

## 8-Channel Oven Data Logger Part of the NOMAD® Family

### OM-CP-OCTTHERMOVAULT



- ✓ 8 Thermocouple Input Channels
- ✓ Programmable Start Time
- ✓ Reusable
- ✓ Automatic Cold junction Compensation
- ✓ Programmable Engineering Units
- ✓ Withstands Oven Temperature up to 350°C (662°F) for up to 25 Minutes

Oven temperature profiling can help ensure that a quality product is consistently produced. Profiling enables users to optimize their process, prove process control and make corrections to a process when required.

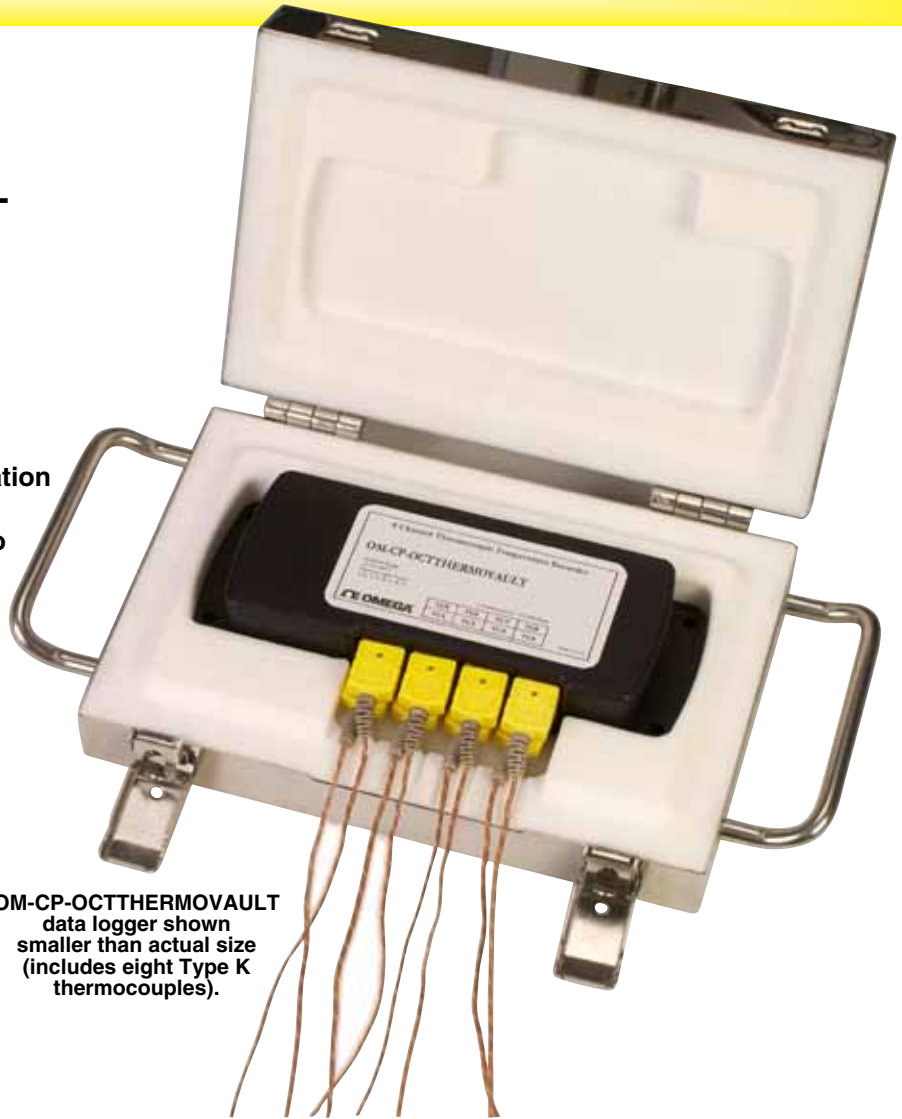
The OM-CP-OCTTHERMOVAULT is an eight channel thermally insulated, battery powered, oven temperature recorder able to withstand extreme temperatures.

It can withstand oven temperatures of up to 350°C (662°F) for up to 25 minutes when properly sealed. Its stainless steel enclosure and thermal properties lend itself to be the ideal temperature recording device for applications such as powder coating cure ovens, wet coating cure ovens, batch ovens and conveyor ovens.

