

Features

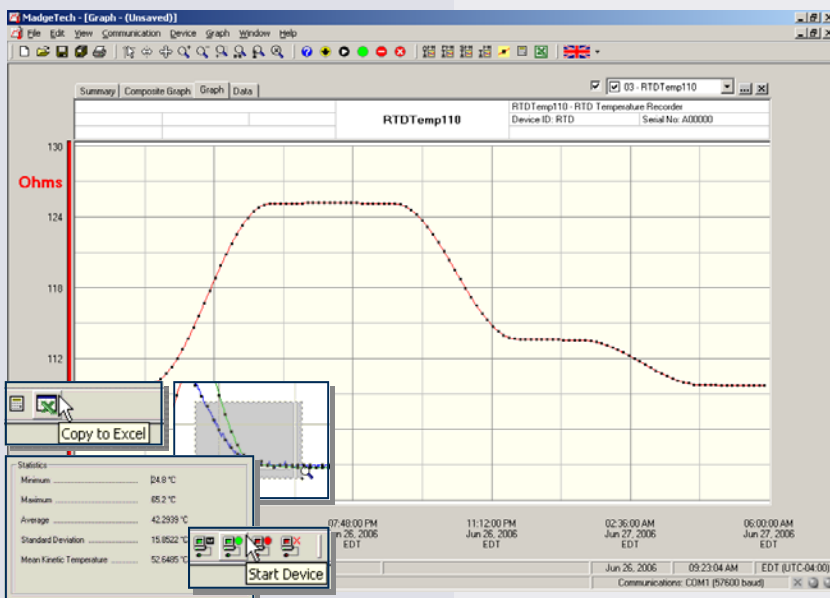
- $\pm 0.1^\circ\text{C}$ Calibrated Accuracy
- 10 year battery life
- High speed download
- N.I.S.T. traceable
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Compact
- User-friendly
- CE compliant
- Accepts 2,3, or 4-wire RTD's

Applications

- Calibration chamber monitoring
- Precision temperature recording
- Process Verification/Validation
- Museum clean room monitoring
- HVAC
- Replace costly strip chart recorders



The RTDTEMP110 is a miniature, battery powered, stand alone, precision temperature recorder. The RTDTEMP110 features a real-time clock module that extends the battery life to > 10 years and allows for high speed downloads. This is an all-in-one compact, portable, easy to use device that will measure and record up to 21,845 measurements. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. The RTDTEMP110 makes data retrieval quick and easy. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.



MadgeTech Data Recorder Software displays temperature data in an easy to use graph.

The Windows®-based software package allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.

Click [MadgeTech Software](#) for more information or to download the software.

RTDTEMP110 SPECIFICATIONS*

Temperature**

Measurement Range: -200 to +850°C

Resolution: 0.01°C

***Calibrated Accuracy: ±0.05°C (-200 to +260°C)
±0.3°C (+260 to +850°C)

Specified Accuracy Range: -200 to +850°C

Resistance

Nominal Range: 0 to 500Ω

Resolution: 0.001Ω

***Calibrated Accuracy: ±0.015Ω (0 to 200Ω)
±0.015Ω + 0.015% of readings
(200 to 400°C)

Specified Accuracy Range: 0 to 500Ω @ 25°C

Input Connection: Removable screw terminal; 2,3 or 4 wire interface

Temperature Effect on Span: <25ppm/°C; < 10ppm/°C typical

Temperature Effect on Offset: <10ppm cumulative over -40 to +80°C

Start Modes: Software programmable immediate start or delay start up to six months in advance, programmable in software.

**Temperature specifications based on ideal 100Ω Pt RTD compliant with IEC 751 (1983) and ITS-90, 5000Ω FSR (accuracy based on 36" lead wire RTD with 4 wire configuration)
***Calibrated accuracies based on standard MadgeTech calibrations for 2 to 200Ω range

Real Time Recording: May be used with PC to monitor and record data in real time

Memory: 21,845 readings; software configurable memory wrap

Reading Rate: 1 reading every 2 seconds to 1 every 12 hours

Calibration: Digital calibration through software

Calibration Date: Automatically recorded within device

Battery Type: 3.6V lithium battery included, **user replaceable**

Battery Life: 10 years typical (15 minute reading rate, 25°C)

Data Format: Date and time stamped °C, °F, K, °R; Ω

Time Accuracy: ±1 minute/month (at 20 to 30°C)

Computer Interface: PC serial or USB (Interface cable required); 57,600 baud

Software: XP SP3/Vista/Windows 7

Operating Environment: -40 to +80°C, 0 to 95%RH non-condensing

Dimensions: 1.7" x 2.7" x 0.8" (44mm x 69mm x 21mm)

Weight: 1.2 oz (33 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.

SOFTWARE FEATURES

Multiple Graphs: Simultaneously analyze data from several units or deployments; easily switch to a single data series

Graphical Cursor: One click displays readings by time, value, parameter or sample number

Data Table: Instantly access tabular view for detailed dates, times, values, and annotations

Scaling Options: Autoscale function fits data to the screen, or allows user to manually enter their own values

Formatting Options: Change colors, line styles, plotting options, show or hide channels quickly

Statistics: Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button

Export Data: Export data in a variety of common formats, or switch to Excel® with a single click

Calibration: Automatically calculate and store calibration parameters

Logger Configuration: Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID

Communications: Automatically sets up communications port, or lets user select configuration

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

ORDERING INFORMATION

Model	Description	Price (U.S.)
RTDTEMP110	Precision Temperature Recorder	\$299.00
IFC110	Software, manual and RS232 interface cable	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
LTC-7PN	Replacement battery for RTDTemp110	\$10.00

For Quantity Discounts call 603-456-2011 or email sales@madgetech.com

ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration
LCD Display	



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