

# OEM 100 CO Wall Mounted Carbon Monoxide Analyzer



For safety critical applications in the workplace



## DESCRIPTION

The MSA OEM 100 CO, powered by Neutronics Technology, is a wall mounted analyzer that accurately measures carbon monoxide in the range of 0 to 200 ppm. Designed for continuous operation, this analyzer measures and displays the level of carbon monoxide in a workplace area and provides audible and visual alarms if the level exceeds predetermined setpoints.

## Features

0 to 200 ppm measurement range

Easy to install wall mount NEMA 4X fiberglass enclosure

Electrochemical sensor is unaffected by background gases

Alarm horn with silence switch

Large 1/2" high LED display

The analyzer is installed in a NEMA 4X fiberglass enclosure with a large window that provides a clear view of the entire control panel. An optional flowmeter and flow switch located inside the enclosure allows the user to adjust the flow rate of the sample gas to ensure that there is sufficient gas flow across the sensor to produce an accurate measurement. The electrochemical sensor ensures reliable performance and fast response for safety critical measurements. The sensor is a small fuel cell that measures carbon monoxide directly. It is easily replaceable and unaffected by most background gases.

As the sample gas from the area passes across the CO sensor, the CO sensor produces a small current proportional to the amount of CO in the sample stream. The current is amplified, filtered, and electronically conditioned by the analyzer circuit board. The resulting signal is then shown on the LED display and compared with the two adjustable alarms. The alarms are triggered if the signal reaches the predetermined setpoints.

Each alarm has a dedicated relay with both normally open and normally closed contacts. Alarm LED status indication is provided for each alarm on the front panel. Both alarms activate a piezoelectric horn. The alarms are configured at the factory as low and high level alarms with settings of 20 ppm and 50 ppm. The "set alarms" switch is used to adjust the potentiometers to match the desired setpoints. Both alarms have a 1 ppm CO hysteresis, which is positive for the high and low alarms. If the low alarm is set to 20 ppm, the alarm relay will activate at 21 ppm and deactivate at 20 ppm. The alarm circuitry, alarm relays, alarm LEDs, and horn can be tested simultaneously by pressing the "press to test" switch on the front panel. A 90 dB alarm horn is mounted on the front panel. The "horn silence" switch will disable the horn. The alarm horn will stay disabled as long as it remains in the silence position. The low power/switch open (LPSO) alarm detects a power supply problem and the status of an external switch or relay. The LPSO red LED will illuminate if the supplied power drops below 6.5 VDC or if an external switch or relay wired to the main terminal block is in the open state.

Ensuring safe and reliable operation of the OEM 100 CO analyzer requires periodic calibration and sensor replacement. The sensor has a typical expected service life of 2 years. It will need to be replaced when the analyzer cannot be adjusted to match the span gas during calibration. A new filter screen and O-Ring should be installed when replacing the sensor. The OEM 100 CO analyzer should be calibrated every month. The calibration procedure requires the use of a zero gas and a span gas with a known level of carbon monoxide. The zero and span potentiometers located on the front panel are used to adjust the display to match the correct gas concentrations.



## MORE INFORMATION:

Scan the QR code to learn more about the OEM 100 CO Wall Mounted Carbon Monoxide Analyzer and other MSA products.

# OEM100-CO Wall Mounted Carbon Monoxide Analyzer



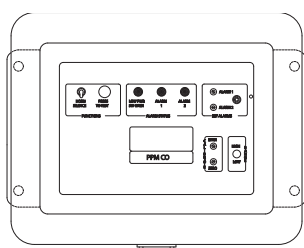
Description	Part Number
Model OEM 100 CO analyzer	7-06-2000-03-0
Model OEM 100 CO analyzer ( 4-20mA output)	7-06-2000-08-0
Sensor replacement kit (sensor, Filter, screen, O-ring)	6-01-1001-37-0
Replacement fuse	1-11-1120-03-0
Potentiometer adjustment tool	2-03-1000-00-0
Flowmeter, 0 to 4.0 lpm	2-05-2003-00-2
90 dB horn	1-15-3002-00-0
Sample gas flow switch	6-01-1000-99-3

Specifications	Description
<b>Type</b>	Wall mount carbon monoxide monitor
<b>Operating range</b>	0 to 200 ppm CO
<b>Maximum overload</b>	500 ppm CO
<b>Sensor type</b>	Electrochemical
<b>Expected sensor service life</b>	2 years in air
<b>Resolution</b>	1 ppm
<b>Response time</b>	T90 < 40 seconds
<b>Linearity</b>	±1%
<b>Pressure range</b>	Atmospheric ±10%
<b>Temperature range</b>	35° to 122° F (2° to 50° C)
<b>Relative humidity</b>	0 to 90%, non-condensing
<b>Warm up time</b>	5 seconds
<b>Low alarm factory setpoint</b>	20 ppm
<b>High alarm factory setpoint</b>	50 ppm

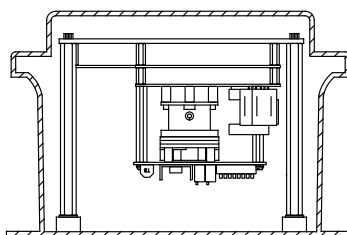
Specifications	Description
<b>Power supply</b>	115/230 VAC ±20%, 50/60 Hz @ 50mA or 9 -15 VDC @ 400mA
<b>Flowmeter*</b>	0.5 to 4.0 lpm @ 4 psig max. input
<b>Flow switch*</b>	Normally open, 0.5 lpm setpoint
<b>Analyzer warranty</b>	12 months from date of shipment
<b>Sensor warranty</b>	6 months from date of shipment
<b>Enclosure</b>	Fiberglass with hinged window cover, NEMA 4X
<b>Dimensions (SP-C-1634)</b>	9.62" (244mm) length x 7.46" (189mm) width x 6.22" (158mm) height
<b>Dimensions (SP-C-1632)</b>	12.00" (305mm) length x 10.00" (254mm) width x 6.00" (152mm) height
<b>Weight</b>	8.0 lbs. (3.6 Kg)

Specifications are subject to change without notice.

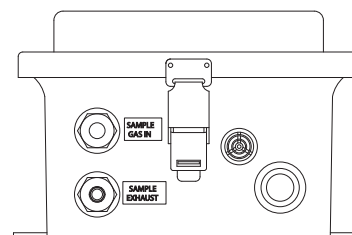
\*Optional items available upon request



Front view



Analyzer mounting detail



Bottom view

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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