

# HiTemp140-PT

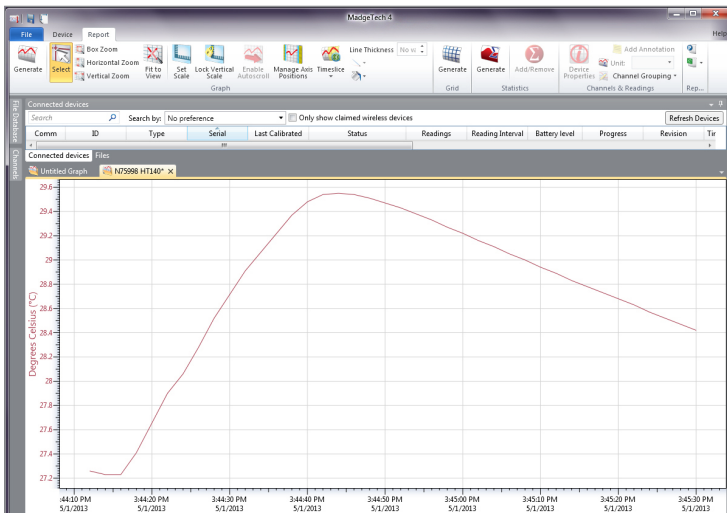
## High Temperature Data Logger with Bendable Probe

The HiTemp140-PT is a submersible, temperature data logger that can operate up to 140 °C (284 °F) and has an accuracy of  $\pm 0.1$  °C ( $\pm 0.18$  °F). The HiTemp140-PT comes in three different probe lengths, two probe styles feature a 24 inch bendable stainless steel probe and either a 1 inch or a 5 inch piercing tip. The HiTemp140-PT-12 features a 12 inch bendable stainless steel probe with a 1 inch piercing tip. All probes can measure 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. The HiTemp140-PT records date and time stamped readings, and has non-volatile solid state memory which retains data even if the battery becomes discharged.

Using the latest MadgeTech Software, starting, stopping and downloading the HiTemp140-PT is simple and easy. To use, simply place the HiTemp140-PT in the IFC400 or IFC406 docking station (sold separately). Using the software, an immediate or delay start can be chosen, as well as the reading rate. Start the data logger, remove it from the docking station and the device is ready to be deployed. Graphical, tabular and summary data is provided for analysis and data can be viewed in °C, °F, K or °R. The data can also be automatically exported to Excel® for further calculations.

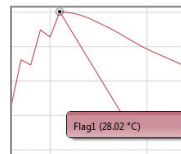


## MadgeTech 4 Software Features

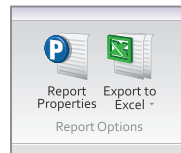


Graph View

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view



Cooling Flags

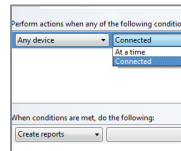


Export to Excel

This screenshot shows a 'Tabular Data View' of the data. It displays a table with columns for 'Time', 'Time Zone', and 'Delta'. The data shows a series of temperature readings over time, with the temperature decreasing from approximately 29.4°C to 28.4°C.

Time	Time Zone	Delta
1:13:37 PM	0400	-00:00:00
1:14:37 PM	0400	-00:00:00
1:15:37 PM	0400	-00:00:00
1:16:37 PM	0400	-00:00:00
1:17:37 PM	0400	-00:00:00
1:18:37 PM	0400	-00:00:00
1:19:37 PM	0400	-00:00:00
1:20:37 PM	0400	-00:00:00
1:21:37 PM	0400	-00:00:00
1:22:37 PM	0400	-00:00:00
1:23:37 PM	0400	-00:00:00
1:24:37 PM	0400	-00:00:00
1:25:37 PM	0400	-00:00:00

Tabular Data View



Automation

## Features

- $\pm 0.1$  °C ( $\pm 0.18$  °F) Accuracy
- Operates up to 140 °C (284 °F)
- Submersible (IP68)
- User Replaceable Battery
- Rugged
- Programmable Start Time
- Programmable Stop Time
- Engraved Label
- 12 or 24 inch Bendable Probe
- Battery Life Indicator

## Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

## Applications

- Autoclave Verification
- Implement HACCP Programs
- Food Preparation and Processing
- Environmental Studies
- Well Monitoring
- Dishwasher Testing
- Pasteurization

## SPECIFICATIONS

\*Specifications are subject to change without notice. Specific warranty remedy limitations apply.

TEMPERATURE	
Temperature Sensor	100 Ω Platinum RTD
Probe Measurement Range	-200 °C to +350 °C (-328 °F to +662 °F) <b>BODY OF LOGGER CANNOT EXCEED 140 °C</b>
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)

GENERAL	
Start Modes	Software programmable immediate start Delay start up to 18 months in advance
Stop Modes	Manual or Timed (specific date and time)
Real Time Recording	May be used with PC to monitor and record data in real time
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
Memory	32,256 readings
Trigger Setting	High and Low limits may be set. Once data meets or exceed sets limits, the device will record to memory. Bi-level start and stop triggers can also be programmed. Users can specify the number of readings to take after the device triggers
Readings in Trigger Settings Mode	6,451 readings
Wrap Around	Yes
Reading Rate	1 reading every second up to 1 reading every 24 hours
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6V high-temperature lithium battery included; user replaceable

Battery Life	1 year typical (1 minute reading rate at 25 °C/77 °F)
Data Format	Date and time stamped °C, K, °F or °R
Time Accuracy	±1 minute/month at 20 °C to 30 °C (68 °F to 86 °F) (Stand alone mode)
Computer Interface	IFC400 OR IFC406 USB docking station required; 125,000 baud
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.1.8.0 or later Secure Software version 4.1.7.0 or later
Operating Environment	-40 °C to +140 °C (-40 °F to +284 °F) 0 %RH to 100 %RH, 0.002 PSIA to 100 PSIA
Dimensions (Body)	1.9 in x 0.97 in dia. (48 mm x 24.6 mm dia.)
Dimensions* (PT-1 Probe)	<b>Probe Tip:</b> 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) <b>Bendable Portion:</b> 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.)
Dimensions* (PT-5 Probe)	<b>Probe Tip:</b> 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) <b>Bendable Portion:</b> 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.)
Dimensions* (PT-1-12 Probe)	<b>Probe Tip:</b> 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) <b>Bendable Portion:</b> 12 in x 0.062 in dia. (305 mm x 1.6 mm dia.)
Weight	4.2 oz (120 g)
Material	316 Stainless Steel, Radel
Approvals	CE

**\*The probe should not be bent within 1 inch of either weld joint.**

**BATTERY 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).

## 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
HiTemp140-PT-1-12-KR	PN 902400-00	Extended Range Temperature Data Logger with a 12 inch Bendable Probe with a 1 inch piercing tip with key ring end cap
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