

Pressure, Humidity and Temperature Data Logger Part of the NOMAD® Family

OM-CP-PRHTEMP101A



- ✓ 10 Year Battery Life
- ✓ 1 Second Reading Rate
- ✓ Multiple Start/Stop Function
- ✓ Ultra High Speed Download
- ✓ Memory Wrap
- ✓ Battery Life Indicator
- ✓ Optional Password Protection
- ✓ Programmable High and Low Alarms
- ✓ Field Upgradable

The OM-CP-PRHTEMP101A is a low cost, state-of-the-art pressure, relative humidity and temperature data logger, specifically designed to be compact and portable for use in a variety of applications such as museum and archive preservation, shipping and transportation, warehouse monitoring, HVAC, clean rooms, clinical laboratories and altitude validation and studies.

The OM-CP-PRHTEMP101A offers a 10-year battery life, 1 second reading rate, multiple start/stop functions, ultra-high speed download capability, optional memory wrap, battery life indicator, optional password protection, programmable high-low alarms and more.

Using the software, starting, stopping and downloading from the OM-CP-PRHTEMP101A is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in °C, °F, °R, K, for the temperature channel, %RH, mg/mL and dew point for the humidity channel, and mbar, PSI, inHg, mmHg, atm, Torr, Pa, m, kPa, MPa for the pressure channel.

The OM-CP-PRHTEMP101A 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 memory, providing maximum data security even if the battery becomes discharged.

Data retrieval is simple. Simply connect the data logger to 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 for further calculations.

The OM-CP-PRHTEMP101A was 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, this can be done automatically from any PC.



OM-CP-PRHTEMP101A shown larger than actual size.

SPECIFICATIONS

Pressure

Sensor: Piezoresistive
Range: 250 to 1300 mbar
Resolution: 0.02 mbar
Calibrated Accuracy: 10 mbar

Humidity

Sensor: Capacitive Polymer
Range: 0 to 95% RH
Resolution: 0.1 %RH
Calibrated Accuracy: 3% RH

Temperature

Sensor: Precision RTD element
Range: -40 to 80°C (-40 to 176°F)
Resolution: 0.01°C (0.018°F)
Calibrated Accuracy: ±0.5 °C (0.9°F)

Reading Rate: 1 reading every second up to 1 reading every 24 hours.

Memory

Readings Per Channel: 688,128
Readings (Manual or Trigger Mode): 412,876
Memory Wrap Around: Yes (software selectable)

Start Modes:

- Immediate start
- Delay start up to 18 months
- Multiple pushbutton start/stop

Stop Modes:

- Manual through software
- Timed (specific date and time)

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

Alarm: Programmable high and low limits; alarm is activated when recording environment reaches or exceeds set limits (pressure channel only).



OM-CP-IFC200 software package (sold separately).



OM-CP-PRHTEMP101A shown larger than actual size.

LED Functionality

Green LED blinks:

- 10 second rate to indicate logging
- 15 second rate to indicate delay start mode/Standby (Waiting to start)

Red LED blinks:

- 10 second rate to indicate low battery and/or full memory
- 1 second to indicate alarm condition met

Password Protection: An optional password may be programmed into the device to restrict access to configuration options. Data may be read without the password.

Engineering Units: Native measurement units can be changed to display measurement units of another type.

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, °R, K, %RH, mg/mL, Dew Point, mbar, PSI, inHg, mmHg, atm, Torr, Pa, kPa, m, MPa units specified through software.

Time Accuracy: ±1 minute/month @ 25 °C

Computer Interface: USB (interface cable required); 115,200 baud

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

Operating Environment: -40 to 80°C (-40 to 176°F), 0 to 95 %RH non-condensing, 0.002 to 100 psia

Dimensions: 36 L x 56 W x 16 mm D (1.4 x 2.2 x 0.6")

Weight: 24 g (0.8 oz)

Materials: ABS Plastic

To Order	
Model No.	Description
OM-CP-PRHTEMP101A	Pressure, humidity and temperature data logger
OM-CP-PRHTEMP101A-CERT	Pressure, humidity and temperature data logger and NIST calibration certificate
OM-CP-IFC200	Windows software and 1.8 m (6') USB interface cable
OM-CP-SVP-SYSTEM	FDA 21 CFR part 11 compliant IQ/OQ/PQ secure software validation workbook and software package (unlimited users, license per computer)
OM-CP-BAT105	Replacement 3.6V lithium battery

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-PRHTEMP101A-CERT, pressure, humidity and temperature data logger with NIST calibration certificate and OM-CP-IFC200 Windows software.