# RHTemp101A
## Humidity and Temperature Data Logger



RHTemp101A
Humidity and Temperature Data Logger
Ambient Range: (-40 to +80) °C
RH Range: (0 to 95) %RH

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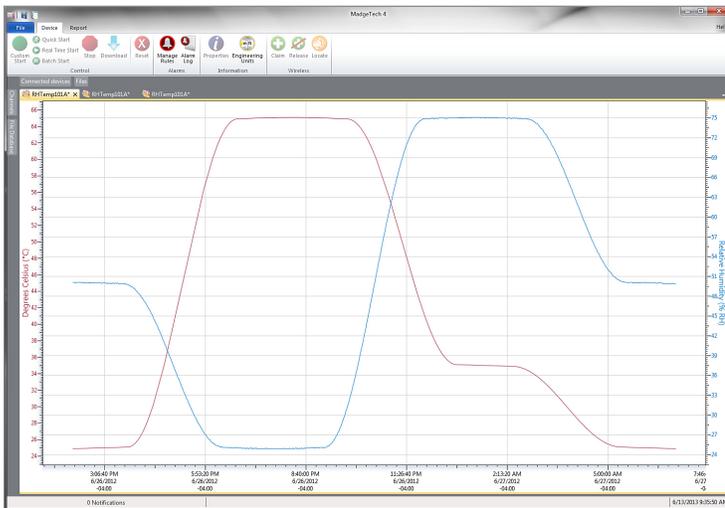
Using the MadgeTech Software, the device can be configured to record at user selected intervals as frequent as one reading every second to as seldom as one reading every 24 hours. With a 10 year battery life and the ability to store over 1,000,000 readings per channel, the RHTemp101A is perfect for long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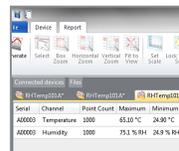
## Features

- 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

## 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

## MadgeTech 4 Software Features



Graph View



Statistics



Report Options

Export to Excel



Tabular Data View



Automation
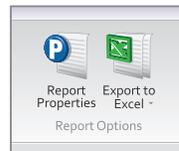
- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
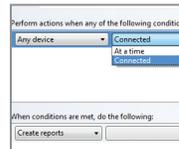- Min./Max./Average lines
- Summary view

# 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** | 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 |

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