RHTEMP1000IS

Intrinsically Safe Temperature
and Humidity Data Logger

PRODUCT USER GUIDE

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Product Overview

The **RHTemp1000IS** carries hazardous location, intrinsically safe certification in accordance with the latest issue of: FM3600, FM3610, CAN/CSA-C22.2 No. 60079-0:15, CAN/CSA-C22.2 No. 60079-11:14

Certified Intrinsically Safe for:
- Class 1 Division 1 Group ABCD
- Class 1 Division 2 Group ABCD
- Temperature Class: T4A

Operational Warnings

- When used in hazardous locations, the RHTemp1000IS is to be **installed prior** to the location becoming hazardous and removed only after the area is no longer hazardous.

- The maximum allowed ambient temperature for the RHTemp1000IS (under any circumstances) is 80 °C. The minimum rated operating temperature is -40 °C.

- The RHTemp1000IS is approved for use only with the Tadiran TL-2150/S battery. Replacement with any other battery will void the safety rating.

- Batteries are user replaceable, but are to be removed or replaced only in locations known to be non-hazardous.

- Tampering or replacement of non-factory components may adversely affect the safe use of the product, and is prohibited. Except for replacement of the battery, the user may not service the RHTemp1000IS. MadgeTech, Inc. or an authorized representative must perform all other service to the product.

Ordering Information

- 902213-00 — RHTemp1000IS
- 902218-00 — RHTemp1000IS-KR (key ring end cap)
- 900319-00 — IFC400
- 900325-00 — IFC406
- 901745-00 — Battery Tadiran TL-2150/S

Installation Guide

Installing the Software

The Software can be downloaded from the MadgeTech website at **madgetech.com**. Follow the instructions provided in the Installation Wizard.

Installing the USB Interface Drivers

IFC400 or IFC406 — Follow the instructions provided in the Installation Wizard to install the USB Interface Drivers. Drivers can also be downloaded from the MadgeTech website at **madgetech.com**.

Device Operation

Connecting and Starting the Data Logger

1. Once the software is installed and running, plug the interface cable into the docking station (IFC400 or IFC406).

2. Connect the USB end of the interface cable into an open USB port on the computer.

3. Place the data logger into the docking station (IFC400 or IFC406).

4. The data logger will automatically appear under **Connected Devices** within the software.

5. 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.)*

6. The status of the device will change to **Running** or **Waiting to Start**, depending upon your start method.

7. 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, unless user selectable memory wrap is enabled. At this point the device cannot be restarted until it has been re-armed by the computer.*

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Device Operation (cont'd)

Downloading Data from a Data Logger

1. Place the logger into the docking station (IFC400 or IFC406).

2. Highlight the data logger in the **Connected Devices** list. Click **Stop** on the menu bar.

3. Once the data logger is stopped, with the logger highlighted, click **Download**.

4. Downloading will offload and save all the recorded data to the PC.

Device Maintenance

Battery Replacement

Materials: Replacement Battery (Tadiran TL-2150/S)

1. Move the device to a non-hazardous location before replacing battery.

2. Observe Operational Warnings when removing and replacing the battery.

3. Unscrew the bottom of the data logger and remove the battery.

4. Place the new battery into the logger. **Caution:** *Observe correct battery polarity when installing.*

5. Screw the cover onto the data logger.

O-Rings

O-ring maintenance is a key factor when properly caring for the RHTemp1000IS. 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 at **madgetech.com**, for information on how to prevent O-ring failure.

Recalibration

Recalibration is recommended annually. To send devices back for calibration, visit **madgetech.com**.

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 **madgetech.com**.*

*To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting **madgetech.com**.*

Communication

To ensure desired operation of the RHTEMP1000IS, **please keep the surface clear of any foreign objects or substances**. The RHTEMP1000IS's data is downloaded through external contact with the IFC400 or IFC406 docking station. Covering the surface with foreign objects **(i.e. Calibration Labels)** can prevent the communication and/or downloading process.

NEED HELP?

Product Support & Troubleshooting:

- Visit our Resources online at **madgetech.com/resources**.
- Contact our friendly Customer Support Team at (603) 456-2011 or **support@madgetech.com**.

MadgeTech 4 Software Support:

- Refer to the built-in help section of the MadgeTech 4 Software.
- Download the MadgeTech 4 Software Manual at **madgetech.com**.
- Contact our friendly Customer Support Team at (603) 456-2011 or **support@madgetech.com**.