

# RHTemp101A

## Humidity and Temperature Data Logger



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.

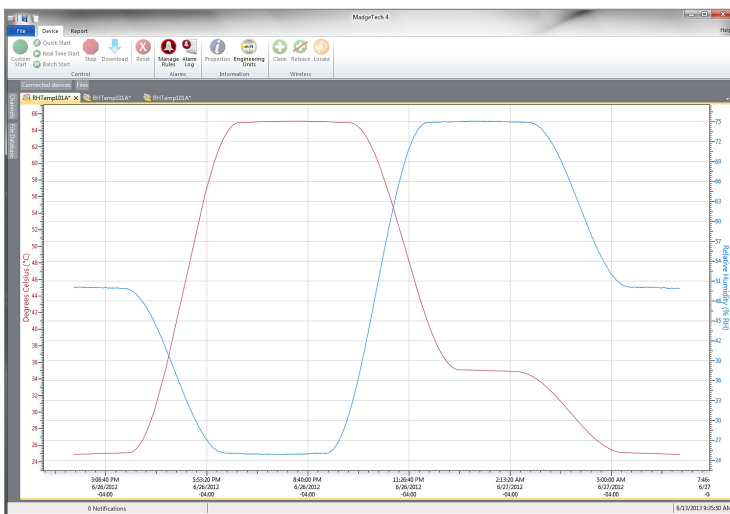
Using the MadgeTech Software, the device can be configured to record at user selected intervals as frequent as one reading every second to as seldom as one reading every 24 hours. With a 10 year battery life and the ability to store over 1,000,000 readings per channel, the RHTemp101A is perfect for long 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.

### Features

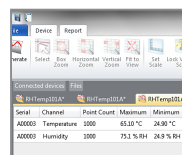
- 10 Year Battery Life
- 1 Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 1,047,552 Readings Per Channel, Storage Capacity
- Memory Wrap
- Precision RTD Sensing Element
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- NIST Traceable
- Field Upgradeable

### MadgeTech 4 Software Features

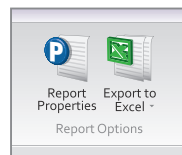


Graph View

- 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



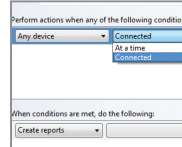
Statistics



Export to Excel

Time	Time Zone	Data
1:13:37 PM	-04:00	-05:00:00
1:14:37 PM	-04:00	-05:01:00
1:15:37 PM	-04:00	-05:02:00
1:16:37 PM	-04:00	-05:03:00
1:17:37 PM	-04:00	-05:04:00
1:18:37 PM	-04:00	-05:05:00
1:19:37 PM	-04:00	-05:06:00
1:20:37 PM	-04:00	-05:07:00
1:21:37 PM	-04:00	-05:08:00
1:22:37 PM	-04:00	-05:09:00
1:23:37 PM	-04:00	-05:10:00
1:24:37 PM	-04:00	-05:11:00
1:25:37 PM	-04:00	-05:12:00
1:26:37 PM	-04:00	-05:13:00
1:27:37 PM	-04:00	-05:14:00
1:28:37 PM	-04:00	-05:15:00

Tabular Data View



Automation

### Benefits

- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment
- Compact and Portable

### Applications

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

## SPECIFICATIONS

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

TEMPERATURE	
Temperature Sensor	Precision RTD Element
Temperature Range	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution	0.01 °C (0.02 °F)
Calibrated Accuracy	±0.5 °C (±0.9 °F) from 0 °C to 55 °C (+32 °F to +131 °F) ±1.0 °C (±1.8 °F) from -40 °C to 0 °C (-40 °F to +32 °F) and +55.01 °C to +80 °C (+131.01 °F to +176 °F)

HUMIDITY	
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

GENERAL	
Start Modes	Immediate start Delay start up to 18 months Multiple pushbutton start/stop
Stop Modes	Manual through software Timed (specific date and time)
Multiple Start/Stop Mode	Start and stop the device multiple times without having to download data or communicate with a PC
Real Time Recording	May be used with PC to monitor and record data in real time
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read without the password.
Memory	1,047,552 readings per channel; software configurable memory wrap 349,184 readings in multiple start/stop mode
Wrap Around	Yes
Reading Rate	1 reading every second up to 1 reading every 24 hours
Alarm	Programmable high and low limits; alarm is activated when humidity reaches or exceeds set limits
LEDs	2 status LEDs
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device
Battery Type	3.6 V 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 25 °C (77 °F)
Computer Interface	USB (interface cable required); 115,200 baud
Operating System Compatibility	Windows XP SP3 or later
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 2.1 in x 0.6 in (35 mm x 54 mm x 15 mm)
Weight	0.8 oz (24 g)
Material	Polycarbonate
Approvals	CE

**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.

## Ordering Information

RHTemp101A	PN 901499-00	Humidity and Temperature Data Logger
IFC200	PN 900298-00	USB interface cable
LTC-7PN	PN 900352-00	Replacement battery for the RHTemp101A