

PRTemp140

High Temperature and Pressure
Data Logger



PRODUCT USER GUIDE

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

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PRODUCT USER GUIDE

Product Overview

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 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.

Water Resistance

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

Installation Guide

Installing the Software

The Software can be downloaded from the MadgeTech website at madgetech.com. Follow the instructions provided in the Installation Wizard.

Installing the Docking Station

IFC400 or IFC406 (sold separately) — Follow the instructions provided in the Installation Wizard to install the USB Interface Drivers. Drivers can also be downloaded from the MadgeTech website at madgetech.com.

Device Operation

Connecting and Starting the Data Logger

1. Once the software is installed and running, plug the interface cable into the docking station.
2. Connect the USB end of the interface cable into an open USB port on the computer.
3. Place the data logger into the docking station.
4. The data logger will automatically appear under **Connected Devices** within the software.
5. For most applications, select **Custom Start** from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click **Start**. (*Quick Start applies the most recent custom start options, Batch Start is used for managing multiple loggers at once, Real Time Start stores the dataset as it records while connected to the logger.*)
6. The status of the device will change to **Running** or **Waiting to Start**, depending upon your start method.
7. 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

1. Place the logger into the docking station.
2. Highlight the data logger in the **Connected Devices** list. Click **Stop** on the menu bar.
3. Once the data logger is stopped, with the logger highlighted, click **Download**. Downloading will offload and save all the recorded data to the PC.

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Device Operation (cont'd)

Set Password

To password protect the device so that others cannot start, stop or reset the device:

1. In the **Connected Devices** panel, click the device desired.
2. On the **Device** Tab, in the **Information** Group, click **Properties**. Or, right-click the device and select **Properties** in the context menu.
3. On the **General** Tab, click **Set Password**.
4. Enter and confirm the password in the box that appears, then select **OK**.

Note: *This product is rated for use up to 140 °C (284 °F). Please heed the battery warning. The product will explode if exposed to temperatures above 140 °C (284 °F).*

Device Maintenance

O-Rings

O-ring maintenance is a key factor when properly caring for the PRTemp140. 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 at madgetech.com, for information on how to prevent O-ring failure.

Battery Replacement

Materials: ER14250-SM

1. Unscrew the bottom of the logger and remove the battery.
2. Place the new battery into the logger. Note the polarity of the battery. It is important to insert the battery with positive polarity pointing upward towards the probe. Failure to do so could result in product inoperability or potential explosion if exposed to high temperatures.
3. Screw the cover back onto the logger.

Recalibration

MadgeTech recommends annual recalibration. To send devices back for calibration, visit madgetech.com.

NEED HELP?

Ordering Information

| | | |
|--|--------------|---|
| PRTemp140-LVL | PN 901225-00 | Pressure and Temperature Data Logger with Flush Top |
| PRTemp140-NPT | PN 901223-00 | High Temperature Pressure Data Logger with 1/8-27 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 |
| ER14250-SM Formerly ER14250MR-145 | PN 900097-00 | Replacement battery for the PR140 |

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



Product Support & Troubleshooting:

- Visit our Resources online at madgetech.com/resources.
- Contact our friendly Customer Support Team at (603) 456-2011 or support@madgetech.com.



MadgeTech 4 Software Support:

- Refer to the built-in help section of the MadgeTech 4 Software.
- Download the MadgeTech 4 Software Manual at madgetech.com.
- Contact our friendly Customer Support Team at (603) 456-2011 or support@madgetech.com.



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