
CARBON MONOXIDE MONITOR

MODEL CM200 SERIES

TYPICAL INSTALLATIONS:

Parking Garages
Car Dealers
Warehouses

Fire Stations
Police Stations
Post Offices

GENERAL DESCRIPTION:

TOXALERT'S Model CM200 Series monitors are compact, solid-state, low maintenance, cost-effective carbon monoxide monitors designed for fixed installation and continuous monitoring.

The Model CM200 Series consists of three separate monitors. Model CM201 has a single stage audible alarm; Model CM202 has two stages of relay outputs, and Model CM203 has a first stage relay output and a second stage audible alarm. All models are microprocessor based with temperature and humidity compensation for stability. The solid state semiconductor-type sensor and associated electronics ensure trouble-free, long-term operation, for there are no pumps, filters or chemical cells to replace or maintain.



MODEL CM200

STANDARD FEATURES:

- Self-Checking feature for sensor failure
- Sensor LED indication
 - Operation Normal— Power On
 - Warning Stage —Alarm Stage
- Completely solid state for long life
- Relay outputs for control and alarming
- User adjustable Warning Level
- User adjustable Alarm Level
- Operating range meets OSHA std. 1910.1000
- Compact Nema 1 enclosure
- No maintenance except periodic calibration checks

OPERATION

The Model CM200 series has a two color LED to indicate its operating status. When the LED is flashing green, operation is normal and unit is not in alarm. When the LED is flashing red, the unit is sensing CO above its setting. A continuous red or green indicates failure and LED off indicates power failure.

Model CM201 is a single stage carbon monoxide monitor with audible alarm. A red LED and audible alarm activate when the concentration of CO exceeds the factory-set (user-adjustable) level.

Model CM202 is a two stage carbon monoxide monitor with a relay output for each stage. If the CO concentration rises and stays above the warning stage set point (field adjustable) for a delay period of thirty seconds continuously, the warning relay, amber warning LED, and a three minute minimum on timer shall activate. The warning stage shall be activated for a minimum of three minutes and then deactivate if the CO concentration is below the warning stage set point. Should the CO concentration remain above the warning stage set point for longer than three minutes, the warning stage shall remain activated until the CO concentration falls below the warning stage set point. If the CO concentration should continue to rise above the alarm stage set point (field adjustable) and remain above the alarm set point for a period of ten minutes, then the alarm stage relay and red alarm LED shall activate.

Model CM203 is a two stage carbon monoxide monitor with a warning stage relay and an audible alarm with silence switch that is activated by the alarm stage. The operation is the same as the Model CM202 except that the audible alarm replaces the alarm relay.

SPECIFICATIONS

- **Sensor Type:** Solid State Metal Oxide Semiconductor
 - **Indicators:**
 - Amber LED for Warning
 - Red LED for Alarm
 - Flashing Green/Red LED
 - Power on—Microprocessor Operating
 - **Audible Alarm”**
 - Model 201— Sustained alarm tone for as long as gas is present
 - Model 203—Alarm horn with silence push button
 - **Warning Stage Delay:** 30 Seconds
 - **Minimum Fan On Time:**
 - Model 202—3 Minutes
 - Model 203—3 Minutes
 - **Alarm Horn Delay:**
 - Model 201—10 Minutes
 - Model 203—10 Minutes
 - **Range:** 0 to 250ppm
 - **Response Time:** Less than 30 Seconds
 - **Input Power:** 12 VDC, 300 mA regulated
 - **Relay Contracts:** 120VAC, 2 A resistive
 - **Factory Setpoints:**
 - Model 201—Alarm 50 ppm
 - Model 202—Warning 50 ppm, Alarm 100ppm
 - Model 203 —Warning 50ppm, Alarm 100ppm
- Other Set Points Available
- **Maintenance:** None other than routine calibration check
 - **Operating:**
 - Temperature: 20°F to 122°F (-29°C to 50°C)
 - Relative Humidity: 5 to 95% non-condensing
 - **Enclosure:**
 - Dimensions—7.5”H x 5” W x 3-3/8” (19.05 x 12.7 x 8.57cm)
 - Weight — 3 lbs (1.3kg)
 - Type—Nema 12
 - Finish—Gray Enamel
 - Material—Steel
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3. BURN-IN:

Burn-In period allows sensor to stabilize before applying power to remote device(s) connected to models CM202 & CM203.

- 1) Be sure power is off to remote devices and monitor supply power is turned on.
- 2) Allow sensor to burn-in for a minimum of 72 hours with power turned on to monitor. Monitor may go in and out of alarm during burn-in.
- 3) When 72 hours have elapsed, confirm remote device(s) wiring and turn power on to remote devices.
- 4) Status LED flashes on and off to indicate normal operation. If LED is on solid green or red; please contact your local representative or TOXALERT International Inc. for servicing.

ORDERING INFORMATION:

CM SERIES CARBON MONOXIDE MONITOR:

<u>MODEL NO.</u>	<u>DESCRIPTION</u>
CM201	Carbon Monoxide Monitor with single stage audible alarm.
CM202	Carbon Monoxide Monitor with warning output relay and alarm output relay
CM203	Carbon Monoxide Monitor with warning output relay and alarm stage audible alarm with silence switch.

OPTIONAL POWER SUPPLIES FOR CM200 SERIES:

<u>MODEL NO.</u>	<u>DESCRIPTION</u>
CMP12U	Power Supply, 120 VAC to 12 VDC @ 300 mA (Regulated) Unit Mounted
CMP12M	Power Supply, 120 VAC to 12 VDC @1.7A (Regulated), Nema 1 Enclosure (for up to five units)



CM202 SHOWN WITH CMP12U
POWER SUPPLY

