

# TEMP101A

## TEMPERATURE DATA LOGGER



### Features

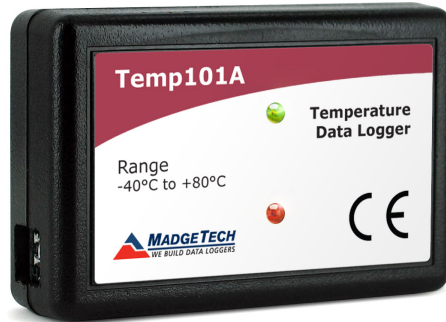
- 10 Year Battery Life
- $\pm 0.5^{\circ}\text{C}$  ( $\pm 0.9^{\circ}\text{F}$ ) Accuracy
- Multiple Start/Stop Function
- Ultra High Speed Download
- 2 Million Reading Storage Capacity
- Memory Wrap
- Precision RTD Sensing Element
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- 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 second to none in the compact, portable and low cost data logger class. This device can measure and record ambient temperature from  $-40^{\circ}\text{C}$  to  $80^{\circ}\text{C}$  and is approximately the size of a matchbox which allows for easy placement even in tight spaces.

The Temp101A features a pushbutton start/stop on the device or can be configured to start

and stop using the MadgeTech Data Logger Software, with the ability to schedule a delayed start up to eighteen months in advance. These features combined with the ability to store up to 2,000,000 readings makes the Temp101A the ideal solution for long term temperature deployment and monitoring cycles.

Some common applications for the Temp101A include but are not limited to cold chain and shipping applications, warehouse and facility mapping, HVAC or refrigerator and freezer monitoring.

## MADGETECH DATA LOGGER SOFTWARE

**Key**

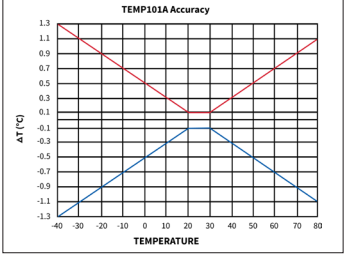
- A** Graph View
- B** Tabular Data View
- C** Statistics
- D** Digital Calibration
- E** Copy to Excel®

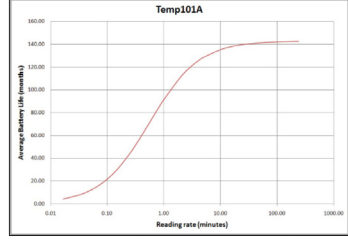
The screenshot displays the software interface with several windows. The main window shows a graph of temperature over time (Graph View). A smaller window shows a table of data points (Tabular Data View). A statistics window shows summary data for the selected channel. A digital calibration window is also visible. A 'Report Options' dialog box is open, showing options for report generation and export to Excel.

### Software Features:

- 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
- 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 up to 1 reading every 24 hours
Memory:	<ul style="list-style-type: none"> <li>2,000,000 readings; software configurable memory wrap</li> <li>660,000 readings in multiple start/stop mode</li> </ul>
Wrap Around:	Yes
Start Modes:	<ul style="list-style-type: none"> <li>Immediate start</li> <li>Delay start up to 18 months</li> <li>Multiple pushbutton start/stop</li> </ul>
Stop Modes:	<ul style="list-style-type: none"> <li>Manual through software</li> <li>Timed (specific date and time)</li> </ul>
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 Activation:	<p>To start the device: Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.</p> <p>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.</p>
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:	<p>Green LED blinks:</p> <ul style="list-style-type: none"> <li>10 second rate to indicate logging</li> <li>15 second rate to indicate delay start mode</li> </ul> <p>Red LED blinks:</p> <ul style="list-style-type: none"> <li>10 second rate to indicate low battery and/or full memory</li> <li>1 second rate to indicate an alarm condition</li> </ul>
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  <p>Graph display of the device recording in a 25 °C environment.</p>
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:	Version 2.06.3 or higher/XP SP3/Vista/Windows 7/Windows 8
Operating Environment:	-40 °C to +80 °C (-40 °F to +176 °F), 0 %RH to 95 %RH non-condensing
Dimensions:	1.4 in x 2.2 in x 0.6 in (36 mm x 56 mm x 16 mm)
Weight:	0.8 oz (24 g)
Materials:	ABS Plastic
Approvals:	CE

**BATTERY 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 1-603-456-2011 OR GO TO [WWW.MADGETECH.COM](http://WWW.MADGETECH.COM) FOR DETAILS.

## ORDERING INFORMATION

MODEL	DESCRIPTION
TEMP101A	Temperature Data Logger
IFC200	Software, manual and USB interface cable
Calibration Certificate	Calibration Certificate available for data logger
LTC-7PN	Replacement battery for Temp101A

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- Motion

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)