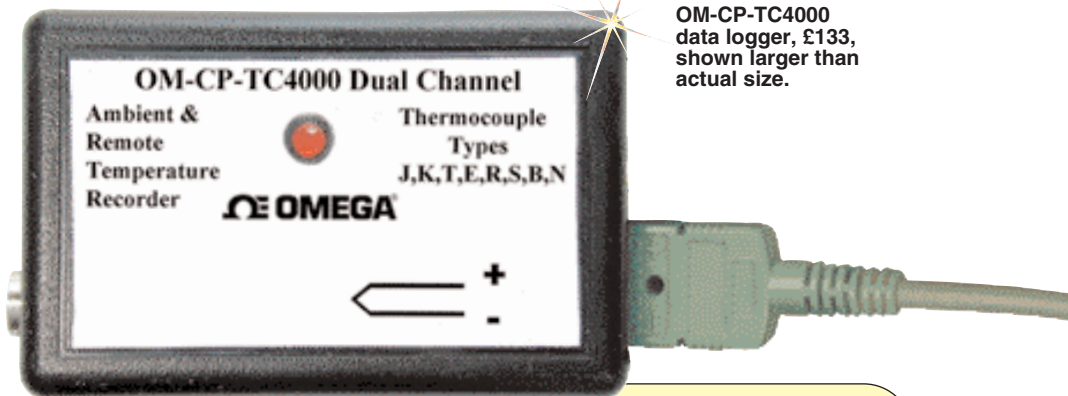


# Ambient Temperature and Thermocouple Data Loggers

## Part of the NOMAD® Family

OM-CP-TC4000  
Starts at  
**£133**



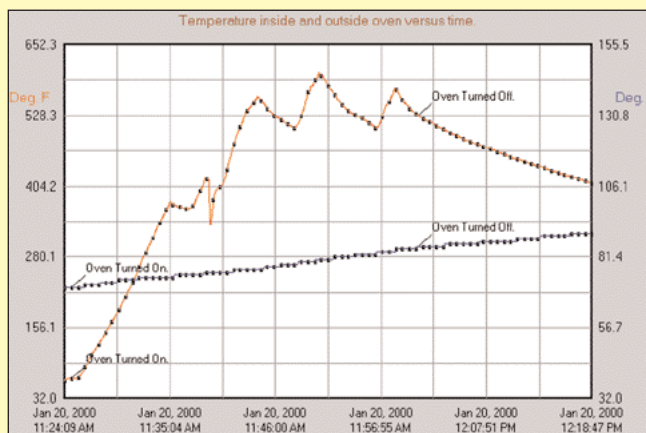
OM-CP-TC4000 data logger, £133, shown larger than actual size.

- ✓ Memory: 16,383 Ambient and 16,383 Remote Readings
- ✓ User Calibration Through Software
- ✓ Dual Channel Ambient and Remote
- ✓ Automatic Thermocouple Linearisation
- ✓ Miniature Size
- ✓ Real-Time Operation

The OM-CP-TC4000 is a miniature, battery-powered, standalone thermocouple-based temperature data logger. This portable, easy-to-use device will read and record up to 32,767 temperature measurements.

This data logger represents a major leap in both size and performance. The real-time clock ensures that all data is time and date stamped. The storage medium is nonvolatile solid state memory, providing maximum data security even if the battery becomes discharged.

The small size of these devices allows them to fit almost anywhere. Data retrieval is simple. Plug the device into an empty COM port and our easy-to-use software does the rest. The software converts a PC into a real-time strip chart recorder. Data can be printed in graphical and tabular format and or exported to a text or Microsoft file.



