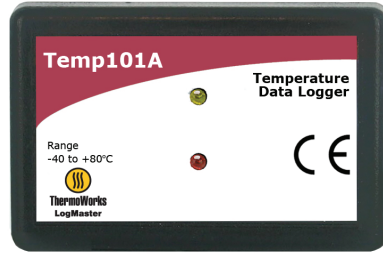


# TEMP101A

## TEMPERATURE DATA LOGGER



### Features

- 10 Year Battery Life
- $\pm 0.5^{\circ}\text{C}$  ( $\pm 0.9^{\circ}\text{F}$ ) Accuracy
- Multiple Start/Stop Function
- Ultra High Speed Download
- 1 Million Reading Storage Capacity
- Memory Wrap
- Precision RTD Sensing Element
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- N.I.S.T. Traceable
- Field Upgradeable

### Benefits

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

### Applications

- Cold Chain
- Refrigerator and Freezer Monitoring
- Vaccine Monitoring
- Warehouse Mapping
- HVAC
- General Purpose Temperature Recording

The Temp101A is one of ThermoWorks' newest data loggers. It is part of a new series of low cost, state-of-the-art data logging devices. ThermoWorks has taken the lead in offering the most advanced, low cost, battery powered data loggers in the world today.

The Temp101A offers a 10 year battery life, a multiple start/stop function, ultra-high speed download capability, 1 million reading storage capacity, optional memory wrap, precision RTD sensing element, battery life indicator, optional password protection, programmable high-low alarms and more. The Temp101A is priced at \$89 each and can be delivered from stock now. Our research has shown that the Temp101A is second to no other data logger when it comes to price and performance.

Using the ThermoWorks LogMaster Software, starting, stopping and downloading from the Temp101A is simple and easy. Graphical, tabular and summary data is provided for analysis and data can be viewed in  $^{\circ}\text{C}$ ,  $^{\circ}\text{F}$ , K or  $^{\circ}\text{R}$ . The data can also be automatically exported to Excel<sup>®</sup> for further calculations.

As the leader in low power data logger technology, ThermoWorks continuously improves its products and develops solutions to meet ever-changing challenges. The Temp101A was designed with our customers in mind. ThermoWorks offers free firmware upgrades for the life of the product so that data loggers already deployed in the field can grow with new technological developments. Units do not need to be returned to the factory for upgrades. The user can do this automatically from any PC.

## @&I =O 3H 3 =- > DATA LOGGER SOFTWARE

**Key**

- A Graph View
- B Tabular Data View
- C Statistics
- D Digital Calibration
- E Copy to Excel<sup>®</sup>

The screenshot displays the LogMaster software interface. The main window shows a graph of temperature data over time. A data table window (B) is open, showing a list of readings with columns for 'Rdy #', 'Date & Time (EST)', 'Temperature', and 'Units'. A statistics window (C) is also open, showing various parameters like 'User Reading', 'Last Reading', 'High Temp', 'Low Temp', 'Range', 'Standard Deviation', and 'Mean/Stdv Temperature'. A calibration window (D) is open, showing fields for 'Device Type', 'Serial Number', 'Last Calibration Date', and 'Next Calibration Due'. A 'Copy to Excel' button (E) is visible on the graph window.

Rdy #	Date & Time (EST)	Temperature	Units
1	Nov 30, 2010 01:13:27 PM	24.9	$^{\circ}\text{C}$
2	Nov 30, 2010 01:14:37 PM	24.9	$^{\circ}\text{C}$
3	Nov 30, 2010 01:15:37 PM	24.9	$^{\circ}\text{C}$
4	Nov 30, 2010 01:16:37 PM	24.9	$^{\circ}\text{C}$
5	Nov 30, 2010 01:17:37 PM	24.9	$^{\circ}\text{C}$
6	Nov 30, 2010 01:18:37 PM	25	$^{\circ}\text{C}$
7	Nov 30, 2010 01:19:37 PM	24.9	$^{\circ}\text{C}$
8	Nov 30, 2010 01:20:37 PM	24.9	$^{\circ}\text{C}$
9	Nov 30, 2010 01:21:37 PM	24.9	$^{\circ}\text{C}$
10	Nov 30, 2010 01:22:37 PM	24.9	$^{\circ}\text{C}$
11	Nov 30, 2010 01:23:37 PM	24.9	$^{\circ}\text{C}$
12	Nov 30, 2010 01:24:37 PM	24.9	$^{\circ}\text{C}$
13	Nov 30, 2010 01:25:37 PM	24.9	$^{\circ}\text{C}$
14	Nov 30, 2010 01:26:37 PM	25	$^{\circ}\text{C}$

- Software Features:**
- Multiple graph overlay
  - Statistics
  - Digital calibration
  - Zoom in/ zoom out
  - Lethality equations ( $F_0$ , PU)
  - Mean Kinetic Temperature
  - Full time zone support
  - Data annotation
  - Min./Max./Average lines
  - Data table view
  - Automatic report generation
  - Summary view
  - Multilingual

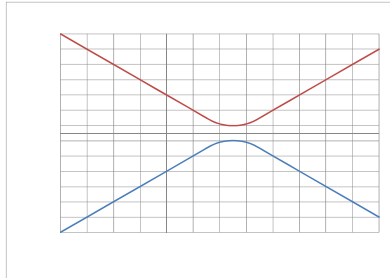
# TEMP101A SPECIFICATIONS\*

**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)



**Reading Rate:** 1 reading every second to 1 reading every 24 hours

**Memory:** 1,000,000 readings; software configurable memory wrap  
330,000 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

**Multiple Start/Stop Mode** To start the device:

**Activation:** 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 temperature 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

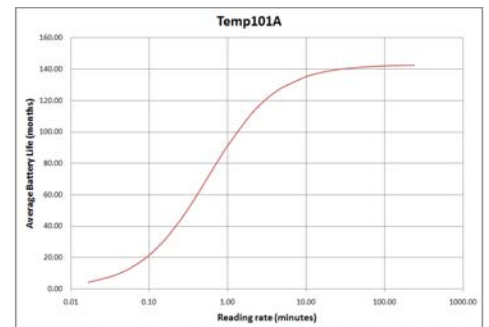
**Password Protection:** An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.

**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



Graph display of the device recording in a 25° C environment.

**Data Format:** Date and time stamped °C, °F, K, °R

**Time Accuracy:** ±1 minute/month (at 20°C/60°F, stand alone data logging)

**Computer Interface:** USB (interface cable required); 115,200 baud

**Software:** XP SP3/Vista/Windows 7

**Operating Environment:** -40°C to +80°C (-40°F to +176°F),  
0%RH to 95%RH non-condensing

**Dimensions:** 1.4" x 2.2" x 0.6" (36mm x 56mm x 16mm)

**Weight:** 0.8 oz (24 g)

**Materials:** ABS Plastic

**Approvals:** CE

**BATTERY WARNING:** WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, CRUSH, PENETRATE, OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80°C (176°F).

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY REMEDY LIMITATIONS APPLY. CALL 1-801-756-7705 OR GO TO WWW.THERMOWORKS.COM FOR DETAILS.

## ORDERING INFORMATION



**ThermoWorks**

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