

RTDTEMP101A

RTD BASED TEMPERATURE DATA LOGGER



Features

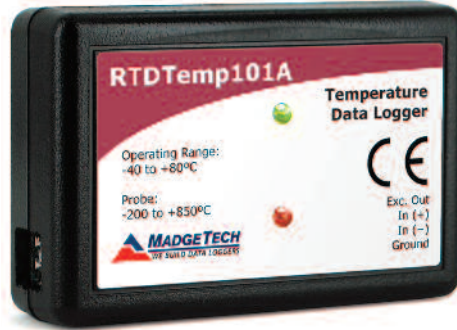
- 10 Year Battery Life
- $\pm 0.05\text{ }^{\circ}\text{C}$ ($\pm 0.09\text{ }^{\circ}\text{F}$) Accuracy
- Multiple Start/Stop Function
- Ultra High Speed Download
- 1,340,000 Reading Storage Capacity
- Memory Wrap
- Precision RTD Sensing Element
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- Field Upgradeable

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Calibration Chamber Monitoring
- HVAC
- Medical/Pharmaceutical
- Environmental Studies
- Precision Temperature Recording



Don't be fooled by the small size, the RTDTemp101A temperature data logger offers a wealth of features with a compact form factor about the size of a matchbox. When used with an external RTD probe, this data logger measures temperatures from $-200\text{ }^{\circ}\text{C}$ to $850\text{ }^{\circ}\text{C}$.

The low power design of this data logger provides a battery life of up to 10 years but still delivers ultra-fast download speeds. The RTDTemp101A

can store over a million readings and offers a software configurable memory wrap option. In addition to having a pushbutton start stop, the device also can be programmed to a delay start up to 18 months in advance.

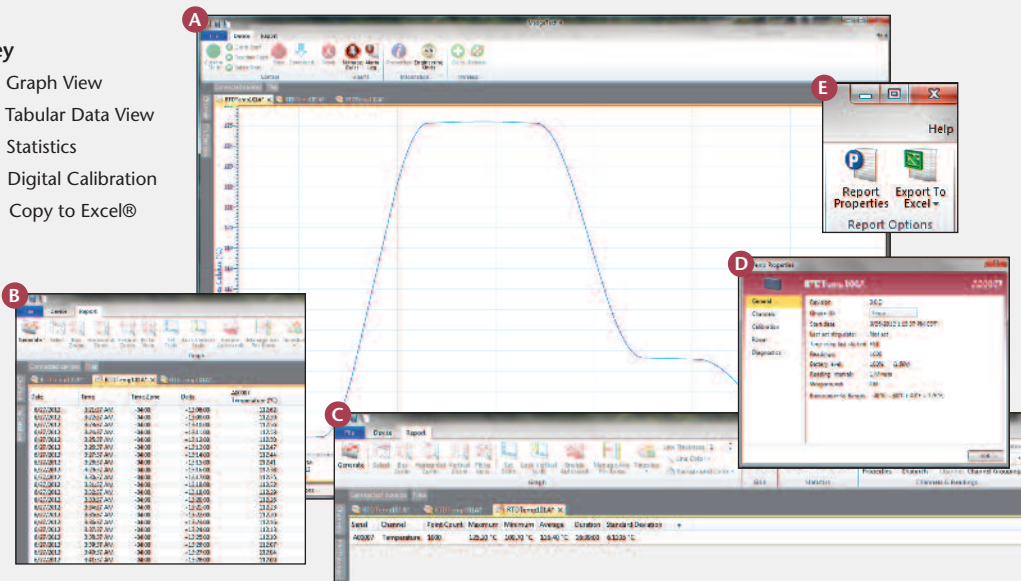
Using the MadgeTech Data Logger Software, data from the RTDTemp101A is easily downloaded, displayed and formatted for reports or the data can be exported to Excel for further presentation customization.

This versatile device can be used for a wide variety of applications such as calibration chamber monitoring, HVAC applications, environmental studies or precision temperature recording for medical and pharmaceutical applications.

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

RTDTEMP101A SPECIFICATIONS*

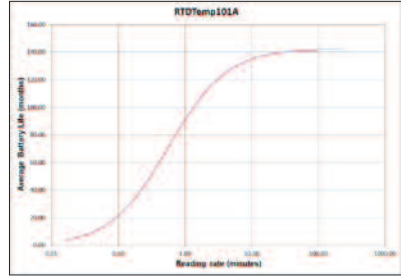
Temperature Sensor:**	External 100 Ω RTD (<i>Sold Separately</i>)
Measurement Temperature Range:	18 Ω to 400 Ω -200 °C to +850 °C (-328 °F to +1562 °F) (<i>Probe Dependent</i>)
Temperature Resolution:	0.0001 Ω 0.01 °C (0.018 °F) (<i>Probe Dependent</i>)
Calibrated Accuracy:	±0.015 Ω ±0.05 °C (±0.09 °F) (<i>Probe Dependent</i>)
Calibrated Accuracy Range***:	18 Ω to 200 Ω -200 °C to +265 °C (-328 °F to +509 °F)
Input Connection****:	Removable screw terminal; 2, 3 or 4 wire interface
Temperature Effect on Span:	< 2 ppm/°C
Temperature Effect on Offset:	< 10 ppm cumulative over entire range
Reading Rate:	1 reading every second up to 1 reading every 24 hours
Memory:	<ul style="list-style-type: none"> 1,340,000 readings; software configurable memory wrap 666,000 readings in multiple start/stop mode
Wrap Around:	Yes
Start Modes:	<ul style="list-style-type: none"> Immediate start Delay start up to 18 months Multiple pushbutton start/stop
Stop Modes:	<ul style="list-style-type: none"> Manual through software Timed (<i>specific date and time</i>)
Multiple Start/Stop Mode:	Start and stop the device multiple times without having to download data or communicate with a PC
Multiple Start/Stop Mode Activation:	<p>To start the device: <i>Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.</i></p> <p>To stop the device: <i>Press and hold the pushbutton for 5 seconds, the red LED will flash for three seconds and then the green LED will flash for two seconds. The device has stopped logging.</i></p>

*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 specifications based on ideal 100 Ω Pt RTD compliant with IEC 751 (1983) and ITS-90, 5000 Ω FSR (accuracy based on 36 in lead wire RTD with 4 wire configuration)

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

****100 Ω, 2 or 4 wire RTD probes are recommended for the most accurate performance. Most 100 Ω, 3 wire RTD probes will work, but MadgeTech cannot guarantee the accuracy. To determine whether or not the 3-wire RTD probe will work, the resistance between the two same colored wires should be less than 1 Ω.
(Note: Please contact the manufacturer of the RTD probe for questions on the resistance)

Real Time Recording:	The device may be used with PC to monitor and record data in real time
Alarm:	Programmable high and low limits; alarm is activated when temperature reaches or exceeds set limits
LED Functionality:	<p>Green LED blinks:</p> <ul style="list-style-type: none"> 10 second rate to indicate logging 15 second rate to indicate delay start mode <p>Red LED blinks:</p> <ul style="list-style-type: none"> 10 second rate to indicate low battery and/or full memory 1 second rate to indicate an alarm condition
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.
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included; user replaceable
Battery Life:	<p>10 years typical at a 15 minute reading rate</p>  <p>Graph display of the device recording in a 25 °C environment.</p>
Data Format:	Date and time stamped °C, °F, K, °R
Time Accuracy:	±1 minute/month (at 20 °C/68 °F, stand alone data logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	1.4 in x 2.2 in x 0.6 in (36 mm x 56 mm x 16 mm)
Weight:	0.8 oz (24 g)
Materials:	ABS Plastic
Approvals:	CE

BATTERY WARNING: FIRE, EXPLOSION AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 100 °C (212 °F), INCINERATE, CRUSH, OR EXPOSE CONTENTS TO WATER.

