

Specification	RHTemp1000
Temperature Sensor	Resistance Temperature Detector (RTD)
Temperature Range	-20°C to +80°C (-4°F to +176°F)
Temperature Resolution	0.01°C
Calibrated Accuracy	±0.5°C (0°C to 55°C)
Humidity Sensor	Internal semiconductor
Humidity Range	0 to 100%RH (non-condensing)
Humidity Resolution	0.1%RH
Calibrated Accuracy	±3%RH maximum; ±2.0%RH typical at 25°C
Memory	16,350 readings per channel
Memory Wrap	Yes
Reading Rate	1 second to 1 reading every 24 hours
RH Units	%RH, dew pt., water vapor concentration (mg/ml)
Required Interface Package	IFC400
Baud Rate	125,000 baud
Typical Battery Life	2 years typical at 25°C, 15 minute reading intervals
Operating Environment	-20°C to +80°C (-4°F to +176°F), 0 to 95%RH (non-condensing)
Material	316 Stainless Steel
Dimensions	1.0" x 2.0" (25.4mm x 50.8mm)
Approvals	CE

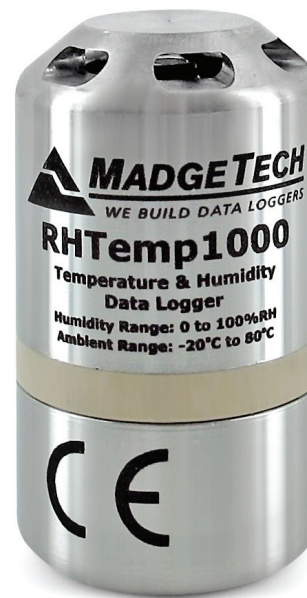
Battery Warning

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

RHTemp1000



RHTemp1000

Rugged Humidity and Temperature Data Logger

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DOC-1279035-00 REV 1 2013.04.04

Installation Guide

Installing the software

Insert the MadgeTech 4 Software Flash Drive into an open USB port on the PC. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Installation Wizard to install the MadgeTech Software. Software can also be downloaded from the MadgeTech website at the following link: www.madgetech.com/software-download

Installing the Interface cable

- IFC400:
Follow the instructions provided in the Installation Wizard to install the USB Interface Drivers. Drivers can also be downloaded from the MadgeTech website at the following link: www.madgetech.com/software-download

Connecting the data logger

- Once the software is installed and running, plug the interface cable into the PC.
- Place the RHTemp1000 data logger into the IFC400 docking station.
- The RHTemp1000 will automatically appear under Connected Devices within the software.

Device Operation

Starting the data logger

- Select the device from the connected devices list.
- Choose the desired start parameters and a **Reading Rate** suitable for the application.
- Enter in any other desired parameters and click **Start**.
- When the device is successfully started, the status will display **Running**.
- Remove the data logger from the IFC400 docking station and place it in the environment to be measured.

Note: The device will stop recording data when the memory capacity is full 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

- Launch the MadgeTech 4 software and connect the interface cable to the PC.
- Place the data logger in the IFC400 docking station.
- Right click the device in the connected devices list and select **Download** (a prompt will appear confirming that the device recording will be stopped). This will offload all recorded data onto the PC and display it in the graph.

Product Notes

IP Rating

The RHTemp1000 is rated IP30 and is non-submersible.

O-Rings

O-Ring maintenance is a key factor when properly caring for the RHTemp1000. The O-Rings ensure a tight seal and prevent liquid from entering the inside of the device. Please refer to the application note "O-Rings 101: Protecting Your Data," found on the MadgeTech website for information on how to prevent O-Ring failure.

Note: This product is rated for use up to 80°C. Please read the battery warning. The product could explode if exposed to temperatures above what is specified.

Communication

To ensure desired operation of the RHTemp1000, please keep the surface clear of any foreign objects or substances. The RHTemp1000s data is downloaded through **external contact** with the IFC400 docking station. Covering the surface with foreign objects (**i.e. Calibration Labels**) can prevent the communication and/or downloading process.

Device Maintenance

Battery Replacement

Materials:

TL-2150-0S Battery

- Unscrew the bottom of the logger and remove the battery.
- Place the new battery into the logger. Note the polarity of the battery.
- Screw the cover back onto the logger.

Recalibration

The RHTemp1000 standard calibration is one temperature point at 25°C and two humidity points at 25%RH and 75%RH.

Additional Services:

Custom Calibration

Call for Pricing

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.