

## OM-CP-STATE 101A State Data Logger

INSTRUCTION SHEET

MQS5050/1216

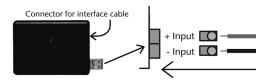
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# Wiring the Data Logger

#### Wiring Options

The OM-CPState101A has a two-position removable screw terminal connection. It accepts 2-wire configurations.



Warning: Note the polarity instructions. Do not attach wires to the wrong terminals.

#### **Product Notes**

The OM-CP-STATE101A data logger measures a digital signal. It records state changes (i.e. on/off, open/closed) and the duration of time between the changes. If there is a change in voltage above 2.7V's or below 0.4V's, the device will register a state change. At the specified reading rate, the device will take a reading and write the state to memory. It is important to choose a reading rate that is faster than the change could occur to ensure that it will be captured by the data logger. Memory is only used if the state has changed. If the state remains the same as the previous reading, it will not record to memory, but will continue to indicate that state. The OM-CP-STATE101A data logger can accept up to 30VDC continuous.

#### **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.

#### **Engineering Units**

**Engineering units** are used to convert one measurement unit to another. The Omega software allows for software level Engineering Units (conversion applied to data after download). Certain devices have device level Engineering Units, which upon download automatically appear in the chosen unit of measure.

#### **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 device: Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.

## **Device Maintenance**

#### **Battery Replacement**

Materials: Small Phillips Head Screwdriver abd a Replacement Battery (OM-CP-BAT105)

- 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 OM-CP-State101A has a digital input signal and cannot be calibrated. A certificate of conformance can be provided.

### Installation Guide

#### Installing the Interface cable

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

#### Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the on screen prompts.

#### Connecting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Click the Communication Menu, then Auto Configure Port.
- After a moment, a box will appear stating a device has been found.
- Click **OK**. The **Device Status** box will appear. Click **OK**.
- At this point, communications have been configured for your logger. These settings can be found under the **Communication Menu**.

Note: For additional installation instructions refer to your "Data Logger & Software Operating Manual".

# **Device Operation**

### Starting the data logger

- Click Device Menu then Start Device.
- Choose the desired start method.
- Choose the start parameters by selecting a **Reading Rate** suitable for your application.
- Enter in any other desired parameters and click Start.
- A box will appear stating the data logger has been started. Click **OK**.
- 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 data logger to the interface cable.
- Click the Device Menu then Read Device Data. This will offload all recorded data onto the PC.

### **OM-CP-STATE101A**

# **OM-CP-STATE101A General Specifications**

Description	OM-CP-STATE101A
Input Range	0 to 30V
Input Low	<0.4V
Input High	>2.8V
Internal Weak Pull-Up	<60µA
Minimum Input Active (Low) Time	10 Microseconds
Resolution	4Hz (reading rate selectable in software)
Channels	1
Memory	406,323 readings; software configurable memory wrap
Reading Rate	4Hz to 1 every 24 hours
LED Indicator	Red and Green
Required Interface Package	OM-CP-IFC200
Baud Rate	115,200
Battery Life	10 years typical, dependent upon frequency and duty cycle
Operating Environment	-40 to +80°C, 0 to 95%RH (non-condensing)
Material	ABS plastic
Dimensions	1.4" x 2.2" x 0.6" (36mm x 56mm x 16mm)
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 60°C (140°F).



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