HiTemp140-TC

High Temperature Thermocouple Data Logger

Product User Guide

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Product Overview

The HiTemp140-TC is a versatile high-temperature data logger featuring an SMP thermocouple connector. Compatible with a broad range of thermocouple types—including J, K, T, E, R, S, B, and N—this device can accommodate various probes to measure temperatures as high as +1820 °C (+3308 °F) and as low as -270 °C (-454 °F), depending on the probe used.

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

Wiring the Data Logger

The standard connector is the SMP connection which allows for the user to insert a subminiature thermocouple plug into the connector on the device.

Device Operation

Connecting 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

Programming The Data Logger

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, change the Thermocouple type in the drop down menu.
4. Apply these changes, there will be a prompt to reset the device, select yes.

Starting The Data Logger

1. 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.)
2. The status of the device will change to **Running** or **Waiting to Start**, depending upon your start method.
3. 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**.

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.**

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).

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-TC	PN 902424-00	High Temperature Data Logger with built-in SMP thermocouple connector
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 HiTemp140-TC

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Description of Revisions

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1	2024.10.30	Original Release