Reading No.	Rem. Temp Deg. F	Amb. Temp. Deg. F	Date and Time	Annotation
1517	528.1	85.1	Jan 20, 2000 12:00:49 PM	Oven Turned Off.
1518	527.9	85.1	Jan 20, 2000 12:00:51 PM	
1519	527.0	85.1	Jan 20, 2000 12:00:53 PM	
1520	526.6	85.1	Jan 20, 2000 12:00:55 PM	
1521	527.0	85.1	Jan 20, 2000 12:00:57 PM	
1522	526.3	85.1	Jan 20, 2000 12:00:59 PM	
1523	526.8	85.1	Jan 20, 2000 12:01:01 PM	
1524	525.4	85.1	Jan 20, 2000 12:01:03 PM	
1525	525.2	85.1	Jan 20, 2000 12:01:05 PM	
1526	524.7	85.1	Jan 20, 2000 12:01:07 PM	
1527	524.1	85.1	Jan 20, 2000 12:01:09 PM	
1528	523.6	85.1	Jan 20, 2000 12:01:11 PM	
		85.1	Jan 20, 2000 12:01:13 PM	
		85.1	Jan 20, 2000 12:01:15 PM	
		85.1	Jan 20, 2000 12:01:17 PM	
		85.1	Jan 20, 2000 12:01:19 PM	

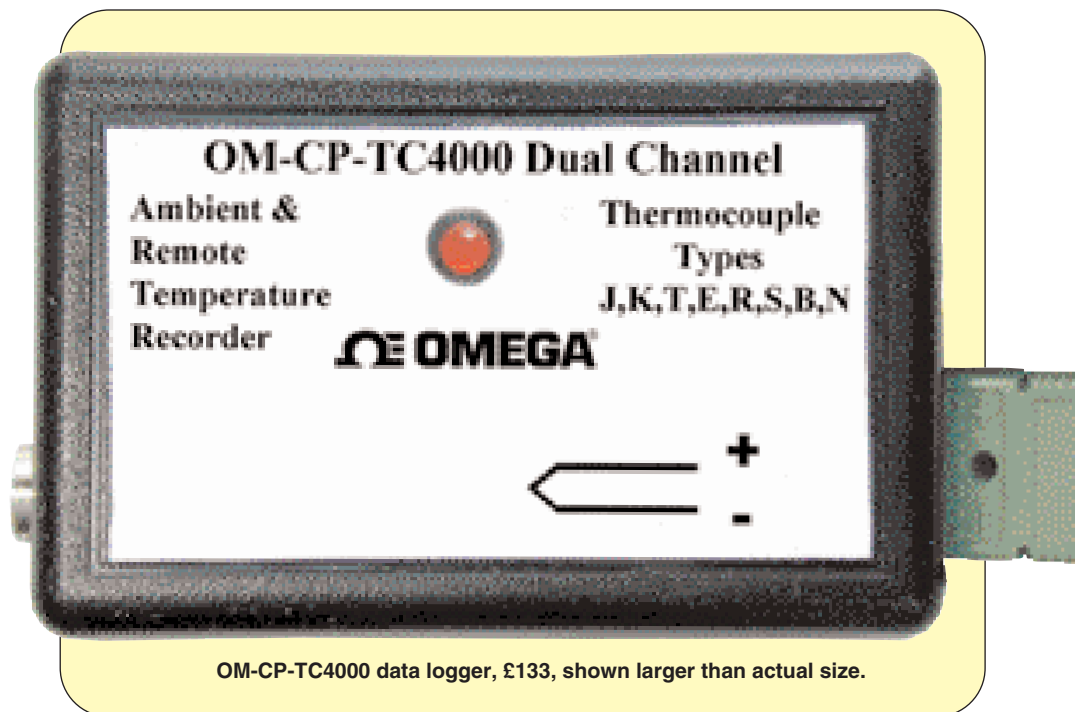
Remote Temperature Channel	
Minimum	64.4 Deg. F
Maximum	602.4 Deg. F
Arithmetic Mean	427.7 Deg. F
Standard Deviation	136.3 Deg. F
Mean Kinetic Temperature	501.9 Deg. F

Ambient Temperature Channel	
Minimum	70.7 Deg. F
Maximum	89.6 Deg. F
Arithmetic Mean	80.6 Deg. F
Standard Deviation	5.8 Deg. F
Mean Kinetic Temperature	81.8 Deg. F

OM-CP-IFC110, £66, Windows software displays data in graphical or tabular format.

