

CARBON MONOXIDE AND NITROGEN DIOXIDE STAND-ALONE DUAL GAS MONITOR

MODEL TSM

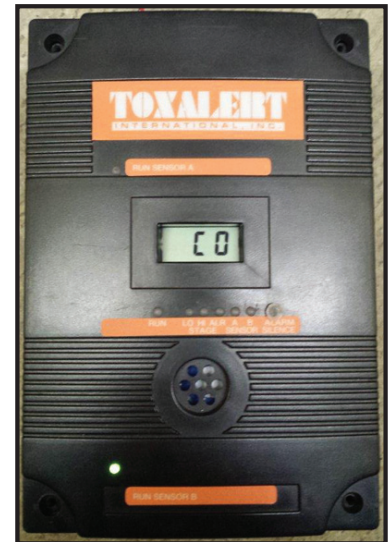
TYPICAL INSTALLATIONS:

- Parking Garages
- Bus Garages
- Fire Stations
- Warehouses
- Car Dealers
- Vehicle Maintenance & Storage
Highway Departments
Utilities
Public Works
- Ice Arenas
- Post Offices
- Police Stations
- Tunnels

GENERAL DESCRIPTION:

TOXALERT'S Model TSM Stand-Alone Monitors are compact, solid state, cost effective gas monitors designed for fixed installation, continuous monitoring of commercial & industrial facilities. The TSM Series is a carbon monoxide (CO) sensor, nitrogen dioxide (NO₂) sensor or a combination of both CO and NO₂ sensors in one monitor. For design flexibility, there is an option to locate one of the sensor remote from the monitor. Each Stand-Alone Monitor is microprocessor based to ensure trouble free, long-term stability and has three (3) field adjustable stages of operation. Relay outputs for each stage are designed for fail-safe operation and fail to energize remote equipment such as ventilation fans and visual alarms.

The Model TMS is a self-contained monitor housed in an architecturally appealing ABS housing with indicators for power on, microprocessor running (malfunction), warning or fan stage energized, alarm stage and high alarm stage. Options available are an LCD display of gas concentration and audible alarm with silence. The audible alarm silence push-button temporarily silences the audible horn until the next alarm occurrence.



TSM with optional LCD Display

FEATURES:

- Single or dual gas monitor
- Fully electronic for long life
- Field selectable 24 volt AC or DC power
- User adjustable warning, alarm and high alarm levels
- Indication of sensor end of life
- Relay outputs for remote control and alarming
- Operating range meets OSHA std. 1910.1000
- Indicators for power on, warning, alarm and high alarm

OPTIONS:

- LCD display of gas concentration in PPM
- Audible alarm with silence, 70db
- One or two sensors remote

SPECIFICATIONS

- Gas Detected: CO, NO₂
- Sensor Type: Electro-Chemical
- Range: CO 0-200 PPM, NO₂ 0-10ppm
- Input Power: 24VAC OR 24VDC +/-10%
- Relay Contacts: 24VAC, .5A resistive
- Response Time: CO sensor 40 seconds to reach 90% of indication, NO₂ sensor 60 seconds to reach 90% of indication
- Resolution: CO sensor = 1 PPM; NO₂ sensor = 0.02 PPM
- Typical Life: CO sensor 7 years in normal service; NO₂ sensor 3 years in normal service
- Indicators:

Power On	Warning Stage
Alarm Stage	High Alarm Stage
Malfunction	
- Environment:

Operating Range	Storage Range
Temperature: -4°F to 122°F (-20°C to 50°C)	Temperature: -40°F to 122°F (-40°C to 50°C)
Relative Humidity: 0-95% non-condensing	Relative Humidity: 0-95% non-condensing
- Enclosure:
 - Dimensions: 7.2"H x 4.9"W x 2.2"D
 - Type: Surface Mount
 - Color: Black
 - Material: ABS

FIELD WIRING

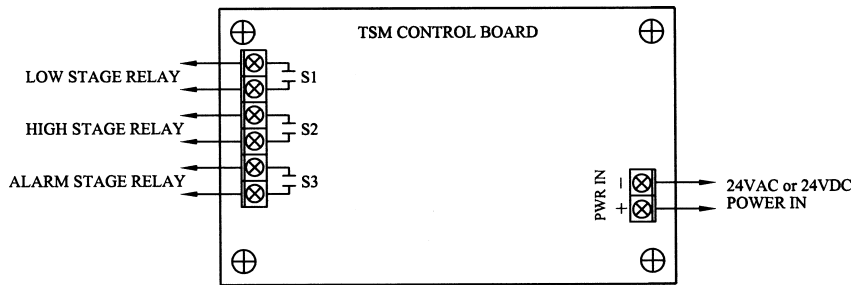
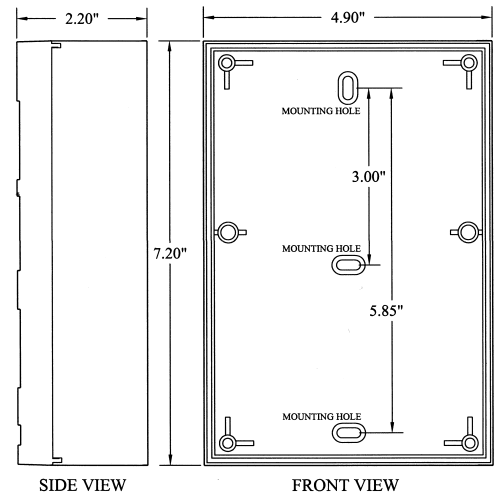


FIGURE 1

FIGURE 2

DIMENSIONS WITH MOUNTING HOLES



ORDERING INFORMATION:

Model	First Sensor (A)	Second Sensor (B)	LCD Display
TMS	- xxx	- xxx	- z
	- COL = CO Sensor Local	- NO ₂ L = NO ₂ Sensor Local	- Ø = None Standard
	- COR = CO Sensor Remote	- NO ₂ R = NO ₂ Sensor Remote	- D = Included
	- NO ₂ L = NO ₂ Sensor Local	- COL = CO Sensor Local	
	- NO ₂ R = NO ₂ Sensor Remote	- COR = CO Sensor Remote	
		- Ø = No 2nd Sensor (B)	

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