

# HiTemp140 Series

## High Temperature Data Loggers

## PRODUCT USER GUIDE

To view the full MadgeTech product line,  
visit our website at [madgetech.com](http://madgetech.com).



IFC406 (Sold Separately)

IFC400 (Sold Separately)



1.888.610.7664

 [www.calcert.com](http://www.calcert.com)

[sales@calcert.com](mailto:sales@calcert.com)

# PRODUCT USER GUIDE

## Product Overview

The HiTemp140 is a rugged, high precision, temperature data logger that is built for use with autoclaves and harsh environments. This stainless steel device is submersible, can withstand temperatures up to +140 °C (+284 °F) and has an accuracy of  $\pm 0.1$  °C ( $\pm 0.18$  °F).

The HiTemp140 can store up to 32,256 readings, and features a rigid external probe capable of measuring extended temperatures, up to +260 °C (+500 °F). Custom probe lengths up to 7 inches are available. The device records date and time stamped readings, and has non-volatile solid state memory that will retain data even if the battery becomes discharged. The HiTemp140 can be used in both wet and dry applications up to +140 °C (+284 °F) indefinitely.

### Water Resistance

The HiTemp140 is fully submersible and is rated IP68. It can be placed in environments with up to 230 feet (70 m) of water.

## Installation Guide

### Installing the Software

The Software can be downloaded from the MadgeTech website at [madgetech.com](http://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](http://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, unless user selectable memory wrap is enabled. 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**.
4. 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

### 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?



## Product Support & Troubleshooting

- Visit our Resource Library online at [madgetech.com/resources](http://madgetech.com/resources).
- Contact our friendly Customer Support Team at (603) 456-2011 or [support@madgetech.com](mailto: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](http://madgetech.com).
- Contact our friendly Customer Support Team at (603) 456-2011 or [support@madgetech.com](mailto:support@madgetech.com).

## Ordering Information

|                                                         |              |                                                                           |
|---------------------------------------------------------|--------------|---------------------------------------------------------------------------|
| <b>HITEMP140-1</b>                                      | PN 900140-00 | High Temperature Data Logger with a 1 inch probe                          |
| <b>HITEMP140-2</b>                                      | PN 900153-00 | High Temperature Data Logger with a 2 inch probe                          |
| <b>HITEMP140-2-TD</b>                                   | PN 900165-00 | High Temperature Data Logger with a 2 inch transitional diameter probe    |
| <b>HITEMP140-5.25</b>                                   | PN 900173-00 | High Temperature Data Logger with a 5.25 inch probe                       |
| <b>HITEMP140-5.25-TD</b>                                | PN 900180-00 | High Temperature Data Logger with a 5.25 inch transitional diameter probe |
| <b>HITEMP140-7</b>                                      | PN 900198-00 | High Temperature Data Logger with a 7 inch probe                          |
| <b>IFC400</b>                                           | PN 900319-00 | Docking station with USB cable                                            |
| <b>IFC406</b>                                           | PN 900325-00 | 6 Port, Multiplexer docking station with USB cable                        |
| <b>ER14250-SM</b> <small>Formerly ER14250MR-145</small> | PN 900097-00 | Replacement battery for the HiTemp140                                     |

