PR140
HIGH TEMPERATURE PRESSURE DATA LOGGER

MADGETECH
WE BUILD DATA LOGGERS

Features
- Operates up to 140 °C
- Submersible (IP68)
- User Replaceable Battery
- Rugged
- Programmable Start Time
- Engraved Label
- CE Compliant
- Software Battery Life Indicator
- 1/8 inch NPT Pressure Port
- Wrench Flats

Benefits
- Simple Setup and Installation
- Compatible with 1/8 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 ±0.03 Bar (±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 1/8 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.
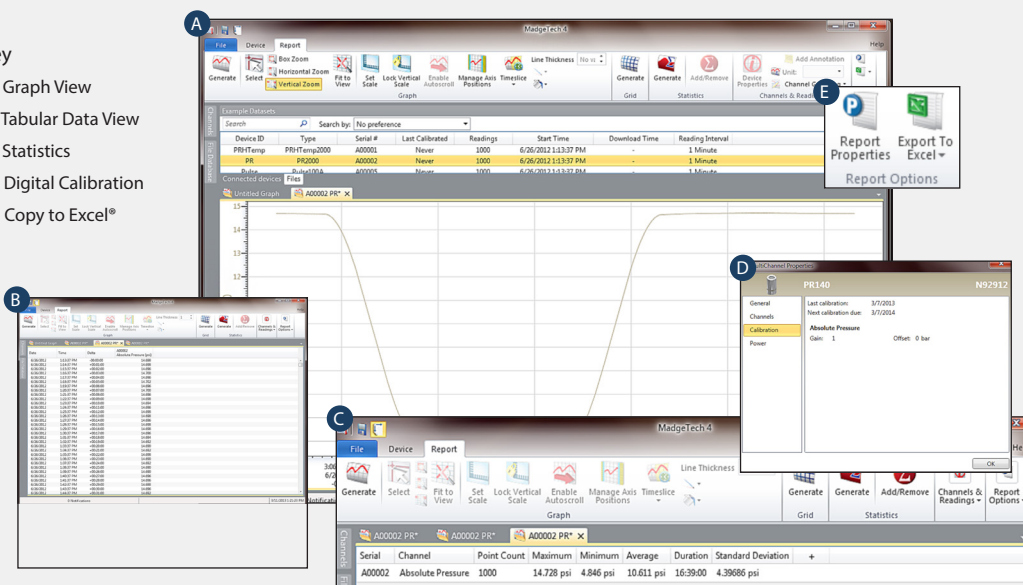
The PR140 is easy to use. Simply place it in the IFC400 or IFC406 docking station (sold separately), connect to a computer, and the device can be started, stopped or downloaded using the MadgeTech software. Graphical, tabular and summary data is provided for analysis and can be viewed in PSIA, mmHg, 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*

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)
Reading Rate:	1 reading every second up to 1 reading every 24 hours
Memory:	32,700 readings; software configurable memory wrap
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
Calibration:	Digital calibration through software
Calibration Interval:	Yearly calibration recommended

Reading Rate:	1 reading every 2 seconds 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:	PSIG, inHg, mmHg, bar, atm, Torr, Pa, kPa, MPa
Time Accuracy:	±1 minute/month (at 20 °C to 30 °C)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
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:	40 oz (1134 g)
Enclosure:	Stainless Steel
Approvals:	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
Calibration Certificate	Calibration Certificate available for data logger

ASK ABOUT OUR OTHER DATA LOGGERS

Temperature
Humidity
Pressure
pH
Level
Shock
LCD Display
Pulse/Event/State
Current
Voltage
Wireless
Intrinsically Safe
Spectral Vibration
Motion

For Quantity Discounts call 603-456-2011 or email sales@madgetech.com