

HiTemp140X2

High Temperature Dual Probe Data Loggers with Two Remote Temperature Probes

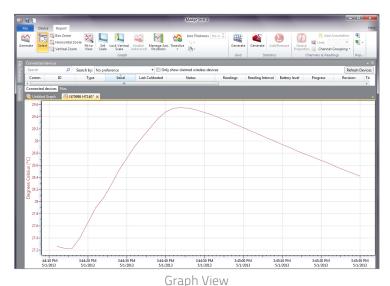
The HiTemp140X2 series of dual probe high temperature data loggers are comprised of a stainless steel data logger body and offers multiple combinations of a 2 inch rigid transitional diameter probe to measure ambient temperature, a flexible probe or a bendable stainless steel probe.

The FP models offer lightweight, flexible RTD probes coated with PFA insulation and come in 6 inch, 12 inch, 36 inch and 72 inch lengths and can be combined with a bendable probe or rigid probe.

The PT models combine a flexible probe or rigid probe with a 24 inch bendable probe made of stainless steel with either a 1 inch or 5 inch probe sheath at the tip. The TD models combine the 2 inch rigid transitional diameter probe with either the flexible probe or bendable probe.

Using the latest MadgeTech Software, starting, stopping and downloading the HiTemp140X2 data is simple and easy. To use, simply place the HiTemp140X2 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 interval. 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



• Mean Kinetic Temperature

• Full time zone support

• Min./Max./Average lines

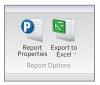
Data annotation

Summary view

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/zoom out
- Lethality equations (F0, PU)



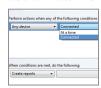
Cooling Flags



Export to Excel



Tabular Data View



Automation



Features

- ±0.1 °C (±0.18 °F) Accuracy (+20 °C to +140 °C)
- Rigid Probe Measurement Range
 -200 °C to +260 °C (-328 °F to +500 °F)
- Flexible Probe Measurement Range -60 °C to +260 °C (-76 °F to +500 °F)
- Bendable Probe Measurement Range -200 °C to +350 °C (-328 °F to +662 °F)
- Operating Environment -40 °C to +140 °C
- Submersible (IP68)
- User Replaceable Battery
- Trigger Settings
- Programmable Start and Stop Time
- 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
- Washer Disinfectors
- Pasteurization

HiTemp140X2

SPECIFICATIONS

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

TEMPERATURE		
Temperature Sensor	HiTemp140X2- FPST: Two Flexible RTD Probes HiTemp140X2- FPST-PT: Flexible RTD Probe and Bendable RTD Probe HiTemp140X2-TD-PT: Rigid RTD Probe with a Bendable RTD Probe HiTemp140X2-TD-FPST: Rigid RTD Probe with a Flexible RTD Probe	
Probe Measurement Range	Rigid Probe: -200 °C to +260 °C (-328 °F to +500 °F) Bendable Probe: -200 °C to +350 °C (-328 °F to +662 °F) Flexible Probe: -60 °C to +260 °C (-76 °F to +500 °F) *BODY OF LOGGER CANNOT EXCEED 140 °C	
Temperature Resolution	0.01 °C (0.02 °F)	
Calibrated Accuracy	±0.1 °C (+20 °C to +140 °C); 0.18 °F (+68 °F to +284 °F) ±0.3 °C (-20 °C to 19.99 °C); 0.54 °F (-4 °F to +67.98 °F) ±0.4 °C (-40 °C to -20.01 °C); 0.72 °F (-40 °F to +68.018 °F)	
GENERAL		

GENERAL	
Start Modes	Software programmable immediate start Delay start up to 18 months in advance
Stop Modes	Manual or Timed (specific date and time)
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. (Triggering on channel #1 only)
Readings in Trigger Settings Mode	16,383 readings
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	32,767 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	3.6 V high-temperature lithium battery included; user replaceable

