

HITEMP140-M12

HIGH TEMPERATURE DATA LOGGER

WITH BUILT IN M12 CONNECTOR



Features

- Measurement Range of -200 °C to +850 °C (-328 °F to +1562 °F)
- ±0.05 °C (±0.09 °F) Accuracy
- M12 Probe Connector
- NIST Traceable
- User Replaceable Battery
- Trigger Settings
- Programmable Start and Stop Time
- Battery Life Indicator

Benefits

- Interchangeable Probe Connector for Multipurpose Use
- Simple Setup and Installation
- Minimal Long-Term Maintenance

Applications

- Depyrogenation
- Autoclave Verification
- Food Preparation & Processing
- Environmental Studies
- Well Monitoring
- Washer Disinfectors
- Pasteurization
- Many More Applications (Probe Dependent)

The HiTemp140-M12 is a rugged and versatile high temperature data logger featuring an M12 probe connector. Compatible with a wide variety of M12 RTD probe styles, this data logger is capable of measuring up to 850 °C (1562 °F) (probe dependent).

All of MadgeTech's HiTemp140 data loggers have a water tight body enclosure made of food grade stainless steel and can be placed in environments with temperatures as high as 140 °C (284 °F). The operating range of the data logger body can be extended to higher temperatures when used with MadgeTech's thermal barrier options and suitable probe.

The HiTemp140-M12 records and stores up to 43,690 time stamped readings and is equipped with non-volatile solid state memory which retains data even if the battery becomes discharged.

A wide selection of compatible M12 probes are available on the market to choose from, making the HiTemp140-M12 the most dynamic data logger of its kind. With the ability to change probes as needed, this device satisfies a multitude of application needs with one powerful data logger versus the need for multiple loggers.



Closeup of the M12 Connector

MADGETECH DATA LOGGER SOFTWARE

Key

- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- E** Copy to Excel®

The screenshot displays the MadgeTech software interface with several key components highlighted by red letters A through E:

- A:** Graph View: A line graph showing a temperature profile over time.
- B:** Tabular Data View: A table showing recorded data points with columns for Date, Time, Time Zone, Delta, and Temperature.
- C:** Statistics: A summary window showing point count, minimum, maximum, average, duration, and standard deviation.
- D:** Digital Calibration: A dialog box for adjusting temperature offsets.
- E:** Copy to Excel: A menu option for exporting report data.

Software Features:

- 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
- Data table view
- Automatic report generation
- Summary view
- Multilingual

HITEMP140-M12 SPECIFICATIONS*

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

Temperature

Temperature Sensor:	Various RTD Probes with M12 Connector <i>(Sold Separately)</i>
Measurement Range:	18 Ω to 400 Ω -200 °C to +850 °C (-328 °F to +1562 °F) <i>(Probe Dependent)</i>
Temperature Resolution:	0.0001 Ω 0.01 °C (0.018 °F) <i>(Probe Dependent)</i>
Calibrated Accuracy:	±0.015 Ω ±0.05 °C (±0.09 °F) <i>(Probe Dependent)</i>
*Calibrated Accuracy Range:	18 Ω to 200 Ω -200 °C to +265 °C (-328 °F to +509 °F)
Connector Type:	M12 Female, 4 Pin

*Calibrated accuracies based on standard MadgeTech calibrations for 0 Ω to 200 Ω range.

General

Reading Rate:	4 readings per second up to 1 reading every 24 hours
Memory:	43,690 readings
Start Modes:	<ul style="list-style-type: none"> 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.
Trigger Settings:	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:	18,724 readings
Memory Wrap Around:	Yes

Battery Type:	3.6V high-temperature lithium battery included; user replaceable
Battery Life:	2 years typical (1 minute reading rate at 25 °C/77 °F)
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Data Format:	Date and time stamped °C, °F, °R, K,
Time Accuracy:	±1 minute/month at 25 °C (77 °F)
Computer Interface:	IFC400 or IFC406 USB docking station required; 125,000 baud
Operating System Compatibility:	XP SP3/Vista/Windows 7/Windows 8
MadgeTech Software Compatibility:	<ul style="list-style-type: none"> MadgeTech Standard Software version 4.2.5.0 or later MadgeTech Secure Software version 4.2.4.0 or later
Operating Environment:	-40 °C to +140 °C (-40 °F to +284 °F) 0 %RH to 100 %RH non-condensing, 0.002 PSIA to 60 PSIA
IP Rating:	IP40 - logger alone <i>(with no probe connected)</i> The logger will inherit IP rating of the attached probe <i>(up to, and including IP68/IP69K).</i>
Dimensions (body):	2.15 in x 0.97 in x 0.97 in (54.5 mm x 24.6 mm x 24.6 mm)
Dimensions (probe):	Probe dependent
Weight:	85 oz (3.0 g)
Materials:	Body: 316 Stainless Steel
Approvals:	CE

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

MODEL	DESCRIPTION
HiTemp140-M12	High temperature data logger with built in M12 probe connector.
IFC400	Docking station with USB cable, software and manual.
IFC406	6 Port, Multiplexer docking station with USB cable, software and manual.
ER1425S-HT	Replacement battery for the HiTemp140-M12
NIST	NIST Calibration Certificate.

For Quantity Discounts call 603-456-2011 or email sales@madgetech.com

ASK ABOUT
OUR OTHER
DATA
LOGGERS

Temperature
Humidity
Pressure
pH
Level
Shock
LCD Display
Pulse/Event/State
Current
Voltage
Wireless
Intrinsically Safe
Spectral Vibration
Motion