

# High Temperature Data Logger With Built-In M12 Connector



## OM-CP-HITEMP140-M12



Optional

- ✔ M12 Probe Connector— Quickly Interchange RTD Probes to Fit Your Application
- ✔ Measurement Range of -200 to 850°C (-328 to 1562°F)
- ✔ ±0.05°C (±0.09°F) Accuracy
- ✔ User Replaceable Battery
- ✔ Trigger Settings
- ✔ Programmable Start and Stop Time
- ✔ Battery Life Indicator

The OM-CP-HITEMP140-M12 is a rugged and versatile high temperature data logger featuring an M12 probe connector. Compatible with a wide variety of M12 RTD probe styles, this data logger is capable of measuring up to 850°C (1562°F) (probe dependent). With the ability to change probes as needed, this device satisfies a multitude of application needs with one powerful data logger versus the need for multiple loggers.

OM-CP-HITEMP140-M12 shown larger than actual size.



Top view showing detail of M12 connector.

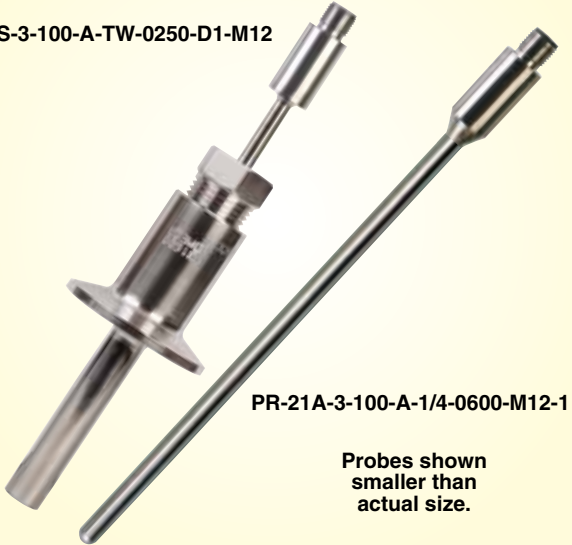


The OM-CP-HITEMP140 data logger has a water tight body enclosure made of food grade stainless steel. It can be placed in environments with temperatures as high as 140°C (284°F) making it suitable for a wide range of applications including autoclave verification, food preparation and processing, environmental studies, well monitoring, washer disinfectors and pasteurization. The OM-CP-HITEMP140-M12 records and stores up to 43,690 time stamped readings and is equipped with non-volatile solid state memory which retains data even if the battery becomes discharged.

### Need an M12 Probe?

OMEGA Offers a Wide Range of M12 Probes Compatible with the OM-CP-HITEMP140-M12 Data Logger!

PRS-3-100-A-TW-0250-D1-M12



PR-21A-3-100-A-1/4-0600-M12-1

Probes shown smaller than actual size.



Data logger software.

Using the OM-CP-HITEMP140-M12 software, starting, stopping and downloading the OM-CP-HITEMP140-M12 is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in °C, °F, K or °R. The data can also be automatically exported to Excel® for further calculations.



The OM-CP-MULTIMOUNT-Z is a versatile mount or stand for use with the OM-CP-HITEMP140 series of data loggers. It can be used to stabilize a logger inside an autoclave, or screwed to a flat surface to create an anchored base. The OM-CP-MULTIMOUNT-Z is made of stainless steel and is able to withstand temperatures up to 150°C (302°F) making it ideal for use in autoclave sterilization processes.



OM-CP-MULTIMOUNT-Z with OM-CP-HITEMP140-M12 shown larger than actual size.



OM-CP-ALUCASE-14 and OM-CP-ALUCASE-18 shown smaller than actual size.

The OM-CP-ALUCASE-14 and OM-CP-ALUCASE-18 are high quality, multi-purpose briefcases, designed for the protection, transport and storage of data loggers, equipment and accessories. These durable aluminum cases include pick and pluck foam inserts, allowing the user to customize a snug fit and secure any combination of products. The briefcase frame is strong yet surprisingly light weight with a comfortable ergonomically upholstered handle. Two sizes are available: a compact 36 cm (14") width (OM-CP-ALUCASE-14) and large 47 cm (18") width (OM-CP-ALUCASE-18), both featuring an egg crate foam lined lid and keyed locks.

