



RHTemp1000IS

Intrinsically Safe

Humidity and Temperature Data Logger



Specifications

Temperature

Temperature Sensor: Resistance Temperature Detector (RTD)
 Temperature Range: -40 °C to +80 °C (-40 °F to +176 °F)
 Temperature Resolution: 0.01 °C
 Temperature Response
 Time in Air:
 t63 - 8 minutes to 63% of change
 t90 - 68 minutes to 90% of change
 Calibrated Accuracy: ±0.5 °C (0 °C to 55 °C)

Humidity

Humidity Sensor: Capacitive Polymer
 Humidity Range: 0 %RH to 100 %RH (non-condensing)
 Humidity Resolution: 0.1 %RH
 Humidity Response
 Time in Air:
 t63 - 30 seconds to 63% of change
 t90 - 2 minutes to 90% of change
 Calibrated Accuracy: ±3.0 %RH maximum

General

Start Modes: Software programmable immediate start or delay start up to 24 months in advance

Real Time Recording: May be used with PC to monitor and record data in real time.

Memory: 16,350 readings per channel

Password Protection: Yes

Reading Rate: 1 reading every second up to 1 reading every 24 hours

Calibration: Digital calibration through software

Calibration Date: Automatically recorded within device

Memory Wrap: Yes

Data Format: Date and time stamped °C, °F, K, °R; %RH, mg/mL, Dew Point

Battery Life: 2 years typical at 25 °C (15 minute reading rate)

Battery Type: 3.6V lithium battery included, user replaceable

Time Accuracy: ±1 minute/month at 25 °C

Required Interface Package: IFC400 or IFC406

Computer Interface: USB (interface cable required); 125,000 baud

Operating System Compatibility: Windows XP SP3/Vista/Windows 7/Windows 8

MadgeTech Software Compatibility: Standard Software version 4.1.0.2 or later.

Operating Environment: -40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 100 %RH (non-condensing)

Dimensions: 1.7 in x 0.97 in x 0.97 in (42 mm x 24.6 mm x 24.6 mm)

Weight: 2.3 oz (65 g)

Material: 316 Stainless Steel/PEEK - IP Rating IP30

Approvals: CE; Intrinsically Safe for Class I, Div 1, groups ABCD; Non-incendive for Class I, Division 2, groups ABCD Hazardous (Classified) Locations



The new RHTemp1000IS is an Intrinsically Safe humidity and temperature data logger. The RHTemp1000IS is FM Approvals certified as Intrinsically Safe for Class 1, Division 1, groups A, B, C, and D and non incandive for Class 1, Division 2 groups A, B, C, D and hazardous environments. This certification makes the device ideal for EtO Sterilization, environmental studies, and numerous other hostile environment applications.

One of the enhancements to the RHTemp1000IS is the stainless steel enclosure with engraved serial number and device name. The device interfaces with the IFC400 or the IFC406 (sold separately) docking station and can be placed directly into the dock for full communications. No more removal of end-caps to download data! The small size of the RHTemp1000IS, allows it to be placed in remote or hard to reach locations. The device now features a battery life indicator allowing users to easily identify low voltage and change batteries when required. This feature maximizes the use of your battery life and is a cost saving efficiency. The RHTemp1000IS can hold up 16,350 humidity and temperature measurements.

Its real time clock ensures that all the data is time and date stamped.

Features

- Software Battery Life Indicator
- Intrinsically Safe Certified
- 316 Stainless Steel Enclosure
- Small, Sleek Design
- Fast Response Time
- Engraved Label
- CE Compliant

Benefits

- Faster Downloads (1 min. full memory)
- Docking Station Communication
- Easily Identify Low Battery Voltage

Applications

- EtO Sterilization
- Environmental Studies
- Hostile Environment Monitoring
- Medical & Pharmaceutical



PTC® Metrology Calibration Lab
 Accredited by A2LA to ISO 17025
 ANSI/NCSL Z540-1
 Certificate number 1896.01



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The Software is a powerful, analytic tool, available to download for free from our website.

[Data Logger Software Download Version 4.2.9.0](#)

Data can be viewed in graphical or tabular formats and summary and statistics views are available for further analysis.

MADGETECH DATA LOGGER SOFTWARE

Key

- A Graph View
- B Tabular Data View
- C Statistics
- D Digital Calibration
- E Copy to Excel®

The screenshot displays the software interface with several key features highlighted:

- A Graph View:** A line graph showing temperature and humidity data over time.
- B Tabular Data View:** A table listing data points with columns for Date, Time, Time Zone, Delta, RH% (Temperature/°C), and Humidity.
- C Statistics:** A summary view showing statistical data for RH% Temperature and Humidity.
- D Digital Calibration:** A dialog box for setting calibration parameters for Temperature and Humidity.
- E Copy to Excel:** A menu option for exporting data to an Excel spreadsheet.

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view
- Multilingual

ORDERING INFORMATION

Data Loggers require a software support kit

1. RHTEMP1000IS Intrinsically Safe Humidity and Temperature Recorder with Stainless Steel enclosure.
2. IFC400 Docking station with USB cable, software, and manual
3. Calibration Certificate available for data logger
4. TL-2150/S Replacement battery for RHTemp1000IS

RHTEMP1000IS SPECIFICATIONS*

*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY.

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