DATASHEET

RHTemp1000Ex

MadgeTech

Distributed by AKRIBIS

MADGETECH
WE BUILD DATA LOGGERS

RHTemp1000Ex

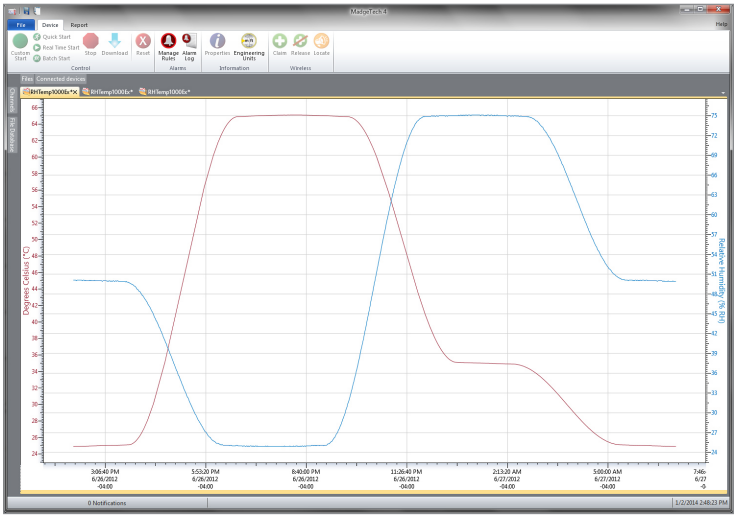
Intrinsically Safe Humidity and Temperature Data Logger

The new RHTemp1000Ex is an Intrinsically Safe humidity and temperature data logger. It carries hazardous location, intrinsically safe certification in accordance with the latest issue of IECEx 60079-0, IECEx 60079-11 and Directive 2014/34/EU (known as ATEX).

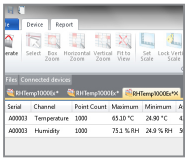
The device can be started and stopped directly from your computer and its small, sleek size allows it to fit almost anywhere. The RHTemp1000Ex makes data retrieval quick and easy. Simply insert the device into the IFC400 or the IFC406 USB docking station (sold separately) and our user-friendly software does the rest. The small size of the RHTemp1000Ex, allows it to be placed in remote or hard to reach locations. The device 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 MadgeTech Software is a powerful, analytic tool, available to download for free from our website **madgetech.com**. Data can be viewed in graphical or tabular formats and summary and statistics views are available for further analysis.

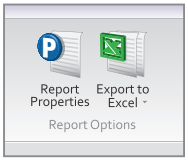
MadgeTech 4 Software Features



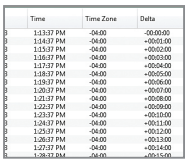
Graph View



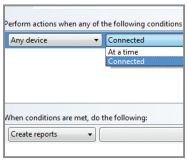
Statistics



Export to Excel



Tabular Data View



Automation

- 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
- Summary view

Features

- Software Battery Life Indicator
- 316 Stainless Steel Enclosure
- Small, Sleek Design
- Fast Response Time
- Engraved Label
- CE Compliant
- Optional Key Ring End Cap

Certified Intrinsically Safe

- Electrical Protection Concepts: IEC: 60079-11 Ex ia – Ex ic, Intrinsic Safety Zones 0-2
- Equipment Protection Level: Ga – Gc, Zones 0-2
- Gas Groups: IIC
- Temperature Class: T4

Benefits

- Fast Downloads (1 min. full memory)
- ISO 17025 Accredited Calibration Certificate Included
- Easily Identify Low Battery Voltage

Applications

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

SPECIFICATIONS

Specifications are subject to change without notice. Specific warranty remedy limitations apply. Call (603) 456-2011 or go to **madgetech.com** for details.

TEMPERATURE	
Temperature Sensor	Resistance Temperature Detector (RTD)
Temperature Range	-40 ºC to +80 ºC (-40 ºF to +176 ºF)
Temperature Resolution	0.01 ºC (0.018 ºF)
Calibrated Accuracy	±0.5 °C (0 °C to +55 °C), ±0.9 °F (32 °F to 122 °F)

HUMIDITY	
Humidity Sensor	Capacitive Polymer
Humidity Range	0 %RH to 100 %RH (non-condensing)
Humidity Resolution	0.1 %RH
Calibrated Accuracy	±3.0 %RH maximum
Specified Accuracy Range	25 %RH to 75 %RH +20 °C to +40 °C (68 °F to 104 °F) Hysteresis Error 1 % typical, 3 % 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
Password Protection	Yes
Memory	32,640 readings
Wrap Around	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 and displayed in software
Battery Type	Tadiran TL-2150/S 3.6V lithium battery included, user replaceable in a non-hazardous location
Battery Life	2 years typical at 15 minute reading rate
Time Accuracy	1 minute/month at 25 °C
Data Format	Date and time stamped °C, °F, K, °R; %RH, mg/mL, Dew Point
Computer Interface	IFC400 or IFC406
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.2.17.0 or later Secure Software version 4.2.16.0 or later
Operating Environment	-40 ºC to +80 ºC (-40 °F to +176 °F) 0 %RH to 100 %RH (case properly sealed) 0.002 PSIA to 100 PSIA
Dimensions	Without Key Ring: 1.67 in x 0.97 in dia. (42.3 mm x 24.6 mm dia.) With Key Ring: 1.98 in x 0.97 in dia. (50.2 mm x 24.6 mm dia.)
Weight	Without Key Ring: 2.4 oz (68 g) With Key Ring: 2.2 oz (63 g)
Material	316 Stainless Steel/Radel
IP Rating	Not Rated
Approvals	CE ATEX Certificate #: 19ATEX0126 IECEx Certificate #: BAS 19.0109

BATTERY 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).

Ordering Information

RHTemp1000Ex	PN 902154-00	Intrinsically Safe Humidity and Temperature Data Logger
RHTemp1000Ex-KR	PN 902208-00	Intrinsically Safe Humidity and Temperature Data Logger with key ring end cap
IFC400	PN 900319-00	Docking station with USB cable
IFC406	PN 900325-00	6 Port, Multiplexer docking station with USB cable
TL-2150/S	PN 901745-00	Replacement battery for the RHTemp1000Ex and RHTemp1000Ex-KR

For Quantity Discounts call (603) 456-2011 or email **sales@madgetech.com**

MADGETECH
WE BUILD DATA LOGGERS
6 Warner Road, Warner, NH 03278
(603) 456-2011 | madgetech.com

AKRIBIS www.akribis.info | contact@akribis.info