

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

### OM-CP-QUADTHERMOVAULT



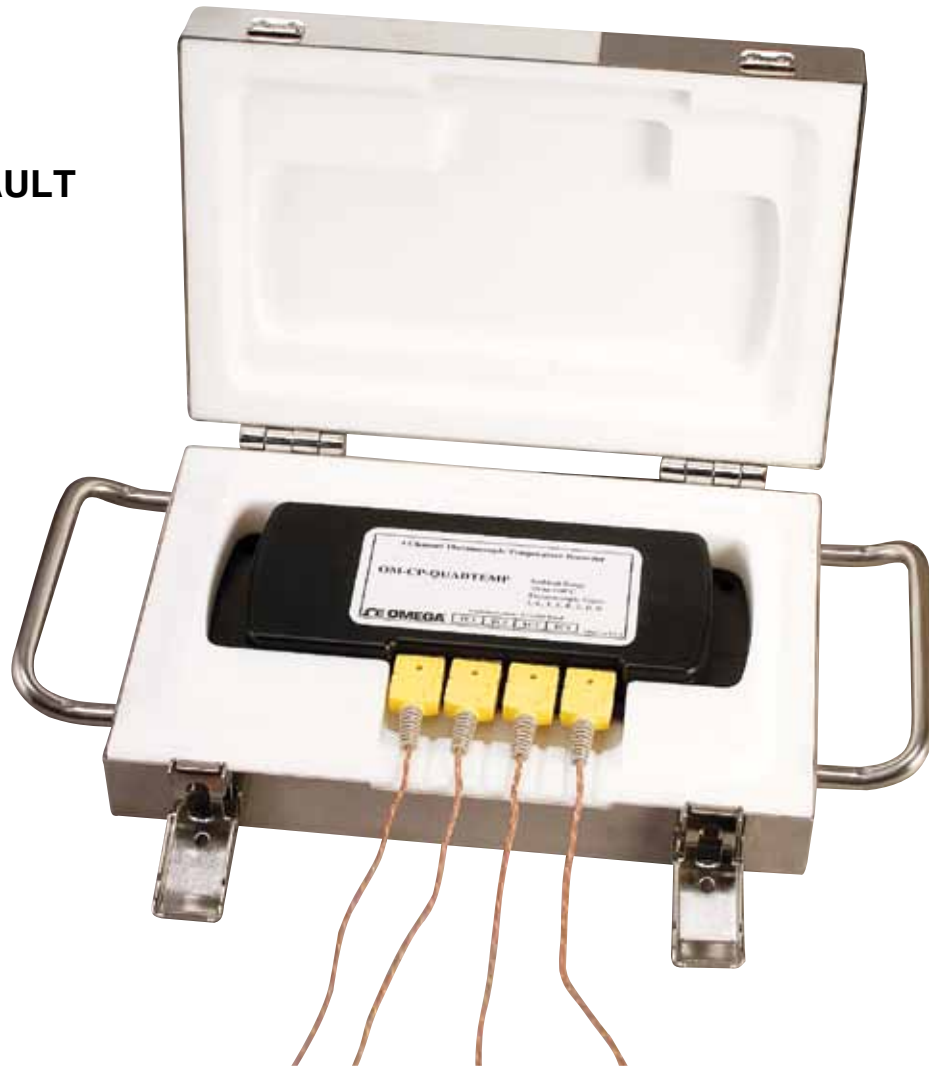
- ✓ 4 Thermocouple Input Channels
- ✓ Programmable Start Time
- ✓ Reusable
- ✓ Miniature Size
- ✓ Automatic Cold Junction Compensation
- ✓ Record Short Thermal Profiling Events

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-QUADTHERMOVAULT is a four 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).



OM-CP-QUADTHERMOVAULT shown smaller than actual size (includes four Type K thermocouples).

If additional analysis is needed, the data can be exported to Excel simply by clicking a button. The OM-CP-QUADTHERMOVAULT'S small size allows it to fit almost anywhere. Data retrieval is simple. Plug it into an available COM port and our easy-to-use software does the rest. Data can be printed in graphical or tabular format or it can be 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)

#### FOUR 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

##### 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

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

**Calibration:**

Digital calibration through software  
**Calibration Date:** Automatically recorded within device

