

## Temperature Data Logger with Integral Probe Part of the NOMAD® Family



OM-CP-TEMP1000P shown smaller than actual size.

### OM-CP-TEMP1000P



- ✓ Rugged Stainless Steel Construction
- ✓ Memory Size: 32,767 Readings
- ✓ Programmable Start Time
- ✓ User Calibration through Software
- ✓ Optional Thermal Shield for Model OM-CP-TEMP1000P Allows Operation up to 350°C (662°F)

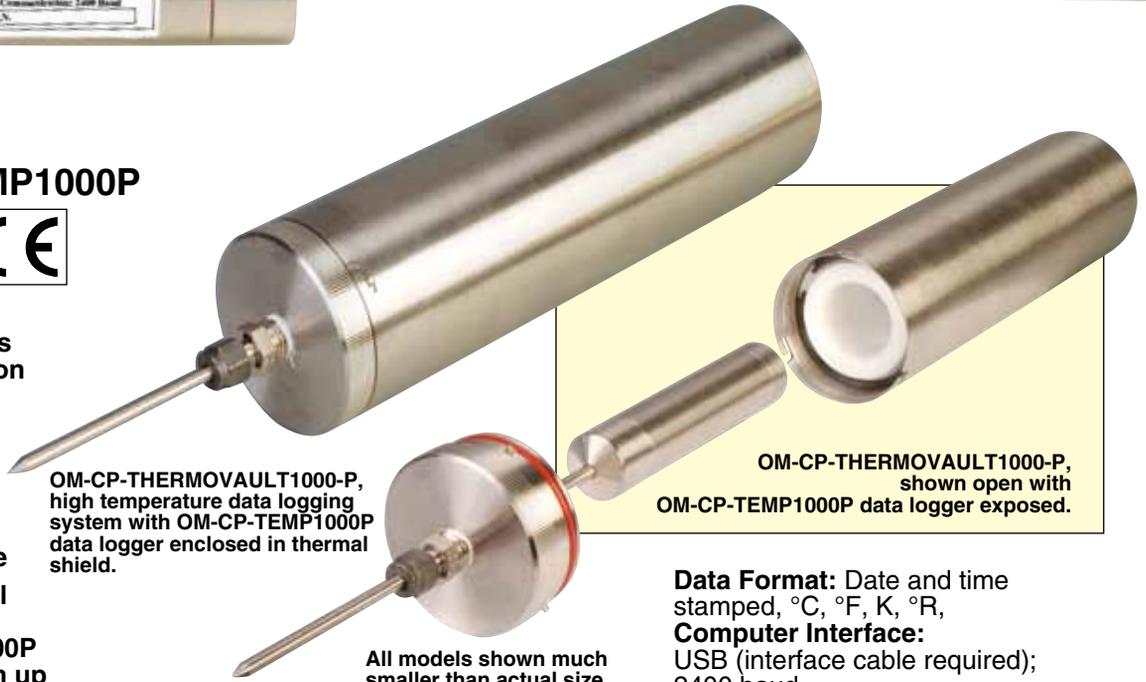
The OM-CP-TEMP1000P temperature logger is a water proof, battery powered, stand-alone device used for automatically recording temperatures from -50 to 400°C.

This all-in-one compact, portable, easy to use device will measure and record up to 32,767 temperature measurements. It includes an integral stainless steel temperature probe that provides a fast response time.

The OM-CP-TEMP1000P is a major leap forward in both size and durability. 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 empty COM 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 graphical or tabular format and can also be exported to a text or Microsoft Excel file.



OM-CP-THERMOVAULT1000-P, high temperature data logging system with OM-CP-TEMP1000P data logger enclosed in thermal shield.

OM-CP-THERMOVAULT1000-P, shown open with OM-CP-TEMP1000P data logger exposed.

All models shown much smaller than actual size.

### Specifications

#### TEMPERATURE CHANNEL

**Temperature Sensor:** 100 Ω Platinum RTD  
**Calibrated Accuracy:** ±0.5°C  
**Temperature Resolution:** 0.05°C  
**Temperature Range: (Body)** -40 to 125°C (-40 to 257°F)  
**Temperature Measurement Range: (Probe):** -50 to 400°C (-58 to 752°F)

#### GENERAL SPECIFICATIONS

**Temperature Calibration:** Digital calibration through software  
**Calibration Date:** Automatically recorded within device to alert user when calibration is required  
**Recording Interval:** 2 seconds to 12 hours selectable in software  
**Start Modes:** Software programmable immediate start or delay start, up to 6 months in advance  
**Real Time Recording:** Device may be used with PC to monitor and record data in real time  
**Power:** 3.6V lithium battery  
**Battery Life:** 1 year typical (1 minute reading rate at 25°C)  
**Time Accuracy:** ±1 minute per month at 20°C when RS-232 port is not in use

