Wireless Data Acquisition

Wireless Humidity and Temperature Monitoring and Alarming System
Part of the NOMAD® Family

OM-CP-THERMALERT-RH

- Wireless Two-Way Communication
- Precision RTD Sensing Element
- View Data in Real-Time
- 2 Year Battery Life
- Battery Life Indicator
- Field Upgradeable

The OM-CP-THERMALERT-RH is a humidity and temperature monitoring and alarming system, designed specifically for laboratories, warehouses and other environments where humidity monitoring is critical. The system can be used to monitor a single temperature location or expanded to include hundreds of locations by adding additional transmitters.

The OM-CP-THERMALERT-RH provides real time notification of humidity and temperature deviations, and features a user programmable alarm that can be configured to send a message via text message, screen alarm or e-mail if an alarm condition occurs.

The OM-CP-THERMALERT-RH system is equipped with wireless two-way communication. Full communication can be performed directly from a central PC, including starting, stopping and downloading. In addition to wirelessly transmitting data, OM-CP-THERMALERT-RH also stores each reading to internal memory for backup. This back up data may be retrieved wirelessly at a later time. Customers can setup automatic archiving preferences, ensuring all data is saved and retained to comply with federal regulations.

Specifications

**TEMPERATURE**

**Sensor:** Semiconductor  
**Range:** -20 to 80°C (-4 to 176°F)  
**Resolution:** 0.01°C (0.018°F)

**Calibrated Accuracy:** ±0.5°C (0.9°F) 0 to 50°C (32 to 122°F)

**HUMIDITY**  
**Sensor:** Semiconductor  
**Range:** 0 to 95% RH  
**Resolution:** 0.1% RH  
**Calibrated Accuracy:** ±3.0% RH  
[±2% RH typical at 25°C (77°F)]

**WIRELESS**  
**RF Frequency:** 2.45 GHz IEEE 802.15.4 ultra-low power wireless transceiver with fully bi-directional communication  
**Band:** ISM band 2.405-2.48 GHz  
**Maximum Output Power:** +0dBm typical

**Receiver Sensitivity (OM-CP-RFC1000-EXT):** -95dBm typical  
**Range**  
- **Outdoor Line-of-Sight:** 610 m (2,000')  
- **Indoor:** 152 m (500')

**GENERAL**  
**Reading Rate:** One reading every two seconds to one every 24 hours

**Memory:** 15,000 readings; software configurable memory wrap  
**Wrap Around:** Yes

**Start Modes:**  
- Immediate start  
- Delay start up to 18 months

**Calibration:** Digital calibration through software

**Calibration Date:** Automatically recorded within device

**Battery Type:** 3.6V lithium battery (included); user replaceable

**Battery Life:** 2 years typical

**Data Format:** Date and time stamped °C, °F, K, °R

**Time Accuracy:** ±1 minute/month at 25°C (77°F)

**Computer Interface:**  
OM-CP-RFC1000-EXT required; 115,200 baud

**Software:** XP SP3/Vista/7 and 8 (32- and 64-bit)

**Operating Environment:**  
-20 to 80°C (-4 to 176°F), 0 to 95% RH non-condensing

**Dimensions:**  
55 W x 133 H x 33 mm D (2.2 x 5.25 x 1.3")

**Enclosure Material:** ABS Plastic
**To Order**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OM-CP-THERMALERT-RH</td>
<td>Wireless humidity and temperature transmitter</td>
</tr>
<tr>
<td>OM-CP-THERMALERT-RH-CERT</td>
<td>Wireless humidity and temperature transmitter with NIST calibration certificate</td>
</tr>
<tr>
<td>OM-CP-RFC1000-EXT</td>
<td>Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved)</td>
</tr>
<tr>
<td>OM-CP-RFC1000-EXT-EUR</td>
<td>Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (CE approved)</td>
</tr>
<tr>
<td>OM-CP-RFC1000-IP69K</td>
<td>Splash proof (IP69K) wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved)</td>
</tr>
<tr>
<td>OM-CP-BAT109</td>
<td>Replacement 3.6V lithium battery</td>
</tr>
</tbody>
</table>

Comes complete with 3.6V lithium battery. Operator’s manual, Windows software and USB interface cable are included with the OM-CP-RFC1000-EXT wireless transceiver package (required to operate the data logger, sold separately).

**Note:** Because of transmission frequency regulations, OM-CP-THERMALERT-RH wireless data loggers are only approved for use in the following countries: Australia, Austria, Belgium, Bulgaria, Canada, Chile, Columbia, Croatia, Cyprus, Czech Republic, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Honduras, Hungary, Iceland, Ireland, Israel, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, New Zealand, Norway, Peru, Poland, Portugal, Romania, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, The Netherlands, Turkey, United Kingdom, United States, Venezuela, Vietnam.

**Ordering Example:** OM-CP-THERMALERT-RH-CERT, wireless humidity and temperature transmitter with NIST calibration certificate and OM-CP-RFC1000-EXT, wireless transceiver package.