## *Wireless Temperature and Humidity Data Logger with Display*

# OM-CP-RFRHTEMP2000A

5 YEAR WARRANTY NIST CE

Optional

- **Wireless 2-Way Communication**
- **View Data in Real-Time**
- **3 Year Battery Life**
- **Battery Life Indicator**
- **Field Upgradeable**
- **Audible and LED Alarm Indicators**
- **Cumulative Alarm Delay**

**OM-CP-RFRHTEMP2000A with mounting bracket, shown actual size.**

The OM-CP-RFRHTEMP2000A is a wireless temperature and humidity data logger with digital display.

The OM-CP-RFRHTEMP2000A is ideal for both industrial or laboratory applications including supply chain storage facilities, incubator monitoring and HVAC studies. Designed with external humidity and RTD based temperature sensors, the device provides a fast response time for both parameters.

For customer convenience, functions include starting, stopping and downloading from the device wirelessly using the OM-CP-RFC1000-EXT wireless transceiver. This allows customers to quickly access data and spend less time maintaining the device. Data can be provided in real time back to a central PC, or the device may be downloaded at periodic intervals. The digital display provides the current reading for both the humidity and temperature channels with minimum, maximum and average statistics accessible for a quick snapshot of the logged data.

The OM-CP-RFRHTEMP2000A features user programmable alarm settings for both temperature and humidity parameters. An audible buzzer and LED alarm indicator notifies users when the temperature or humidity is above or below the threshold set in the alarm. Email and text alarms can also be configured and sent from within the software, allowing users to be notified almost anywhere.

The OM-CP-RFRHTEMP2000A can be used as a single, wireless data logging system, or it can be expanded to a large scale system, which can include hundreds of data loggers measuring a number of areas (additional wireless data loggers and transceivers may be required).

Data retrieval is simple. Plug the device into an available USB port and our easy-to-use software does the rest. The software converts a PC into a real-time strip chart recorder.

The data logger software is a powerful, analytic tool. Data can be viewed in graphical or tabular formats and summary and statistics views are available for further analysis.

The software features export to Excel®, data annotation and more.

## Specifications

**TEMPERATURE**
**Internal Channel**
**Temperature Range:**
-20 to 60°C (-4 to 140°F)
**Temperature Resolution:**
0.01°C (0.02°F)
**Calibrated Accuracy:**
±0.5°C (±0.9°F)
0 to 55°C (32 to 131°F)
**Response Time:**
10 minutes free air

**HUMIDITY**
**Range:** 0 to 95% RH
**Resolution:** 0.1% RH
**Calibrated Accuracy:** ±3.0% RH, ±2.0% RH typical @ 25°C (77°F); [10 to 90% RH; 5 to 55°C (41 to 131°F)]
**Response Time:** 2 minutes to 63% of change

**OM-CP-RFC1000-EXT, Windows® software displays data in graphical or tabular format, sold separately.**

**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 to 2.48 GHz

**Output Power:** +0dBm typical

**Receiver Sensitivity (OM-CP-RFC1000-EXT):** -95dBm typical

**Range:** 610 m (2000') maximum outdoors (line of sight unobstructed); 152 m (500') maximum indoors (typical urban)

**GENERAL**

**Reading Rate:** One reading every second up to one every 24 hours

**Memory:** 16,128 per channel

**LED Functionality:**

- Green LED blinks every 5 seconds to indicate unit is logging
- Blue LED blinks every 15 seconds to indicate unit is in wireless mode
- Red LED blinks every 1 second to indicate alarm condition

**Memory Wrap Around:** Yes

**Start Modes:** Immediate start

**Calibration:** Digital calibration through software

**Calibration Date:** Automatically recorded within device

**Battery Type:** 9V lithium battery (included); user replaceable

**Battery Life:** 3 years typical at 1 minute reading rate

**Data Format:**

**For Display:** °C or °F, %RH

**For Software:** Date and time stamped °C, K, °F, or °R ,%RH, mg/mL, dew point, °C/K/°F/°R

**Time Accuracy:** ±1 minute/month

**Computer Interface:** USB to mini USB, 250,000 baud for standalone operation or OM-CP-RFC1000-EXT required for wireless operation

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

**Operating Environment:** -20 to 60°C (-4 to 140°F), 0 to 95% RH non-condensing

**Dimensions:** 76.2 H x 88.9 W x 24.1 mm D (3.0 x 3.5 x 0.95") data logger only

**Weight:** 116 g (4.1 oz)

**Enclosure Material:** ABS plastic

**Alarm:** Programmable high and low limits for temperature and humidity. Alarm is activated when temperature or humidity reaches or exceeds set limits

**Alarm Delay:** A cumulative alarm delay may be set in which the device will activate the alarm (via LED) only when the device has recorded a user specified time duration of data

**Audible Alarm Functionality:** 1 beep per second for reading alarm above/below threshold

## To Order

| Model No. | Description |
|---|---|
| **OM-CP-RFRHTEMP2000A** | Wireless temperature and humidity data logger with LCD display |
| **OM-CP-RFRHTEMP2000A-CERT** | Wireless temperature and humidity data logger with LCD display and NIST calibration certificate |
| **OM-CP-RFC1000-EXT** | Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved) |
| **OM-CP-RFC1000-EXT-EUR** | Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (CE approved) |
| **OM-CP-RFC1000-IP69K** | Splash proof (IP69K) wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved). |
| **OM-CP-BAT103** | Replacement 9V lithium battery |

*Comes complete with 9V lithium battery and mounting bracket. 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-RFRHTEMP2000A wireless data loggers are only approved for use in the following countries: Australia, Austria, Belgium, Bulgaria, Canada, Chile, China, Columbia, Croatia, Cyprus, Czech Republic, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Honduras, Hungary, Iceland, Ireland, Israel, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malaysia, Malta, Mexico, New Zealand, Norway, Peru, Poland, Portugal, Romania, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, The Netherlands, Turkey, United Kingdom, United States, Venezuela, Vietnam.*

***Ordering Example: OM-CP-RFRHTEMP2000A** wireless temperature and humidity data logger with LCD display and **OM-CP-RFC1000-EXT** wireless transceiver package.*