Data Format Date and time stamped °C, K, °F or °R #1 minute/month at 25 °C (77 °F) Extended Operation: #20 minutes/month at 140 °C (#450 pp. Computer Interface IFC400 OR IFC406 USB docking station required; 125,000 baud Windows XP SP3 or later Windows XP SP3 or later MadgeTech Standard Software version 4.2.1.0 or later MadgeTech Secure Software version 4.2.0.0 or later Operating Environment Pating IP68 Dimensions (Body) I.89 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm) 6 inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm) 12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) 12 inch Flexible Probe: 36 in x 0.13 in (1829 mm x 3.2 mm) 16 inch Flexible Probe: 36 in x 0.13 in (1829 mm x 3.2 mm) 17 inch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) TD Rigid Probe: 2.0 in x 0.125 in dia. (0.188 in transitional dia.) HiTemp140X2-FPST: 4.1 oz (115 g) HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-FPST-PT: 3.0 oz (85 g)			
Time Accuracy £1 minute/month at 25 °C (77 °F) Extended Operation: ±20 minutes/month at 140 °C (±450 pp. Computer Interface IFC400 OR IFC406 USB docking station required; 125,000 baud Windows XP SP3 or later Windows XP SP3 or later MadgeTech Standard Software version 4.2.1.0 or later MadgeTech Secure Software version 4.2.0.0 or later MadgeTech Secure Software version 4.2.0.0 or later Operating Environment IP Rating IP68 Dimensions (Body) I.89 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm) 6 inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm) 12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) 36 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) 36 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) 1 Inch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) IT Rigid Probe: 2.0 in x 0.125 in dia. (0.188 in transitional dia.) IT Rigid Probe: 2.0 in x 0.125 in dia. (4.8 mm transitional dia.) HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-FPST-PT: 3.0 oz (85 g)	Life 1 y	1 year typical (1 minute reading rate at 25 °C/ 77 °F)	
Extended Operation: ±20 minutes/month at 140 °C (±450 pp. Computer Interface IFC400 OR IFC406 USB docking station required; 125,000 baud Windows XP SP3 or later Windows XP SP3 or later MadgeTech Standard Software version 4.2.1.0 or later MadgeTech Secure Software version 4.2.0.0 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 IP Rating IP68 Dimensions (Body) 1.89 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm) 6 inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm) 12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) 36 inch Flexible Probe: 36 in x 0.13 in (1829 mm x 3.2 mm) 36 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) 1 Inch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) TD Rigid Probe: 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.) HiTemp140X2-FPST: 4.1 oz (115 g) HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-TD-PT: 3.0 oz (85 g)	ormat Da	te and time stamped °C, K, °F or °R	
Operating System Compatibility Software Compatibility MadgeTech Standard Software version 4.2.1.0 or later MadgeTech Secure Software version 4.2.0.0 or later Operating Environment PRating IP68 Dimensions (Body) 1.89 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm) 6 inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm) 12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) 36 inch Flexible Probe: 36 in x 0.13 in (914.4 mm x 3.2 mm) 36 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) 11 inch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) TD Rigid Probe: 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.) HiTemp140X2-FPST: 4.1 oz (115 g) HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-TD-PT: 3.0 oz (85 g)	CCUracy	±1 minute/month at 25 °C (77 °F) Extended Operation: ±20 minutes/month at 140 °C (±450 ppm)	
Compatibility Windows XP SP3 or later Software Compatibility MadgeTech Standard Software version 4.2.1.0 or later MadgeTech Secure Software version 4.2.0.0 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 IP Rating IP68 Dimensions (Body) 1.89 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm) 6 inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm) 12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) 36 inch Flexible Probe: 36 in x 0.13 in (914.4 mm x 3.2 mm) 36 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) 11 inch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) Hitemp140X2-FPST: 4.1 oz (115 g) Hitemp140X2-FPST: 4.1 oz (115 g) Hitemp140X2-FPST-PT: 3.9 oz (110 g) Hitemp140X2-TD-PT: 3.0 oz (85 g)	ter intertace		
Compatibility MadgeTech Secure Software version 4.2.0.0 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 IP Rating IP68 Dimensions (Body) 1.89 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm) 6 inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm) 12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) 12 inch Flexible Probe: 36 in x 0.13 in (914.4 mm x 3.2 mm) 36 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) 1 lnch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) TD Rigid Probe: 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.) Weight HiTemp140X2-FPST: 4.1 oz (115 g) HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-TD-PT: 3.0 oz (85 g)		ndows XP SP3 or later	
Environment 0 %RH to 100 %RH, 0.002 PSIA to 100 PSIA			
Dimensions (Body) 1.89 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm) 6 inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm) 12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) 36 inch Flexible Probe: 36 in x 0.13 in (914.4 mm x 3.2 mm) 72 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) 1 Inch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) 5 Inch PT Bendable Probe: Probe tip: 4.8 in x 0.125 in dia. with 1 in x 0.188 in dia. handle Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) TD Rigid Probe: 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.) HiTemp140X2-FPST: 4.1 oz (115 g) HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-TD-PT: 3.0 oz (85 g)	0	,	
G inch Flexible Probe: 6 in x 0.13 in (152 mm x 3.2 mm)	ng IP6	8	
12 inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm 36 inch Flexible Probe: 36 in x 0.13 in (914.4 mm x 3.2 mm 72 inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm 1 Inch PT Bendable Probe: Probe tip: 1.7 in x 0.125 in dia. (42 mm x 3.2 mm dia.) Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) 5 Inch PT Bendable Probe: Probe tip: 4.8 in x 0.125 in dia. with 1 in x 0.188 in dia. handed (121 mm x 3.2 mm dia.) with 25 mm x 4.8 mm dia. handled Bendable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) 51 mm x 3.2 mm dia. (0.188 in transitional dia.) 51 mm x 3.2 mm dia. (4.8 mm transitional dia.) HiTemp140X2-FPST: 4.1 oz (115 g) HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-TD-PT: 3.0 oz (85 g)	sions (Body) 1.8	9 in x 0.97 in x 0.97 in (48 mm x 24.6 mm x 24.6 mm)	
Weight HiTemp140X2-FPST-PT: 3.9 oz (110 g) HiTemp140X2-TD-PT: 3.0 oz (85 g)	12 36 72 11 Pr Be 51 Pr (12 Be TD 2.0	inch Flexible Probe: 12 in x 0.13 in (305 mm x 3.2 mm) inch Flexible Probe: 36 in x 0.13 in (914.4 mm x 3.2 mm) inch Flexible Probe: 72 in x 0.13 in (1829 mm x 3.2 mm) inch Flexible Probe: 75 in x 0.13 in (1829 mm x 3.2 mm) inch PT Bendable Probe: 75 in dia. (42 mm x 3.2 mm dia.) indable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) inch PT Bendable Probe: 75 in dia. with 1 in x 0.188 in dia. handle 1 mm x 3.2 mm dia. with 25 mm x 4.8 mm dia. handle 1 mm x 3.2 mm dia. with 25 mm x 4.8 mm dia. handle indable portion: 22 in x 0.062 in dia. (559 mm x 1.6 mm dia.) Rigid Probe: in x 0.125 in dia. (0.188 in transitional dia.)	
HiTemp140X2-TD-FPST: 3.5 oz (100 g)	Hi Hi	Геmp140X2-FPST-PT: 3.9 oz (110 g)	
Material Body: 316 Stainless Steel, PEEK Bendable Probe: 316 Stainless Steel Flexible Probe: PFA Insulated Cable with Stainless Steel	ıl Be	•	
Approvals CE	als 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 $^{\circ}$ C (302 $^{\circ}$ F).

