

Description	MicroRHTemp
Temperature Sensor	Internal semiconductor
Temperature Range	0 °C to +60 °C (+32 °F to +140 °F)
Temperature Resolution	0.1 °C (0.18 °F)
Temperature Accuracy	±0.5 °C (±0.9 °F)
Humidity Sensor	Internal semiconductor
Humidity Range	0 %RH to 95 %RH
Humidity Resolution	0.1 %RH
Humidity Accuracy	±3.0 %RH
Memory	16,383/channel
LED Indicator	Red & Green
RH Units	%RH, dew pt., water vapor concentration (mg/ml)
Required Interface Package	IFC202
Baud Rate	38,400
Response Time	90% change in 60 seconds in slow moving air
Reading Rate	1 reading every 2 seconds up to 1 reading every 12 hours
Battery Type	2 - 1.55V SR1154W batteries included, user replaceable
Typical Battery Life	1 year
Operating Environment	0 °C to +60 °C (+32 °F to +140 °F), 0 %RH to 95 %RH (non-condensing)
Submersible	No
Dimensions	1.5 in x 0.6 in dia. (39 mm x 16 mm x dia.)
Weight	1 oz (30 g)
Material	303 stainless steel

### 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 60 °C (140 °F).**

*Specifications subject to change.*

See MadgeTech's terms and conditions at [www.madgetech.com](http://www.madgetech.com)

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### MicroRHTemp

Ultra Small, Temperature and Humidity Data Logger

## Product Notes

### LEDs

Once started, the green LED will flash at the selected reading rate to indicate that the device is running. The red LED will flash in one second intervals if there is an alarm condition.

### Alarm Settings

To change the settings for the temperature alarm:

- In the **Connected devices** panel, select the intended device to change the alarm settings.
- On the **Device** tab, in the **Information** group, click **Properties**. Users can also right-click on the device and select **Properties** in the context menu.
- Click the **Alarm** tab. If the Alarm tab is missing, the device does not have any alarm settings.

Configure the alarm settings:

- The High and Low settings indicate reading thresholds at which the alarm becomes active.
- The Warn high and Warn low settings indicate reading thresholds at which the alarm warning becomes active.
- The **Delay** setting indicates how long to wait before the alarm becomes active after passing an alarm threshold.
- The **Use cumulative alarm delay** checkbox indicates whether the alarm delay should reset when reading values fall back within the alarm threshold. *Note: Available settings vary per model.*
- Click the **Apply** button.

## Installation Guide

### Installing the Interface cable

- IFC202  
Insert the device into a USB port. The drivers will install automatically.
- USB-1 or USB-101  
Install the USB drivers from the CD provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

### Installing the software

The Software can be downloaded from the MadgeTech website at the following link: [www.madgetech.com/software-download](http://www.madgetech.com/software-download). Follow the instructions provided in the Installation 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

- Connect the logger to the interface cable.
- 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:

#### Replacement Battery (SR1154W)

- Unscrew the knurled endcap.
- Tip the batteries (enclosed in a plastic sleeve) out of the enclosure tube.
- Use a small, dull, non-metallic tool (e.g. pen cap) to push the batteries out of the sleeve.
- Press the new batteries into the sleeve negative (-) end first.
- Please the sleeved batteries in the enclosure tube positive (+) end first.
- Screw the knurled cap back in place.

### Recalibration

The MicroRHTemp standard calibration is one point at +25 °C and two points at 25 %RH and 75 %RH.

### 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](http://www.madgetech.com)*

*To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting [www.madgetech.com](http://www.madgetech.com), then under the services tab, select RMA Process.*