



**MONARCH INSTRUMENT**

*Innovation in Instrumentation*

# DataChart® RHTemp1000

## Rugged Temperature & Humidity Data Logger

### Features

- Ruggedized/Small
- Temperature Range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Humidity Range: 5% to 95% RH
- Memory Size: 21,845 Temperature and 21,845 Humidity Readings
- Programmable Start Time
- Dew Point Calculated in Software
- Vapor Concentration Calculated in Software
- Reusable
- N.I.S.T. Traceable
- User Calibration through Software
- No Programming experience necessary
- Real Time Chart Recording Operation
- Low Cost
- Operational in Minutes
- Record Keeping Simplified

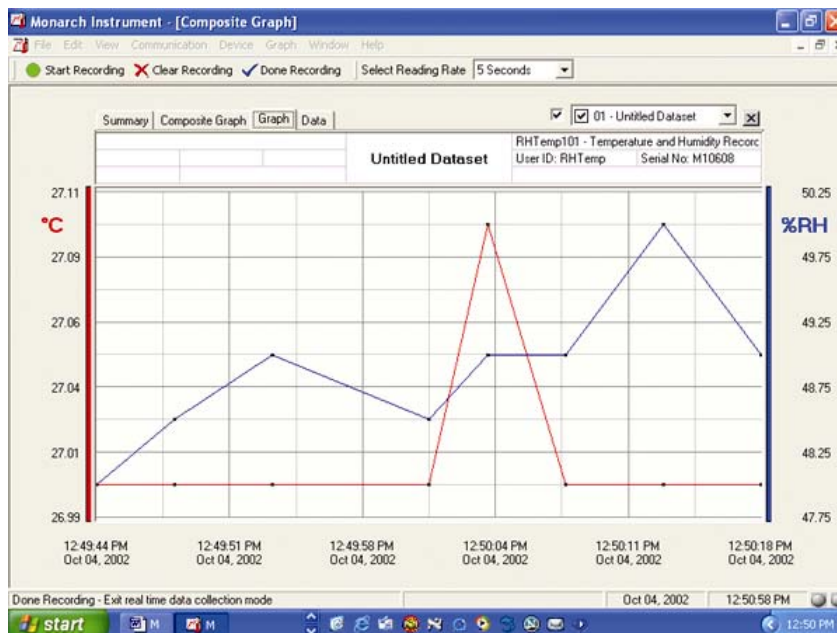
### Applications

- Hostile Environment Monitoring
- Implementing HACCP Programs
- Medical/Pharmaceutical
- Kiln Drying Studies
- Warehouse Monitoring
- Environmental Studies
- Replace Costly Strip Chart Recorders



### Description

This Rugged Humidity and Temperature Logger is a waterproof, battery powered, stand-alone device used for automatically recording temperatures between  $-40^{\circ}\text{C}$  and  $125^{\circ}\text{C}$ . This all-in-one, compact, portable, easy to use device will measure and record up to 21,845 temperature and 21,845 humidity measurements. Because it is ruggedized, it can be used in harsh environments. The RHTemp1000 is a major leap forward in both size and performance. Its real time clock ensures that all data is time and date stamped. The storage medium is non-volatile solid-state memory, providing maximum data security even if the battery becomes discharged. Its small size allows it to fit almost anywhere. Data retrieval is simple. Plug it into an empty COM port and our easy to use software does the rest.



## Specifications

**Temperature Range:** -40°C to +125°C

**Extended Temperature Range:** 101°C to 125°C; 15 minutes

**Calibrated Temperature Accuracy:**  $\pm 0.5^\circ\text{C}$  ( $0^\circ\text{C}$  to  $+50^\circ\text{C}$ )

**Temperature Resolution:**  $0.1^\circ\text{C}$

**Humidity Range:** 5% to 95% RH (non-condensing)

**Humidity Accuracy:** 3% RH

**Humidity Resolution:** 0.5% RH

**Temperature & Humidity Calibration:** Digital calibration is available through software.

**N.I.S.T. Traceable:** N.I.S.T. certificates available.

**Calibration Date:** Automatically recorded within device to alert user when calibration is required.

**Recording Interval:** 30/minute to 2/day selectable through software.

**Start Time:** Start time and date are programmable through software.

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

**Memory:** 21,845 temperature readings and 21,845 humidity readings max.

**User-Replaceable Battery:** 1 year typical.

**Time Accuracy:**  $\pm 1$  minute per month at  $20^\circ\text{C}$

**Data Format:** Date and Time stamped, %RH, mg/ml of water vapor concentration,  $^\circ\text{C}$ ,  $^\circ\text{F}$ ,  $^\circ\text{K}$ ,  $^\circ\text{R}$ .

**Shock resistance:** Drop proof to 5'.

**Weight:** 8 oz.

**Computer Interface:** RS 232C Serial Port

Software: Windows®95/98/NT/2000/XP based software for complete control and operation.

**Operating Environment:** -40°C to +125°C, 0% to 100% RH

**Dimensions:** 5.4" x 1.0" dia. (138mm x 26mm dia.)

**Material:** Clear Anodized Aluminum (stainless steel available)

## Software Features

*The software used to operate the RHTemp1000 requires no programming skills, enables users to effortlessly select reading rate, user ID and initiate the start of data collection within moments after user connects hardware. After retrieving the data, it may be viewed instantly in graphical or tabular form.*

**Zoom In/Out:** Use mouse to click and drag to select area for zooming in or out.

**Statistics:** min, max, mean, mean kinetic temperature, standard deviation

**Cursor:** Use mouse to click on graph to obtain specific reading information.

**Programmable Start Time:** Program start time and date through software.

**Real Time Operation:** Convert PC into strip chart recorder for real time data collection.

**Annotating Data:** All data points may be easily annotated.

**Printing:** Automatic printing of data in graphical or tabular form

**Units:**  $^\circ\text{C}$ ,  $^\circ\text{F}$ ,  $^\circ\text{K}$ ,  $^\circ\text{R}$ , %RH, dew point, mg. of water vapor concentration.

**User ID:** Programmable through software and stored within device.

**AutoScale:** Autoscale function may be enabled or disabled by user.

**Calibration:** Automatic calibration through software and calibration parameters stored within device

**Exporting Data:** All data can be directly exported to Microsoft Excel® or to text format.

**Graph Grid Size:** The grid size is user selectable.

### ORDERING INFORMATION

Item No.	Model	Description
5399-0203	RHTemp1000	Rugged, Temperature and Humidity Data Logger - Aluminum Case
5399-0204	RHTemp1000	Rugged, Temperature and Humidity Data Logger - Stainless Steel Case
5399-9901	IFC101	9 Pin Computer Interface Cable Software & Manual

### Ask About Our Other Data Loggers

Temperature	4.0 to 20.0 mA
Humidity	Pulse/Counter
Pressure	Submersible
pH	Level
Shock/Vibration	Multi-Parameter
Voltage	Intrinsically Safe
RF Transmitters	

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