

OM-CP-TEMP101A Temperature Data Logger with 10 year battery life

INSTRUCTION SHEET

MQ\$5026/0117

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Product Notes

The OM-CP-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 °C to 80 °C and is approximately the size of a matchbox which allows for easy placement even in tight spaces.

The OM-CP-TEMP101A features a pushbutton start/stop on the device or can be configured to start and stop 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 OM-CP-Temp101A the ideal solution for long term temperature deployment and monitoring cycles

LEDs

- Green LED blinks: 10 seconds to indicate logging and 15 seconds to indicate delay start mode.
- Red LED blinks: 10 seconds to indicate low battery and/or memory and 1 second 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

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 temperature reaches or exceeds set limits.

Installation Guide

Installing the Interface cable

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

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.

OM-CP-TEMP101A

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

OM-CP-BAT105 battery

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

Recalibration

Standard calibration is one point at 25 °C.

Additional Services:

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

Call for custom calibration options to accommodate specific application needs.

OM-CP-TEMP101A General Specifications

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Description	OM-CP-TEMP101A
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	<u>+</u> 0.5 °C (<u>+</u> 0.9 °F)
Memory	2,000,000 readings 660,000 readings in multiple start/stop mode
Wrap Around	Yes
Reading Rate	1 reading every second up to 1 reading every 24 hours
LED Indicator	Red & Green
Alarm	Yes
Required Interface Package	IFC200
Baud Rate	115,200
Battery Life	10 years typical at a 15 minute reading rate Temp101A Temp10A Temp10A Temp10A Tem
Operating Environment	-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 0.6 in (36 mm x 56 mm x 16 mm)
Weight	0.8 oz (24 g)
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 100 °C (212 °F).

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- 1. Purchase Order number under which the product was PURCHASED,
- 2. Model and serial number of the product under warranty, and
- 3. Repair instructions and/or specific problems relative to the product.

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