# MADGETECH
### WE BUILD DATA LOGGERS

| Description | RHTemp101A |
|---|---|
| Temperature Sensor | Precision RTD Element |
| Temperature Range | −40 °C to +80 °C (-40 °F to +176 °F) |
| Temperature Resolution | 0.01 °C |
| Calibrated Accuracy | ±0.5 °C |
| Humidity Sensor | Internal semiconductor |
| Humidity Range | 0 %RH to 95 %RH |
| Humidity Resolution | 0.1 %RH |
| Calibrated Accuracy | ±3.0 %RH (±2 %RH typical at 25 °C/77 °F) |
| Memory | 1,000,000 readings per channel 500,000 readings in multiple start/stop mode |
| Wrap Around | Yes |
| Reading Rate | 1 reading every second up to 1 reading every 24 hours |
| RH Units | %RH, dew pt., water vapor concentration (mg/ml) |
| Alarm | Yes, Humidity |
| Required Interface Package | IFC200 |
| Baud Rate | 115,200 |
| Typical Battery Life | 10 years at a 15 minute reading rate |
| Operating Environment | −40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH non-condesing |
| Material | ABS Plastic |
| Dimensions | 1.4 in x 2.2 in x 0.6 in (36 mm x 56 mm x 16 mm) |
| Weight | 0.9 oz (24 g) |
| Approvals | CE |

## RHTemp101A



**RHTemp101A**
Humidity and Temperature Data Logger
with a 10 Year Battery Life

### Battery Warning

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).

*Specifications subject to change.*
*See MadgeTech's terms and conditions at www.madgetech.com*

# MADGETECH
### WE BUILD DATA LOGGERS

To view the full MadgeTech product line,
visit our website at www.madgetech.com.

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

## Installation Guide

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

### Installing the software
Insert the Software USB Stick in an open USB port. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Wizard.

## Device Operation

### Connecting and 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
The RHTemp101A standard calibration is one point at 25 °C and two points at 25 %RH and 75 %RH.

**Pricing:**

| | |
|---|---|
| Recalibration traceable to NIST | $110.00 |
| Recalibration | $70.00 |

**Additional Services:**

| | |
|---|---|
| Verification Point | $15.00 per point |

*Prices and specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com*
*To send the devices back, visit www.madgetech.com, select  Services then RMA Process.*