ORDERING INFORMATION

MODEL	DESCRIPTION
RTDTEMP101A	RTD Temperature Data Logger
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
LTC-7PN	Replacement battery for RTDTEMP101A

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

TC101A

THERMOCOUPLE-BASED TEMPERATURE DATA LOGGER



Features

- 10 Year Battery Life
- 1 Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 1,000,000 Reading Storage Capacity
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- Field Upgradeable

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Process Validation
- Dry Ice Shipments and Storage
- Oven Profiling
- HVAC
- Implement HACCP Programs
- General Purpose Temperature Recording



The TC101A temperature data logger, is a compact versatile device to be used with thermocouple probes for accurate temperature monitoring and profiling. This data logger is an ideal and affordable solution for applications such as HVAC studies, oven profiling, dry-ice shipments, process validation and many general purpose temperature monitoring applications.

Compatible with eight different types of thermocouple probes, the TC101A can measure temperatures as low as -270 °C , and up to as high as 1820 °C (probe dependent), with an environmental operating temperature range of -40 °C to +80 °C for the data logger body.

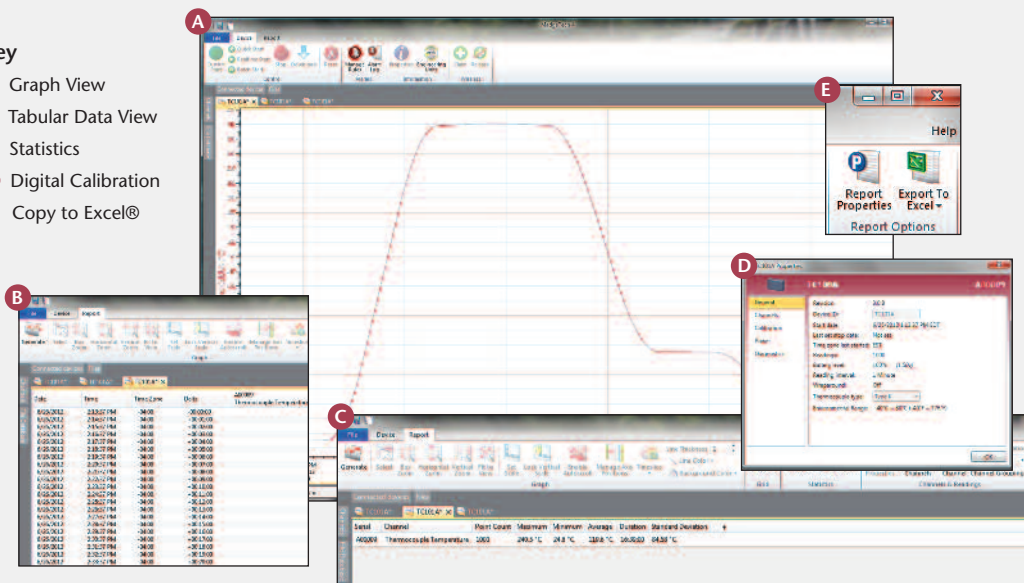
The 10 year battery life and the memory storage capacity of 500,000 readings with optional memory wrap makes the TC101A ideal for extended deployments.

With the user friendly MadgeTech Data Logger Software, the TC101A is easily connected to a PC to download the collected data. The MadgeTech Software is capable of presenting the data in graphic, tabular, and summary formats for reporting. Data can also be exported easily to Excel for further analysis and calculations.

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

TC101A SPECIFICATIONS*

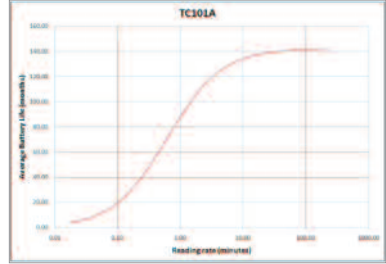
*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

Internal Channel

Temperature Range:	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution:	0.01 °C (0.018 °F)
Calibrated Accuracy:	±0.5 °C (±0.9 °F)

Remote Channel

Thermocouple Connection:	<ul style="list-style-type: none"> Female subminiature (SMP) (MP model) Pluggable screw terminal (TB model) Fixed screw terminal (ST model) 		
Cold Junction Compensation:	Automatic based on internal channel		
Max. Thermocouple Resistance:	100 Ω		
Thermocouple Type:	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1 °C	±0.5 °C
K	-270 to +1370	0.1 °C	±0.5 °C
T	-270 to +400	0.1 °C	±0.5 °C
E	-270 to +980	0.1 °C	±0.5 °C
R	-50 to +1760	0.5 °C	±2.0 °C
S	-50 to +1760	0.5 °C	±2.0 °C
B	+50 to +1820	0.5 °C	±2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C
* Thermocouple accuracy is specified with a 24 AWG			
Reading Rate:	1 reading every second up to 1 reading every 24 hours		
Memory:	<ul style="list-style-type: none"> 1,000,000 readings; software configurable memory wrap. 500,000 readings in multiple start/stop mode or trigger settings mode 		
Wrap Around:	Yes		
Start Modes:	<ul style="list-style-type: none"> Immediate start Delay start up to 18 months Multiple pushbutton start/stop 		
Stop Modes:	<ul style="list-style-type: none"> Manual through software Timed (specific date and time) 		
Multiple Start/Stop Mode:	Start and stop the device multiple times without having to download data or communicate with a PC		
Multiple Start/Stop Mode Activation:	<p>To start the device: Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.</p> <p>To stop the device: Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.</p>		
Real Time Recording:	The device may be used with PC to monitor and record data in real time.		

Alarm:	Alarm: Programmable high and low limits; alarm is activated when temperature reaches or exceeds sets limits. Alarm Delay: A cumulative alarm delay may be set in which the device will activate the alarm (via LED) only when the device has recorded a user specified time duration of data.
Trigger Settings:	High and Low limits may be set for the thermocouple channel. 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.
LED Functionality:	Green LED blinks: 10 second rate to indicate logging, 15 second rate to indicate delay start mode Red LED blinks: 10 second rate to indicate low battery and/or full memory, 1 second rate to indicate an alarm condition
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.
Battery Type:	3.6V lithium battery included; user replaceable
Battery Life:	10 years typical at a 15 minute reading rate  Graph display of the device recording in a 25 °C environment.
Data Format:	Date and time stamped °C, °F, K, °R; μV, mV, V
Time Accuracy:	±1 minute/month (at 20 °C, stand alone data logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	1.4 in x 2.2 in x 0.6 in (36 mm x 56 mm x 16 mm)
Weight:	0.9 oz (24 g)
Approvals:	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80 °C (176 °F).

