

# 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
- 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.

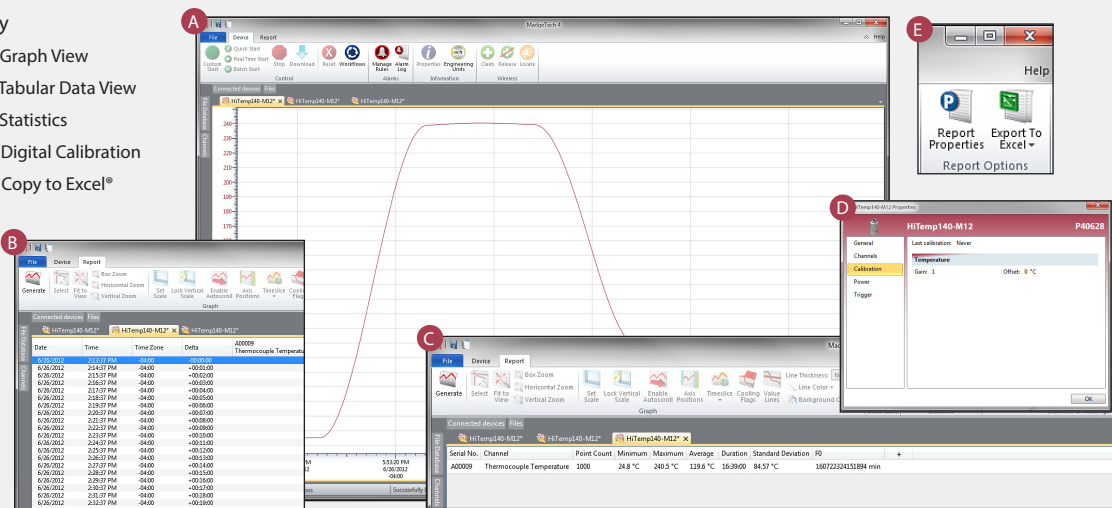


Closeup of the M12 Connector

## MADGETECH DATA LOGGER SOFTWARE

#### Key

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



# 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 (Sold Separately)  |
| Measurement Range:          | 18 Ω to 400 Ω<br>-200 °C to +850 °C (-328 °F to +1562 °F) (Probe Dependent)<br><b>*BODY OF LOGGER CANNOT EXCEED 140 °C</b> |
| Temperature Resolution:     | 0.0001 Ω<br>0.01 °C (0.018 °F) (Probe Dependent)   |
| Calibrated Accuracy:        | ±0.015 Ω<br>±0.05 °C (±0.09 °F) (Probe Dependent)  |
| *Calibrated Accuracy Range: | 18 Ω to 200 Ω<br>-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:                     | 1 year typical<br>(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)<br>0 %RH to 100 %RH non-condensing, 0.002 PSIA to 60 PSIA<br><b>*BODY OF LOGGER CANNOT EXCEED 140 °C</b>                     |
| IP Rating:                        | IP40 - logger alone (with no probe connected)<br>The logger will inherit IP rating of the attached probe (up to, and including IP68/IP69K).                        |
| 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                               |
| Calibration Certificate | Calibration Certificate available for data logger                       |

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

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)