The external thermocouple probes provide accurate temperature measurements, with fast response times. Our user-friendly software easily downloads the data to a computer, where the readings may be displayed in degrees Celsius, degrees Fahrenheit, Kelvin or Rankine.

The software allows the user to view all data points or a range of data points and a summary of the data being viewed for calculations such as Mean Kinetic Temperature (MKT).

If additional analysis of the data needs to be performed, the data can be easily exported to Excel® by simply clicking a button. Data retrieval is simple. Plug the device into an available COM port and our easy-to-use software does the rest.



OM-CP-OCTTHERMOVAULT data logger shown smaller than actual size (includes eight Type K thermocouples).

The software converts a PC into a real-time strip chart recorder. Data can be printed in graphical and tabular format or exported to a text or Microsoft Excel file

#### Specifications

##### INTERNAL CHANNEL

**Temperature Range:** -20 to 60°C (-4 to 140°F)

**Temperature Resolution:** 0.05°C

**Calibrated Accuracy:** ±0.5°C (0 to 50°C)

##### 8 REMOTE CHANNELS

**Thermocouple Types:**

J, K, T, E, R, S, B, N

**Thermocouple Connection:** Female subminiature (SMP)

**Cold Junction Compensation:**

Automatic, based on internal channel

**Start Modes:** Software programmable immediate start or delay start up to six months in advance

Maximum Exposure Time	
Ambient Temp °C (°F)	Max Duration in Minutes**
100 (212)	110
150 (302)	62
200 (392)	45
250 (482)	35
260 (500)	33
300 (572)	30
350 (662)	25

\*\* Assuming logger box is initially at 25°C

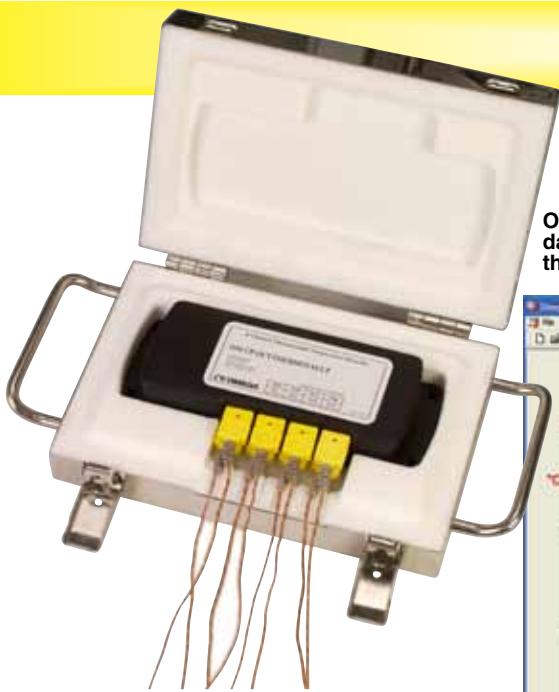
#### Real Time Recording:

May be used with PC to monitor and record data in real time

**Memory:** 500,000 readings per channel, channels can be disabled to increase memory

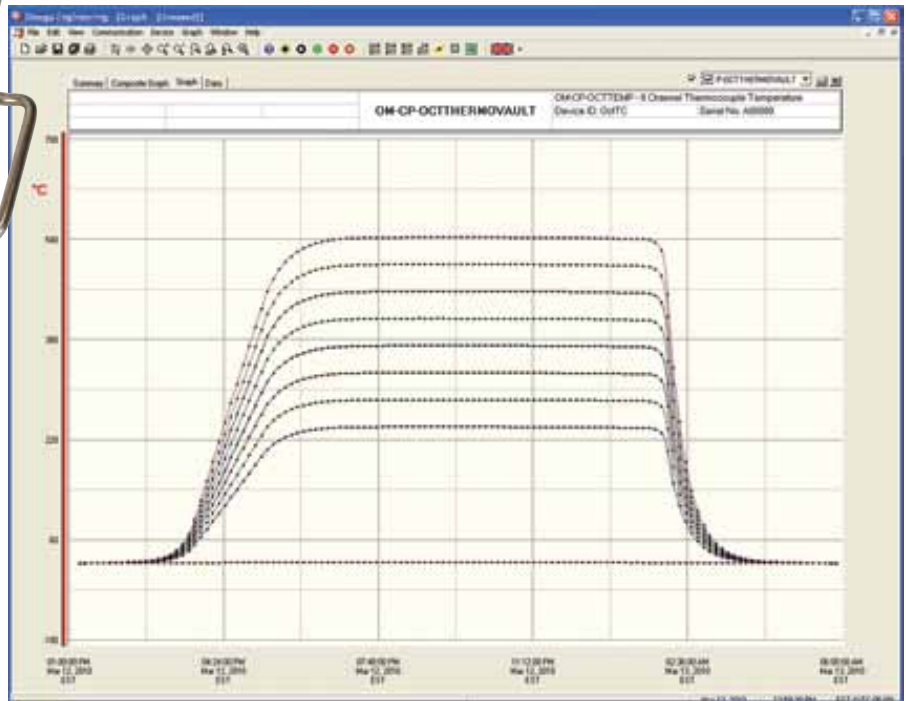
**Recording Internal:** 4 readings per second up to 1 every 24 hours

