

# PR140 HIGH TEMPERATURE PRESSURE DATA LOGGER



## Features

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

## Benefits

- Simple Setup and Installation
- Compatible with .125 inch NPT
- Adaptors and Fittings

## Applications

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

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.

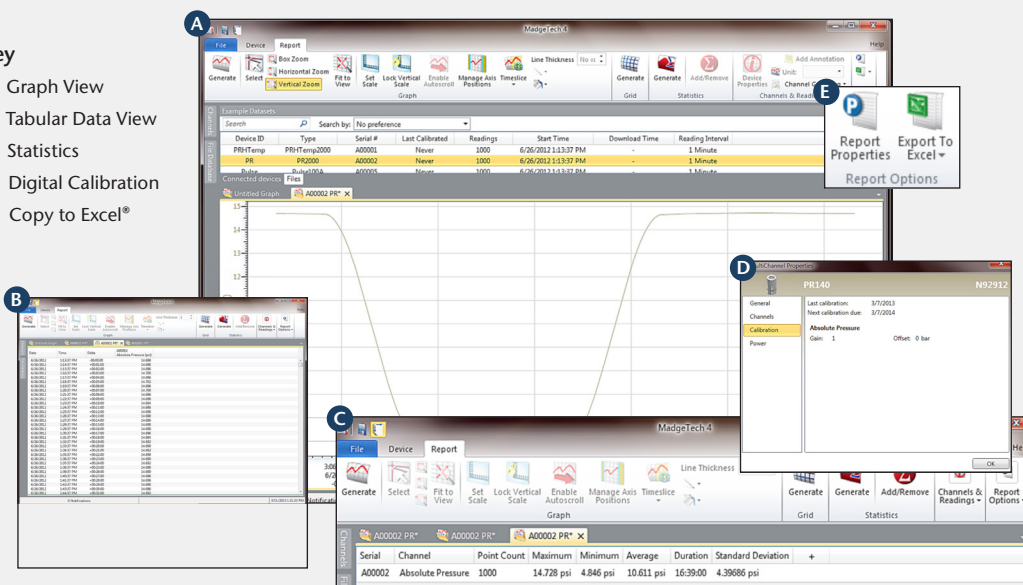
The PR140 is easy to use. Simply place it in the IFC400 or IFC406 docking station (sold separately), connect to a computer, and the device can be started, stopped or downloaded using the MadgeTech software. Graphical, tabular and summary data is provided for analysis and can be viewed in PSIA, mmHg,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



## MADGETECH DATA LOGGER SOFTWARE

### Key

- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- E** Copy to Excel®



### Software Features:

- 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
- Data table view
- Automatic report generation
- Summary view
- Multilingual

# PR140 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>	Semiconductor 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), +20 °C to +140 °C (+68 °F to +284 °F)
<b>Pressure Response Time:</b>	0.1 ms (10 to 90 % FSR)
<b>Reading Rate:</b>	1 reading every second up to 1 reading every 24 hours
<b>Memory:</b>	32,700 readings; software configurable memory wrap
<b>Start Modes:</b>	Software programmable immediate start or delay start up to six months
<b>Real Time Recording:</b>	May be used with PC to monitor and record data in real time
<b>Calibration:</b>	Digital calibration through software
<b>Calibration Interval:</b>	Yearly calibration recommended

<b>Reading Rate:</b>	1 reading every 2 seconds 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, <b>user replaceable</b>
<b>Battery Life:</b>	2 years
<b>Data Format:</b>	PSIA, inHg, mmHg, bar, atm, Torr, Pa, kPa, MPa
<b>Time Accuracy:</b>	±1 minute/month (at 20 °C to 30 °C)
<b>Computer Interface:</b>	USB (interface cable required); 115,200 baud
<b>Software:</b>	XP SP3/Vista/Windows 7/Windows 8
<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>	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.)
<b>Weight:</b>	40 oz (1134 g)
<b>Enclosure:</b>	Stainless Steel
<b>Approvals:</b>	CE

**BATTERY WARNING:** RISK OF FIRE OR EXPLOSION. DO NOT RECHARGE, FORCE OPEN, HEAT OR DISPOSE OF IN FIRE.

## ORDERING INFORMATION

MODEL	DESCRIPTION
PR140-LVL	Pressure Data Logger, with Flush Top
PR140	Pressure Data Logger, with NPT Pressure Port Top
IFC400	Docking station with USB cable, software and manual
IFC406	6 Port, Multiplexer docking station with USB cable, software and manual
ER1425S-HT	Replacement battery for the PR140
<b>Calibration Certificate</b>	Calibration Certificate available for data logger

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- Spectral Vibration
- Motion

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