PR140

Pressure Sensor	Semiconductor (strain gauge)
Pressure Range (Nominal)	0 to 5 Bar (0 to 72.5 PSIA)
Pressure Resolution	0.1m Bar (0.0015 PSIA)
Pressure Response Time	0.1ms (10 to 90% FSR)
Repeatability	±0.5% FSR; ±0.2% typical
Calibrated Accuracy	±0.03 Bar (±0.435 PSI), 20°C to +140°C (68°F to +284°F)
Memory	32,700 readings; software configurable memory wrap
Reading Rate	1 second to once every 24 hours
Required Interface Package	IFC400
Baud Rate	125,000 baud
Typical Battery Life	2 years
Operating Environment	-20°C to +140°C (-4°F to +284°F); 0 to 100%RH
Dimensions	Flush Top: 2.0" x 1.0" dia. (50.8mm x 25.4mm dia.) NPT Pressure Port Top: 2.3" x 1.0" dia. (58.2mm x 25.4mm dia.)
Submersible	Yes (IP68)
Material	Stainless Steel
Weight	3oz (85g)
Approvals	CE

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 140°C (284°F).

Specifications subject to change.

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PR140
High Temperature Pressure Data Logger

To view the full MadgeTech product line, visit our website at www.madgetech.com.

Product Notes

The PR140 can be used in both wet and dry applications up to 140°C indefinitely. Available with Flush or NPT Pressure Port Top

Submergibility

The PR140 is fully submersible and is rated IP68. It can be placed in environments with up to 230 ft (70m) of water.

O-Rings

O-ring maintenance is a key factor when properly caring for the PR140. The O-rings ensure a tight seal and prevent liquid from entering the inside of the device. Please refer to the application note "O-Rings 101: Protecting Your Data," found on the MadgeTech website, for information on how to prevent O-ring failure.

Note: This product is rated for use up to 140°C. Please heed the battery warning. The product will explode if exposed to temperatures above 140°C.

Installation Guide

Installing the Interface cable

• IFC400

  Refer to the "Quick Start Guide" included in the package.

Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Wizard.

Connecting the data logger

• Once the software is installed and running, plug the interface cable into the data logger.
• Click the **Communication Menu**, then **Auto Configure Port**.
• After a moment, a box will appear stating a device has been found.
• Click **OK**. The **Device Status** box will appear. Click **OK**.
• At this point, communications have been configured for the logger. These settings can be found under the **Communication Menu**.

Note: For additional installation instructions refer to the "Data Logger & Software Operating Manual".

Device Operation

Starting the data logger

• Click **Device Menu** then **Start Device**.
• Choose the desired start method.
• Choose the start parameters by selecting a **Reading Rate** suitable for the application.
• Enter in any other desired parameters and click **Start**.
• A box will appear stating the data logger has been started. Click **OK**.
• Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

• Connect the data logger to the interface cable.
• Click the **Device Menu** then **Read Device Data**. This will offload all recorded data onto the PC.

Device Maintenance

Battery Replacement

Materials:

ER14255-HT Battery

• Unscrew the bottom of the data logger and remove the battery.
• Place the new battery into the data logger. Note the polarity of the battery.
• Screw the cover back onto the data logger.

Recalibration

The PR140 standard calibration is 2 points at 1 & 4 bar.

Pricing:

Recalibration traceable to NIST	$70.00
Recalibration	$40.00

Prices and specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com To send the devices back, visit www.madgetech.com, select Services then RMA Process.