

Carbon Monoxide Data Loggers with USB Interface



OM-EL-USB-CO Series



OM-EL-USB-CO with protective cap removed shown actual size.

- ✓ 0 to 1000 ppm CO (OM-EL-USB-CO) or 0 to 300 ppm CO (OM-EL-USB-CO300)
Measurement Ranges
- ✓ Stores up to 32,510 Measurements
- ✓ User-Programmable Warning Threshold with Bright Visual and Audible Warnings
- ✓ USB Interface for Set-Up and Data Download
- ✓ Expected Sensor Life: 4 years
- ✓ Supplied with Replaceable Internal Lithium Battery and Windows® Control Software

The OM-EL-USB-CO and OM-EL-USB-CO300 are standalone data loggers that measure and store up to 32,510 carbon monoxide (CO) readings over a 0 to 1000 ppm (OM-EL-USB-CO) or 0 to 300 ppm (OM-EL-USB-CO300) measurement range and -10 to 40°C (14 to 104°F) operating temperature range. The user can easily set up the logging rate and start time, and download the stored data by plugging the data logger into a PC's USB port and running the Windows control software. The data can then be graphed, printed and exported to other applications. The data logger is supplied complete with a long-life lithium battery. Data is stored in non-volatile memory and is retained when the battery is empty. A bright red LED will flash and a buzzer can sound when a preset warning level has been exceeded.

IMPORTANT SAFETY WARNING

Do not attempt to use the OM-EL-USB-CO or OM-EL-USB-CO300 data loggers without reading and understanding the documentation. Carbon monoxide monitoring is a complex procedure. The user should consult a qualified expert if there is any doubt as to the safety of the application.

The OM-EL-USB-CO and OM-EL-USB-CO300 are professional measuring instruments designed to record carbon monoxide (CO) gas levels for later analysis. They are not alarm/safety/warning devices and should not be used in this capacity for the following reasons:

1. The lights and sound emitted by the OM-EL-USB-CO or OM-EL-USB-CO300 to indicate a high level of CO do not provide adequate warning to those in the surrounding area that a high level of CO has been recorded.
2. The battery life of the OM-EL-USB-CO or OM-EL-USB-CO300 during audible and visual indication of a high level of CO will rapidly diminish and will therefore only be active for a short period of time.
3. The OM-EL-USB-CO or OM-EL-USB-CO300 takes a sample reading at intervals as set by the user for recording/monitoring/analysis purposes. Dangerous levels of CO will not register with the device until a sample reading is taken.
4. Due to the limitations of the device as a professional instrument, it is left to the user to set the light and sound alarms indicating the presence of CO. Therefore the instrument can be set up to provide NO form of warning. Carbon monoxide is poisonous. It is a clear, colorless gas that has no smell or taste and can be lethal even in very low concentrations. It can injure or kill people and animals who are not adequately warned of its presence. In areas where the safety of humans and animals is a concern, a domestic or industrial CO detector/alarm designed to a nationally approved quality standard with features such as a high decibel alarm or siren and a clear visual warning specifically designed to provide adequate warning of dangerous CO levels should be installed, used and maintained.



OM-EL-WIN-USB (CONTROL SOFTWARE)

The OM-EL-WIN-USB control software is supplied free of charge with each data logger. The software is used to set-up the data logger as well as download, graph and export data to Excel.



The software allows the following parameters to be configured:

- Logger name
- Logging rate (10 s, 30 s, 1 m, 5 m)
- Warning threshold
- Start date and start time

SPECIFICATIONS

Measurement Range

OM-EL-USB-CO: 3 to 1000 ppm CO (do not expose to levels above 1000 ppm, i.e. directly measuring the exhaust of a car or wood burner)

OM-EL-USB-CO300: 0 to 300 ppm CO

Internal Resolution: 0.5 ppm CO

Accuracy:

OM-EL-USB-CO (Overall Error): ± 2 ppm min, $\pm 6\%$ typ

OM-EL-USB-CO300: ± 5 ppm or $\pm 4\%$ typ (whichever is greater)

Repeatability:

Long Term Drift: 5%/year

Zero Offset: ± 2 ppm CO

Response Time (to Reach 90%): 1 minute

Logging Interval: 10 sec, 30 sec, 1 min, 5 min

Status Indicators (LEDs): Red and green LEDs. The first LED flashes red to indicate that the data logger is in an alarm condition (logged data has exceeded a high or low alarm level). The second LED flashes green to indicate that the data logger is logging normally and is not in an alarm condition.



OM-EL-USB-CO shown smaller than actual size.

Audible Alarm: The audible alarm will sound once per second when the warning threshold has been exceeded. To disable the warning, remove the cap from the data logger. The audible warning will sound once every 60 seconds when there is a low battery condition. This indicates that the battery must be replaced.

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

Operating Temperature (15 to 90% RH, Non-Condensing): -10 to 40°C (14 to 104°F)

Operating Pressure: 900 to 1100 mbar

Power: $\frac{1}{2}$ "AA" 3.6V lithium battery life (included); user replaceable

Battery Life: 3 months (with battery supplied, 5 minute logging rate, 25°C ambient temperature, audible warning disabled, reading <10 ppm CO). On inserting a battery the red then green LED will flash in turn for approximately 2 min, while the logger stabilizes. Do not connect to the USB port of a computer until this has finished.

Dimensions: See dimensional drawing

Weight: 43 g (1.5 oz)

Dimensions: mm (inch)



OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.

To Order

Model No.	Description
OM-EL-USB-CO	Carbon monoxide (CO) data logger with USB interface, 3 to 1000 ppm range
OM-EL-USB-CO300	Carbon monoxide (CO) data logger with USB interface, 0 to 300 ppm range
OM-EL-BATT	Replacement 3.6V lithium battery

Comes complete with Windows OM-EL-WIN-USB control software and operator's manual on CD-ROM, protective cap and 3.6V lithium battery.

Ordering Example: OM-EL-USB-CO carbon monoxide (CO) data logger with USB interface, 3 to 1000 ppm range and OCW-2 OMEGACARE extends standard 1-year warranty to a total of 3 years.