HiTemp140 Series
High Temperature Data Loggers
Probe Selection Chart

HiTemp140 Model	Probe Size	Recommended Applications	
HiTemp140-1"	1/8 in OD rounded tip (with 3/16 in OD x 0.6 in L transition)	<ul> <li>Autoclave Monitoring</li> <li>Refrigerator and Freezer Monitoring/Mapping</li> <li>Pasteurization</li> </ul>	<ul><li>Incubator Monitoring</li><li>Oven Monitoring</li></ul>
HiTemp140-2"	2 in OAL x 3/16 in OD pointed tip	Meat Processing     Complying with USDA Regulations     Dishwasher/Dryer Studies     Conveyor Cooking/Cooling Cycles     Food Process Monitoring     Nut Roasting	<ul><li>Smoke Houses</li><li>Canning</li><li>Meat Storage</li><li>HACCP Compliance</li><li>Retort Packaging</li></ul>
HiTemp140-5.25"	5.25 in OAL x 3/16 in OD pointed tip	<ul> <li>Meat Processing - Internal temperature monitoring</li> <li>Complying with USDA Regulations</li> <li>Conveyor Cooking/Cooling Cycles</li> <li>Food Process Monitoring</li> <li>Canning</li> </ul>	<ul><li>Smoke Houses</li><li>Meat Storage</li><li>HACCP Compliance</li><li>Retort Packaging</li></ul>
HiTemp140-7"	7 in: 7.0 in OAL x 3/16 in OD pointed tip	<ul> <li>Meat Processing – Internal temperature monitoring</li> <li>Complying with USDA Regulations</li> <li>Conveyor Cooking/Cooling Cycles</li> <li>Food Process Monitoring</li> <li>Canning</li> </ul>	<ul><li>Smoke Houses</li><li>Meat Storage</li><li>HACCP Compliance</li><li>Retort Packaging</li></ul>
HiTemp140-PT	Probe tip: 0.125 in OD x 1.5 in L Flexible Portion: 24 in x 0.062 in OD dia.	<ul> <li>Autoclave Monitoring</li> <li>Conveyor Cooking/Cooling Cycles</li> <li>Refrigerator and Freezer Monitoring/Mapping</li> </ul>	<ul><li>Oven Monitoring</li><li>Open Air Applications</li></ul>

จัดจำหน่ายโดย : บริษัท โอเมก้า เมชเชอริ่ง อินสทรูเม้นท์ จำกัด Tel: 02 105 4676 Email: info@omi.co.th Web: www.omi.co.th

# HITEMP140 HIGH TEMPERATURE DATA LOGGER

#### **Features**

- ±0.1 °C (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
- Probe Lengths Up To 7 inches
- 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

The HiTemp140 is a rugged, high precision, temperature data logger that is built for use in harsh environments. This stainless steel device is submersible and can withstand temperatures up to 140 °C (284 °F). With the HiTemp140's standard calibration, an accuracy of  $\pm -0.1$  °C (0.18 °F) can be achieved over a wide temperature range.

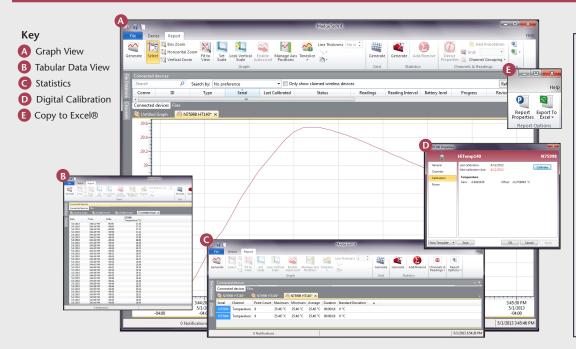
The HiTemp140 can store up to 32,700 readings, and features a rigid external probe capable of measuring extended temperatures, up to 260 °C (500 °F). Custom probe lengths are available up to 7 inches. The device records date and time stamped readings, and has non-volatile solid state memory which retains data even if the battery becomes discharged.



IFC400 (sold separately)

Using the MadgeTech Software, starting, stopping and downloading the HiTemp140 is simple and easy. To use, simply place the HiTemp140 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 DATA LOGGER SOFTWARE



#### **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

จัดจำหน่ายโดย : บริษัท โอเมกัา เมชเชอริ่ง อินสทรูเม้นท์ จำกัด Tel : 02 105 4676 Email : info@omi.co.th Web : www.omi.co.th

# **HITEMP140 SPECIFICATIONS\***

Temperature Sensor:	100 Ω Platinum RTD
Probe Measurement Range:	-200 °C to +260 °C (-328 °F to +500 °F)
Temperature Resolution:	0.01 °C (0.02 °F)
	±0.1 °C/±0.18 °F (20 °C to +140 °C/68 °F to +284 °F) ±0.3 °C/±0.54 °F
Calibrated Accuracy:	(-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)
Start Modes:	<ul> <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.
Memory:	32,700 readings
Wrap Around:	Yes
Reading Rate:	1 reading every second up to 1 reading every 24 hours
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)

Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Data Format:	Date and time stamped °C, °F, K, °R
Time Accuracy:	$\pm 1$ 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
Software:	XP SP3/Vista/Windows 7/Windows 8 (MadgeTech 4 Only)
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 HiTemp140-1):	1.6 in x 0.970 in dia. (40 mm x 24.6 mm dia.)
Dimensions (Body HiTemp140-2, 5.25, 7):	1.9 in x 0.970 in dia. (48 mm x 24.6 mm dia.)
Model Number	Dimensions (Probe)
HITEMP140-1:	1.1 in x 0.125 in dia. (0.188 in transitional dia.) 27 mm x 3.2 mm dia. (4.8 mm transitional dia.)
HITEMP140-2: HITEMP140-2-TD:	2.0 in x 0.188 in dia. (51 mm x 4.8 mm) 2.0 in x 0.125 in dia. (0.188 in transitional dia.) 51 mm x 3.2 mm dia. (4.8 mm transitional dia.)
HITEMP140-5.25: HITEMP140-5.25-TD:	5.25 in x 0.188 in dia. (133 mm x 4.8 mm dia.) 5.25 in x 0.125 in dia. (0.188 in transitional dia.) 133 mm x 3.2 mm dia. (4.8 mm transitional dia.)
HITEMP140-7:	7.0 in x 0.188 in dia. (178 mm x 4.8 mm dia.)
Weight:	4.2 oz (120 g)
Material:	316 Stainless Steel
Approvals:	CE

BATTERY WARNING: 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		
HITEMP140-1	High Temperature Data Logger with a 1" probe	Temperature	
HITEMP140-2/ HITEMP140-2-TD	High Temperature Data Logger with a 2" probe / 2" transitional diameter probe  ASK ABOUR OT	THER pH	
HITEMP140-5.25/ HITEMP140-5.25-TD	High Temperature Data Logger with a 5.25" probe/5.25" transitional diameter probe		
HITEMP140-7	High Temperature Data Logger with a 7" probe		
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	Motion	
Calibration Certificate	Calibration Certificate available for data logger		