# TEMPRETRIEVER-RH LOW COST TEMPERATURE & HUMIDITY DATA LOGGER



#### Features

- Low cost
- · User-friendly
- Push button start and stop
- LED alarm indication
- User selectable alarm limits
- · Programmable start time
- Reusable
- Miniature size
- 38,400 baud offload speed
- · Approved for Delta® Mainline Flights

#### Applications

- · Implement HACCP programs
- · Cold chain monitoring
- Verify products are stored and shippped safely
- Monitor refrigerated cars
- · Medical and Pharmaceutical
- Meat aging
- Laboratory
- · Research and Development
- · Replace costly strip chart recorders

To ensure the quality of perishable goods, temperature and humidity monitoring has become essential in applications such as transportation and storage, horticulture, and heating and ventilation. The TempRetriever-RH makes safeguarding against dangerous environments simple.

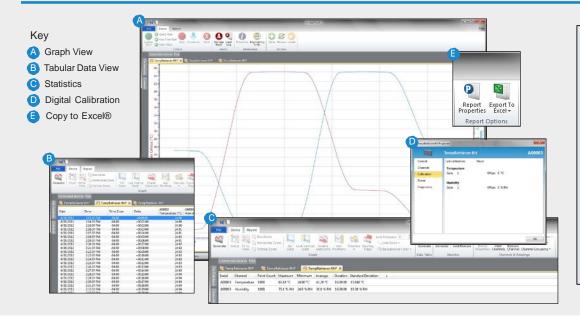


The TempRetriever-RH is a low cost, reusable,

temperature and humidity recorder. No external probes are required to achieve its high performance as both the humidity and temperature sensors are internal to the device. The device can record up to 16,383 readings in its non-volatile memory and coupled with up to a one year battery life, this makes for the perfect temperature and humidity recorder when keeping down costs is paramount.

The MadgeTech software includes a full host of features that allows the user to set the start method (i.e. pushbutton, delayed start or start now), start date and time, sample rate, high/low alarm limits, 6-character device ID and a 16-character extended ID. Data can be offloaded and displayed in most common temperature and humidity units. The software will also automatically calculate Mean Kinetic Temperature, dew point, water vapor concentration as well as other useful statistics to simplify analysis. For additional custom analysis, the data can be quickly exported into a MS Excel® spreadsheet with the click of a button.

#### MADGETECH DATA LOGGER SOFTWARE



#### Software Features:

- 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

# TEMPRETRIEVER-RH SPECIFICATIONS\*

## Temperature

Temperature Sensor:	Semiconductor
Temperature Range:	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution:	0.1 °C (0.18 °F)
Calibrated Accuracy:	±0.5 °C (0 °C to +50 °C)

## Humidity

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Humidity Sensor:	Semiconductor
Humidity Range:	0 %RH to 95 %RH
Humidity Resolution:	0.1 %RH
Calibrated Accuracy:	±3.0 %RH (±2 %RH typical at 25 °C)
Accuracy Range:	+10 °C to +40 °C (+50 °F to +104 °F), 10 %RH to 80 %RH
Response Time:	90% change in 60 seconds in slow moving air
Activity Indicator:	Green LED blinks every 15 seconds to indicate device has been started.
Temperature Alarm:	Programmable high and low limits; When logged data reaches or exceeds either limit, red LED blinks every three seconds
Memory:	16,383 readings per channel; 32,766 total readings

Reading Rates:	1 reading every 5 seconds up to 1 reading every 30 minutes
Start Modes:	Software programmable immediate start or delay start up to 6 months in advance; or external pushbutton
Time Accuracy:	±2 minute/month at 25 °C (77 °F).
Data Format:	Date and time stamped °C, °F, K, °R; %RH, mg/ml water vapor concentration
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included, user replaceable
Battery Life:	1 year typical @ 25 °C, 1 minute reading rate
Computer Interface:	PC serial or USB (interface cable required); 38,400 baud
Software:	XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	1.4 in x 2.2 in x 0.6 in (36 mm x 56 mm x 16 mm)
Weight:	0.9 oz (24 g)
Approvals:	Approved for carriage on Delta® mainline flights

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

# ORDERING INFORMATION

MODEL	DESCRIPTION
TEMPRETRIEVER-RH	Low cost, Reusable, Humidity and Temperature Recorder
IFC110	Software, manual and RS232 interface cable
IFC200	Software, manual and USB interface cable
NIST	NIST Calibration Certificate
LTC-7PN	Replacement battery for TempRetriever-RH
MadgeTech 4 Secure Software License	License for MadgeTech Secure Software (unlimited users, 1 license per computer, more licenses are available.)

