

## Pulse Input Data Logger Part of the NOMAD® Family

### OM-CP-PULSE101A



- ✓ 10 Year Battery Life
- ✓ 10 KHz Pulse Rate
- ✓ Multiple Start/Stop Function
- ✓ Ultra High Speed Download
- ✓ Memory: 500,000 Readings
- ✓ Memory Wrap Around
- ✓ Battery Life Indicator
- ✓ Optional Password Protection
- ✓ Real-Time Operation

The OM-CP-PULSE101A is a low-cost recording device that will sense a pulse input or contact closure from external sources such as transducers or pulse initiators (gas, water, and electric meters) and transform those inputs into engineering units.

In addition, this data logger allows the user to store user defined units such as gallons/min into the device as well as scale factors and offset values. This enables the user to easily linearize and scale any transducer that provides a pulse or contact closure output to any user required units automatically.

Once activated the data logger senses and records the number of pulses/contact closures that occur within adjacent "time bin" periods. The bin period is selectable from 1 second to over 24 hours. At the end of each bin period, the total number of pulses/counts within the bin period is recorded.

The data logger then starts another bin period and continues until either the memory is full or the test period has ended. Its real time clock ensures that all data is time and date stamped. This is ideal for recording events.



OM-CP-PULSE101A shown actual size.



OM-CP-PULSE101A.

The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. Its small size allows it to fit almost anywhere. Data retrieval is simple. Plug it into an empty COM port and our easy-to-use software does the rest.

The software converts your PC into a real time strip chart recorder. Data can be printed in graphical or tabular format and can be exported to a text or Microsoft Excel file.

### Specifications

**Input Connection:** Removable screw terminal

**Maximum Pulse Rate:** 10 KHz

**Input Range:** 0 to 30 Vdc continuous

**Input Low:** <0.4V

**Input High:** >2.8V

**Internal Weak Pull-Up:** <60  $\mu$ A

**Input Impedance:** >60 k $\Omega$

**Minimum Pulse Width/  
Contact Closure Duration:**  
 $\geq$  10 microseconds

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

### 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

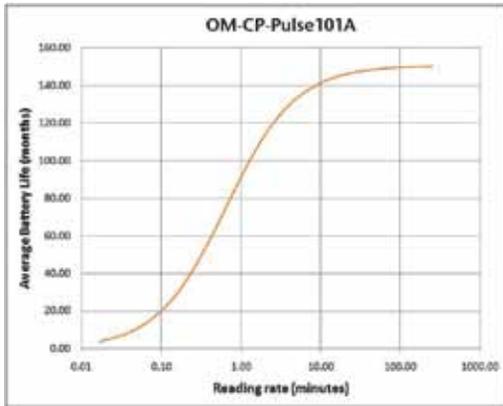
### Multiple Start/Stop Mode

**Activation:** To start the device press and hold the pushbutton for 5 seconds, the device has started logging; to stop the device press and hold the pushbutton for 5 seconds while the device is logging, the device has stopped logging

**Memory:** 500,000 readings; software configurable memory wrap 250,000 readings in multiple start/stop mode

**Memory Wrap Around:** Yes (software selectable)

# DATA LOGGERS



Average Battery Life vs. Reading Rate of the OM-CP-PULSE101A recording in a 25°C environment.



OM-CP-WATERBOX101A weatherproof enclosure for data logger, shown smaller than actual size.

## 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; 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.

**Engineering Units:** Native measurement units can be scaled to display measurement units of another type. This is useful when monitoring outputs from different types of sensors such as flow rate, wind speed and more.

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

**Battery Life:** 10 years typical, dependent upon frequency and duty cycle (see chart)



OM-CP-IFC200 Windows software displays data in graphical or tabular format.

## Dimensions

### Data Logger:

64 L x 36 W x 16 mm D  
(2.5 x 1.4 x 0.6")

### 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

**Time Accuracy:**  $\pm 1$  minute/month at 20°C (68°F), stand alone data logging

### Computer Interface:

USB (interface cable required); 115,200 baud

**Software:** XP SP3/Vista/7 and 8 (32- and 64-bit)

### Operating Environment:

-40 to 80°C (-40 to 176°F), 0 to 95% RH non-condensing

## To Order

| Model No.              | Description  |
|------------------------|--|
| OM-CP-PULSE101A        | Pulse input data logger with USB interface           |
| OM-CP-IFC200           | Windows software and 3.7 m (12') USB interface cable |
| OM-CP-BAT105           | Replacement 3.6V lithium battery                     |
| OM-CP-WATERBOX101A     | Weatherproof NEMA 4 (IP65) enclosure for data logger |
| OM-CP-WATERBOX101A-KIT | Maintenance kit for OM-CP-WATERBOX101A               |

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

**Ordering Example:** OM-CP-PULSE101A pulse input data logger with USB interface and OM-CP-IFC200 window software with USB cable.