

## Differential Pressure and Thermocouple Temperature Data Logger

OM-CP-PRTC110 Series  
Starts at

**\$399**



Optional

- ✓ 5 Year Battery Life
- ✓ Wide Temperature Range
- ✓ Accepts Thermocouple Types J, K, T, E, R, S, B, and N
- ✓ High Speed Download
- ✓ Real-Time Operation
- ✓ Programmable Start Time
- ✓ Miniature Size

The OM-CP-PRTC110 is a differential pressure and temperature data logger, ideal for use in factory and laboratory applications. This device is available in a 0 to 2inH<sub>2</sub>O or 0 to 5inH<sub>2</sub>O model.

The OM-CP-PRTC110 features a real-time clock module that extends the battery life up to 5 years and allows for high speed downloads.

This device will measure and record up to 10,922 measurements per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The OM-CP-PRTC110 can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

The OM-CP-PRTC110 makes data retrieval quick and easy. Simply plug it into an available COM port and our user-friendly 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 or exported to a text or Microsoft Excel® file.

### Specifications

#### INTERNAL CHANNEL

##### Temperature Range:

-20 to 80°C (-4 to 176°F)

Temperature Resolution: 0.1°C

Calibrated Accuracy:

±0.5°C (0 to 50°C)



OM-CP-PRTC110-2H<sub>2</sub>O, \$399, shown larger than actual size.

#### REMOTE CHANNELS

##### Thermocouple Types:

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

##### Thermocouple Connection:

Female subminiature thermocouple connector

##### Cold Junction Compensation:

Automatic, based on internal channel

##### Maximum Thermocouple

Resistance: 1000 Ω, <1000 Ω recommended

##### Pressure Range (Nominal):

0 to 2inH<sub>2</sub>O or 0 to 5inH<sub>2</sub>O

(differential)

##### Pressure Range (Max):

-2 to +4inH<sub>2</sub>O and -2 to +8inH<sub>2</sub>O

(differential)

##### Pressure Connections:

REF and IN ports via 3/32" ID polyurethane tubing

##### Pressure Resolution:

0.002 inH<sub>2</sub>O and 0.005 inH<sub>2</sub>O

##### Pressure Specified Accuracy:

Nominal range at 25°C

##### Combined Calibration

Accuracy: ±0.5% FSR max

at 0.25°C over 1 year

##### Start Modes:

Software programmable immediate start or delay start up six months in advance

##### Real-Time Recording:

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

**Memory:** 10,922 readings per channel; software configurable memory wrap

**Reading Rate:** 2 seconds every 12 hours, selectable in software

Thermocouple Type	Range	Resolution	Accuracy*
J	-200 to 760°C	0.1°C	±0.5°C
K	-200 to 1370°C	0.1°C	±0.5°C
T	-200 to 400°C	0.1°C	±0.5°C
E	-200 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	60 to 1820°C	0.5°C	±2.0°C
N	-260 to 1300°C	0.1°C	±0.5°C
Voltage	-75 mV to 75 mV	5µV	±20µV

\* Accuracy specifications based on 3 m (9.8') 24 AWG thermocouple.



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Bead type  
thermocouple

Snap-on  
strain relief

Miniature size  
connector shown smaller  
than actual size.

5SRTC, \$48, 5 pack, shown  
smaller than actual size.



OM-CP-PRTC110-2H<sub>2</sub>O,  
\$399, shown larger than actual size.

**Calibration:** Digital calibration  
through software

**Calibration Date:** Automatically  
recorded within device

**Battery Type:** 3.6V lithium battery  
(included), user replaceable

**Battery Life:** 2 years  
(15 minute reading rate at 25°C)

**Data Format:** Date and time  
stamped °C, °F, K, °R; inH<sub>2</sub>O, PSIG,  
inHg, mmHG, bar, atm, Torr, Pa,  
kPa, and MPa

**Time Accuracy:** ±1 minute/month  
(at 20 to 30°C)

**Computer Interface:** PC serial  
or USB (interface cable required);  
57,600 baud

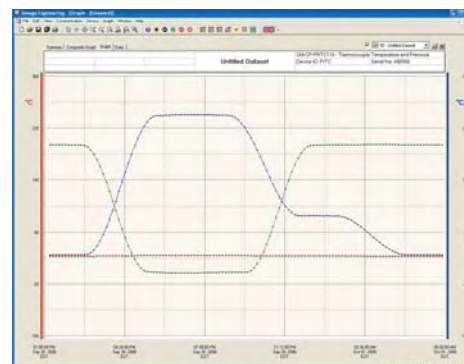
**Software:**  
WIN98/NT/2000/XP/VISTA 32-bit  
(VISTA 32-bit version only;  
VISTA 64-bit is not supported)

**Operating Environment:**  
-20 to 80°C (-4 to 176°F),  
0 to 95% RH non-condensing

**Dimensions:**  
68 H x 41 W x 20 mm D  
(2.7 x 1.6 x 0.8") plus  
connective tube

**Enclosure:** ABS plastic

**Weight:** 250 g (8.8 oz)



OM-CP-IFC110, \$99, Windows software  
displays data in graphical or tabular format.

**AVAILABLE FOR FAST DELIVERY!**

## To Order (Specify Model Number)

Model No.	Price	Description
OM-CP-PRTC110-2H2O	\$399	Differential pressure (0 to 2 inH <sub>2</sub> O) and temperature data logger
OM-CP-PRTC110-2H2O-CERT	519	Differential pressure (0 to 2 inH <sub>2</sub> O) and temperature data logger with NIST calibration certificate
OM-CP-PRTC110-5H2O	399	Differential pressure (0 to 5 inH <sub>2</sub> O) and temperature data logger
OM-CP-PRTC110-5H2O-CERT	519	Differential pressure (0 to 5 inH <sub>2</sub> O) and temperature data logger with NIST calibration certificate
OM-CP-IFC110	99	Windows software and 1.2 m (4') RS232 cable with DB9F termination
OM-CP-IFC200	119	Windows software and 3.7 m (12') USB interface cable
OM-CP-BAT105	10	Replacement 3.6V lithium battery
TYUTH95-532332-50-TRBL	8	Translucent blue polyurethane tubing

Comes complete with 3.6V lithium battery. Operator's manual and RS232 cable are included with the OM-CP-IFC110 Windows software  
(required to operate the data logger and is sold separately).

**Ordering Example:** OM-CP-PRTC110-2H2O-CERT, differential pressure and temperature data logger with NIST calibration certificate,  
and OM-CP-IFC110, Windows software, \$519 + 99 = \$618.

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