

Features

- Multiple transmitter configurations
- Memory wrap around
- Software configurable
- Real-time operation
- Programmable start time
- Miniature size
- User-friendly
- N.I.S.T. traceable

Applications

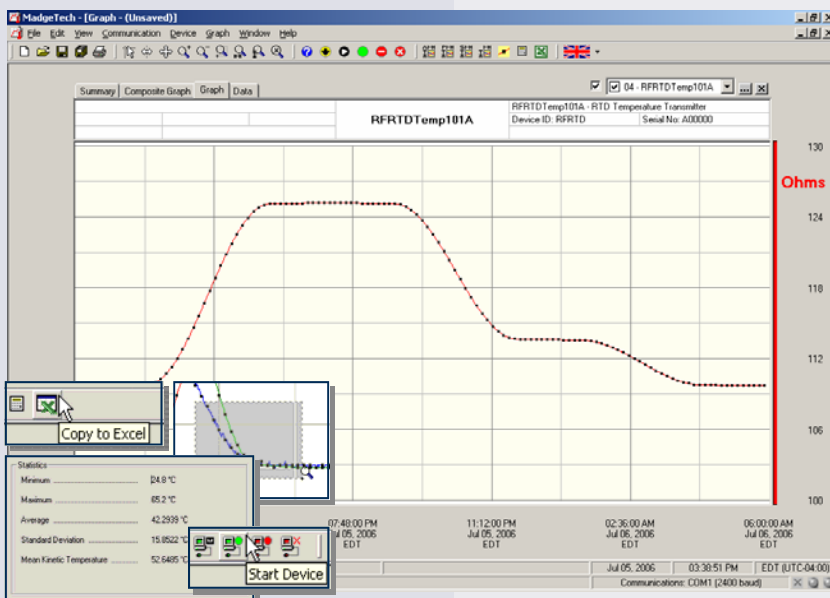
- Refrigerator/Freezer Monitoring
- Calibration chamber monitoring
- Precision temperature recording
- Laboratory monitoring
- Medical
- Bio-Pharmaceutical
- Replace Thermometers

The RFRTDTemp101A is a battery powered precision temperature recorder and wireless temperature transmitter with its own internal memory. This all-in-one



compact, portable device will measure, record and transmit temperature readings at a user-defined interval. The RFRTDTemp101A includes a precision RTD temperature probe mounted in a miniature bottle filled with a ethylene glycol solution. This provides temperature "buffered" readings which helps to eliminate false alarms. Each transmitter can be supplied with a serial-numbered, NIST traceable certificate at an additional cost.

The device can be started, stopped and configured directly from your computer. Its small size allows it to fit almost anywhere. In addition to the wireless communications, the RFRTDTemp101A makes data retrieval quick and easy. Simply plug the device into an empty COM port and our user-friendly software will handle 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.

RFRTDTemp101A SPECIFICATIONS*

Temperature**

Sensors: Precision RTD
Measurement Range: -50°C to 80°C (-58°F to +176°F)
Resolution: 0.01°C (0.02°F)
Calibrated Accuracy: ±0.5°C (Over 100°C span)
 ±0.9°F (Over 180°F span)

Resistance

Memory: 5,461 readings; software configurable memory wrap
Reading Rate: 1 reading every 30 seconds to 1
Bottle: 30ml, 60ml, or 250ml bottle with ethylene glycol.
Calibration: Digital calibration through software
Time Accuracy: ±1 minute/month (at 20 to 30°C)
Computer Interface: PC serial or RS232C COM (interface cable required); 57,600 baud
Data Format: Date and time stamped °C, °F, K, °R, Ω

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 AND 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, 5000Ω

RF Carrier Frequency: 418 ± 0.075MHz

RF Baud Rate: 4,800 baud

Output Power: <0dBm typical (<1mW)

Receiver Sensitivity (RFC101A): -90dBm typical

Range: Line-of-sight: up to 120 ft., Urban: up to 40 ft. (Contact MadgeTech for options to extend wireless range)

Approvals: US (FCC), CA (IC)

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

Battery Life: 1 year typical (1 min reading rate @ 25 °C)

Software: Windows 95/98/ME/NT/2000/XP based software

Operating Environment: -30 to +70°C, 0 to 95%RH non-condensing

Dimensions: 1.7" x 2.7" x 0.8" + 2.0" antenna (42mm x 69mm x 21mm + 51mm antenna)

Probe Length 2.5" for 30ml, 3" for 60ml, and 4.5" for 250ml glycol bottle

Wire Length: 3.5" for all versions

Weight: Logger Plus Probe plus 250 ml bottle plus ethylene glycol is 500 grams

Logger Plus Probe plus 60 ml bottle plus ethylene glycol is 150 grams

Logger Plus Probe plus 30 ml bottle plus ethylene glycol is 100 grams

Enclosure: ABS plastic

Line of Sight: 120 Feet

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: Automatically calculate averages, min, max, standard deviation, and mean kinetic temperature.

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

ORDERING INFORMATION

Model	Description	Price (U.S.)
RFRTDTemp101A-1	Precision temperature recorder with wireless transmitter, RTD probe, and 30ml bottle filled with ethylene glycol.	\$329.00
RFRTDTemp101A-2	Precision temperature recorder with wireless transmitter, RTD probe, and 60ml bottle filled with ethylene glycol.	\$329.00
RFRTDTemp101A-3	Precision temperature recorder with wireless transmitter, RTD probe, and 250ml bottle filled with ethylene glycol.	\$329.00
RFC101A	Wireless receiver, software, manual, power supply and RS232 interface cable	\$199.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
LTC-7PN	Replacement battery for Therm•A•lert	\$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

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

