# Data Loggers

### State Data Logger Part of the NOMAD<sup>®</sup> Family

### OM-CP-STATE101A



- Interfaces to Contact Closures or TTL Inputs up to 30V
- 10 Year Battery Life
- 4 Hz Second Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- Field Upgradeable

The OM-CP-STATE101A is one of our newest data loggers. It is part of a new series of low cost, state-ofthe-art data logging devices that has taken the lead in offering the most advanced, low cost, battery powered data loggers in the world today.

The OM-CP-STATE101A offers a 10 year battery life, 4 Hz reading rate, a multiple start/stop function, ultra-high speed download capability, 406,323 reading storage capacity, optional memory wrap, battery life indicator, optional password protection and more.

The OM-CP-STATE101A senses input transitions or contact closures from external sources such as transducers and/or state initiators and records the time and input state of the device when a transition occurs. Once activated the data logger senses and records transition or state changes at the input. The device's real-time clock ensures that all data is time and date stamped. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged.

The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. Data retrieval is simple. Simply plug it into an available USB port and our userfriendly software does the rest. The software converts a PC into a real-time strip chart recorder. Data can be printed in graphical and tabular format or exported to a text or Microsoft Excel file.

The OM-CP-STATE101A was designed with our customers in mind. We offer 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.

#### **Specifications**

Input Connection: Removable screw terminal Input Range: 0 to 30V Input Low: <0.4V Input High: >2.8V Internal Weak Pull-Up: <60 $\mu$ A Input Impedance: >60 k $\Omega$ Time Resolution: 4 Hz (reading rate selectable in software) Reading Rate: 4 Hz to 1 every 24 hours Memory: 406,323 readings; software configurable memory wrap

## 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 Activation:

#### 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.

#### To Stop the Device:

Press and hold the pushbutton for 5 seconds, the red LED will flash for three seconds and then the green LED will flash for two seconds. The device has stopped logging.

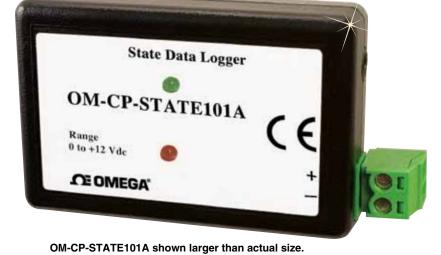
**Real Time Recording:** The device may be used with PC to monitor and record data in real-time

#### **LED Functionality:**

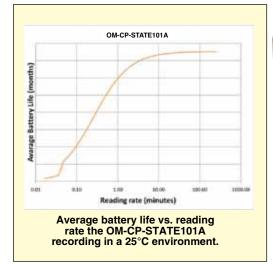
**Green LED Blinks:** 10 second rate to indicate logging 15 second rate to indicate delay start mode

#### **Red LED Blinks:**

10 second rate to indicate low battery and/or full memory



# Data Loggers



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.

Engineering Units: Native measurement units can be scaled to display measurement units of another type such as on/off, open/closed and more.

**Battery Type:** 3.6V lithium battery (included); user replaceable

Battery Life: 10 years typical, dependent upon frequency and duty cycle

**Time Accuracy:** ±1 minute/month [at 20°C (68°F), stand alone data logging]

Computer Interface: USB

(interface cable required); 115,200 baud

Software: XP SP3/Vista/Windows 7 (32 and 64-bit)

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

Data Logger: 36 H x 56 W x 16 mm D (1.4 x 2.2 x 0.6")

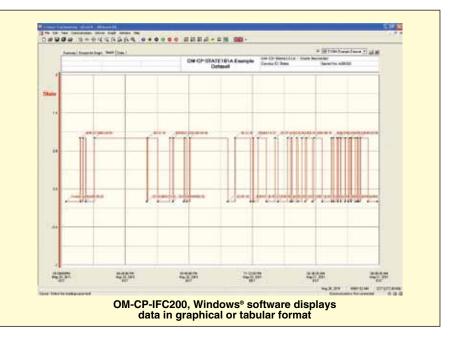
OM-CP-WATERBOX101A,

shown smaller than actual size.

optional weatherproof enclosure for data logger,

Waterbox Enclosure: 74 H x 148 W x 39 mm D (2.9 x 5.8 x 1.5")

Weight: 24 g (0.9 oz) Materials: Data Logger: ABS Plastic Waterbox Enclosure: Black anodized aluminum



To Order visit omega.com/om-cp-state101a for Pricing and Details	
Description	
State data logger	
Windows software and 3.7 m (12') USB interface cable	
Replacement 3.6V lithium battery	
Weatherproof NEMA 4 (IP65) enclosure for data logger	

To Order, Call 1-800-327-4333<sup>sm</sup> or Shop Online at *omega.com<sup>sm</sup>* 

Comes complete with 3.6V lithium battery. USB cable and operator's manual are included with the OM-CP-IFC200 Windows software (required to operate the data logger and sold separately).

Ordering Example: OM-CP-STATE101A, state data logger and OM-CP-IFC200 Windows software.