HITEMP140-CF

Thermal Processing Data Logger

HiTemp140-CF-3.9   HiTemp140-CF-3.1   HiTemp140-CF-2.1   HiTemp140-CF-1.1

Product User Guide

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

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Product Overview

The HiTemp140-CF combines the robust features of the standard HiTemp140 with added versatility for direct integration into canning processes. This high-precision temperature data logger, designed for harsh environments, is constructed from durable stainless steel and is submersible, making it ideal for use with retorts. It can withstand temperatures up to +140 °C (+284 °F) and maintains an accuracy of ±0.1 °C (±0.18 °F).

This variant features a threaded end for seamless compatibility with both the CF200 Canning Fitting and the ThermaLock-Pro Canning Fitting, enhancing its utility in food processing applications. The HiTemp140-CF can store up to 32,256 readings and includes a rigid external probe that can measure temperatures up to +260 °C (+500 °F), with custom probe lengths available up to 7 inches. Equipped with non-volatile solid state memory, it ensures data retention even if the battery is discharged, recording date and time stamped readings. The HiTemp140-CF is perfectly suited for continuous use in both wet and dry environments up to +140 °C (+284 °F).

Water Resistance

The HiTemp140-CF 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.

IFC406

IFC400

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.

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.
- 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-CF-1.1	902425-00	Threaded High Temperature Data Logger with a 1.1 inch probe
HiTemp140-CF-2.1	902426-00	Threaded High Temperature Data Logger with a 2.1 inch probe
HiTemp140-CF-3.1	902427-00	Threaded High Temperature Data Logger with a 3.1 inch probe
HiTemp140-CF-3.9	902428-00	Threaded High Temperature Data Logger with a 3.9 inch probe
ThermaLock 1.1	902122-00	1.1" Thermowell for HiTemp140-CF
ThermaLock 2.1	902435-00	2.1" Thermowell for HiTemp140-CF
ThermaLock 3.1	902128-00	3.1" Thermowell for HiTemp140-CF
ThermaLock 3.9	902119-00	3.9" Thermowell for HiTemp140-CF
CF202	902430	Canning Fitting for HiTemp140-CF
IFC400	900319-00	Docking station with USB cable
IFC406	900325-00	6 Port, Multiplexer docking station with USB cable
ER14250-SM *Formerly ER14250MR-145*	900097-00	Replacement battery for the HiTemp140