Wireless Pulse Data Logger with Display

OM-CP-RFPULSE2000A

5 YEAR WARRANTY **NIST** CE
Optional

✔ **Wireless Two-Way Communication**
✔ **Pulse Input for Monitoring Wind Speed, Energy or Flow Rate**
✔ **View Data in Real Time**
✔ **Battery Life Indicator**
✔ **Digital Display**
✔ **3 Year Battery Life**
✔ **Audible and LED Alarm Indicators**
✔ **Configurable Alarms**

The OM-CP-RFPULSE2000A is a wireless data logger that records pulse output signals from various sensors such as flow meters and anemometers. When started, the data logger samples at 100 Hz and at the user specified reading rate, recording the total number of pulses from the sample to memory

The OM-CP-RFPULSE2000A features an LCD screen which provides instant access to the current reading, minimum, maximum and average statistics. Through the software the device can be programmed to convert the pulse output into a different unit of measure such as gallons per minute or miles per hour. This information can be viewed on the LCD screen of the data logger as well as in the software.

The OM-CP-RFPULSE2000A is unique in that it not only calculates pulse count, but it also calculates pulse rate. Engineering units can be programmed into the device as a rate, which allows the device to calculate the measurement unit in rates per second, minute, hour or per day. This provides more useful statistics to the user when data logging over long periods of time.

The OM-CP-RFPULSE2000A can be used as a standalone data logger, or it can be used with the OM-CP-RFC1000-EXT wireless transceiver to wirelessly transmit data back to a central PC. The OM-CP-RFPULSE2000A transmits up to 152 m (500') line of sight to the OM-CP-RFC1000-EXT transceiver. Multiple OM-CP-RFC1000-EXT's can be used as repeaters and transmit up to 305 m (1000') line of sight to other OM-CP-RFC1000-EXT's. This allows the data to be sent back over a greater distance.

The OM-CP-RFPULSE2000A can be used as a single, wireless data logging system, or can be expanded to a large scale system, which can include hundreds of data loggers measuring a number of areas (additional wireless loggers and transceivers may be required).

Data can be viewed in graphical or tabular formats and summary and statistics views are available for further analysis. The software features export to Excel®, data annotation, digital calibration and more.

OM-CP-RFPULSE2000A shown smaller than actual size.

SPECIFICATIONS
PULSE INPUT
Measurement:

Maximum Pulse Rate: 10 KHz

Range: Input low <720 mV, input high >1.070V

Resolution: ≤10 µS

Calibrated Accuracy: 512 ±1 pulses per second

Response Time: 10 µS

WIRELESS

RF Frequency: 2.45GHz IEEE 802.15.4 ultra-low power wireless transceiver with fully bi-directional communication

Band: ISM band 2.405 to 2.475 GHz operation (channels 11 through 25) @ 250 kbps data rate

Transceiver Sensitivity (OM-CP-RFC1000-EXT): -95dBm typical

Transmission Distance (to other OM-CP-RFC1000-EXT's):

OM-CP-RFC1000-EXT, OM-CP-RFC1000-IP69K:

Maximum Outdoors: 1220 m (4000') (line of sight unobstructed)

Maximum Indoors: 305 m (1000') (typical urban environment)

OM-CP-RFC1000-EXT-EUR:

Maximum Outdoors: 762 m (2500') (line of sight unobstructed)

Maximum Indoors: 213 m (700') (typical urban environment)

Transmission Distance (to Data Loggers):

OM-CP-RFC1000-EXT, OM-CP-RFC1000-EXT-EUR, OM-CP-RFC1000-IP69K:

Maximum Outdoors: 610 m (2000')
(line of sight unobstructed)

Maximum Indoors: 152 m (500')
(Typical urban environment)

GENERAL

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

Memory: 16,128 readings

LED Functionality:

• Green LED blinks every 5 seconds to indicate unit is logging

• Blue LED blinks every 15 seconds to indicate unit is in wireless mode

• Red LED blinks every 1 second to indicate alarm condition

Memory Wrap Around: Yes

Start Modes: Immediate start and delayed start

Battery Type: 9V lithium included; user replaceable

Battery Life: 3 years typical at 15 minute reading rate

Display Details: Displays pulse/interval count and total count

Time Accuracy: ±1 minute/month

Computer Interface: USB to mini USB, 250,000 baud for standalone operation or OM-CP-RFC1000-EXT/OM-CP-RFC1000-EXT-EUR/OM-CP-RFC1000-IP69K required for wireless operation

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

Operating Environment: -20 to 60°C (-4 to 140°F) 0 to 95% RH non-condensing

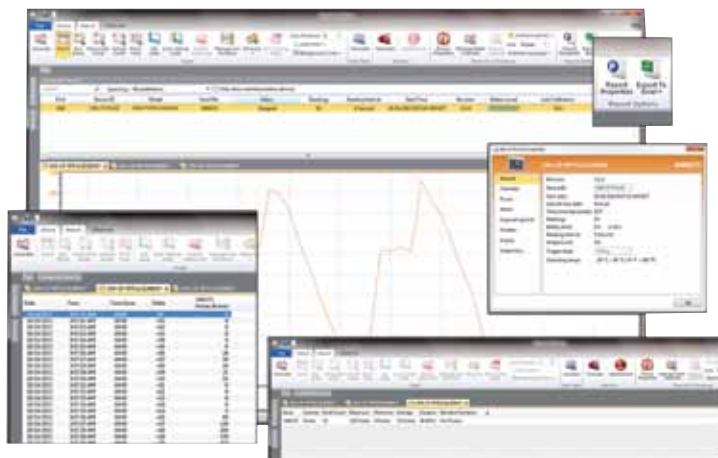**Dimensions:** 76.2 H x 88.9 W x 24.1 D mm (3.0 x 3.5 x 0.95") data logger only

Weight: 116 g (4.1 oz)

Enclosure Material: ABS plastic

Alarm: User configurable audible, on-screen, email and text (SMS) alarms

Alarm Delay: A cumulative alarm delay may be set in which the device will activate the alarm (via LED) only when the device has recorded a user specified time duration of data

Audible Alarm Functionality: 1 beep per second for reading alarm above/below threshold

OM-CP-RFC1000-EXT, Windows software displays data in graphical or tabular format, sold separately.

Note: Because of transmission frequency regulations, OM-CP-RFPULSE2000A wireless data loggers are only approved for use in the following countries: Australia, Austria, Belgium, Bulgaria, Canada, Chile, China, Columbia, Croatia, Cyprus, Czech Republic, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Honduras, Hungary, Iceland, Ireland, Israel, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malaysia, Malta, Mexico, New Zealand, Norway, Peru, Poland, Portugal, Romania, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, The Netherlands, Turkey, United Kingdom, United States, Venezuela, Vietnam.

To Order

Model No.	Description
OM-CP-RFPULSE2000A	Wireless pulse data logger with LCD display
OM-CP-RFC1000-EXT	Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved)
OM-CP-RFC1000-EXT-EUR	Wireless transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (CE approved)
OM-CP-RFC1000-IP69K	Splash proof (IP69K) wireless RF transceiver package includes RF transceiver, USB cable, Windows software and operator's manual (not CE approved)
OM-CP-BAT103	Replacement 9V lithium battery

Comes complete with 9V lithium battery. Operator's manual, Windows software and USB interface cable are included with the OM-CP-RFC1000-EXT wireless transceiver package (required to operate the data logger, sold separately).

***Ordering Example: OM-CP-RFPULSE2000A,** wireless pulse data logger with LCD display and **OM-CP-RFC1000-EXT** wireless transceiver package.*