ORDERING INFORMATION

MODEL	DESCRIPTION
TC101A-MP	Thermocouple Data Logger, standard mini plugs
TC101A-ST	Thermocouple Data Logger, fixed screw terminals
TC101A-TB	Thermocouple Data Logger, pluggable screw terminals
IFC200	Software, Manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
LTC-7PN	Replacement battery for TC101A

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

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PRTC110 DIFFERENTIAL PRESSURE AND THERMOCOUPLE TEMPERATURE DATA LOGGER



Features

- 5 year battery life
- Wide temperature range
- Accepts thermocouple types J, K, T, E, R, S, B, N
- High speed download
- Real time operation
- Low cost
- Programmable start time
- Miniature size

Applications

- R&D
- Diagnostics
- Measure Pressure and Temperature Pipelines
- Clean Rooms
- Atmospheric pressure gradient monitoring



The PRTC110 is a differential pressure and temperature data logger, ideal for use in factory and laboratory applications. The device is available in a 0 to 2inH₂O or 0 to 5inH₂O model.

The PRTC110 features a real-time clock module that extends the battery life up to 5 years and allows for high speed downloads. This device will measure and record up to 10,922 measurements per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The PRTC110 can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

The PRTC110 makes data retrieval quick and easy. Simply plug the device into an empty COM or USB port and our user-friendly software does the rest.

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 software interface with several key features highlighted:

- A Graph View:** A line graph showing a temperature profile over time.
- B Tabular Data View:** A data table with columns for Date, Time, Time Zone, and Data.
- C Statistics:** A summary of data statistics including Range Count, Minimum, Maximum, Average, Duration, Standard Deviation, and Units.
- D Digital Calibration:** A calibration window for the PRTC110 device, showing fields for Absolute Temperature, Thermocouple Temperature, and Absolute Pressure.
- E Copy to Excel:** A menu option to export data to an Excel spreadsheet.

- 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

PRTC110 SPECIFICATIONS*

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Internal Channel

Temperature Range:	-20 °C to +80 °C (-4 °F to +176 °F)
Temperature Resolution:	0.1 °C (0.18 °F)
Calibrated Accuracy:	±0.5 °C (0 °C to 50 °C)

Remote Channel

Thermocouple Types:	J, K, T, E, R, S, B, N		
Thermocouple connection:	Mini U connector		
Cold Junction Compensation:	Automatic, based on internal channel		
Maximum thermocouple Resistance:	1000 Ω, <1000 Ω recommended		
**Thermocouple Type:	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1 °C	±0.5 °C
K	-270 to +1370	0.1 °C	±0.5 °C
T	-270 to +400	0.1 °C	±0.5 °C
E	-270 to +980	0.1 °C	±0.5 °C
R	-50 to +1760	0.1 °C	±2.0 °C
S	-50 to +1760	0.1 °C	±2.0 °C
B	+50 to +1820	0.1 °C	±2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C
Voltage	-75 mV to +75 mV	5 μV	±20 μV
**Accuracy specifications based on 3-meter 24 AWG thermocouple.			
Pressure Range (nominal):	0 to 2 inH2O and 0 to 5 inH2O (differential)		
Pressure Range (max):	-2 to +4 inH2O and -2 to +8 inH2O (differential)		
Pressure Resolution:	0.002 inH2O and 0.005 inH2O		
Pressure Specified Accuracy:	Nominal Range at +25 °C (+77 °F)		

Combined Calibration Accuracy:	±5.0% FSR max at 25 °C over 1 year
Start Modes:	Software programmable immediate start or delay start up to six months in advance
Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	10,922 readings per channel; software configurable memory wrap
Reading Rate:	2 seconds to 24 hours, selectable in software
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included, user replaceable
Battery Life:	5 year typical (5 minute, 25 °C)
Data Format:	Date and time stamped °C, °F, °K, °R; inH2O, PSIG, inHg, mmHg, bar, atm, Torr, Pa, kPa, MPa
Time Accuracy:	±1 minute/month (at 20 °C to 30 °C)
Computer Interface:	PC serial or USB (interface cable required); 57,600 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-20 °C to +80 °C (-4 °F to +176 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	2.7 in x 1.6 in x 0.8 in (68 mm x 41 mm x 20 mm) plus connective tubing
Enclosure:	ABS Plastic
Weight:	1.25 oz (34 g)
Approvals:	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212 °F, INCINERATE OR EXPOSE CONTENTS TO WATER

ORDERING INFORMATION

MODEL	DESCRIPTION
PRTC110-2inH2O	2inH2O Differential Pressure and Thermocouple Temperature Recorder
PRTC110-5inH2O	5inH2O Differential Pressure and Thermocouple Temperature Recorder
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
LTC-7PN	Replacement battery for PRTC110

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

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QUADTEMP

4 CHANNEL THERMOCOUPLE DATA LOGGER



Features

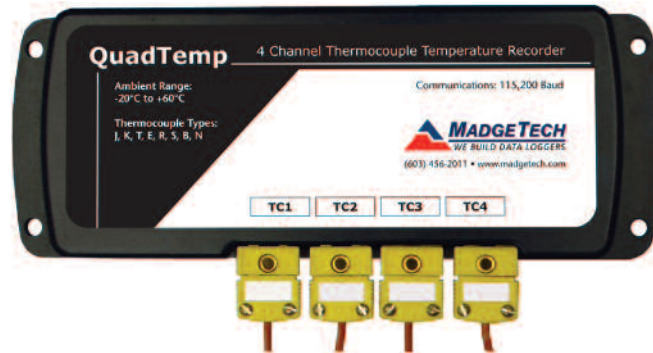
- 4 Hz Reading Rate
- 500,000 Readings Per Channel
- Open Channel Detection
- Title Channels
- Accepts Thermocouple Types J, K, T, E, R, S, B, N
- External Power or User Replaceable Battery
- Pushbutton or Programmable Start

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Warehouse Monitoring
- Refrigerator Monitoring
- Medical and Pharmaceutical
- Oven Monitoring
- Smoke Houses
- Food Processing
- HVAC
- Engine Studies



*Thermocouple Plugs/Probes Sold Separately

The QuadTemp is a four channel thermocouple data logger with a reading rate of up to 4 Hz. It can measure and record 500,000 readings per channel. To maximize memory capacity, users can enable or disable channels. For easy identification, each channel can be named with up to a ten digit title.

