

Description	HiTemp140-PT-1	HiTemp140-PT-5
Temperature Sensor	100 Ω Platinum RTD	
Probe Measurement Range	-200 °C to +350 °C (-328 °F to +662 °F)	
Temperature Resolution	0.01 °C (0.02 °F)	
Calibrated Accuracy	±0.1 °C/±0.18 °F (20 °C to +140 °C/68 °F to +284 °F) ±0.3 °C/±0.54 °F (-20 °C to +19.99 °C/-4 °F to +67.98 °F) ±0.4 °C/±0.72 °F (-40 °C to -20.01 °C/-40 °F to -4.02 °F)	
Memory	65,536 readings	
Reading Rate	1 reading every second up to 1 reading every every 24 hours	
Required Interface Package	IFC400 or IFC406	
Baud Rate	125,000 baud	
Typical Battery Life	1 year typical (1 minute reading rate at 25 °C/77 °F)	
Operating Environment	-40 °C to +140 °C (-40 °F to +284 °F), 0 %RH to 100 %RH, 0.002 PSIA to 100 PSIA	
Material	316 Stainless Steel	
Dimensions (Body)	1.9 in x 0.97 in dia. (48 mm x 24.6 mm dia.)	
Weight	4.2 oz (120 g)	
Submersible	Yes (IP68)	
Approvals	CE	
Model Number	Dimensions (Probe)	
HiTemp140-PT-1	Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.)	
HiTemp140-PT-5	Probe tip: 4.8 in x 0.125 in dia. with 1 in x 0.188 in dia. handle (121 mm x 3.2 mm dia. with 25 mm x 4.8 mm dia. handle) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.)	

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 150 °C (302 °F).

*Specifications subject to change.
See MadgeTech's terms and conditions at madgetech.com*

MadgeTech, Inc.
6 Warner Road • Warner, NH 03278
Phone (603) 456.2011 • Fax (603) 456.2012
madgetech.com • info@madgetech.com

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HiTemp140-PT Series



HiTemp140-PT Series

High Temperature Data Loggers with 24 inch Bendable Stainless Steel Probes
1 inch and 5 inch probes available

Product Notes

The HiTemp140-PT is a submersible, temperature data logger that can operate from 20 °C up to 140 °C (284 °F) and has an accuracy of +/-0.1 °C (0.18 °F). The device features a 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.

Submergibility

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 .25 inch bend radius. The probe should not be bent within 1 inch of either weld joint.

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 on the MadgeTech website, for information on how to prevent O-ring failure.

Note: This product is rated for use up to 140 °C. Please heed the battery warning. The product will explode if exposed to temperatures above 140 °C.

Installation Guide

Installing the Interface cable

- IFC400 or IFC406

Refer to the “Quick Start Guide” included in the package.

Installing the software

The Software can be downloaded from the MadgeTech website at madgetech.com. Follow the instructions provided in the Installation Wizard to install the MadgeTech Software.

Device Operation

Connecting and Starting the data logger

- Once the software is installed and running, plug the interface cable into the docking station.
- Connect the USB end of the interface cable into an open USB port on the computer.
- Place the data logger into the docking station.
- The data logger will automatically appear under **Connected Devices** within the software.
- 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.*)

- The status of the device will change to **Running**, **Waiting to Start** or **Waiting to Manual Start**, depending upon your start method.
- Disconnect the data logger from the docking station 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

- Place the logger into the docking station.
- Highlight the data logger in the **Connected Devices** list. Click **Stop** on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click **Download**. You will be prompted to name your report.
- Downloading will offload and save all the recorded data to the PC.

Device Maintenance

Battery Replacement

Materials:

ER1425S-HT Battery

- Unscrew the bottom of the logger and remove the battery.
- Place the new battery into the logger. Note the polarity of the battery.
- Screw the cover back onto the logger.

Recalibration

Recalibration is recommended annually. To send devices back for calibration, visit madgetech.com.

Call for custom calibration options to accommodate specific application needs. Prices and specifications subject to change. See MadgeTech's terms and conditions at madgetech.com. To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting madgetech.com.