DATA ACQUISITION



OM-CP-TC4000 data logger, £133, shown larger than actual size.

## Specifications

### Internal Channel

#### Temperature Accuracy:

$\pm 0.5^{\circ}\text{C}$  (0 to  $50^{\circ}\text{C}$ )

#### Temperature Resolution: $0.1^{\circ}\text{C}$

#### Temperature Range:

-40 to  $80^{\circ}\text{C}$

### Remote Channel

#### Thermocouple Connection:

Female subminiature thermocouple connector

#### Cold Junction Compensation:

Automatic

#### Temperature Calibration:

Digital calibration is available 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 Time:** Start time and date are programmable through software

**Real-Time Recording:** Device may be used with PC to monitor and record data in real-time

**Green Visual Indicator:** LED flashes at selected reading rate

**Power:** 3.6V lithium battery included

**Battery Life:** 1 year at 1 min reading rate

**Time Accuracy:**  $\pm 1$  minute/month

when RS-232 port is not in use

**Data Format:** Date and time stamped;  $^{\circ}\text{C}$ ,  $^{\circ}\text{F}$ ,  $^{\circ}\text{K}$ ,  $^{\circ}\text{R}$

**Weight:** 30 g

#### Computer Interface:

PC serial, RS-232C COM or USB (interface cable required)

**Communications:** 2400 baud

**Software:** Windows 95/98/NT/2000/XP

**Operating Environment:** -40 to  $80^{\circ}\text{C}$

5 to 95% RH non-condensing

**Dimensions:** 36 H x 56 W x 16 mm D

### External Thermocouple Channel

**Accuracy:**  $\pm 0.5^{\circ}\text{C}$  for types J, K, T, E, N;  $\pm 2.0^{\circ}\text{C}$  for types R, S, B, (does not include thermocouple error)

**Resolution:**  $0.1^{\circ}\text{C}$  for types J, K, T, E, N;  $0.5^{\circ}\text{C}$  for types R, S, B

### Range Type:

**J:** -210 to  $760^{\circ}\text{C}$

**K:** -270 to  $1370^{\circ}\text{C}$

**T:** -270 to  $400^{\circ}\text{C}$

**E:** -270 to  $980^{\circ}\text{C}$

**R:** -50 to  $1760^{\circ}\text{C}$

**S:** -50 to  $1760^{\circ}\text{C}$

**B:** 50 to  $1820^{\circ}\text{C}$

**N:** -270 to  $1300^{\circ}\text{C}$



**MOST POPULAR MODEL HIGHLIGHTED!**

To Order (Specify Model Number)		
Model No.	Price	Description
<b>OM-CP-TC4000</b>	<b>£133</b>	Ambient temperature and thermocouple data logger with 1-year battery life
<b>OM-CP-TC4000-CERT</b>	<b>174</b>	Ambient temperature and thermocouple data logger with 1-year battery life and traceable calibration certificate
<b>OM-CP-IFC110</b>	<b>66</b>	Windows software and 1.2 m RS-232 cable with DB9F termination
<b>OM-CP-IFC200</b>	<b>80</b>	Windows software and 3.7 m USB interface cable
<b>OM-CP-BAT105</b>	<b>8</b>	Replacement 3.6V lithium battery
<b>CS-3766</b>	<b>67</b>	Reference Book: Sensor Technology Handbook

Operator's manual, 3.6 V lithium battery, and RS-232 cable are included with the OM-CP-IFC110 Windows software (required to operate the data logger and is sold separately). **Ordering Example:** OM-CP-TC4000-CERT, ambient temperature and thermocouple data logger with calibration certificate and OM-CP-IFC110, Windows software with RS-232 cable,  $\pounds 174 + 66 = \pounds 240$ .



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