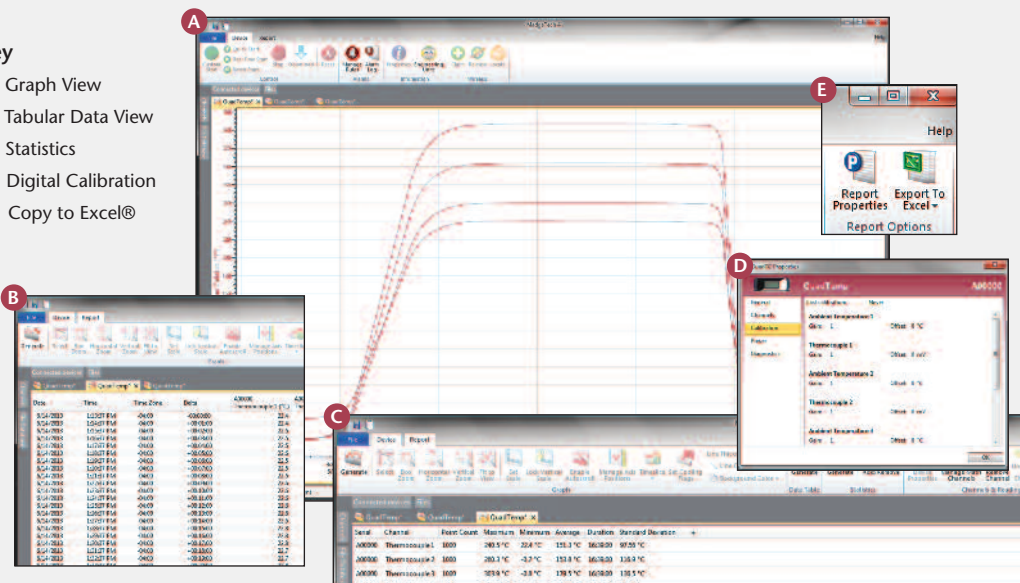
In addition, the QuadTemp features individual cold junction compensation for each channel providing increased accuracy and response time, and if a probe is removed or severed during logging, the software automatically annotates the data.

The QuadTemp is ideal for a variety of applications, whether it is remote temperature monitoring, or multiple points in a central location. Data from all channels is simultaneously logged. After the monitoring cycle is complete, data can be downloaded for analysis.

MADGETECH DATA LOGGER SOFTWARE

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Software Features:

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QUADTEMP SPECIFICATIONS*

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4 Internal Channels			
Temperature Range:	-20 °C to +60 °C (-4 °F to +140 °F)		
Temperature Resolution:	0.05 °C		
Calibrated Accuracy:	±0.5 °C (0 to +50 °C)		
4 Remote Channels			
Remote Channel Thermocouple Types:	J, K, T, E, R, S, B, N		
Thermocouple Connection:	Female subminiature (SMP)		
Cold Junction Compensation:	Automatic, based on internal channel		
Maximum Thermocouple Resistance:	1000 Ω, <100 Ω recommended		
Thermocouple	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1 °C	±0.5 °C
K	-270 to +1370	0.1 °C	±0.5 °C
T	-270 to +400	0.1 °C	±0.5 °C
E	-270 to +980	0.1 °C	±0.5 °C
R	-50 to +1760	0.5 °C	±2.0 °C
S	-50 to +1760	0.5 °C	±2.0 °C
B	+50 to +1820	0.5 °C	±2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C
Start Modes:	Software programmable immediate start or delay start up to six months in advance		

Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	500,000 readings per channel, channels can be disabled to increase memory
Reading Rate:	4 readings every second up to 1 reading every 24 hours
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	9 Volt lithium or alkaline battery included, user replaceable
Battery Life:	18 months typical
Data Format:	Date and time stamped °C, °F, K, °R, mV, V
Time Accuracy:	±1 minute/month
Computer Interface:	USB (Interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8 (MadgeTech 4 only)
Operating Environment:	-20°C to +60°C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	7.24 in x 2.7 in x 1.02 in (183 mm x 68 mm x 26 mm)
Material:	Black anodized aluminum
Weight:	15.2 oz (430g)
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 80 °C (176 °F).

ORDERING INFORMATION

MODEL	DESCRIPTION
QUADTEMP	4 Channel Thermocouple Recorder
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
U9VL-J	Replacement battery for QuadTemp

ASK ABOUT OUR OTHER DATA LOGGERS

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

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QUADTEMP2000

4 CHANNEL THERMOCOUPLE DATA LOGGER W/LCD

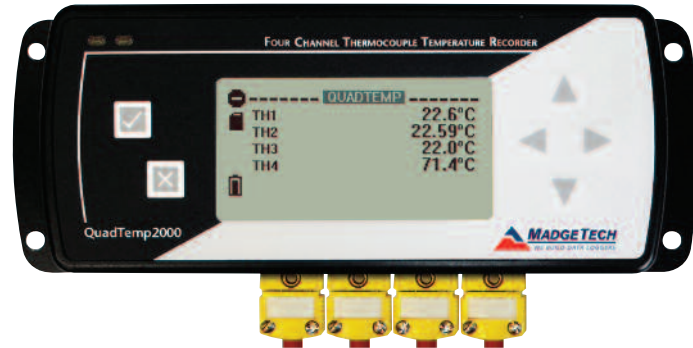


Features

- Large Backlit LCD
- User-Friendly Front Panel
- Accepts thermocouple types J, K, T, E, R, S, B, N
- High speed downloading
- Onscreen statistics
- External power or user replaceable battery
- Low battery indicator

Applications

- Monitor multiple points
- Warehouse monitoring
- Refrigerator monitoring
- Medical and Pharmaceutical
- Oven monitoring
- Smoke houses
- Food Processing
- HVAC
- Engine Studies



*Thermocouple Plugs/Probes Sold Separately

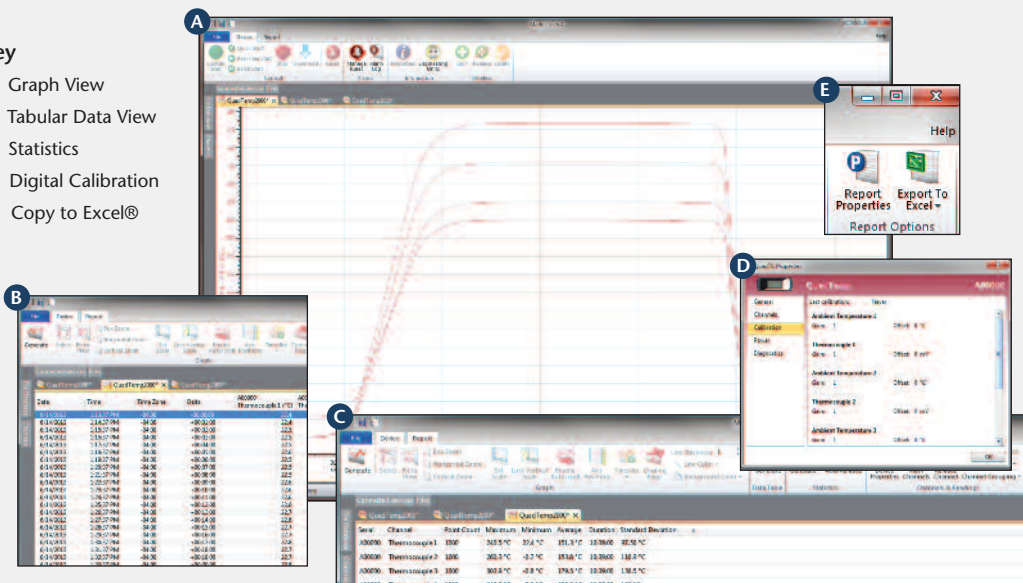
The QuadTemp2000 is a four channel thermocouple data logger with an LCD. The device features onscreen minimum, maximum and average statistics, as well as a user configurable graphics screen that allows for any combination of channels to be displayed. The device accepts J, K, T, E, R, S, B and N type thermocouples.

