## *Humidity and Temperature Data Logger Part of the NOMAD® Family*

### **OM-CP-RHTEMP101A**



- 10 Year Battery Life
- 1 Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- Memory: 500,000 Readings
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms

The OM-CP-RHTEMP101A is part of a new series of low cost, state-ofthe-art data logging devices.

The OM-CP-RHTEMP101A offers a 10 year battery life, a 1 second reading rate, a multiple start/stop function, ultra-high speed download capability, 500,000 reading storage capacity, optional memory wrap, precision RTD sensing element, battery life indicator, optional password protection, programmable high-low alarms and more.

Using the software, starting, stopping and downloading from the OM-CP-RHTEMP101A is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in °C, °F, K, °R, %RH, mg/ml water vapor concentration and dew point. The data can also be automatically exported to Excel® for further calculations.

The OM-CP-RHTEMP101A is a major leap forward in both size and performance. Its real time clock ensures that all data is time and date stamped.

The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. Its small size allows it to fit almost anywhere.

Data retrieval is simple. Plug it into an available USB port and the easy to use Windows software does the rest. The software converts your PC into a real time strip chart recorder. Data can be printed in tabular format and can also be exported to a text or Microsoft Excel file. The OM-CP-RHTEMP101A designed with our customers in mind. There are free firmware upgrades for the life of the product so that data loggers already deployed in the field can grow with new technological developments. Units do not need to be returned to the factory for upgrades. The user can do this automatically from any PC.

## **Specifications**

Temperature Sensor: Precision RTD Element

**Temperature Range:** -40 to 80°C (-40 to 176°F)

**Temperature Resolution:** 0.01°C (0.018°F) **Calibrated Accuracy:** 

±0.5°C (0.9°F)

Humidity Sensor: Internal semi-conductor

Humidity Range: 0 to 95% RH

Humidity Resolution: 0.1% RH

**Calibrated Accuracy:** ±3.0% RH, ±2% RH typical @ 25°C (77°F)

**Specified Accuracy Range:** 10 to 40°C (50 to 104°F); 10 to 80% RH

Reading Rate: 1 reading every second to 1 every 24 hours Memory: 500,000 readings; software configurable memory wrap 250,000 readings in multiple start/ stop mode

## Memory Wrap Around: Yes (software selectable)

## Start Modes:

- Immediate start
- Delay start up to 18 months
- Multiple pushbutton start/stop **StopModes:**
- Manual through software
- Timed (specific date and time)

Multiple Start/Stop Mode: Start and stop the device multiple times without having to download data or communicate with a PC

#### Multiple Start/Stop Mode Activation:

**To Start the Device:** Press and hold the pushbutton for 5 seconds, the green light will flash during this time. The device has started logging.

#### To Stop the Device:

Press and hold the pushbutton for 5 seconds, the red light will flash during this time. The device has stopped logging.

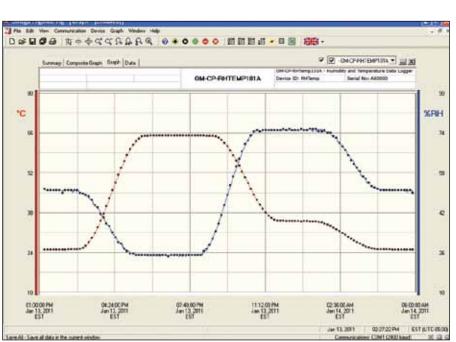
**Real Time Recording:** The device may be used with PC to monitor and record data in real-time

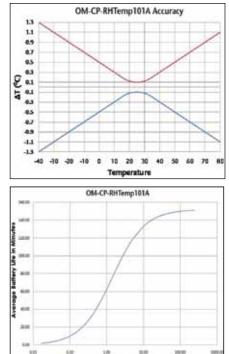
Alarm: Programmable high and low limits; alarm is activated when humidity reaches or exceeds set limits



10 to 80% RH Real Tin Reading Rate: 1 reading every may be u

# Data Loggers





Average Battery Life vs. Reading Rate of the OM-CP-RHTEMP101A recording in a 25°C environment.

OM-CP-IFC200, Windows software displays data in graphical or tabular format.

#### **LED Functionality:**

**Green LED Blinks:** 10 second rate to indicate logging; 15 second rate to indicate delay start mode

**Red LED Blinks:** 10 second rate to indicate low battery and/or full memory; 1 second rate to indicate an alarm condition

**Password Protection:** An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password **Calibration:** Digital calibration through software

Calibration Date: Automatically recorded within device

Battery Type: 3.6V lithium battery (included); user replaceable Battery Life: 10 years typical at a 15 minute reading rate Data Format: Date and time stamped °C, °F, K, °R; %RH, mg/ml water vapor concentration, dew point

**Time Accuracy:** ±1 minute/month at 20°C (68°F), stand alone data logging

#### Computer Interface: USB

(interface cable required);
115,200 baud
Software: Windows® XP
SP3/Vista/7 and 8 (32- and 64-bit)
Operating Environment:
-40 to 80°C (-40 to 176°F),
0 to 95% RH non-condensing
Dimensions:
36 L x 56 W x 16 mm D
(1.4 x 2.2 x 0.6")
Weight: 24 g (0.9 oz)
Material: ABS plastic

To Order Visit omega.com/om-cp-rhtemp101a for Pricing and Details	
Model No.	Description
OM-CP-RHTEMP101A	Humidity and temperature data logger
OM-CP-RHTEMP101A-CERT	Humidity and temperature data logger and NIST calibration certificate
OM-CP-IFC200	Windows software and 1.8 m (6') USB interface cable
OM-CP-BAT105	Replacement 3.6V lithium battery

To Order, Call 1-800-327-4333<sup>sm</sup> or Shop Online at *omega.com<sup>sm</sup>* 

Comes complete with 3.6V lithium battery. Operator's manual and USB cable are included with the **OM-CP-IFC200** Windows software (required to operate the data logger and sold separately).

Ordering Example: OM-CP-RHTEMP101A-CERT, humidity and temperature data logger with NIST calibration certificate and OM-CP-IFC200 Windows software.