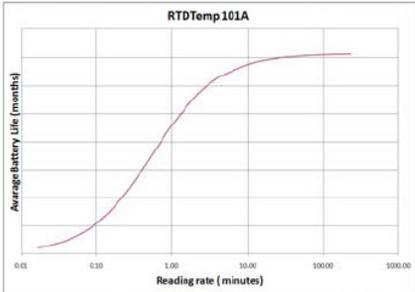


Description	RTDTemp101A
Temperature Sensor**	External 100 Ω RTD (Sold Separately)
Temperature Range	18 Ω to 400 Ω, -200 °C to +850 °C (-328 °F to +1562 °F) (Probe Dependent)
Temperature Resolution	0.0001 Ω, 0.01 °C (0.018 °F) (Probe Dependent)
Calibrated Accuracy	±0.015 Ω, ±0.05 °C (±0.09 °F) (Probe Dependent)
Memory	1,340,000 readings software configurable memory wrap 666,000 readings in multiple start/stop mode
Wrap Around	Yes
Reading Rate	1 reading every second up to 1 reading every 24 hours
LED Indicator	Red & Green
Alarm	Yes
Required Interface Package	IFC200
Baud Rate	115,200
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>
Operating Environment	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH non-condensing
Material	ABS plastic
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)
Approvals	CE

Battery Warning

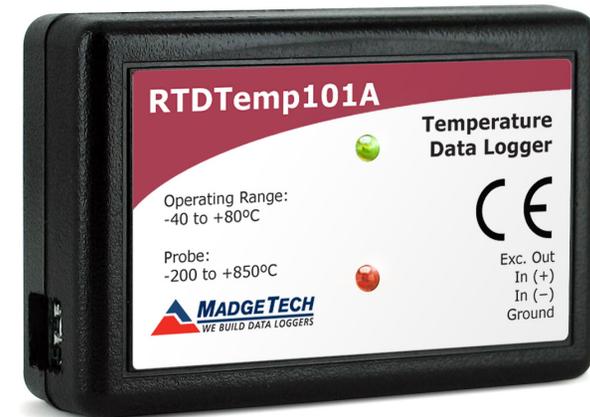
WARNING: FIRE, EXPLOSION AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 100 °C (212 °F), INCINERATE, CRUSH, OR EXPOSE CONTENTS TO WATER.

Specifications subject to change.

See MadgeTech's terms and conditions at www.madgetech.com

MadgeTech, Inc.
6 Warner Road • Warner, NH 03278
Phone 603.456.2011 • Fax 603.456.2012
www.madgetech.com • info@madgetech.com

DOC-1216035-00 REV 9 2015.07.01



RTDTemp101A

Temperature Data Logger with 10 Year Battery Life

Product Notes

LEDs

- Green LED blinks: 10 seconds to indicate logging and 15 seconds to indicate delay start mode.
- Red LED blinks: 10 seconds to indicate low battery and/or memory and 1 second 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

Multiple Start/Stop Mode Activation

- To start device: Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.
- 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.

Alarm Settings

Programmable high and low limits; alarm is activated when temperature reaches or exceeds set limits.

Wiring the Data Logger

Wiring Options

For 4-wire RTD probes, connect the four lead wires to your RTD logger as shown in the figure.

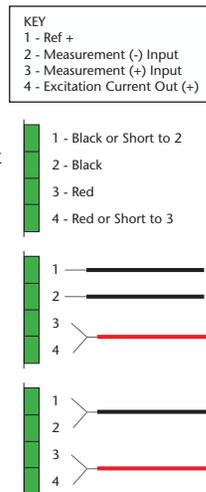
For 3-wire RTD probes, short inputs 3 and 4 together, then connect the lead wires to inputs 1, 2 and 3.

For 2-wire RTD probes, short inputs 3 and 4 together and inputs 1 and 2 together, then connect the RTD lead wires to inputs 2 and 3.

Warning: Note the polarity instructions. Do not attach wires to the wrong terminals.

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)



Installation Guide

Installing the Interface cable

- IFC200:
Insert the device into a USB port. The drivers will install automatically.

Installing the software

Software can also be downloaded from the MadgeTech website at the following link: www.madgetech.com/software-download. Double click the zipped download file and follow the steps to finish downloading

Device Operation

Starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- For most applications, select **"Custom Start"** from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click **"Start"**. (**"Quick Start"** applies the most recent custom start options, **"Batch Start"** is used for managing multiple loggers at once, **"Real Time Start"** stores the dataset as it records while connected to the logger.)
- The status of the device will change to **"Running"**, **"Waiting to Start"** or **"Waiting to Manual Start"**, depending upon your start method.
- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Highlight the data logger in the Connected Devices list. Click **"Stop"** on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click **"Download"**. You will be prompted to name your report.
- Downloading will offload and save all the recorded data to the PC.

Device Maintenance

Battery Replacement

Materials:

Small Phillips Head Screwdriver

LTC-7PN battery

- Puncture the center of the back label with the screw driver and unscrew the enclosure.
- Remove the battery by pulling it perpendicular to the board.
- Insert the new battery into the terminals and verify it is secure.
- Screw the enclosure back together securely.

Recalibration

Standard calibration is two points at 50 Ω and 150 Ω and is verified at 100 Ω .

Additional Services:

Custom calibration and verification point options available, please call for pricing.

Call for custom calibration options to accommodate specific application needs.

Prices and specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com

To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting www.madgetech.com, then under the services tab, select RMA Process.