HiTemp140-PT

High Temperature Data Logger with Bendable Stainless Steel Probe

PRODUCT USER GUIDE

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IFC406 (Sold Separately)

IFC400 (Sold Separately)

HiTemp140-PT
High Temperature Data Logger
with 24" Flexible Probe
Ambient Range: -40°C to 140°C

PRODUCT USER GUIDE

Product Overview

The HiTemp140-PT is a submersible, temperature data logger that can operate from -40 °C (-40 °F) up to +140 °C (+284 °F) and has an accuracy of ±0.1 °C (±0.18 °F). The device features a 12 or 24 inch bendable stainless steel probe for measuring extended temperatures up to +350 °C (+662 °F). The probe is durable and can be spiraled, bent or angled in any direction, making it easy to log temperatures within bottles, vials or other hard to reach places.

Water Resistance

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

Bend Radius

The flexible probe on the HiTemp140-PT can be bent to a 0.25 inch bend radius. The probe should not be bent within 1 inch of either weld joint.

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**.

4. Downloading will offload and save all the recorded data to the PC.

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Device Operation (cont'd)

Trigger Settings

The device can be programmed to only record based off user configured trigger settings.

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. Select **Trigger** in the Properties window.

4. Trigger formats are available in **Window** or **Two Point Mode**. Window mode allows a high and/or low trigger set point, and a trigger sample count or "window" of time recorded when set points are exceeded to be defined. Two point allows for different Start and Stop setpoints to be defined for both the high and low triggers.

Refer to the **Trigger Settings - MadgeTech 4 Data Logger Software** video on **madgetech.com** for instructions on how to configure Trigger Settings.

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

O-Rings

O-ring maintenance is a key factor when properly caring for the HiTemp140-PT. 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 Battery

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 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**.

Ordering Information

HITEMP140-PT-1	PN 900230-00	Extended Range Temperature Data Logger with a 24 inch Bendable Probe with a 1 inch piercing tip
HITEMP140-PT-1-KR	PN 902152-00	Extended Range Temperature Data Logger with a 24 inch Bendable Probe with a 1 inch piercing tip with key ring end cap
HiTemp140-PT-5	PN 900243-00	Extended Range Temperature Data Logger with a 24 inch Bendable Probe with a 5 inch piercing tip
HiTemp140-PT-5-KR	PN 902365-00	Extended Range Temperature Data Logger with a 24 inch Bendable Probe with a 5 inch piercing tip with key ring end cap
HiTemp140-PT-1-12	PN 902306-00	Extended Range Temperature Data Logger with a 12 inch Bendable Probe with a 1 inch piercing tip
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-PT