**Data Format:** Date and time stamped, °C, °F, K, °R,  
**Computer Interface:** USB (interface cable required); 2400 baud  
**Software:** XP SP3/Vista/7 and 8 (32-bit and 64-bit)  
**Operating Environment:** -40 to 125°C (-40 to 257°F), 0 to 100% RH non-condensing  
**Probe Diameter:** 5 mm (0.2")  
**Probe Length:** See To Order Table for standard lengths\*  
**Logger Dimensions:** 26 mm dia x 115 mmL (1.0 x 4.5")  
**Weight:** 205 g (7.3 oz.)  
**Response Time:**  
**Water:** 1 minute (to 95% of change)  
**Air:** 10 minutes (to 95% of change)  
**Material:** 303 stainless steel (logger) 304 stainless steel (probe)

### Specifications

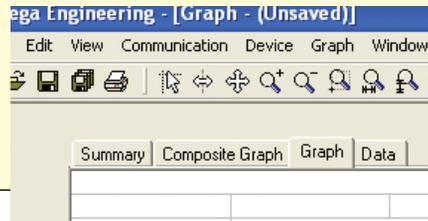
#### THERMAL SHIELD

**Operating Environment:** -200 to 350°C (-328 to 662°F); 230°C (446°F) with O-ring, 0 to 100% RH  
**IP Rating:** IP68  
**Insulation Type:** Dewar flask and PTFE  
**Access Port Thread:** ¼ NPT female  
**Enclosure Material:** 304 SS  
**Dimensions:** 236 mm L X 66 mm dia (9.3 x 2.6")  
**Weight:** 1.45 kg (3.2 lb)



Reading No.	Reading Gallons/Min	Date and Time	Annotation
10	2.3500E+01	May 02, 2011 09:43:44 AM	
11	2.4000E+01	May 02, 2011 10:43:44 AM	
12	2.4500E+01	May 02, 2011 11:43:44 AM	
13	2.4500E+01	May 02, 2011 12:43:44 PM	Maximum Flow Rate
14	2.4500E+01	May 02, 2011 01:43:44 PM	
15	2.4000E+01	May 02, 2011 02:43:44 PM	
16	2.4000E+01	May 02, 2011 03:43:44 PM	
17	2.4000E+01	May 02, 2011 04:43:44 PM	
18	2.4000E+01	May 02, 2011 05:43:44 PM	
19	2.4000E+01	May 02, 2011 06:43:44 PM	
20	2.3500E+01	May 02, 2011 07:43:44 PM	
21	2.3500E+01	May 02, 2011 08:43:44 PM	
22	2.4000E+01	May 02, 2011 09:43:44 PM	
23	2.4000E+01	May 02, 2011 10:43:44 PM	
24	2.4000E+01	May 02, 2011 11:43:44 PM	
25	2.3500E+01	May 03, 2011 12:43:44 AM	

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



### OM-CP-THERMOVAULT1000-P (Thermal Shield with OM-CP-TEMP1000P Data Logger)



OM-CP-TEMP1000P shown smaller than actual size.

Ambient Temperature °C	Time in Air to Maximum Internal Temp (min)	Time in Liquid to Maximum Internal Temperature (minimum)
100	600	130
150	315	120
200	240	75
250	180	60
300*	165	—
350*	150	—

\* Contact Omega for these extended ranges

## To Order

Model No.	Description
OM-CP-TEMP1000P	Temperature data logger with 180 mm (7") long integral probe
OM-CP-TEMP1000P-CERT	Temperature data logger with 180 mm (7") long integral probe and NIST calibration certificate
OM-CP-TEMP1000P-1	Temperature data logger with 25 mm (1") long integral probe
OM-CP-TEMP1000P-1-CERT	Temperature data logger with 25 mm (1") long integral probe and NIST calibration certificate
OM-CP-TEMP1000P-12	Temperature data logger with 300 mm (12") long integral probe
OM-CP-TEMP1000P-12-CERT	Temperature data logger with 300 mm (12") long integral probe and NIST calibration certificate
OM-CP-THERMOVAULT1000-P	High temperature data logging system with OM-CP-TEMP1000P data logger enclosed in thermal shield
OM-CP-THERMOVAULT1000-P-CERT	High temperature data logging system with OM-CP-TEMP1000P data logger enclosed in thermal shield 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-BAT112	Replacement 3.6V lithium battery

\*Other probe lengths are available. Contact Engineering Department.

Comes complete with 3.6V lithium battery. Operator's manual and USB interface cable are included with the **OM-CP-IFC200** Windows software (software is required to operate the data logger and is sold separately). The entire data logger/probe assembly is not submersible. Only the probe portion can be immersed (do not immerse the probe past the joint area where it connects into the body of the data logger as this joint area can be penetrated by liquid).

**Ordering Example:** **OM-CP-TEMP1000P-CERT** Temperature data logger with 180 mm (7") long integral probe with NIST calibration certificate and **OM-CP-IFC200** Windows software and USB interface cable.