The QuadTemp2000 is ideal for a variety of applications, whether it is remote temperature monitoring, or multiple points in a central location. Data from all channels is simultaneously logged and displayed onscreen for real-time monitoring. It can then be downloaded to a PC for further analysis.

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

QUADTEMP2000 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.

4 Internal Channels			
Temperature Range:	-20 °C to +60 °C (-4 °F to +140 °F)		
Temperature Resolution:	0.05 °C		
Calibrated Accuracy:	±0.5 °C (0 to +50 °C)		
4 Remote Channels			
Remote Channel Thermocouple Types:	J, K, T, E, R, S, B, N		
Thermocouple Connection:	Female subminiature (SMP)		
Cold Junction Compensation:	Automatic, based on internal channel		
Maximum Thermocouple Resistance:	1000Ω, <100Ω recommended		
Thermocouple	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1 °C	±0.5 °C
K	-270 to +1370	0.1 °C	±0.5 °C
T	-270 to +400	0.1 °C	±0.5 °C
E	-270 to +980	0.1 °C	±0.5 °C
R	-50 to +1760	0.5 °C	±2.0 °C
S	-50 to +1760	0.5 °C	±2.0 °C
B	+50 to +1820	0.5 °C	±2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C

BATTERY WARNING: DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN. DO NOT DISPOSE OF IN FIRE, RECHARGE, PUT IN BACKWARDS, DISASSEMBLE, OR MIX WITH OTHER BATTERY TYPES. MAY EXPLODE, FLAME, OR LEAK AND CAUSE PERSONAL INJURY.

Start Modes:	Software programmable immediate start or delay start up to six months in advance
Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	500,000 readings per channel, channels can be disabled to increase memory
Reading Rate:	4 readings every second up to 1 reading every 24 hours
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	9 Volt lithium or alkaline battery included, user replaceable
Battery Life:	18 months typical with display off. 3 months typical with continuous display use.
Data Format:	Date and time stamped °C, °F, K, °R, mV, V
Time Accuracy:	±1 minute/month
Computer Interface:	USB (Interface cable required); 115,2000 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	7.24 in x 2.7 in x 1.14 in (183 mm x 68 mm x 29 mm)
Material:	Black anodized aluminum
Weight:	14.8 oz (420 g)
Approvals:	CE

ORDERING INFORMATION

MODEL	DESCRIPTION
QUADTEMP2000	4 Channel Thermocouple Recorder
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
U9VL-J	Replacement battery for QuadTemp2000

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

OCTTEMP

8 CHANNEL THERMOCOUPLE DATA LOGGER



Features

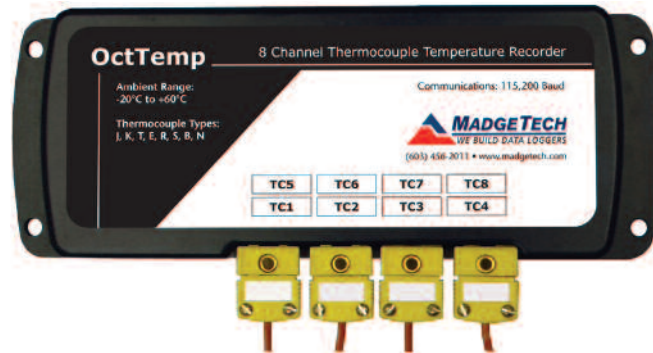
- 4 Hz Reading Rate
- 500,000 Readings per Channel
- Open Channel Detection
- Title Channels
- Accepts Thermocouple Types J, K, T, E, R, S, B, N
- External Power or User Replaceable Battery
- Pushbutton or Programmable Start

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Warehouse Monitoring
- Refrigerator Monitoring
- Medical and Pharmaceutical
- Oven Monitoring
- Smoke Houses
- Food Processing
- HVAC
- Engine Studies



*Thermocouple Plugs/Probes Sold Separately

The OctTemp is an eight channel thermocouple data logger with a reading rate of up to 4 Hz. It can measure and record 500,000 readings per channel. To maximize memory capacity, users can enable or disable channels. For easy identification, each channel can be named with up to a ten digit title.

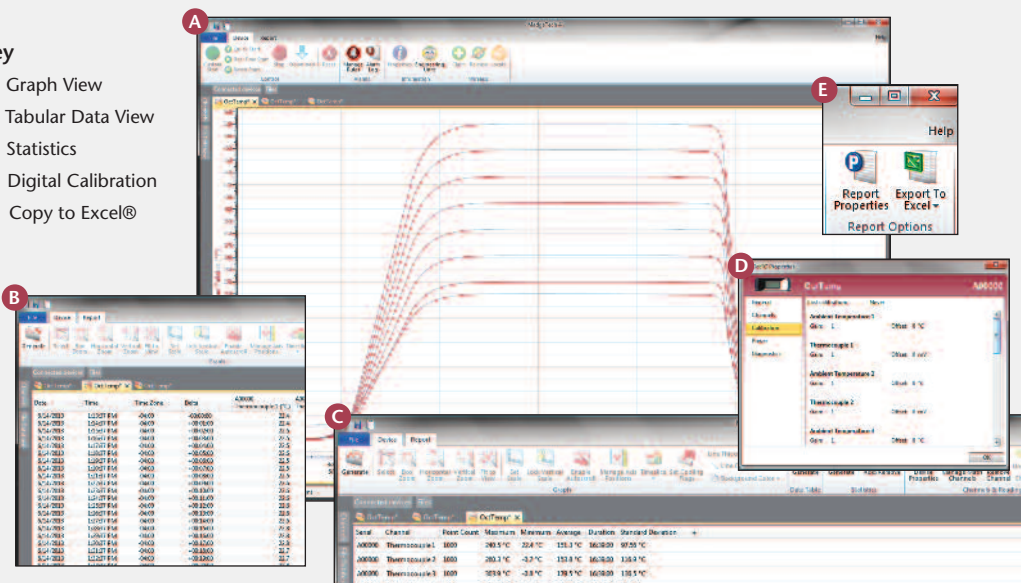
In addition, the OctTemp features individual cold junction compensation for each channel providing increased accuracy and response time, and if a probe is removed or severed during logging, the software automatically annotates the data.

The OctTemp is ideal for a variety of applications, whether it is remote temperature monitoring, or multiple points in a central location. Data from all channels is simultaneously logged. After the monitoring cycle is complete, data can be downloaded for analysis.

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

OCTTEMP 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.

