

SCM3 Standalone Carbon Monoxide Detector

Carbon monoxide (CO), a product of combustion, is an odorless, colorless gas. Faulty combustion equipment is one source of this dangerous gas known as the “silent killer”.

The SCM3 standalone carbon monoxide detector measures CO in parts per million (ppm). Use it for walk-around tests to help pinpoint sources of CO indoors. Measure CO ppm in flue gas using the optional AOX P2 pump.



CO exposure effects

CO ppm	Effects
9 ppm	Minimal. Max allowable concentration for eight hours (EPA and ASHRAE).
35 ppm	Max for continuous exposure for one hour (EPA and ASHRAE).
50 ppm	Max for eight hours (OSHA).
100 ppm	Trips installed CO detectors. UL2034 specifies a max exposure of 100 min.
200 ppm	In two to three hours: slight headache, tiredness, dizziness, nausea. UL2034 specifies a max exposure of 35 min.
400 ppm	In one or two hours: frontal headaches. In three hours: life threatening. UL2034 specifies a max exposure of 15 minutes.
800 ppm	In forty five minutes: dizziness, nausea, and convulsions.
800 ppm	In two to three hours: death.
1600 ppm	In one hour: death.
6400 ppm	In fifteen minutes: death.
12800 ppm	In three minutes: death.

Effects can vary significantly depending on age, sex, weight, and overall health. Never stay in an area of high concentration of CO, get outdoors and call emergency response.

“Walk around” Test

The SCM3 responds to changes in CO levels in real time. You must find the source of CO when levels rise on entry into a structure.

- Zero the unit outdoors away from any source of CO.
- Enter the structure.
- Walk around and watch the display.
- Move toward the area of highest concentration to find the CO source.

Persistent sources of CO, such as malfunctioning combustion equipment in occupied spaces, must be serviced immediately.

Specifications:

Range: 0 to 1000 ppm (2000 ppm with 5 minute max exposure time)

Initial accuracy at 73°F ± 9°F, <75%RH:

0-15 ppm ±5% reading ±1 ppm after zeroing

16-35 ppm ±5% reading ±2 ppm after zeroing

36-1000 ppm ±5% reading ±5 ppm after zeroing

Display: Updates real-time

CO air sample temperature range: 32 to 105°F

Operating environment: 32 to 122°F (0 to 50°C)

Operating relative humidity: 15 to 90% RH, non-condensing

Storage temperature: -4°F to 140°F, 0 to 80% R.H. with battery removed from meter.

Sensor type: Electrochemical (specific to CO)

Sensor calibration: Factory calibrated on 205 ppm

Long term drift: <5% / year (depending on use)

Battery: 9V

Battery life: Approx.150 hrs typical (Alkaline)

Auto power off (APO): 15 minutes