

High Temperature Data Logger Part of the NOMAD® Family

OM-CP-HITEMP140



- ✓ Operating Temperature Range: -40 to 140°C (-40 to 284°F)
- ✓ Optional Thermal Shield for Operation up to 250°C (482°F)
- ✓ Submersible IP68
- ✓ Programmable Start/StopTime
- ✓ User Calibration Through Software
- ✓ Real-Time Operation
- ✓ Autoclave Verification
- ✓ Pharmaceutical
- ✓ Implement HACCP Programs
- ✓ Food Preparation and Processing

The OM-CP-HITEMP140 is a rugged, high precision, temperature data logger that is built for use in harsh environments. This stainless steel device is submersible, can withstand temperatures up to 140°C (284°F) and has an accuracy of $\pm 0.1^{\circ}\text{C}$ (0.18°F) over the entire operating range.

The OM-CP-HITEMP140 can store up to 32,700 readings, and features a 2" rigid external probe capable of measuring extended temperatures, up to 260°C (500°F). The device records date and time stamped readings, and has non-volatile solid state memory that will retain data even if the battery becomes discharged.

Using the OM-CP-HITEMP140 software, starting, stopping and downloading the OM-CP-IFC400 is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in $^{\circ}\text{C}$, $^{\circ}\text{F}$, K or $^{\circ}\text{R}$. The data can also be automatically exported to Excel® for further calculations.

The OM-CP-IFC406 multiplexer data logger interface allows for multiple devices to be connected into one interface. Each OM-CP-IFC406 allows for 6 data loggers to be connected. Up to 3 OM-CP-IFC406 units may be daisy-chained together to communicate with a total of 18 devices through 1 USB port. To connect multiple OM-CP-IFC406 interfaces together, simply join the units side by side, making sure the spring pin contacts are connected and magnetically joined.

The OM-CP-HITEMP140-TSK is a kit that includes a OM-CP-HITEMP140 data logger housed in a thermal shield. The combined features of the $\pm 0.1^{\circ}\text{C}$ accuracy of the OM-CP-HITEMP140 and the properties of the durable thermal shield allow the device to be used for a wide range of validation applications.



OM-CP-HITEMP140-TSK, data logger with thermal shield, shown smaller than actual size.



OM-CP-HITEMP140, shown in OM-CP-IFC400 docking station, shown smaller than actual size.



OM-CP-IFC406 multiplexer data logger interface, shown smaller than actual size.

When using software, the data logger is fast and easy to setup. Remove the thermal shield and place the OM-CP-HITEMP140 into the OM-CP-IFC400 docking station (sold separately). Using the software, an immediate or delay start can be chosen, as well as the reading rate. Select Start to program the settings and start the data logger. Place the thermal shield around the OM-CP-HITEMP140 and screw it back together. The device is ready to be deployed.

The OM-CP-HITEMP140-TSK can be completely submerged and is built for applications that require extreme temperature monitoring.

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.

Specifications

OM-CP-HITEMP140-TSK (Thermal Shield)

Operating Environment: -200 to 250°C (-328 to 482°F)
(time limited) 0 to 100% RHU

Enclosure Material: PTFE

Dimensions: 110 x 51 mm dia. (4.3 x 2.0")

Weight: 274 g (9.7 oz) (not including data logger)

OM-CP-HITEMP140 (Without Thermal Shield)

Temperature Sensor: 100Ω Platinum RTD

Temperature Range (Body): -40 to 140°C (-40 to 284°F)

Temperature Measurement

Range (Probe): -200 to 260°C (-328 to 500°F)

Temperature Resolution: 0.01°C (0.02°F)

Calibrated Accuracy: ±0.1°C (±0.18°F)
[20 to 140°C (68 to 284°F)]

Start Modes:

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

Stop Modes:

- Manual through Software
- Time (specific date and time)

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

Memory: 32,700 readings

Reading Rate: One second up to once every 24 hours

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

Battery Life: 1 year 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, K, °R

Time Accuracy: ±1 minute/month at 20 to 30°C (68 to 86°F) (RS232 cable not in use)

Computer Interface:

OM-CP-IFC400 USB docking station required
125,000 baud

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

Operating Environment:

-40 to 140°C (-40 to 284°F), 0 to 100% RH

Dimensions

Body: 48 H x 25 mm D (1.9 x 0.97")

Probe: 51 L x 4.8 mm dia (2.0 x 0.188"); See additional probe lengths in the ordering chart on the next page

Weight: 120 g (4.2 oz)

Material: 316 stainless steel

OM-CP-IFC406 Multiplexer

Operating Environment: 10 to 35°C (50 to 95°F);
0 to 95% RH non-condensing

Baud Rate: 125,000 baud

Connection Type: USB to PC

Weight: 750 g (1.65 lb)

Material: 6061 Aluminum (PTFE impregnated hard anodize coating), ABS plastic

Enclosure Dimensions: 24.13 L x 4.95 W x 4.45 cm H
(9.5 x 1.95 x 1.75")

