

Description	PRHTemp101A
Pressure Sensor	Piezoresistive
Pressure Range	250 mbar to 1300 mbar
Pressure Resolution	0.02 mbar
Pressure Calibrated Accuracy	10 mbar
Humidity Sensor	Capacitive Polymer
Humidity Range	0 %RH to 95 %RH
Humidity Resolution	0.1 %RH
Humidity Calibrated Accuracy	3 %RH
Temperature Sensor	RTD
Temperature Range	-40 °C to +80 °C (-40 °F to +176 °F)
Temperature Resolution	0.01 °C
Temperature Calibrated Accuracy	±0.5 °C
Memory	688,128 readings; software configurable memory wrap 412,876 readings; (manual or trigger mode)
Reading Rate	1 reading every second to 1 reading every 24 hours
LED Indicator	Red and green
Required Interface Package	IFC200
Baud Rate	115,200
Typical Battery Life	10 year battery life typical, at a 15 minute reading rate
Operating Environment	-40 °C to +80 °C, 0 %RH to 95 %RH non-condensing 0.002 PSIA to 100 PSIA
Material	ABS plastic
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	CE

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 100 °C (212 °F), INCINERATE, CRUSH OR EXPOSE CONTENTS TO WATER.

*Specifications subject to change.
See MadgeTech's terms and conditions*

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Product User Guide

PRHTemp101A



PRHTemp101A
Pressure, Humidity & Temperature Data Logger
with a 10 Year Battery Life

Product Notes

The PRHTemp101A is a pressure, humidity and temperature data logger, specifically designed to be compact and portable for use in a variety of applications like museum and archive preservation, shipping and transportation, warehouse monitoring, HVAC and more.

LEDs

- Green LED blinks: 10 seconds to indicate logging and 15 seconds to indicate delay start mode/standby (*waiting to start*)
- Red LED blinks: 10 seconds to indicate low battery and/or memory and 1 second to indicate an alarm condition met.

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

Multiple Start/Stop Mode Activation

- To start 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.

Alarm Settings

Programmable high and low limits; alarm is activated when the environment reaches or exceeds set limits. (*Pressure channel only*)

Installation Guide

Installing the Interface Cable

- IFC200
- Insert the device into a USB port. The drivers will install automatically.

Installing the Software

The Software can be downloaded from the MadgeTech website. Follow the instructions provided in the Installation Wizard.

Device Operation

Connecting and Starting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Connect the USB end of the interface cable into an open USB port on the computer.
- The device will appear in the Connected Devices list, highlight the desired data logger.
- For most applications, select **"Custom Start"** from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click **"Start"**. (*"Quick Start" applies the most recent custom start options, "Batch Start" is used for managing multiple loggers at once, "Real Time Start" stores the*

dataset as it records while connected to the logger.)

- The status of the device will change to **"Running"**, **"Waiting to Start"** or **"Waiting to Manual Start"**, depending upon your start method.
- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Highlight the data logger in the Connected Devices list. Click **"Stop"** on the menu bar.
- Once the data logger is stopped, with the logger highlighted, click **"Download"**. You will be prompted to name your report.
- Downloading will offload and save all the recorded data to the PC.

Device Maintenance

Battery Replacement

Materials: Small Phillips Head Screwdriver & Replacement Battery (LTC-7PN)

- Puncture the center of the back label with the screw driver and unscrew the enclosure.
- Remove the battery by pulling it perpendicular to the circuit board.
- Insert the new battery into the terminals and verify it is secure.
- Screw the enclosure back together securely.

Note: Be sure not to over tighten the screws or strip the threads.

Recalibration

The PRHTemp101A standard calibration is one point for temperature at 25 °C, two points for humidity at 25 %RH and 75 %RH and two points for pressure at 460 mbar and 1095 mbar.

Recalibration is recommended annually for any MadgeTech data logger; a reminder is automatically displayed in the software when the device is due.

Prices and specifications subject to change. See MadgeTech's terms and conditions