MADGETECH
WE BUILD DATA LOGGERS

Description	PRHTemp101	PRHTemp110
Temperature Sensor	Internal 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 (±0.9 °F)	
Pressure Sensor	Semiconductor (strain gauge)	
Pressure Range	0 PSIA to 30 PSIA	
Pressure Resolution	0.002 PSIA	
Calibrated Accuracy	±1 %FSR @ 25 °C, ±0.2% typical	
Humidity Sensor	Internal Semiconductor	
Humidity Range	0 %RH to 95 %RH	
Humidity Resolution	0.5 %RH	
Calibrated Accuracy	±3.0 %RH	
Memory	13,107/channel	
Reading Rate	1 reading every 2 seconds up to 1 reading every 12 hours	
LED	Red	
Typical Battery Life	1 year	10 years
Required Interface Package	IFC110 or IFC200	
Baud Rate	2,400	57,600
Operating Environmant	–40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH (non–condensing)	
Material	ABS plastic	
Dimensions	1.4 in x 2.2 in x 0.9 in (36 mm x 56 mm x 23 mm)	1.7 in x 2.3 in x 0.9 in (44 mm x 59 mm x 23 mm)
Approvals	CE	

Battery Warning

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).

Specifications subject to change.
See MadgeTech's terms and conditions at www.madgetech.com

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DOC-1027035-00 REV 11 2014.11.11

Product Information Card

PRHTemp101 and PRHTemp110

PRHTemp101
Temperature, Humidity and Pressure Data Logger

PRHTemp110
Temperature, Humidity and Pressure Data Logger
with a 10 Year Battery Life

MADGETECH
WE BUILD DATA LOGGERS

To view the full MadgeTech product line,
visit our website at www.madgetech.com.

Product Notes

The PRHTemp101 and PRHTemp110 both measure ambient temperature, humidity and barometric pressure. The temperature and humidity sensors are internal to the device and the port for the pressure sensor is located on the front of the device.

LEDs

Once started, the LED will flash at the selected reading rate to indicate that the device is running.

Installation Guide

Installing the Interface cable

- IFC200
  Insert the device into a USB port. The drivers will install automatically.
- IFC110
  Plug the serial cable into the port and verify it is secure.

Installing the software

Insert the Software USB Stick in an open USB port. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the 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

- Connect the logger to the interface cable.
- 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 PRHTemp101 or PRHTemp110 standard calibration is performed at one temperature point at 25 °C, two humidity points at 25 %RH and 75 %RH and two pressure points at 14.7 PSI and 30 PSI.

Pricing:

Recalibration traceable to NIST	$150.00
Recalibration	$100.00

Additional Services:

Custom calibration and verification point options available, please call for pricing.

Call for custom calibration options to accommodate specific application needs.
Prices and specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com
To send devices to MadgeTech for calibration, service or repair, please use the MadgeTech RMA Process by visiting www.madgetech.com, then under the services tab, select RMA Process.