MADGETECH
WE BUILD DATA LOGGERS

Description	HiTemp150FP-TSK
Temperature Sensor	100 Ω Platinum RTD
Temperature Range	-40 °C to +150 °C
Probe Measurement Range	-40 °C to +250 °C
Temperature Resolution	0.05 °C
Calibrated Accuracy	±0.5 °C (over 100 °C span)
Memory	32,767 readings
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 95 %RH (non-condensing)
Material	HiTemp150: 316 Stainless Steel Thermal Shield and Cable: TEFLON®
Dimensions	Body: 1.1 in x 1.75 in dia. (28 mm x 45 mm dia.) Shield: 2.1 in x 2.6 in dia. (53.34 mm x 66 mm dia.) Probe: 4 in x 1/8 in dia. (102 mm x 4 mm dia.)
Weight	9 oz (255 g)
Approvals	CE

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.
See MadgeTech's terms and conditions at www.madgetech.com

MadgeTech, Inc.
6 Warner Road • Warner, NH 03278
Phone 603.456.2011 • Fax 603.456.2012
www.madgetech.com • info@madgetech.com

DOC-1197035-00 REV 8 2014.09.30

Product Information Card

HiTemp150FP-TSK

HiTemp150FP-TSK
Extended Range Temperature Data Logger
with Flexible Probe and Thermal Shield

MADGETECH
WE BUILD DATA LOGGERS

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

Product Notes

Getting Started

The HiTemp150FP-TSK consists of a HiTemp150FP data logger in a thermal enclosure. The thermal enclosure allows the device to withstand higher temperatures for certain durations of time. The chart located below 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.

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

Operating Environment

The HiTemp150FP-TSK has a time limited operating environment of between -160 °C to +250 °C, and 0 %RH to 95 %RH, non-condesing.

Ambient Temperature	Time in Air to Max Internal Temp (150 °C/302 °F)
160 °C (320 °F)	75 minutes
170 °C (338 °F)	63 minutes
180 °C (356 °F)	55 minutes
190 °C (374 °F)	50 minutes
200 °C (392 °F)	45 minutes
210 °C (410 °F)	42 minutes
220 °C (428 °F)	39 minutes
230 °C (446 °F)	36 minutes
240 °C (464 °F)	34 minutes
250 °C (482 °F)	32 minutes

O-Rings

O-ring maintenance is a key factor when properly caring for the HiTemp150FP-TSK. 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.
- IFC110
  Plug the serial cable into the port and verify it is secure.
- USB-1 or USB-101
  Install the USB drivers from the USB software stick provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

Installing the software

Insert the Software USB into an open 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

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear 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 data 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 HiTemp150FP-TSK must be sent to MadgeTech for battery replacement.

Recalibration

The HiTemp150FP standard calibration is 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.