

CGM II 900

AutoCal[®] Series

Multi-gas monitor with ToxAlert



- 4 gas monitor plus ToxAlert (protection from hundreds of gases)
- AutoCal[®] automatic calibration
- Smart sensor technology
- PTO connection for accessories and data logging
- Limited lifetime warranty

ToxAlert

Electrochemical sensors are standard in virtually all portable confined space monitors because they can identify specific known gases. However, in many environments such as sewers or storage vessels, unknown gases may be present. For protection in these cases, a broad range sensor is essential. The ToxAlert sensor literally protects you from hundreds of toxic gases with no false alarms. Today's CGM remains the only instrument to successfully combine the unique characteristics and benefits of both electrochemical and broadrange MOS sensors.

The New Standard in Safety.

The CGM combines smart sensor technology with advanced electronics for a truly superior confined space instrument. The ground breaking ToxAlert sensor, without false alarms, ensures you superior protection from hundreds of unknown toxic gases. The AutoCal® feature simplifies and reduces the time required for calibration. With these key features and a power take off (PTO) port for data logging, an optional mini-pump, remote alarms, and other useful accessories, the CGM provides you with

the protection and convenience you need.

A misconception

It is true that the combustible sensor in conventional gas monitors will also detect most of the gases or vapors listed below. But the concentration levels at which these gases are combustible is usually far in excess to the level at which they pose a threat to health. Some extremely dangerous gases such as trichloroethylene are not combustible and would therefore never be detected.



What does OSHA think about broadrange sensors?

"Where the employer has already identified (atmospheric) hazards, substance-specific sensors are preferable, because they accurately indicate the concentrations of identified air contaminants. By contrast, where the employer has not been able to identify the specific atmospheric hazards present or potentially present in a sewer, **broad range sensors are preferable** because they indicate that the hazardous threshold of a class (or classes) of contaminants (i.e. hydrocarbons) in the sewer have been exceeded."

The broad range ToxAlert protects you from hundreds of gases!

Conventional toxic gas detectors can protect you from only two or three gases.

acetic acid (C ₂ H ₄ O ₂)	ethyl chloride (C ₂ H ₅ Cl)	methanol (CH ₃ OH)	vinyl chloride (C ₂ H ₃ Cl)
acetone (C ₃ H ₆ O)	ethyl ether (C ₄ H ₁₀ O)	methyl acetate (C ₂ H ₆ O ₂)	xylene (C ₈ H ₁₀)
acrylonitrile (C ₃ H _{3.5} N)	ethyl mercaptan (C ₂ H ₅ SH)	methyl alcohol (CH ₄ O)	xylydine ((CH ₃) ₂ C ₆ H ₃ NH ₂)
ammonia (NH ₃)	ethylamine (CH ₃ CH ₂ NH ₂)	methyl chloride (CH ₂ Cl)	...and dozens more
benzene (C ₆ H ₆)	flouorotrichloromethane (CCl ₃ F)	methyl chloroform (C ₂ H ₃ Cl ₃)	
butanone (mek) (C ₆ H ₁₆ O ₄)	formaldehyde (CH ₂ O)	methyl ketone (C ₄ H ₈ O)	
butyl acetate (C ₈ H ₁₆ O)	heptane (C ₇ H ₁₆)	methyl mercaptan (CH ₃ SH)	
butyl alcohol (CH ₃ CH ₂ CH ₂ CH ₂ OH)	hexane (C ₆ H ₁₄)	methyl styrene (C ₉ H ₁₀)	
carbon monoxide (CO)	hexone (C ₆ H ₁₂ O)	methylene chloride (CH ₂ Cl ₂)	
carbon tetrachloride (CCl ₄)	hydrogen chloride (HCl)	naphthalene (C ₁₀ H ₈)	
chlorobenzene (C ₆ H ₁₁ O)	hydrogen cyanide (HCN)	nitropropane (C ₃ H ₇ NO ₂)	
cyclohexene (C ₆ H ₁₀ Cl)	hydrogen peroxide (H ₂ O ₂)	nitrotoluene (C ₇ H ₇ NO ₂)	
dichlorobenzene (C ₆ H ₄ C ₁₂)	hydrogen sulfide (H ₂ S)	propyl alcohol ((CH ₃) ₂ CHOH)	
dichloroethylene (C ₂ H ₂ Cl ₂)	isoamyl acetate (C ₇ H ₁₄ O ₂)	styrene (C ₈ H ₈)	
diisobutyl ketone (C ₈ H ₁₈ O)	isobutyl alcohol (C ₄ H ₁₀ O)	sulfur dioxide (SO ₂)	
dimethylamine ((CH ₃) ₂ NH)	isopropyl alcohol (C ₃ H ₈ O)	tetrachloroethylene (C ₂ Cl ₄)	
ethanol (C ₂ H ₆ O)	isopropylamine (C ₃ H ₉ N)	toluene (C ₇ H ₈)	
ethanolamine (NH ₂ CH ₂ CH ₂ OH)	jp8	trichloroethylene (C ₂ HCl ₃)	
ethyl acetate (C ₄ H ₈ O ₂)	lp9	turpentine (UVCB)	

Technical Data

CGM 900 multi-gas monitor

Gases

EX	Combustible gases LEL
OX	Oxygen (O ₂) % volume
TOX	Carbon monoxide (CO)
	Hydrogen sulfide (H ₂ S)
ToxAlert	Broad range

Ranges

EX	CH ₄ 0 to 100% LEL
OX	O ₂ 0 to 25% volume
TOX	CO 0 to 500 ppm
	H ₂ S 0 to 100 ppm
ToxAlert	MOS 0 to 20 ppm

Detection principles (sensors)

EX	Catalytic combustion
OX	Electrochemical
TOX	Electrochemical
ToxAlert	Metal oxide sensor (MOS)

Response time

4 to 30 seconds depending on type of gas

Expected sensor life

OX, TOX, and ToxAlert	2 years
EX	1 year

Gas supply

Diffusion / sampling pump (optional)

Display

Auto-backlight, graphic alpha-numeric display

Operation

Touch keys for on / off, auto-zeroing, peak values, TWA and STEL readings, pump / display functions

Alarms

Visual—red LED, flashing gas readings
Audible—buzzer

Operation time

10 to 12 hours (depending on sensors, alarms, and sampling time)

Power source

Rechargeable NiMH battery pack

Temperature range

+25 to +110°F (-4 to +44°C) continuous
0 to +120°F (-18 to +49°C) intermittent

Casing

RF resistant, reinforced carbon fiber

Weight and dimensions

18 ounces (504 grams)
3.5x6.2x1.8 inches (90x199x60 mm) (WxHxD)

Approvals

UL Class I, Groups A B C D

Accessories / options

Hi-lite, high intensity alarm
Mini-sample pump
Hand aspirator
Dosimeter PC program and cable
Protective soft carrying case
Easy-to-grip rubber boot
12 V DC charger

Specifications subject to change without notification

Distributed by:



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