

# 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.

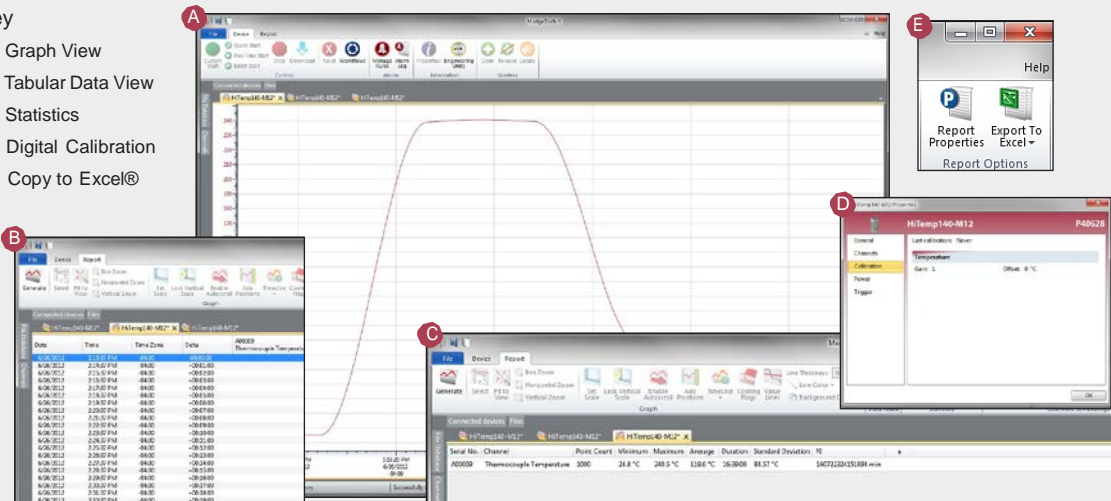


Closeup of the M12 Connector

## MADGETECH DATA LOGGER SOFTWARE

#### Key

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



#### 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.

## 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"> <li>Software programmable immediate start</li> <li>Delay start up to 18 months in advance</li> </ul>
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"> <li>MadgeTech Standard Software version 4.2.5.0 or later</li> <li>MadgeTech Secure Software version 4.2.4.0 or later</li> </ul>
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.

\*To order the product with the NIST certificate add *-CERT* to the end of the part number.

ASK ABOUT OUR OTHER DATA LOGGERS

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Shock  
LCD Display  
Pulse/Event/State  
Current  
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Spectral Vibration  
Motion

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