OM-CP-HITEMP140-TSK (Data Logger with Thermal Shield)

Ambient Temperature	Time in Air to Maximum Internal Temp (140°C / 284°F)	Time in Liquid to Maximum Internal Temp (140°C / 284°F)
-200°C (-328°F)	14 min	N/A
-180°C (-292°F)	15 min	N/A
-160°C (-256°F)	16 min	N/A
-140°C (-220°F)	18 min	N/A
-120°C (-184°F)	21 min	N/A
-100°C (-148°F)	24 min	N/A
-80°C (-112°F)	30 min	N/A
-60°C (-76°F)	42 min	25 min
-40 to 140°C (-40 to 284°F)	Indefinitely	Indefinitely
150°C (302°F)	66 min	40 min
160°C (320°F)	57 min	34 min
170°C (338°F)	48 min	29 min
180°C (356°F)	42 min	26 min
190°C (374°F)	38 min	23 min
200°C (392°F)	34 min	21 min
210°C (410°F)	32 min	19 min
220°C (428°F)	30 min	18 min
230°C (446°F)	27 min	17 min
240°C (464°F)	26 min	16 min
250°C (482°F)	24 min	15 min

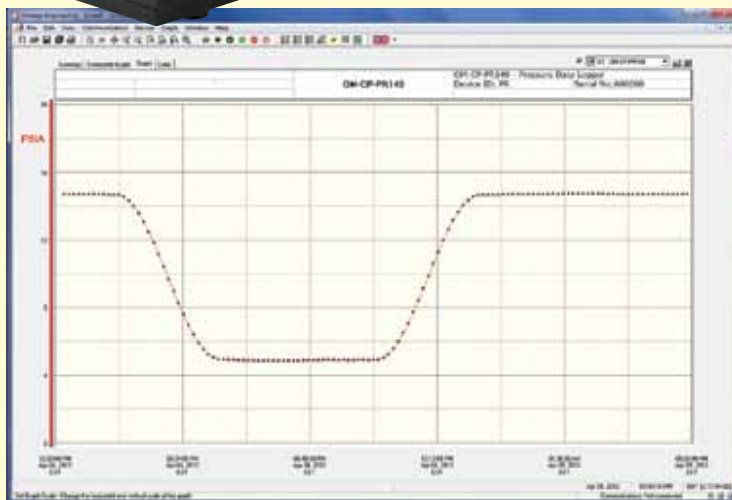
DATA LOGGERS



OM-CP-MULTIMOUNT-Z bracket, sold separately.



OM-CP-IFC406 multiplexer data logger interface, shown smaller than actual size.



OM-CP-IFC400, Windows® software displays data in graphical or tabular format.

To Order

Model No.	Description
OM-CP-HITEMP140	High temperature data logger with 50 mm (2") probe
OM-CP-HITEMP140-CERT	High temperature data logger with 50 mm (2") probe and NIST certificate
OM-CP-HITEMP140-TSK	OM-CP-HITEMP140 data logger with thermal shield
OM-CP-HITEMP140-TSK-CERT	OM-CP-HITEMP140 data logger with thermal shield and NIST certificate
OM-CP-HITEMP140-1	High temperature data logger with 25 mm (1") probe
OM-CP-HITEMP140-1-CERT	High temperature data logger with 25 mm (1") probe with NIST certificate
OM-CP-HITEMP140-5.25	High temperature data logger with 131 mm (5.25") probe
OM-CP-HITEMP140-5.25-CERT	High temperature data logger with 131 mm (5.25") probe and NIST certificate
OM-CP-HITEMP140-5.25-TSK	High temperature data logger with 131 mm (5.25") probe and thermal shield
OM-CP-HITEMP140-5.25-TSK-CERT	High temperature data logger with 131 mm (5.25") probe, thermal shield and NIST certificate
OM-CP-HITEMP140-7	High temperature data logger with 175 mm (7") probe
OM-CP-HITEMP140-7-CERT	High temperature data logger with 175 mm (7") probe and NIST certificate
OM-CP-HITEMP140-7-TSK	High temperature data logger with 175 mm (7") probe and thermal shield
OM-CP-HITEMP140-7-TSK-CERT	High temperature data logger with 175 mm (7") probe, thermal shield and NIST certificate
OM-CP-IFC406	Multiplexer data logger interface (accepts up to 6 data loggers) with USB cable, software and manual
OM-CP-IFC400	Docking station (for single data logger) with USB cable, software and manual
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-BAT110	Replacement 3.6V high-temperature lithium battery
OM-CP-MULTIMOUNT-Z	Mount/stand for OM-CP-HITEMP140 data loggers
OM-CP-CF100	Canning fitting for OM-CP-HITEMP140 data loggers
OM-CP-CFK100	Canning fitting with hole punch kit for OM-CP-HITEMP140 data loggers

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-CERT high temperature data logger with NIST certificate.