

CGM II 900

Multi-gas detector with ToxAlert



CGM II Multi-gas detector

- 4-gas monitor plus a **ToxAlert broad range sensor** for protection from hundreds of gases
- **AutoCal®** automatic calibration
- Datalogging ready
- **Smart sensor** technology
- PTO (power take-off port) for simple connection to datalogging and other accessories
- **Limited lifetime warranty**
- Optional mini-pump

GfG Instrumentation

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CGM II 900

Intuitive design with an added level of safety

The **CGM II 900** confined space gas detector continuously measures up to four hazards (CO, H₂S, O₂ and percent LEL combustible gas) in air as well as broad range detection of hundreds of other toxic gases with the ToxAlert sensor.

ToxAlert

The GfG toxAlert broad range sensor is based on MOS technology. The sensor will respond to literally hundreds of potential toxic gas hazards and provide an alert if a hazardous condition may exist. In combination with O₂, CO, H₂S substance specific electrochemical sensors and catalytic combustible sensors it makes for the perfect configuration entry into sewers where some hazards are known and others are not.

The broad range ToxAlert sensor protects you from hundreds of gases!

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

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

Easy Operation

With simple push button design and a large display the **CGM II 900** keeps gas detection simple. Most day-to-day functions are controlled with a single button, including display of Peak and TWA readings.

Automatic calibration

The **GfG Autocal**[®] feature automatically completes the calibration adjustments and updates the information in the instruments on-board memory.

Datalogging

All CGM II 900 detectors include a datalogging feature. The datalogger stores a comprehensive set of history data for detailed analysis, which may be downloaded to a PC for viewing, storage and evaluation.

What does OSHA think about broad range sensor?

Appendix E - Sewer entry: "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 is 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."

Specifications

Ranges & resolution for select sensors

| | | | | |
|-------------------------------------|---------|--------|-----|-------|
| Oxygen (O ₂) | 0 - 25 | % vol | 0.1 | %/vol |
| Combustible (LEL) | 0 - 100 | % LEL | 1 | % LEL |
| Carbon monoxide (CO) | 0 - 500 | ppm | 1 | ppm |
| Hydrogen sulfide (H ₂ S) | 0 - 100 | ppm | 1 | ppm |
| Broad range (ToxAlert) | 0 - 20 | counts | 1 | count |

Detection principles

| | |
|---|--------------------------|
| CH ₄ | Catalytic combustion |
| CO, H ₂ S and O ₂ | Electrochemical |
| ToxAlert | Metal oxide sensor (MOS) |

Other Specifications

| | |
|--------------------|--|
| Dimensions: | 6.2x3.5x1.8 in (157x89x46 mm) |
| Weight: | 18 oz (510 g) |
| Power: | Rechargeable NiMH battery pack |
| Operation time: | Up to 12 hours of continuous |
| Alarms: | Audible: 99 db (30 cm) Visual: LED |
| Housing: | IP-64 (dust and highly water resistant) RF resistant, reinforced carbon fiber |
| Temperature range: | -4 to +122°F (-20 to +50°C) |
| Humidity range: | 5 to 95% r.h. (non-condensing) |
| Pressure Range: | 700 to 1,300 hPa |
| Intrinsic safety: | UL Class 1, Groups A, B, C, D |
| Detection method: | Diffusion or optional sampling pump |
| Display: | Auto-backlight, graphic alpha-numeric display |

Standard Accessories

| |
|---------------------|
| Charger |
| Rubber boot |
| Datalogging enabled |
| Manual |

Optional Accessories

| | |
|---|--------------------------|
| Datalogging cable and software | |
| Calibration gas | |
| CO, H ₂ S and O ₂ | Electrochemical |
| ToxAlert | Metal oxide sensor (MOS) |

Warranty

Limited lifetime on instrument and electronics. Two years on O₂, LEL, CO and H₂S. One year on ToxAlert sensor.

Refer to GfG complete warranty for details

Specifications subject to change without notification

Distributed by:



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