HiTemp150-TSK and HiTemp150-PT-TSK
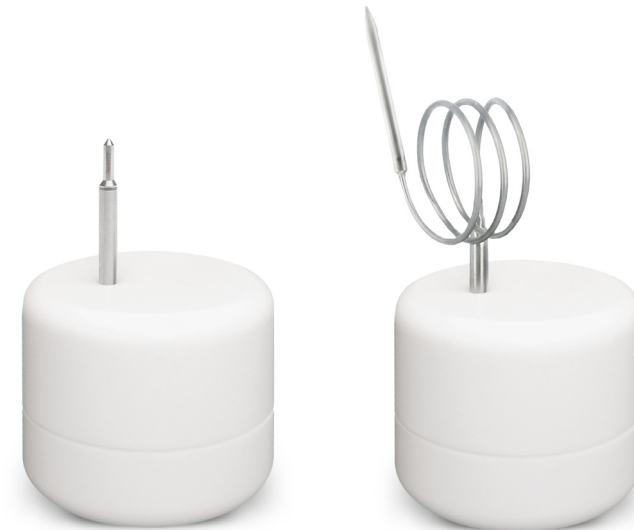
Description	HiTemp150-TSK	HiTemp150-PT-TSK
Temperature Sensor	100Ω platinum RTD	
Temperature Range	–40 °C to +250 °C	
Probe Temperature Range	-200 °C to +260 °C	
Temperature Resolution	0.05 °C	
Temperature Accuracy	±0.5 °C	
Memory	32,767	
Reading Rate	1 reading every second up to 1 reading every 12 hours	
Required Interface Package	IFC110 or IFC200	
Baud Rate	2,400	
Typical Battery Life	1 year	
Operating Environment	–200 °C to +250 °C (Time Limited), 0 %RH to 100 %RH	
Material	Data Logger: 316 stainless steel Thermal Shield: Teflon	
Dimensions: Body	Body: 1.1 in x 1.75 in dia. (28 mm x 45 mm dia.)	
Dimensions: Shield	Shield: 2.1 in x 2.6 in dia. (53.34 mm x 66 mm dia.)	
Dimensions: Probe	Probe: 2.0 in x 3/16 in dia. (50 mm x 5 mm dia.)	Tip: 0.125 in OD x 1.5 in L Flexible Portion: 24 in x 0.062 in OD dia.
Weight	17 oz (481.9 g)	10.40 oz (294.84 g)
Approvals	CE	

Ambient Temperature	Time in Air to Max Internal Temp (150 °C/302 °F)	Time in Liquid to Max Internal Temp (150 °C/302 °F)
-200 °C (-328 °F)	18 minutes	N/A
-180 °C (-292 °F)	19 minutes	N/A
-160 °C (-256 °F)	21 minutes	N/A
-140 °C (-220 °F)	24 minutes	N/A
-120 °C (-184 °F)	27 minutes	N/A
-100 °C (-148 °F)	32 minutes	N/A
-80 °C (-112 °F)	40 minutes	N/A
-60 °C (-76 °F)	55 minutes	25 minutes
-40 °C to +150 °C (-40 °F to +302 °F)	Indefinitely	Indefinitely
160 °C (320 °F)	75 minutes	34 minutes
170 °C (338 °F)	63 minutes	29 minutes
180 °C (356 °F)	55 minutes	26 minutes
190 °C (374 °F)	50 minutes	23 minutes
200 °C (392 °F)	45 minutes	21 minutes
210 °C (410 °F)	42 minutes	19 minutes
220 °C (428 °F)	39 minutes	18 minutes
230 °C (446 °F)	36 minutes	17 minutes
240 °C (464 °F)	34 minutes	16 minutes
250 °C (482 °F)	32 minutes	15 minutes

HiTemp150-TSK
Extended Range Temperature Data Logger with Thermal Shield

HiTemp150-PT-TSK
Extended Range Temperature Data Logger with a 24"
Stainless Steel Flexible Probe and Thermal Shield

Battery Warning

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

Specifications subject to change.
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To view the full MadgeTech product line,
visit our website at www.madgetech.com.

Product Notes

Getting Started

The HiTemp150-TSK consists of a HiTemp150 data logger in a thermal enclosure and the HiTemp150-PT-TSK consists of a HiTemp150-PT data logger in a thermal enclosure. They can be used in both wet and dry applications up to 150 °C indefinitely. When used with the thermal enclosure the devices can withstand higher temperatures for certain durations of time. The chart located on the back page, outlines the time versus temperature durations.

- To start the logger, unscrew the thermal enclosure and separate the thermal enclosure lid, from the body of the data logger. Unscrew the knurled nut to access the communication port. Screw the knurled nut back on to ensure a waterproof fit.

- The logger should be removed from the barrier immediately after removal from the heat environment. Be extremely careful, the logger may be very hot.

Submergibility

The HiTemp150 and the HiTemp150-PT are fully submergible and are rated IP68. They can be placed in environments with up to 345 feet (105 m) of water.

O-Rings

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.

Installation Guide

Installing the Interface cable

- IFC200

   Insert the device into a USB port. The drivers will install automatically.

Installing the software

Insert the Software USB Stick in an open USB port. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Wizard.

Device Operation

Connecting and starting the data logger

Connecting and starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- In the Connected Devices list, highlight the desired data logger.
- 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 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

- Connect the logger to the interface cable.
- 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

The HiTemp150-TSK and HiTemp150-PT-TSK must be sent to MadgeTech for battery replacement.

Recalibration

The HiTemp150 and HiTemp150-PT standard calibrations are two points at 50 °C and 150 °C.

Pricing:

Recalibration traceable to NIST	$70.00
Recalibration	$40.00

Prices and specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com
To send the devices back, visit www.madgetech.com, select Services then RMA Process.