**Battery Type:** 9V lithium or alkaline battery (included), user replaceable

**Battery Life:** 18 months typical

**Data Format:** Date and time stamped; °C, °F, °K, °R, μV, mV, V

**Time Accuracy:**  
 ±1 minute/month (at 20°C, RS-232 port not in use)

**Computer Interface:**

PC serial, RS-232C COM or USB (interface cable required); 115,200 baud

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

**OPERATING ENVIRONMENT:  
 OM-CP-QUADTHERMOVAULT**

**System:** -20 to 350°C (see table for temperature vs. duration) 0 to 95% RH non-condensing

**Internal OM-CP-QUADTEMP-A**

**Data Logger:** -20 to 55°C, 0 to 95% RH non-condensing

**Dimensions:**

231 H x 149 L x 62 mm D (9.1 x 5.9 x 2.45")

**Weight:** 4.01 kg (8.85 lbs)

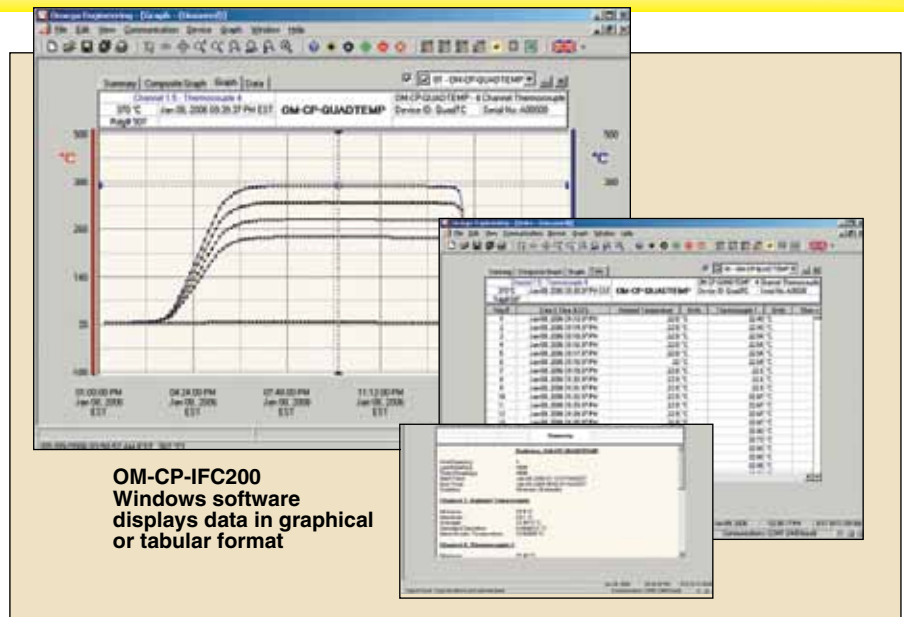
**Enclosure (Thermal Box):**

Thermal insulators encased in stainless steel

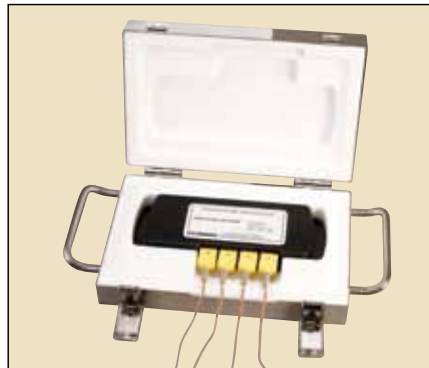
**Enclosure (Logger):**

Black Delrin®

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



Thermocouple Type	Range	Resolution	Accuracy*
J	-210 to 760°C	0.1°C	±0.5°C
K	-270 to 1370°C	0.1°C	±0.5°C
T	-270 to 400°C	0.1°C	±0.5°C
E	-270 to 980°C	0.1°C	±0.5°C
R	-50 to 1760°C	0.5°C	±2.0°C
S	-50 to 1760°C	0.5°C	±2.0°C
B	50 to 1820°C	0.5°C	±2.0°C
N	-270 to 1300°C	0.1°C	±0.5°C



Maximum Exposure Temperature vs Duration	
Ambient Temp °C (°F)	Max Duration in Minutes**
100 (212)	110
150 (302)	62
200 (392)	45
250 (482)	35
260 (500)	34
300 (572)	30
350 (662)	25

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

**To Order**

Model No.	Description
OM-CP-QUADTHERMOVAULT	Oven temperature data logger
OM-CP-QUADTHERMOVAULT-CERT	Oven temperature data logger with NIST calibration certificate
OM-CP-IFC200	Windows software and 1.8 m (6') USB interface cable
OM-CP-BAT103	Replacement 9V lithium battery
5SRTC-GG-K-24-72	Extra type K thermocouples, glass braid insulation, 24 AWG, 72 inch length, 5-pack

Comes complete with 3.6V lithium battery. Operator's manual and USB interface cable are included with the OM-CP-IFC200 software/cable package (required for data logger operation, sold separately).

OM-CP-QUADTHERMOVAULT includes 4 type K thermocouples, (glass braid insulation, 24 AWG, 72" length).

Ordering Example: OM-CP-QUADTHERMOVAULT-CERT, oven temperature data logger with NIST calibration certificate, OM-CP-IFC200, Windows software and USB cable.