**Calibration:** Digital calibration through software



**OM-CP-OCTTHERMOVAULT**  
data logger shown smaller  
than actual size.

**Calibration Date:** Automatically recorded within device  
**Battery Type:** 9 V lithium battery (included) or external power via included ac adaptor  
**Battery Life:** 18 months typical  
**Data Format:** Date and time stamped °C, °F, °K, °R;  $\mu$ V, mV, V  
**Time Accuracy:**  $\pm 1$  minute/month (at 20°C, RS232 port not in use)  
**Computer Interface:** PC serial or USB (cable required); 115,200 baud  
**Software:** XP SP3/Vista/7 and 8 (32-bit and 64-bit)  
**Operating Environment:**  
**(OM-CP-OCTTHERMOVAULT System):** -20 to 350°C (-4 to 662°F); see table for temperature vs. duration on previous page, 0 to 95% RH non-condensing  
**Internal OM-CP-OCTTEMP-A Data Logger:** -20 to 55°C, 0 to 95% RH non-condensing  
**Dimensions:**  
 231 L x 149 W x 62 D mm (9.1 x 5.9 x 2.45")  
 Not including hardware  
**Weight:** 4.07 kg (8.98 lb)



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

Thermocouple Type	Range	Resolution	Accuracy*
J	-210 to 760°C	0.1°C	$\pm 0.5^\circ\text{C}$
K	-260 to 1370°C	0.1°C	$\pm 0.5^\circ\text{C}$
T	-260 to 400°C	0.1°C	$\pm 0.5^\circ\text{C}$
E	-260 to 980°C	0.1°C	$\pm 0.5^\circ\text{C}$
R	-50 to 1760°C	0.5°C	$\pm 2.0^\circ\text{C}$
S	-50 to 1760°C	0.5°C	$\pm 2.0^\circ\text{C}$
B	50 to 1820°C	0.5°C	$\pm 2.0^\circ\text{C}$
N	-260 to 1300°C	0.1°C	$\pm 0.5^\circ\text{C}$

\* Accuracy does not include errors due to thermocouple.

## To Order

Model No.	Description
<b>OM-CP-OCTTHERMOVAULT</b>	8-channel oven temperature data logger (includes universal 120/230 Vac 50/60 Hz AC adaptor)
<b>OM-CP-OCTTHERMOVAULT-CERT</b>	8-channel oven temperature data logger (includes universal 120/230 Vac 50/60 Hz AC adaptor) with NIST calibration certificate
<b>OM-CP-IFC200</b>	Windows software and 1.8 m (6') USB interface cable
<b>OM-CP-BAT103</b>	Replacement 9V lithium battery
<b>5SRTC-GG-K-24-72</b>	Extra Type K thermocouples, glass braid insulation, 24 AWG, 72" length, 5-pack

Operator's manual and USB cable are included with the **OM-CP-IFC200** Windows software (required to operate the data logger and sold separately). **OM-CP-OCTTHERMOVAULT** includes 8 type K thermocouples (glass braid insulation, 24 AWG, 72" length).

**Ordering Example:** **OM-CP-OCTTHERMOVAULT**, 8-channel oven temperature data logger with NIST calibration certificate and **OM-CP-IFC200**, Windows software and USB interface cable.