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 ±0.1°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 °C, °F, K or °R. The data can also be automatically exported to Excel® for further calculations.

The OM-CP-HITEMP140-TSK is a kit that includes an OM-CP-HITEMP140 data logger housed in a thermal shield. The combined features of the ±0.1°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.
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)

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