

# PR140

## High Temperature Pressure Data Logger

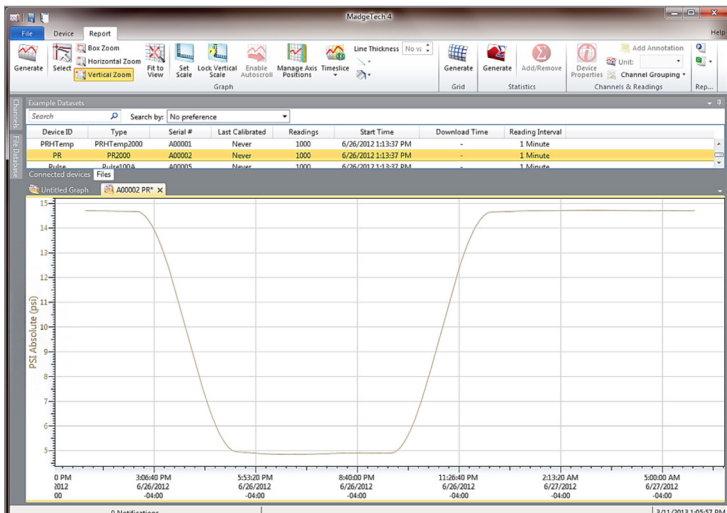
The PR140 is a pressure data logger designed for use in autoclave validation and mapping. This rugged device can withstand temperatures up to 140 °C and is completely submersible (IP68).

The PR140 is built with a precision stainless steel pressure gauge. The device has an accuracy of  $\pm 0.03$  Bar ( $\pm 0.435$  PSI), which can be achieved over a wide temperature range, from 20 °C to +140 °C (68 °F to 284 °F). The PR140 can be programmed to take readings as often as once per second (1 Hz), and has non-volatile memory that can store up to 32,700 measurements.

The .125 inch NPT pressure port featured on the device allows for compatibility with a variety of fittings and adapters. This is ideal for calibration purposes, as well as connecting the data logger to measure process pressure systems.

The PR140 is easy to use. Simply place it in the IFC400 or IFC406 docking station (sold separately), connect to a computer, and the device can be started, stopped or downloaded using the MadgeTech software. Graphical, tabular and summary data is provided for analysis and can be viewed in PSIA, mmHg, bar, Torr and kPa. The data can also be automatically exported to Excel® for further calculations.

### 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	Maxim
A00002	PSI*	A00002	PSI*
A00002	Absolute Pressure	1000	14.728

Statistics

Report Options

- Report Properties
- Export to Excel

Export to Excel

Time	Time Zone	Data
1:13:37 PM	-0400	-05:00:00
1:14:37 PM	-0400	-05:01:00
1:15:37 PM	-0400	-05:02:00
1:16:37 PM	-0400	-05:03:00
1:17:37 PM	-0400	-05:04:00
1:18:37 PM	-0400	-05:05:00
1:19:37 PM	-0400	-05:06:00
1:20:37 PM	-0400	-05:07:00
1:21:37 PM	-0400	-05:08:00
1:22:37 PM	-0400	-05:09:00
1:23:37 PM	-0400	-05:10:00
1:24:37 PM	-0400	-05:11:00
1:25:37 PM	-0400	-05:12:00
1:26:37 PM	-0400	-05:13:00
1:27:37 PM	-0400	-05:14:00
1:28:37 PM	-0400	-05:15:00

Tabular Data View

Automation

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



### Features

- Operates up to 140 °C
- Submersible (IP68)
- User Replaceable Battery
- Rugged Stainless Steel Body
- Programmable Start Time
- Engraved Label
- CE Compliant
- Software Battery Life Indicator
- .125 inch NPT Pressure Port
- Wrench Flats

### Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Compatible with .125 inch NPT Adapters and Fittings

### Applications

- Autoclave Validation and Mapping
- Canning and Cooking Pouches
- Pressurized Process Reactors
- Beverage Production, Including Wine and Soda

## 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	
Pressure Sensor	Semiconductor strain gauge
Pressure Range	0 to 5 Bar (0 to 72.5 PSIA)
Pressure Resolution	0.0001 Bar
Calibrated Accuracy	+0.03 Bar (+0.435 PSI) +20 °C to +140 °C (+68 °F to +284 °F)
Pressure Response Time	0.1 ms (10 to 90 % FSR)

GENERAL	
Start Modes	Software programmable immediate start or delay start up to six months
Real Time Recording	May be used with PC to monitor and record data in real time
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read without the password.
Memory	65,536 readings
Wrap Around	Yes
Reading Rate	1 reading every second up to 1 reading every 24 hours
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6V high-temperature lithium battery included, user replaceable
Battery Life	2 years
Data Format	PSIA, inHg, mmHg, bar, atm, Torr, Pa, kPa, MPa
Time Accuracy	±1 minute/month at 20 °C to 30 °C
Computer Interface	IFC400 or IFC406 USB docking station required
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 2.06.02 or later Secure Software version 4.1.3.0 or later
Operating Environment	-20 °C to +140 °C (-4 °F to +284 °F) 0 %RH to 100 %RH, 0.002 PSIA to 100 PSIA
Dimensions	Flush Top: 2.0 in x 1.0 in dia. (50.8 mm x 25.4 mm dia.) NPT Pressure Port Top: 2.3 in x 1.0 in dia. (58.2 mm x 25.4 mm dia.)
Weight	Flush Top: 3.1 oz (90 g) NPT Pressure Port Top: 3.5 oz (100 g)
IP Rating	IP68
Material	Stainless Steel
Approvals	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

PR140-LVL	PN 900998-00	Pressure Data Logger with Flush Top
PR140-NPT	PN 900992-00	Pressure Data Logger with NPT Pressure Port Top
IFC400	PN 900319-00	Docking station with USB cable
IFC406	PN 900325-00	6 Port, Multiplexer docking station with USB cable
ER14250MR-145	PN 900097-00	Replacement battery for the PR140

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