8 Internal Channels

Temperature Range:	-20 °C to +60 °C (-4 °F to +140 °F)
Temperature Resolution:	0.05 °C (0.09 °F)
Calibrated Accuracy:	±0.5 °C (0 °C to +50 °C)

8 Remote Channels

Remote Channel Thermocouple Types:	J, K, T, E, R, S, B, N		
Thermocouple Connection:	Female subminiature (SMP)		
Cold Junction Compensation:	Automatic, based on internal channel		
Maximum Thermocouple Resistance:	1000 Ω, <100 Ω recommended		
Thermocouple	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1 °C	±0.5 °C
K	-270 to +1370	0.1 °C	±0.5 °C
T	-270 to +400	0.1 °C	±0.5 °C
E	-270 to +980	0.1 °C	±0.5 °C
R	-50 to +1760	0.5 °C	±2.0 °C
S	-50 to +1760	0.5 °C	±2.0 °C
B	+50 to +1820	0.5 °C	±2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C
Start Modes:	Software programmable immediate start or delay start up to six months in advance		

Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	500,000 readings per channel, channels can be disabled to increase memory
Reading Rate:	4 readings every second up to 1 reading every 24 hours
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	9 Volt lithium or alkaline battery included, user replaceable
Battery Life:	18 months typical
Data Format:	Date and time stamped °C, °F, K, °R, mV, V
Time Accuracy:	±1 minute/month
Computer Interface:	USB (Interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8 (MadgeTech 4 only)
Operating Environment:	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	7.24 in x 2.7 in x 1.26 in (183 mm x 68 mm x 32 mm)
Material:	Black anodized aluminum
Weight:	17.3 oz (490 g)
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 80 °C (176 °F).

ORDERING INFORMATION

MODEL	DESCRIPTION
OCTTEMP	8 Channel Thermocouple Recorder
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
U9VL-J	Replacement battery for OctTemp

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

OCTTEMP2000

8 CHANNEL THERMOCOUPLE DATA LOGGER WITH LCD



Features

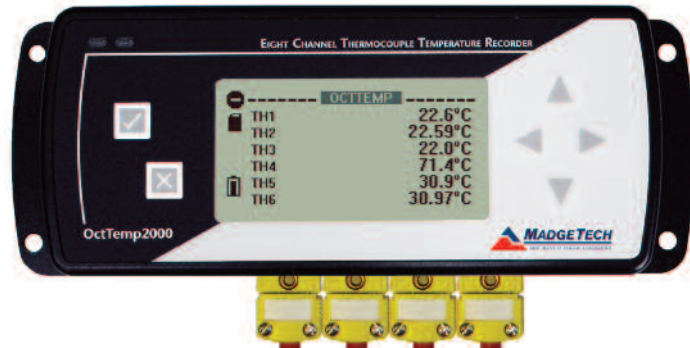
- Large Backlit LCD
- User-Friendly Front Panel
- Accepts Thermocouple Types J, K, T, E, R, S, B, N
- High Speed Downloading
- Onscreen Statistics
- External Power or User Replaceable Battery
- Low Battery Indicator

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Monitor Multiple Points
- Warehouse Monitoring
- Refrigerator Monitoring
- Medical and Pharmaceutical
- Oven Monitoring
- Smoke Houses
- Food Processing
- HVAC
- Engine Studies



*Thermocouple Plugs/Probes Sold Separately

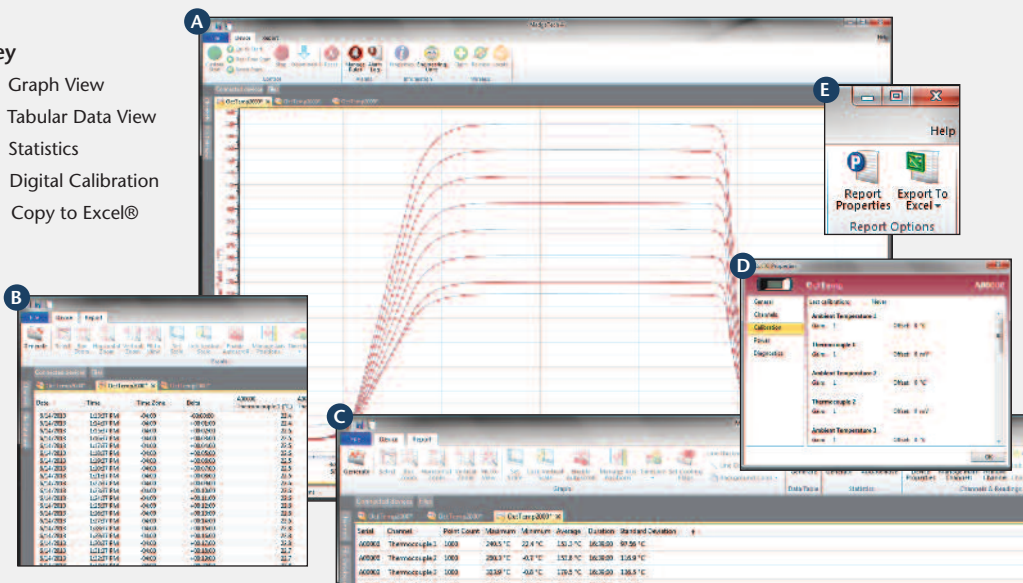
The OctTemp2000 is an eight channel thermocouple data logger with an LCD. The device features onscreen minimum, maximum and average statistics, as well as a user configurable graphics screen that allows for any combination of channels to be displayed. The device accepts J, K, T, E, R, S, B and N type thermocouples.

The OctTemp2000 is ideal for a variety of applications, whether it is remote temperature monitoring, or multiple points in a central location. Data from all channels is simultaneously logged and displayed onscreen for real-time monitoring. It can then be downloaded to a PC for further analysis.

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

OCTTEMP2000 SPECIFICATIONS*

8 Internal Channels			
Temperature Range:	-20 °C to +60 °C (-4 °F to +140 °F)		
Temperature Resolution:	0.05 °C		
Calibrated Accuracy:	±0.5 °C (0 to +50 °C)		
8 Remote Channels			
Remote Channel Thermocouple Types:	J, K, T, E, R, S, B, N		
Thermocouple Connection:	Female subminiature (SMP)		
Cold Junction Compensation:	Automatic, based on internal channel		
Maximum Thermocouple Resistance:	1000 Ω, <100 Ω recommended		
Thermocouple	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1 °C	±0.5 °C
K	-270 to +1370	0.1 °C	±0.5 °C
T	-270 to +400	0.1 °C	±0.5 °C
E	-270 to +980	0.1 °C	±0.5 °C
R	-50 to +1760	0.5 °C	±2.0 °C
S	-50 to +1760	0.5 °C	±2.0 °C
B	+50 to +1820	0.5 °C	±2.0 °C
N	-270 to +1300	0.1 °C	±0.5 °C
Start Modes:	Software programmable immediate start or delay start up to six months in advance		

Real Time Recording:	May be used with PC to monitor and record data in real time
Memory:	500,000 readings per channel, channels can be disabled to increase memory
Reading Rate:	4 readings every second up to 1 reading every 24 hours
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	9 Volt lithium or alkaline battery included, user replaceable
Battery Life:	18 months typical with display off. 3 months typical with continuous display use.
Data Format:	Date and time stamped °C, °F, K, °R, mV, V
Time Accuracy:	±1 minute/month
Computer Interface:	USB (Interface cable required); 115,2000 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	7.24 in x 2.7 in x 1.39 in (183 mm x 68 mm x 36 mm)
Material:	Black anodized aluminum
Weight:	16.9 oz (480 g)
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 80 °C (176 °F).

