

## Thermocouple Temperature and Pressure Data Logger

OM-CP-PRTC210 Series

**\$649**

All Models



- ✓ Up to 2 Years 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-PRTC210 is a pressure and thermocouple temperature data logger, ideal for use in factory settings. This device is available from 2 to 345 bar (30 to 5000 psi) and features a 1/8 MNPT fitting for quick connection.

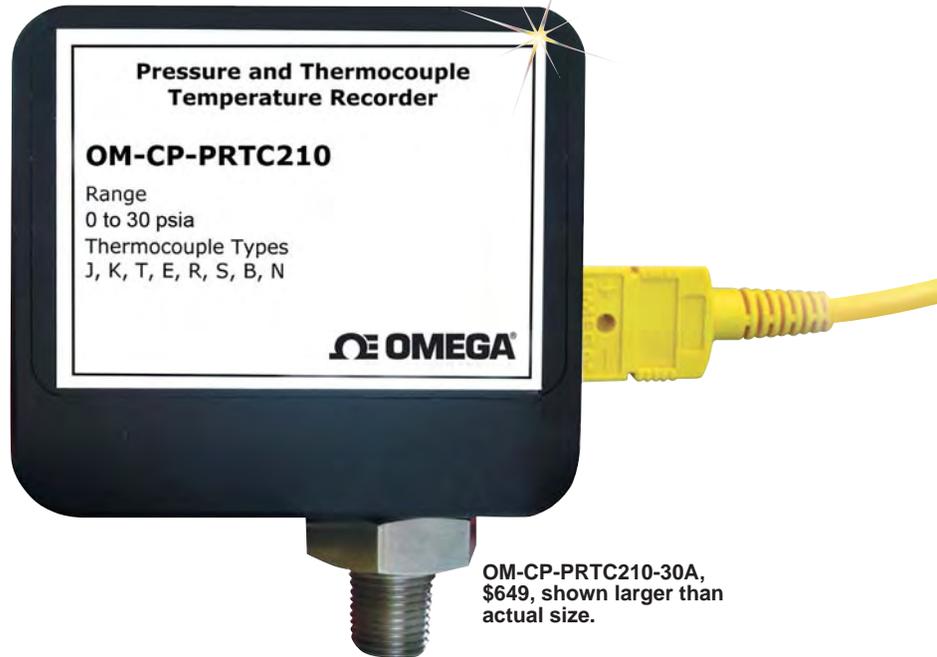
The OM-CP-PRTC210 has a real-time clock and a battery life of up to 2 years. This all in one compact, portable, easy to use device has a high-speed download and can measure and record up to 21,844 readings per channel.

The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged.

The OM-CP-PRTC210 can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

The OM-CP-PRTC210 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.



OM-CP-PRTC210-30A, \$649, shown larger than actual size.

### Specifications

#### INTERNAL CHANNEL

**Temperature Range:** -20 to 80°C (-4 to 176°F)  
**Temperature Resolution:** 0.1°C  
**Calibrated Accuracy:** ±0.5°C

#### REMOTE CHANNEL

**Thermocouple Types:** J, K, T, E, R, S, B and N  
**Thermocouple Connection:** Female subminiature (SMP) connector  
**Cold Junction Compensation:** Automatic, based on internal channel  
**Maximum Thermocouple Resistance:** 1000Ω, <100Ω recommended  
**Pressure Sensor:** Semiconductor strain gauge

#### Pressure Specified Accuracy:

2% FSR, 0.25% @ 25°C Typical

#### Pressure Response Time:

0.1 ms (10 to 90% FSR)

#### Pressure Connection:

1/8 MNPT

#### 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:

21,844 readings per channel for a total of 65,532

readings; software configurable memory wrap

#### Reading Rate:

2 seconds to 12 hours, selectable in software

#### Calibration:

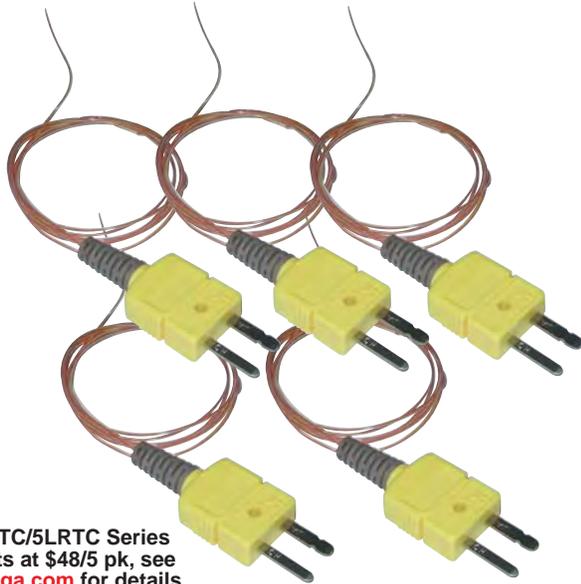
Digital calibration through software

#### Calibration Date:

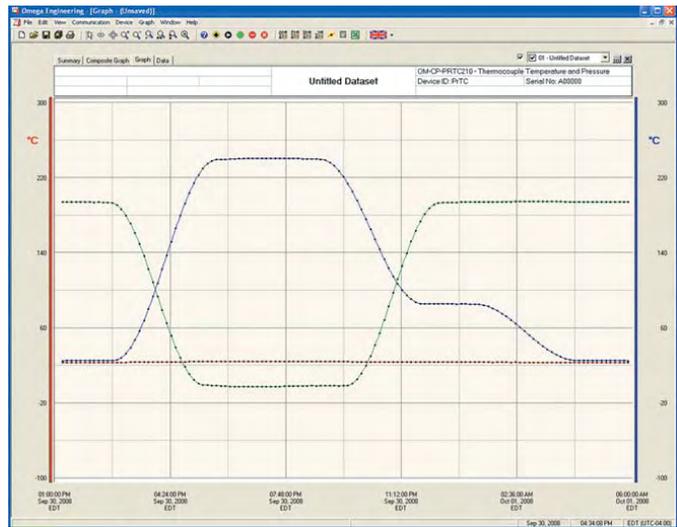
Automatically recorded within device

Thermocouple Type	Range	Resolution	Accuracy*
J	-210 to 760°C	0.1°C	±0.5°C
K	-260 to 1370°C	0.1°C	±0.5°C
T	-260 to 400°C	0.1°C	±0.5°C
E	-260 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



5SRTC/5LRTC Series starts at \$48/5 pk, see [omega.com](http://omega.com) for details.



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

Pressure Range	Resolution
0 to 30 psia	0.002 psia
0 to 30 psig	0.002 psig
0 to 100 psia	0.005 psia
0 to 100 psig	0.005 psig
0 to 300 psia	0.02 psia
0 to 300 psig	0.02 psig
0 to 500 psia	0.05 psia
0 to 500 psig	0.05 psig
0 to 1000 psia	0.05 psia
0 to 5000 psia	0.2 psia

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

**Battery Life:** Up to 2 years

**Data Format:** Date and time stamped °C, °F, K, °R, °C, °F, °K, °R, mV; inH<sub>2</sub>O, psig, inHg, 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:**

55 H x 63 W x 22 mm D (2.2 x 2.5 x 0.9") plus NPT fitting

**Enclosure:** Delrin®  
**Weight:** 119 g (4.2 oz)

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**To Order (Specify Model Number)**

Model No.	Price	Description
OM-CP-PRTC210-30A	\$649	Thermocouple temperature and pressure data logger, 0 to 30 psia
OM-CP-PRTC210-30G	649	Thermocouple temperature and pressure data logger, 0 to 30 psig
OM-CP-PRTC210-100A	649	Thermocouple temperature and pressure data logger, 0 to 100 psia
OM-CP-PRTC210-100G	649	Thermocouple temperature and pressure data logger, 0 to 100 psig
OM-CP-PRTC210-300A	649	Thermocouple temperature and pressure data logger, 0 to 300 psia
OM-CP-PRTC210-300G	649	Thermocouple temperature and pressure data logger, 0 to 300 psig
OM-CP-PRTC210-500A	649	Thermocouple temperature and pressure data logger, 0 to 500 psia
OM-CP-PRTC210-500G	649	Thermocouple temperature and pressure data logger, 0 to 500 psig
OM-CP-PRTC210-1000A	649	Thermocouple temperature and pressure data logger, 0 to 1000 psia
OM-CP-PRTC210-5000A	649	Thermocouple temperature and pressure data logger, 0 to 5000 psia
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 3.6 lithium battery

Comes complete with 3.6V lithium battery. Operator's manual and RS232 cable are included with the OM-CP-IF110 windows software (required to operate the data logger and is sold separately).

To order data logger with NIST calibration certificate, add suffix "-CERT" to model number and add \$60 to price.

**Ordering Example:** OM-CP-PRTC210-30A-CERT, thermocouple temperature and pressure data logger with NIST calibration certificate, and OM-CP-IFC110, Windows software, \$709 + 99 = \$808.

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