

### Features

- Up to 2 year battery life
- Wide temperature range
- Accepts thermocouple types J, K, T, E, R, S, B, N
- High speed download
- N.I.S.T. traceable
- Real-time operation
- Low cost
- Programmable start time
- Miniature size

### Applications

- Factory systems
- Laboratory testing
- HVAC
- Environmental studies

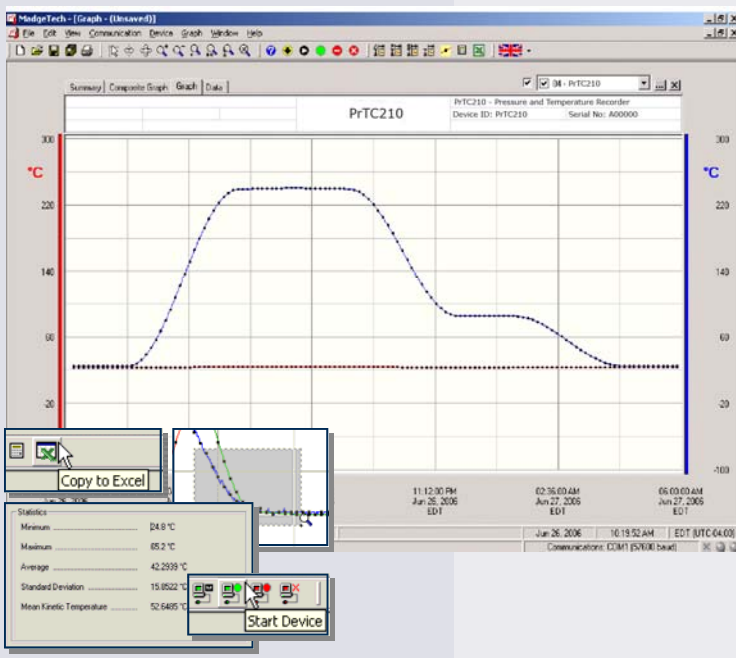
The PRTC210 is a pressure and thermocouple temperature data logger, ideal for use in factory settings.

The device is available from 30 to 5000 PSI and features a 1/8" NPT fitting for quick connection.



The 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 10,922 readings per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The PRTC210 can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

The PRTC210 makes data retrieval quick and easy. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.



### MadgeTech Data Recorder Software

displays pressure and temperature data in an easy to use graph.

The Windows®-based software package allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.

Click [MadgeTech Software](#) for more information or to download the software.

# PRTC210 SPECIFICATIONS\*

**Internal Channel**  
-20 to +80°C

**Temperature Resolution:** 0.1°C

**Calibrated Accuracy:** ±0.5°C

**Remote Channel**

**Thermocouple Types:** J, K, T, E, R, S, B, N

**Thermocouple connection:** Removable screw terminal

**Cold Junction Compensation:** Automatic, based on internal channel

**Maximum thermocouple**  
1000Ω, <100Ω recommended

**Thermocouple Type:	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1°C	±0.5°C
K	-260 to +1370	0.1°C	±0.5°C
T	-260 to +400	0.1°C	±0.5°C
E	-260 to +980	0.1°C	±0.5°C
R	-50 to +1760	0.5°C	±2.0°C
S	-50 to +1760	0.5°C	±2.0°C
B	+60 to +1820	0.5°C	±2.0°C
N	-260 to +1300	0.1°C	±0.5°C
Voltage	-75 mV to +75mV	5µV	±20µV

**Pressure Sensor:** Semi Conductor Strain Gauge

**Pressure Range:** 0 to 30, 100, 300 500 PSIA/G; 1000 PSIA, 5000PSIA

**Pressure Resolution:** 0.002, 0.005, 0.02, 0.05PSIA/G;

**Calibrated Accuracy:** 2% FSR, 0.25% @ 25°C typical

**Pressure Response Time:** 0.1 ms (10 to 90% FSR)

**Adapter:** 1/8" Male NPT

**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:** 10,922 readings per channel 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

**Battery Type:** 3.6V 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; inH2O, 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:** XP SP3/Vista/Windows 7

**Operating Environment:** -20 to +80°C, 0 to 95%RH non-condensing

**Dimensions:** 2.2" x 2.5" x 0.9" (55mm x 63mm x 22mm) plus NPT Fitting

**Enclosure:** Delrin

**Weight:** 4.2 oz (119 g)

**BATTERY WARNING:** FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212°F, INCINERATE OR EXPOSE CONTENTS TO WATER

\*\*Accuracy specifications based on 3-meter 24 AWG thermocouple.

## SOFTWARE FEATURES

**Multiple Graphs:** Simultaneously analyze data from several units or deployments; easily switch to a single data series

**Graphical Cursor:** One click displays readings by time, value, parameter or sample number

**Data Table:** Instantly access tabular view for detailed dates, times, values, and annotations

**Scaling Options:** Autoscale function fits data to the screen, or allows user to manually enter their own values

**Formatting Options:** Change colors, line styles, plotting options, show or hide channels quickly

**Statistics:** Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button

**Export Data:** Export data in a variety of common formats, or switch to Excel® with a single click

**Calibration:** Automatically calculate and store calibration parameters

**Real-time:** Real-time recording, and automatic e-mails of readings included

**Logger Configuration:** Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID

**Communications:** Automatically sets up communications port, or lets user select configuration

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY AND REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

## ORDERING INFORMATION

Model	Description	Price (U.S.)
PRTC210	Pressure and Thermocouple Temperature Recorder	\$649.00
IFC110	Software, manual and RS232 interface cable	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
LTC-7PN	Replacement battery for PRTC210	\$10.00

### ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration
LCD Display	

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)