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ORDERING INFORMATION

MODEL	DESCRIPTION
OCTTEMP2000	8 Channel Thermocouple Recorder
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
U9VL-J	Replacement battery for OctTemp2000

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

CTL2000 CARCASS TEMPERATURE DATA LOGGER



Features

- IP67, dust proof and splash proof
- Pushbutton or programmable start
- Channel naming for location detection

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Carcass Temperature Monitoring during Pasteurization
- Verification and Validation of Pathogen Reduction

MadgeTech's redesigned CTL2000 Carcass Temperature data logger is a rugged, one of a kind solution for temperature monitoring during carcass pasteurization cycles. Equipped with eight thermocouple ports, the CTL2000 monitors and records the temperatures of various sections of the carcass during pasteurization, providing a continuous and accurate temperature profile to verify and validate that harmful microorganisms are effectively depleted.

The durable enclosure is drop tested and designed to survive the elements of the slaughter environment. The top of the enclosure is made of food grade stainless steel with an industrial quality custom machined base that skirts the thermocouple ports to guard against debris infiltration and harsh wash down cycles. The quality materials and form factor options were chosen using sanitary standards and guidelines, and made with materials certified for direct food contact as described by NSF-51.



Measuring only eight inches in length and weighing only three pounds, the CTL2000 is easy to handle and hangs securely from the carcass by a single stainless steel hook. This device is capable of withstanding temperatures from -20 °C to 100 °C (-4 °F to +212 °F), allowing it to monitor the entire pasteurization process.

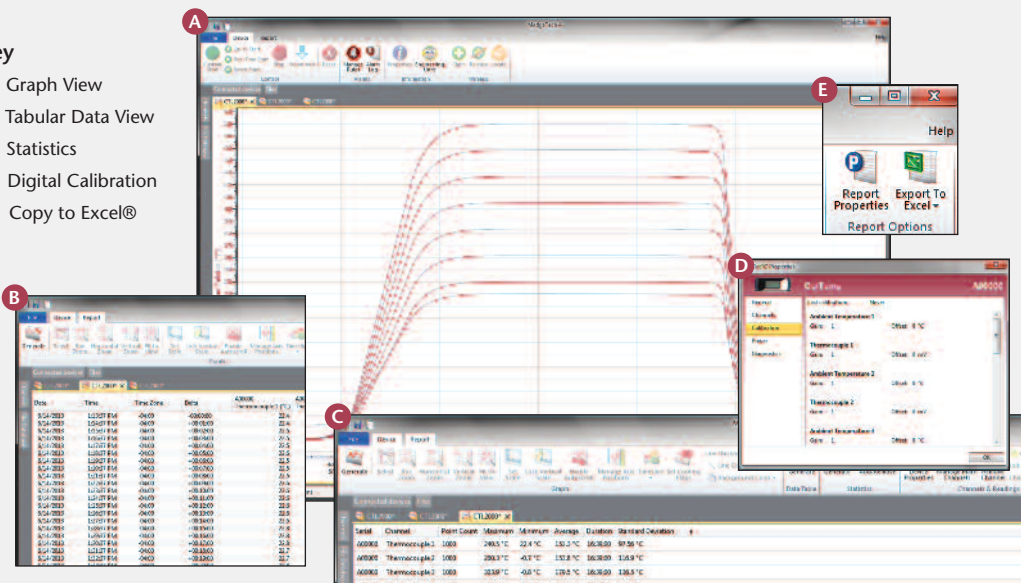
Each channel of the CTL2000 can store up to 129,024 readings which aids in the logging of multiples cycles. Reading rate capabilities range from as fast as four readings per second or as infrequently as one reading every 24 hours. The CTL2000 operates on user replaceable batteries and features a pushbutton start option directly on the device. Delayed start is user programmable from within the MadgeTech Software for up to six months in advance.

The MadgeTech software offers a wealth of data display and reporting options to easily analyze the results of each cycle and provide verification for USDA regulation compliance.

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

CTL2000 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

8 Internal Channels

Internal Channel Temperature Sensor:	Semiconductor
Temperature Range:	-20 °C to +100 °C (-4 °F to +212 °F)
Temperature Resolution:	0.01 °C (0.018 °F)
Calibrated Accuracy:	±0.5 °C (+10 °C to +80 °C)

8 Remote Channels

Remote Channel Temperature Sensor:	Compatible with Type K Only (<i>Thermocouples sold separately</i>)
Thermocouple Connection Type:	Female Subminiature (SMP)
Cold Junction Compensation:	Automatic, based on internal channel
Thermocouple Temperature Range:	-270 °C to +1370 °C (-454 °F to +2498 °F)
Temperature Resolution:	0.1 °C (0.18 °F)
Calibrated Accuracy:	±0.5 °C (±0.9 °F)

BATTERY WARNING: FIRE, EXPLOSION AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 100 °C (212 °F), INCINERATE, CRUSH, OR EXPOSE CONTENTS TO WATER.

Reading Rate:	4 readings every second up to 1 reading every 24 hours
Memory:	129,024 readings per channel
LED Functionality:	Green LED: <ul style="list-style-type: none"> Blinks every 2 seconds to indicate unit is logging Blinks every 5 seconds to indicate unit is in delay start mode
Start Modes:	Software programmable immediate start, pushbutton or delay start up to six months in advance.
Password Protection:	An optional password may be programmed into the device to restrict access to configuration options. Data may be read without the password.
Memory Wrap Around:	Yes
Battery Type:	(2) 3.6V lithium battery included; user replaceable
Battery Life:	4 years typical at a 5 minute reading rate
Calibration:	MadgeTech recommends annual factory calibration. Digital calibration within the software is also available.
Calibration Date:	Automatically recorded within the device
Data Format:	Date and time stamped °C, °F, K, °R, mV, V
Time Accuracy:	±1 minute/month
Computer Interface:	IFC200 USB (Interface cable required)
Operating System Compatibility:	XP SP3/Vista/Windows 7/Windows 8
MadgeTech Software Compatibility:	<ul style="list-style-type: none"> Standard Software version 4.2.5.0 or later Secure Software version 4.2.4.0 or later
Operating Environment:	Continuous use: -20 °C to +100 °C (-4 °F to +212 °F) 0 %RH to 100 %RH
IP Rating:	IP67
Dimensions:	8.1 in x 6.5 in x 3.1 in (205 mm x 165 mm x 80 mm)
Weight:	3.1 lb (49 oz)
Materials:	<ul style="list-style-type: none"> Enclosure & Hook: 316 Stainless Steel Gasket Seal: EPDM rubber (<i>NSF-51</i>)

ORDERING INFORMATION

MODEL	DESCRIPTION
CTL2000	Carcass Temperature Monitoring Data Logger
CTL2000 (Thermocouple Bundle)	Carcass Temperature Monitoring Data Logger with 8 type K thermocouple probes with a 3 or 6 inch sheath
TC-K-60-3-125 Probe (3" sheath)	Type K Thermocouple assembly. 60 in PFA wire with a 1/8 in dia. 3 in Stainless Steel Sheath
TC-K-60-6-188 Probe (6" sheath)	Type K Thermocouple assembly. 60 in PFA wire with a 1/8 in dia. 5.75 in Stainless Steel Sheath
IFC200	Software, Manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
TLH-5903	Replacement battery for CTL2000

ASK ABOUT OUR OTHER DATA LOGGERS

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

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IRTC101A

INFRARED THERMOCOUPLE DATA LOGGER



Features

- 10 Year Battery Life
- Wide Temperature Range
- Uses Thermocouple Type K (contact sales for other types)
- High Speed Download
- Real-time Operation
- Low Cost
- Programmable Start Time
- Miniature Size

Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications

- Non-contact Temperature Monitoring
- Flow Monitoring
- Surface Temperature
- Process Verification and Validation
- Remote Areas
- Moving Objects
- Long Distance Temperature Measurement
- Heavy Equipment



The IRTC101A is a battery powered infrared thermocouple based temperature data logger. It provides nearly instantaneous, non-contact temperature measurements, making it a perfect solution for applications such as surface temperature recording and monitoring moving objects.

