

Wireless Temperature and Humidity Data Logger with Display

OM-CP-RFRHTEMP2000A



- ✓ 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

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



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

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



WIRELESS DATA ACQUISITION



OM-CP-RFRHTEMP2000A shown smaller than actual size.



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 Visit omega.com/om-cp-rfrhtemp2000a for Pricing and Details

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-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).

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

omega.co.uk[®]

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488
+44-(0)161-777-6611

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

FRANCE

www.omega.fr

0800-466-342

GERMANY

www.omega.de

Deckenfronn, Germany
0800-8266342

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters