

# PRTemp140

## High Temperature and Pressure Data Logger



The PRTemp140 is a pressure and high temperature data logger all in one, created specifically for use in autoclave validation, mapping studies and pressurized processes. Featuring the familiar body style of the 140 series of data loggers and made of rugged stainless steel, this dual purpose device is less than 2.5 inches in length, allowing it to fit discretely inside small spaces.

The PRTemp140 data logger downloads temperature and pressure data simultaneously and displays the combined results in a single graph, simplifying data collection and analysis and eliminating unnecessary steps for the user.

This data logger is able to measure and record temperatures from -20 °C to 140 °C, and pressure from 0 bar to 5 bar, accommodating a wide range of applications even in the harshest conditions.

The memory capacity on the PRTemp140 stores up to 16,128 time and date stamped readings and will retain data even if the battery becomes discharged.

The PRTemp140 utilizes the latest MadgeTech data logger software, making the entire process from starting the device to analyzing data, efficient and easy for the user. Downloaded data can be viewed in various formats including graphic and tabular and can also be exported to Excel® for further analysis and calculations.

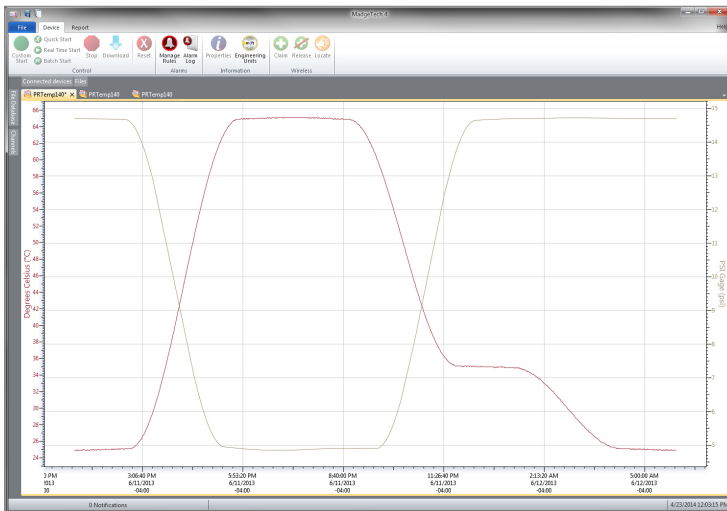
### Features

- Operates from -20 °C to +140 °C
- Submersible (IP68)
- User Replaceable Battery
- Rugged Stainless Steel Body
- Programmable Start Time
- Engraved Label
- CE Compliant
- Software Battery Life Indicator
- 1/8 inch NPT Pressure Port
- Wrench Flats (NPT Model)

### Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Compatible with 1/8-27 NPT Adapters and Fittings

### MadgeTech 4 Software Features



Graph View

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view

Serial	Channel	Point Count	Maximum	Minimum	Avg
A0000	Temperature	3000	65.1 °C	24.0 °C	42.0
A0000	Gage Pressure	3000	34.738 psi	4.846 psi	13.0

#### Statistics

Report Options

Report to Properties | Export to Excel

#### Export to Excel

Time	Time Zone	Data
1:13:37 PM	-04:00	-05:00:00
1:14:37 PM	-04:00	-05:01:00
1:15:37 PM	-04:00	-05:02:00
1:16:37 PM	-04:00	-05:03:00
1:17:37 PM	-04:00	-05:04:00
1:18:37 PM	-04:00	-05:05:00
1:19:37 PM	-04:00	-05:06:00
1:20:37 PM	-04:00	-05:07:00
1:21:37 PM	-04:00	-05:08:00
1:22:37 PM	-04:00	-05:09:00
1:23:37 PM	-04:00	-05:10:00
1:24:37 PM	-04:00	-05:11:00
1:25:37 PM	-04:00	-05:12:00
1:26:37 PM	-04:00	-05:13:00
1:27:37 PM	-04:00	-05:14:00
1:28:37 PM	-04:00	-05:15:00

#### Tabular Data View

Perform actions when any of the following conditions:

Any device - Connected

At a time - Connected

When conditions are met, do the following:

Create reports

#### Automation

## SPECIFICATIONS

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to [madgetech.com](http://madgetech.com) for details.

PRESSURE	
<b>Pressure Sensor</b>	Strain gauge
<b>Pressure Range</b>	0 to 5 bar (0 to 72.5 PSIA)
<b>Pressure Resolution</b>	0.0001 bar
<b>Calibrated Accuracy</b>	±0.03 bar (±0.435 PSI) from +20 °C to +140 °C (+68 °F to +284 °F) ±0.1 bar (±1.45 PSI) from -20 °C to +19.99 °C (-4 °F to +68 °F)

TEMPERATURE	
<b>Temperature Sensor</b>	Resistance Temperature Detector (RTD)
<b>Temperature Range</b>	-20 °C to +140 °C (-4 °F to +284 °F)
<b>Temperature Resolution</b>	0.01 °C (0.018 °F)
<b>Calibrated Accuracy</b>	±0.1 °C (+20 °C to +140 °C) (68 °F to 284 °F) ±0.3 °C (-20 °C to +19.99 °C) (-4 °F to +68 °F)

GENERAL	
<b>Start Modes</b>	Immediate start Delay start up to 18 months in advance
<b>Stop Modes</b>	Manual or Timed (specific date and time)
<b>Real Time Recording</b>	May be used with PC to monitor and record data in real time
<b>Password Protection</b>	An optional password may be programmed into the device to restrict access to configuration options. Data may be read without the password.
<b>Memory</b>	16,128 readings
<b>Wrap Around</b>	Yes
<b>Reading Rate</b>	1 reading every second up to 1 reading every 24 hours
<b>Calibration</b>	Digital calibration through software
<b>Calibration Date</b>	Automatically recorded within device
<b>Battery Type</b>	3.6V high-temperature lithium battery included, user replaceable
<b>Battery Life</b>	2 years typical (1 minute reading rate)
<b>Data Format</b>	°C, °F, °R, K, bar, mbar, PSI, inHg, mmHg, atm, Torr, Pa, kPa, MPa
<b>Time Accuracy</b>	±1 minute/month at 25 °C Extended Operation: ±20 mins/month at 140 °C (±450 ppm)
<b>Computer Interface</b>	IFC400 or IFC406 USB docking station required
<b>Operating System Compatibility</b>	Windows XP SP3 or later
<b>Software Compatibility</b>	Standard Software version 4.2.3.0 or later Secure Software version 4.2.2.0 or later
<b>Operating Environment</b>	-20 °C to +140 °C (-4 °F to +284 °F) 0 %RH to 100 %RH, 0.002 PSIA to 100 PSIA
<b>Dimensions</b>	<b>Flush Top:</b> 1.98 in x 0.97 in dia. (50.2 mm x 24.6 mm dia.) <b>NPT Pressure Port Top:</b> 2.3 in x 0.97 in dia. (58.2 mm x 24.6 mm dia.) <b>NPT Specification:</b> 1/8-27
<b>Weight</b>	<b>Flush Top:</b> 3.1 oz (90 g) <b>NPT Pressure Port Top:</b> 3.5 oz (100 g)
<b>IP Rating</b>	IP68
<b>Material</b>	316 Stainless Steel, Radel
<b>Approvals</b>	CE

**BATTERY WARNING:** FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, CRUSH, PENETRATE, OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 150 °C (302 °F).

## Ordering Information

<b>PRTemp140-LVL</b>	PN 901225-00	High Temperature and Pressure Data Logger with Flush Top
<b>PRTemp140-NPT</b>	PN 901223-00	High Temperature and Pressure Data Logger with 1/8-27 NPT Pressure Port Top
<b>IFC400</b>	PN 900319-00	Docking station with USB cable
<b>IFC406</b>	PN 900325-00	6 Port, Multiplexer docking station with USB cable
<b>ER14250-SM</b> Formerly ER14250MR-145	PN 900097-00	Replacement battery for the PRTemp140

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