within laboratories, art museums, wine cellars and industrial spaces. User customisation allows you to set the frequency of readings and the ability to set thresholds for alerts via SMS text and/or email.

## HIGHLIGHTS

- Up to 128 sensors connected to a single gateway
- Ultra-low power
- ISM band wireless
- Critical Data Recovery (CDR) feature, 21 days at 10 min posting intervals
- Non-intrusive installation

## APPLICATIONS

- Laboratory temperature and humidity monitoring
- Art gallery and museum environment monitoring
- Wine cellar humidity monitoring
- Server room humidity monitoring
- Greenhouse humidity monitoring
- Agriculture environmental monitoring

## SENSOR SPECIFICATIONS

### Relative Humidity

|                                   |  |
|-----------------------------------|--|
| Relative Humidity Operating Range | 0 – 100% RH  |
| Accuracy                          | ±2% RH   |
| Repeatability                     | ±0.1% RH   |
| Hysteresis                        | ±1% RH (10% ≤ RH ≤ 70%)                              |
| RH Response Time                  | 15s (63% of the total RH change after a step change) |

### Coin Cell

|                                       |  |
|---------------------------------------|--|
| Battery Type                          | CR2450   |
| Classification                        | Lithium Coin   |
| Typical Capacity                      | 620mAh   |
| Dimensions                            | 24.5mm x 5.0mm   |
| Max Operating Temperature             | -20 °C to +60 °C   |
| Optimal Battery Operating Temperature | +10 °C to +50 °C   |
| Supply Voltage                        | 2.0 - 3.6 V  |
| Battery Life                          | At 10-minute heartbeat setting, coin cell battery will typically last ~ 5 years (battery life is determined by sensor reporting frequency and other variables) |

### Wireless

|           |  |
|-----------|--|
| Frequency | 868 MHz Operating Frequency  |
| Range     | Up to 200 m non-line-of-sight device range (actual range may vary) |

For more information about our products, please contact our sales department.

Visit our website at [www.xemote.co.za](http://www.xemote.co.za) | [sales@xemote.co.za](mailto:sales@xemote.co.za)

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# WIRELESS HUMIDITY SENSOR WITH EXTERNAL ANTENNA AND PROBE SENSOR



|                        |   |
|------------------------|---|
|                        | depending on environment). Longer ranges available with GSM Gateway 868Mhz outdoor Omni antenna 6dB gain. (Typically, 300 m plus) |
| Security               | Encrypted   |
| Certifications         | ETSI EN 300 220-2 V2.4.1 (2012-05)  |
| Antenna                | Right angle or Straight angle on request  |
| <b>I/O</b>             |   |
| Bidirectional IO Ports | 2x Internal Input/output  |
| Logic Level            | 3.3V  |
| Drive Current          | 20mA Max  |
| <b>Mechanical</b>      |   |
| Dimensions             | 50mm x 50mm x 20mm<br>65mm x 50mm x 20mm – Including flanges  |
| Weight                 | 0.035 kg  |
| Material               | ABS Plastic   |
| Mounting Options       | Wall mount flanges, button magnet, Velcro strips, double sided tape   |
| <b>Environmental</b>   |   |
| Operating Temperature  | -20 °C to +60 °C  |
| Storage Temperature    | -20 °C to +45 °C (Incl. Battery)  |
| <b>Warranty Terms</b>  |   |
| Period                 | 12 months   |

## ORDERING INFORMATION

| Part Number | Details                            | Configuration   |
|-------------|------------------------------------|---|
| XEMT4-20051 | Wireless coin cell Humidity sensor | Supplied with 1x CR2450 coin cell battery, right-angle antenna and 1m length probe cable. Longer cable lengths are available on request. Straight angle antenna on request. |

*Product images are for illustrative purposes only and may differ from the actual product.  
Specifications are subject to change without notice.*