HiTemp140X2

Ordering Information

		The second secon
HITEMP140X2-FPST-6	PN 902335-00	High Temperature dual probe data logger with two 6 inch flexible probes with stainless steel tips
HITEMP140X2-FPST-12	PN 902331-00	High Temperature dual probe data logger with two 12 inch flexible probes with stainless steel tips
HITEMP140X2-FPST-24	PN 902333-00	High Temperature dual probe data logger with two 24 inch flexible probes with stainless steel tips
HITEMP140X2-FPST-36	PN 902318-00	High Temperature dual probe data logger with two 36 inch flexible probes with stainless steel tips
HITEMP140X2-FPST-72	PN 902321-00	High Temperature dual probe data logger with two 72 inch flexible probes with stainless steel tips
HITEMP140X2-FPST-6-FPST-12	PN 902334-00	High Temperature dual probe data logger with a 6 inch flexible probe and 12 inch flexible probe with stainless steel tips
HITEMP140X2-FPST-6-FPST-36	PN 902328-00	High Temperature dual probe data logger with a 6 inch flexible probe and 36 inch flexible probe with stainless steel tips
HITEMP140X2-FPST-12-PT-1	PN 902332-00	High Temperature dual probe data logger with a 12 inch flexible probe with stainless steel tip and 24 inch bendable probe with a 1 inch piercing tip
HITEMP140X2-FPST-36-PT-1	PN 902319-00	High Temperature dual probe data logger with a 36 inch flexible probe with stainless steel tip and 24 inch bendable probe with a 1 inch piercing tip
HITEMP140X2-FPST-72-PT-1	PN 902322-00	High Temperature dual probe data logger with a 72 inch flexible probe with stainless steel tip and 24 inch bendable probe with a 1 inch piercing tip
HITEMP140X2-FPST-36-PT-5	PN 902320-00	High Temperature dual probe data logger with a 36 inch flexible probe with stainless steel tip and 24 inch bendable probe with a 5 inch piercing tip
HITEMP140X2-FPST-72-PT-5	PN 902323-00	High Temperature dual probe data logger with a 72 inch flexible probe with stainless steel tip and 24 inch bendable probe with a 5 inch piercing tip
HITEMP140X2-TD-FPST-6	PN 902338-00	High Temperature dual probe data logger with 2 inch transitional diameter probe and 6 inch flexible probe with stainless steel tip
HITEMP140X2-TD-FPST-12	PN 902329-00	High Temperature dual probe data logger with 2 inch transitional diameter probe and 12 inch flexible probe with stainless steel tip
HITEMP140X2-TD-FPST-36	PN 902324-00	High Temperature dual probe data logger with 2 inch transitional diameter probe and 36 inch flexible probe with stainless steel tip
HITEMP140X2-TD-FPST-72	PN 902325-00	High Temperature dual probe data logger with 2 inch transitional diameter probe and 72 inch flexible probe with stainless steel tip
HITEMP140X2-TD-PT-1	PN 900281-00	High Temperature dual probe data logger with 2 inch transitional diameter probe and 24 inch bendable probe with a 1 inch piercing tip
HITEMP140X2-TD-PT-5	PN 900283-00	High Temperature dual probe data logger with 2 inch transitional diameter probe and 24 inch bendable probe with a 5 inch piercing tip
IFC400	PN 900319-00	Docking station with USB cable
IFC406	PN 900325-00	6 Port, Multiplexer docking station with USB cable
ER14250MR-145	PN 900097-00	Replacement battery for the HiTemp140X2-FPST