RHTEMP101A
HUMIDITY AND TEMPERATURE
DATA LOGGER

MADGETECH
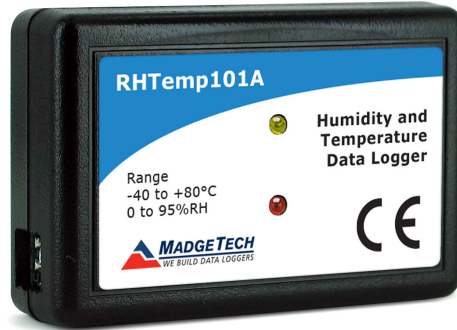WE BUILD DATA LOGGERS

Features
- 10 Year Battery Life
- 1 Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 1,032,192 Readings Per Channel, Storage Capacity
- Memory Wrap
- Precision RTD Sensing Element
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- NIST Traceable
- Field Upgradeable

Benefits
- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications
- Implement HACCP Programs
- HVAC
- Warehouse Monitoring
- Museum Monitoring
- Medical/Pharmaceutical
- General Purpose Humidity Recording

For many applications that require the monitoring of both ambient temperature and humidity, the RHTemp101A is the ideal solution. Used for warehouse and museum monitoring as well as HVAC studies, the RHTemp101A can measure ambient temperature from -40 °C to +80 °C and humidity from 0 %RH to 95 %RH.

This compact device can be placed virtually anywhere to provide an accurate temperature and humidity record of the environment. Use several RHTemp101A's to capture a thorough mapping of large rooms or facilities.
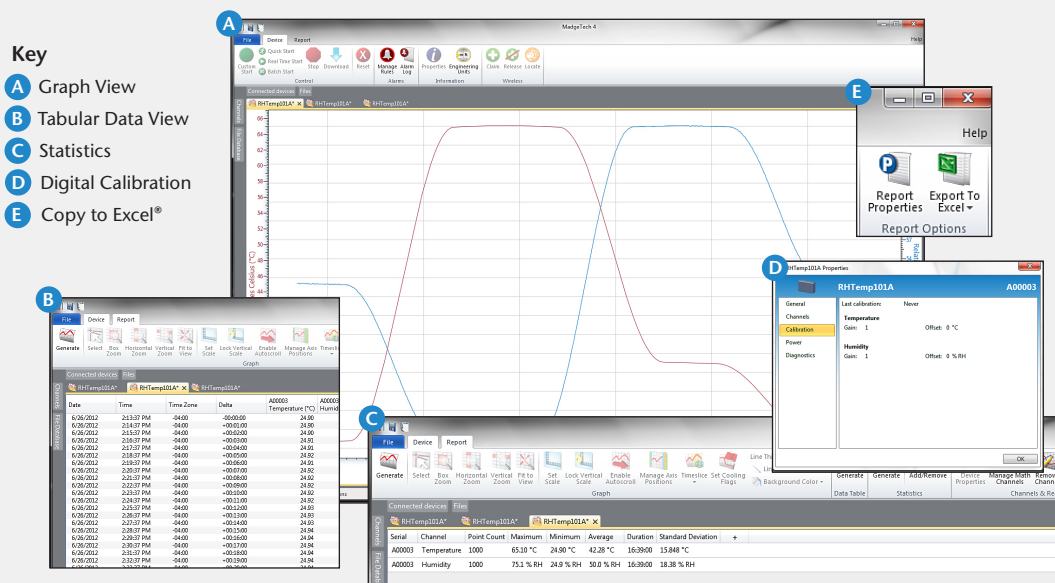
Using the MadgeTech Software, the device can be configured to record at user selected intervals as frequent as one reading every second to as seldom as one reading every 24 hours. With a 10 year battery life and the ability to store over 1,000,000 readings per channel, the RHTemp101A is perfect for long term data logging studies.

This affordable, low maintenance device is popular for many applications in the medical & pharmaceutical industry, storage monitoring and general purpose humidity recording.

MADGETECH DATA LOGGER SOFTWARE

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

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

RHTEMP101A SPECIFICATIONS*

Temperature Sensor:	Precision RTD Element
Temperature Range:	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution:	0.01 °C (0.018 °F)
Calibrated Accuracy:	±0.5 °C (±0.9 °F)
Calibrated Accuracy Range:	0 °C to +55 °C
Humidity Sensor:	Internal Semiconductor
Humidity Range:	0 %RH to 95 %RH
Humidity Resolution:	0.1 %RH
Calibrated Accuracy:	±3.0 %RH
Specified Accuracy Range:	25 %RH to 75 %RH +20 °C to +40 C Hysteresis Error 1 % typical, 3 % Maximum
Reading Rate:	1 reading every second up to 1 reading every 24 hours
Memory:	• 1,032,192 readings per channel; software configurable memory wrap • 516,096 readings in multiple start/stop mode
Wrap Around:	Yes
Start Modes:	• Immediate start • Delay start up to 18 months • Multiple pushbutton start/stop
Multiple Start/Stop Mode:	Start and stop the device multiple times without having to download data or communicate with a PC
Stop Modes:	• Manual through software • Timed (specific date and time)
Multiple Start/Stop Mode Activation:	To start the device: *Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.* To stop the device: *Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.*
Real Time Recording:	The device may be used with PC to monitor and record data in real time.

Alarm:	Programmable high and low limits; alarm is activated when humidity reaches or exceeds set limits
LED Functionality:	Green LED blinks: *10 second rate to indicate logging* *15 second rate to indicate delay start mode* Red LED blinks: *10 second rate to indicate low battery and/or full memory* *1 second rate to indicate an alarm condition*
Password Protection:	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included; **user replaceable**
Battery Life:	10 years typical at a 15 minute reading rate
Data Format:	Date and time stamped °C, °F, K, °R ; %RH, mg/ml water vapor concentration, dew point
Time Accuracy:	±1 minute/month (at 20 °C/68 °F, stand alone data logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Software:	Windows XP SP3 or later
MadgeTech Software Compatibility:	Standard Software version 2.03.06 or later Secure Software version 4.1.3.0 or later
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 (35.1 mm x 54.1 mm x 14.8 mm)
Weight:	0.9 oz (24 g)
Materials:	ABS Plastic
Approvals:	CE

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

MODEL	PART NUMBER	DESCRIPTION
RHTEMP101A	901499-00	Humidity and Temperature Data Logger
IFC200	900298-00	USB interface cable
LTC-7PN	900352-00	Replacement battery for RHTemp101A

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

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