

### Features

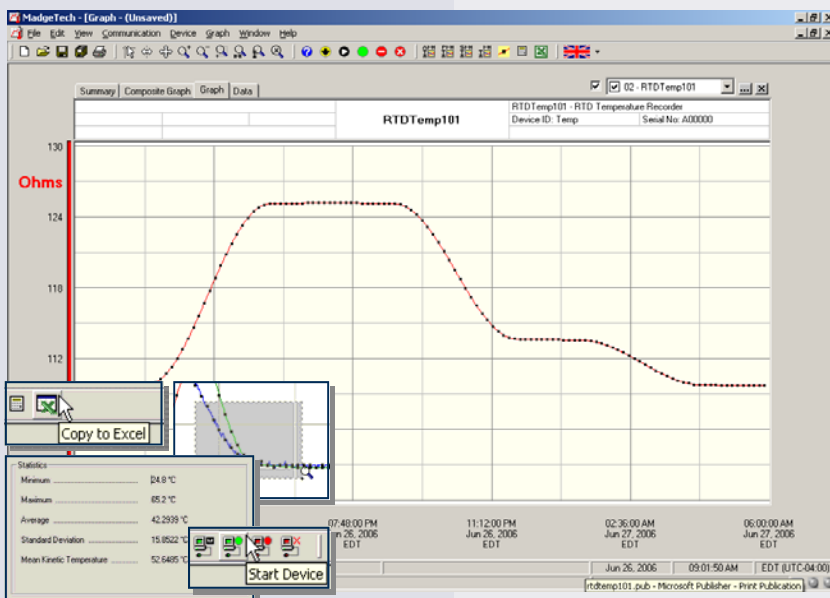
- N.I.S.T. traceable
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Miniature size
- User-friendly
- CE compliant

### Applications

- Calibration chamber monitoring
- Warehouse monitoring
- HVAC
- Medical/Pharmaceutical
- Museum monitoring
- Environmental studies
- Replace costly strip chart recorders
- Implement HACCP programs
- Precision Temperature Recording



The RTDTemp101 is a miniature, battery powered, stand alone, precision temperature recorder. This is an all-in-one compact, portable, easy to use device will measure and record up to 21,845 measurements per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The RTD sensor does not suffer from the cold-junction issues of the thermocouple nor the errors at high and low temperatures of the thermistor. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. The RTDTemp101 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.

# RTDTEMP101 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)

## 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)

**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

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

**Memory:** 21,845 readings

**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:** 1 year typical (1 minute reading rate at 25°C)

**Data Format:** Date and time stamped °C, °F, K, °R, ohms

**Time Accuracy:** ±1 minute/month (at 20°C, RS232 Port not in use)

**Computer Interface:** PC serial or USB (interface cable required); 2,400 baud

**Software:** XP SP3/Vista/Windows 7

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

**Dimensions:** 1.4" x 2.5" x 0.6" (36mm x 64mm x 16mm)

**Weight:** 1.0 oz (28 g)

**Approvals** CE, Approved for carriage on Delta® mainline flights

\*\*Temperature specifications based on ideal 100Ω platinum RTD compliant with IEC 751 (1983) and ITS-90, 5000Ω (accuracy based on 36" lead wire RTD with 4 wire configuration)

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

**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

<u>Model</u>	<u>Description</u>	<u>Price (U.S.)</u>
RTDTEMP101	Precision Temperature Recorder	\$199.00
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 RTDTemp101	\$10.00

### 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	

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



DOC-1006009-00 REV H 2010.09.17