

MADGE TECH HiTemp140 High Temperature Data Loggers User Guide

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HiTemp140 High Temperature Data Loggers

Product Information

The HiTemp140 Series is a range of high temperature data loggers designed for monitoring and recording temperature in extreme environments. The series includes the following models:

- HiTemp140-1
- HiTemp140-2
- HiTemp140-5.25
- HiTemp140-7

The HiTemp140 data loggers are fully submersible and have an IP68 rating, making them suitable for use in environments with up to 230 feet (70 m) of water.

Product Usage Instructions

Installing the Software

To install the software for the HiTemp140 data loggers, follow these steps:

1. Visit the MadgeTech website at [madgetech.com](https://www.madgetech.com).
2. Download the software from the website.
3. Follow the instructions provided in the Installation Wizard to

complete the installation.

Installing the Docking Station

To install the docking station for the HiTemp140 data loggers, follow these steps:

1. If you have the IFC400 or IFC406 docking station (sold separately), follow the instructions provided in the Installation Wizard to install the USB Interface Drivers.
2. Alternatively, you can download the drivers from the MadgeTech website at madgetech.com.

Connecting and Starting the Data Logger

To connect and start using the HiTemp140 data logger, follow these steps:

1. Ensure that the software is installed and running on your computer.
2. Plug the interface cable into the docking station.
3. Connect the USB end of the interface cable into an open USB port on your computer.
4. Place the data logger into the docking station.
5. The data logger will automatically appear under Connected Devices within the software.
6. Select Custom Start from the menu bar and choose the desired start method, reading rate, and other parameters appropriate for your data logging application. Click Start.
7. The status of the device will change to Running or Waiting to Start, depending on your start method.
8. Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The data logger will stop recording data when the end of memory is reached or the device is manually stopped, unless you have enabled user selectable memory wrap. To restart the device, it needs to be re-armed by connecting it to the computer.

Downloading Data from a Data Logger

To download recorded data from a HiTemp140 data logger, follow these steps:

1. Place the logger into the docking station.
2. Highlight the data logger in the Connected Devices list within

the software. Click Stop on the menu bar.

3. Once the data logger is stopped, with the logger highlighted, click Download.
4. The software will offload and save all the recorded data to your computer.

Device Maintenance – Battery Replacement

To replace the battery of the HiTemp140 data logger, follow these steps:

1. Unscrew the bottom of the logger to access the battery.
2. Remove the old battery.
3. Insert the new battery, ensuring that the positive polarity is pointing upward towards the probe. Failure to do so could result in product inoperability or potential explosion if exposed to high temperatures.
4. Screw the cover back onto the logger.

[View Fullscreen](#)

HiTemp140 Series
High Temperature Data Loggers
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To view the full MadgeTech product line, visit our website at madgetech.com.

HiTemp140-1

HiTemp140-2

HiTemp140-5.25

HiTemp140-7

IFC406 (Sold Separately) IFC400 (Sold Separately)

HiTemp140 Series
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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 ± 0.1 °C (± 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. 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, 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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HiTemp140 Series

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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.

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NEED HELP?

Product Support & Troubleshooting

· Visit our Resource Library 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.

Ordering Information

HITEMP140-1

PN 900140-00

HITEMP140-2

PN 900153-00

HITEMP140-2-TD

PN 900165-00

HITEMP140-5.25

PN 900173-00

HITEMP140-5.25-TD

PN 900180-00

HITEMP140-7

PN 900198-00

IFC400

PN 900319-00

IFC406

PN 900325-00

ER14250-SM Formerly ER14250MR-145


PN 900097-00

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

High Temperature Data Logger with a 1 inch probe
High Temperature Data Logger with a 2 inch probe
High Temperature Data Logger with a 2 inch transitional diameter probe
High Temperature Data Logger with a 5.25 inch probe
High Temperature Data Logger with a 5.25 inch transitional diameter probe
High Temperature Data Logger with a 7 inch probe
Docking station with USB cable
6 Port, Multiplexer docking station with USB cable
Replacement battery for the HiTemp140

6 Warner Road, Warner, NH 03278 (603) 456-2011
info@madgetech.com madgetech.com
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Documents / Resources

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