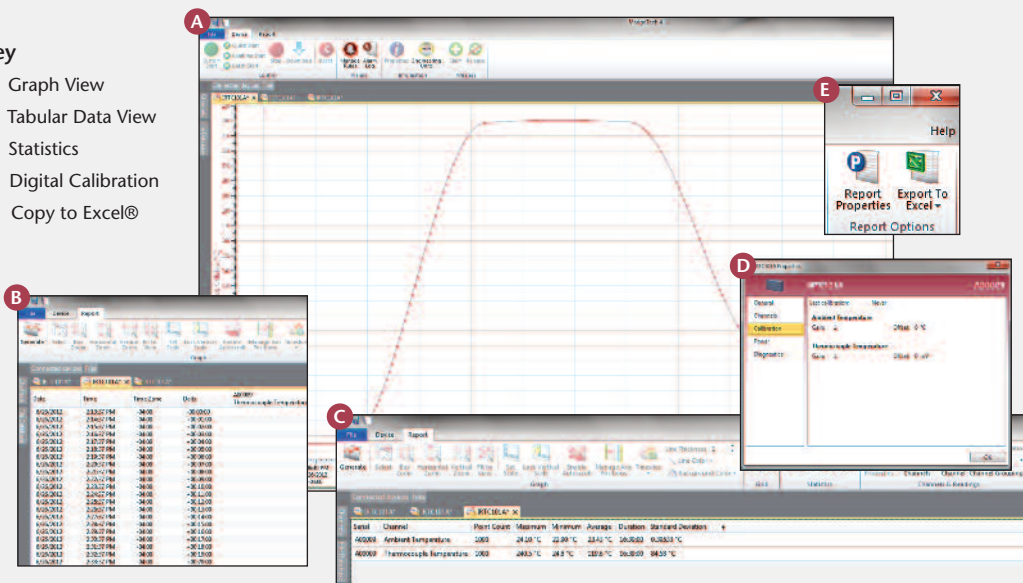
The IRTC101A features a 10 year battery life, 1 second reading rate, a multiple start/stop function, ultra-high speed download capability, 500,000 reading storage capacity, optional memory wrap, battery life indicator, optional password protection, programmable high-low alarms and more.

As the leader in low power data logger technology, MadgeTech continuously improves its products and develops solutions to meet ever-changing challenges. The IRTC101A was designed with our customers in mind. MadgeTech offers free firmware upgrades for the life of the product so that data loggers already deployed in the field can grow with new technological developments. Units do not need to be returned to the factory for upgrades. The user can do this from any PC.

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Key

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

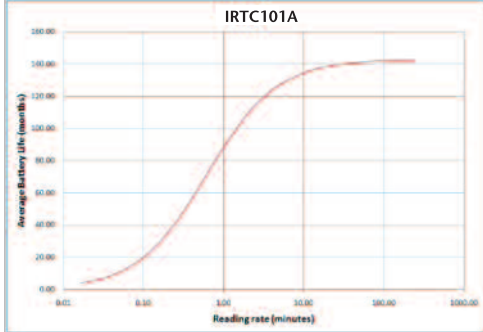


Software Features:

- 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

IRTC101A SPECIFICATIONS*

Internal Channel		
Temperature Range:	-40 °C to +80 °C (-40 °F to +176 °F)	
Temperature Resolution:	0.1 °C (0.18 °F)	
Calibrated Accuracy:	±0.25 °C (±0.45 °F)	
Remote Channel		
Thermocouple Type:	K (Infrared, contact sales for other types)	
Thermocouple connection:	Female subminiature (SMP)	
Cold Junction Compensation:	Automatic, based on internal channel	
Maximum Thermocouple Resistance:	3000 Ω	
Thermocouple Type	Range (°C)	Sensor
K	25 °C to 80 °C	±2.0 °C
	<i>Contact for other ranges.</i>	
Field of View:	60 ° (1:1)	
Minimum Spot Size:	8 mm (0.3 in)	
Spectral Response:	6.5 to 14 microns	
Reading Rate:	1 reading every second up to 1 reading every 24 hours	
Memory:	<ul style="list-style-type: none"> • 500,000 readings; software configurable memory wrap • 250,000 readings in multiple start/stop mode 	
Wrap Around:	Yes	
Start Modes:	<ul style="list-style-type: none"> • Immediate start • Delay start up to 18 months • Multiple pushbutton start/stop 	
Stop Modes:	<ul style="list-style-type: none"> • Manual through software • Timed (specific date and time) 	
Multiple Start/Stop Mode:	Start and stop the device multiple times without having to download data or communicate with a PC	
Multiple Start/Stop Mode Activation:	<p>To start the device: Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.</p> <p>To stop the device: Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.</p>	

Real Time Recording:	The device may be used with PC to monitor and record data in real time
Alarm:	Programmable high and low limits; alarm is activated when temperature reaches or exceeds set limits
LED Functionality:	<p>Green LED blinks: 10 second rate to indicate logging 15 second rate to indicate delay start mode</p> <p>Red LED blinks: 10 second rate to indicate low battery and/or full memory 1 second rate to indicate an alarm condition</p>
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.
Battery Type:	3.6V lithium battery included; user replaceable
Battery Life:	<p>10 years typical at a 15 minute reading rate</p>  <p>Graph display of the device recording in a 25 °C environment.</p>
Data Format:	Date and time stamped °C, °F, K, °R; μV, mV, V
Time Accuracy:	±1 minute/month (at 20 °C, stand alone data logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-18 °C to +70 °C (-40 °F to 158 °F) 0 %RH to 95 %RH non-condensing
Dimensions:	1.4 in x 2.2 in x 0.6 in (36 mm x 56 mm x 16 mm)
Data Logger Probe Dimensions:	3.25 in L x 1.80 cm Dia. (1.28 x 0.71 in); 0.9 m (36 in) PFA coated unshielded stranded wire
Weight:	0.9 oz (24 g)

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212 °F, INCINERATE OR EXPOSE CONTENTS TO WATER.

*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.

ORDERING INFORMATION

MODEL	DESCRIPTION
IRTC101A	Thermocouple Recorder with infrared thermocouple.
IFC200	Software, manual and USB interface cable.
Calibration Certificate	Calibration Certificate available for data logger
LTC-7PN	Replacement battery for IRTC101A.

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DATA
LOGGERS

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

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