The OM-CP-IFC406 is a multiplexer data logger interface for compatible OM-CP Series data loggers. The OM-CP-IFC406 allows up to six data loggers to be connected into one interface. Up to three OM-CP-IFC406 units may be daisy-chained together to communicate with a total of 18 data loggers through one USB port. To connect multiple OM-CP-IFC406 multiplexer interfaces together, simply join the units side by side, making sure the spring pin contacts are connected and magnetically joined.



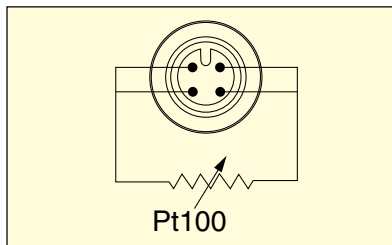
OM-CP-IFC406 with assorted OM-CP Series data loggers (sold separately) shown smaller than actual size.



## Specifications

**Temperature Sensor:** Pt100 RTD probe with M12 connector (probe sold separately)

**Compatible with RTD Probes with the Following Wiring Configuration:**



**Measurement Range:** 18 to 400  $\Omega$ ; -200 to 850°C (-328 to 1562°F) (probe dependent)

**Temperature Resolution:** 0.0001  $\Omega$ ; 0.01°C (0.018°F) (probe dependent)

**Calibrated Accuracy:**  $\pm 0.015 \Omega$ ;  $\pm 0.05^\circ\text{C}$  ( $\pm 0.09^\circ\text{F}$ ) (probe dependent)

**Calibrated Accuracy Range:** 18 to 200  $\Omega$ ; -200 to 265°C (-328 to 509°F)

**Connector Type:** M12 female, 4-pin

**Reading Rate:** 4 readings per second up to 1 reading every 24 hours

**Memory:** 43,690 readings

**Start Modes:**

- Software programmable immediate start
- Delay start up to 18 months in advance

**Stop Modes:** Manual or timed (specific date and time)

**Real Time Recording:** May be used with PC to monitor and record data in real time

**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

**Trigger Settings:** High and low limits may be set. Once data meets or exceeds sets limits, the device will record to memory. Bi-level start and stop triggers can also be programmed. Users can specify the number of readings to take after the device triggers



**OM-CP-HITEMP140-M12**  
shown larger than actual size.

**Readings in Trigger Settings Mode:** 18,724 readings

**Memory Wrap Around:** Yes

**Battery Type:** 3.6V high-temperature lithium battery included; user replaceable

**Battery Life:** 2 years typical  
[1 minute reading rate at 25°C (77°F)]

**Calibration:** Digital calibration through software

**Calibration Date:** Automatically recorded within device

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

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

**Computer Interface:** OM-CP-IFC400 or OM-CP-IFC406  
USB docking station required; 125,000 baud

**Operating Environment:** -40 to 140°C (-40 to 284°F),  
0 to 100% RH non-condensing, 0.002 to 60 psia

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

**IP Rating:** IP40-logger alone (with no probe connected); the logger will inherit IP rating of the attached probe (up to, and including IP68/IP69K)

**Dimensions (Body):** 54.5 H x 24.6 mm dia (2.15 x 0.97")

**Weight:** 85 g (3.0 oz)

**Materials (Body):** 316 Stainless Steel

| To Order                 |  |
|--------------------------|--|
| Model No.                | Description  |
| OM-CP-HITEMP140-M12      | High temperature data logger with M12 connector  |
| OM-CP-HITEMP140-M12-CERT | High temperature data logger with M12 connector and NIST calibration certificate   |
| OM-CP-IFC400             | Docking station (for single data logger) with USB cable, software and manual   |
| OM-CP-IFC406             | Multiplexer data logger interface (accepts up to 6 data loggers) with USB cable, software and manual                                   |
| OM-CP-BAT110             | Replacement 3.6 V lithium battery  |
| 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-MULTIMOUNT-Z       | Mount/stand for OM-CP-HITEMP140 data loggers   |
| OM-CP-ALUCASE-14         | Aluminum data logger briefcase, 36.8 x 29.2 cm (14.5 x 11.5")  |
| OM-CP-ALUCASE-18         | Aluminum data logger briefcase, 47 x 38.1 cm (18.5 x 15")  |

*Comes complete with 3.6V lithium battery. Operator's manual and USB interface cable are included with the OM-CP-IFC400 software/cable package and OM-CP-IFC406 multiplexer. OM-CP-IFC400 required for data logger operation. Both models sold separately.*

*Ordering Example: OM-CP-HITEMP140-M12 high temperature data logger and OM-CP-IFC400 docking station (for single data logger) with USB cable, software and manual.*