

G850

6-gas Monitor PLUS ToxAlert Broad Range Sensor



- Exceptional HAZMAT and confined space performance
- Compact 1-to-6 sensor design **plus**...
- Optional broad range ToxAlert sensor protects against hundreds of toxic gases
- Built-in motorized pump operates in diffusion or sample-draw mode
- Highly configurable smart sensor design

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 G850 remains the premier instrument to successfully combine the unique characteristics and benefits of both electrochemical and **broad range** MOS sensors.

Beyond the Safety Standard

The G850 combines smart sensor technology with advanced electronics for a truly superior confined space instrument. The G850's ground breaking features are user-friendly and simple to operate. The **broad range** ToxAlert sensor gives you superior protection from hundreds of unknown toxic gases, without false alarms.

The AutoCal® feature simplifies and reduces calibration time. With these key features, an internal pump, and other useful accessories, the G850 provides both protection and convenience.

The versatile G850 recognizes the sensor type, detection range, calibration interval and alarm threshold values. Two gas supply modes (diffusion and internal pump) make this the ideal warning instrument to use before entering confined spaces.

The optional built-in pump allows for increased safety in confined spaces. If the pump is switched on, the diffusion outlet automatically shuts down to avoid distorting the measurement results.

What does OSHA think about broad range 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 sensor protects you from hundreds of gases!

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

acetic acid (C₂H₄O₂)
acetone (C₃H₆O)
acrylonitrile (C₃H_{3.5}N)
ammonia (NH₃)
benzene (C₆H₆)
butanone (mek) (C₄H₈O)
butyl acetate (C₄H₁₀O)
butyl alcohol (C₄H₁₀O)
carbon monoxide (CO)
carbon tetrachloride (CCl₄)
chlorobenzene (C₆H₅Cl)
cyclohexene (C₆H₁₀)
dichlorobenzene (C₆H₄Cl₂)
dichloroethylene (C₂H₂Cl₂)

diisobutyl ketone (C₉H₁₈O)
dimethylamine ((CH₃)₂NH)
ethanol (C₂H₆O)
ethanolamine (NH₂CH₂CH₂OH)
ethyl acetate (C₄H₈O₂)
ethyl chloride (C₂H₅Cl)
ethyl ether (C₄H₁₀O)
ethyl mercaptan (C₂H₅SH)
ethylamine (CH₃CH₂NH₂)
flourotrichloromethane (CCl₃F)
formaldehyde (CH₂O)
heptane (C₇H₁₆)
hexane (C₆H₁₄)

hexone (C₆H₁₂O)
hydrogen chloride (HCl)
hydrogen cyanide (HCN)
hydrogen peroxide (H₂O₂)
hydrogen sulfide (H₂S)
isoamyl acetate (C₇H₁₄O₂)
isobutyl alcohol (C₄H₁₀O)
isopropyl alcohol (C₃H₈O)
isopropylamine (C₃H₉N)
jp8
lpg
methanol (CH₃OH)
methyl acetate (C₃H₆O₂)
methyl alcohol (CH₄O)
methyl chloride (CH₃Cl)

methyl chloroform (C₂H₃Cl₃)
methyl ketone (C₄H₈O)
methyl mercaptan (CH₃SH)
methyl styrene (C₉H₁₀)
methylene chloride (CH₂Cl₂)
naphthalene (C₁₀H₈)
nitropropane (C₃H₇NO₂)
nitrotoluene (C₇H₇NO₂)
propyl alcohol ((CH₃)₂CHOH)
styrene (C₈H₈)
sulfur dioxide (SO₂)
tetrachloroethylene (C₂Cl₄)

toluene (C₇H₈)
trichloroethylene (C₂HCl₃)
turpentine (UVCB)
vinyl chloride (C₂H₃Cl)
xylene (C₈H₁₀)
xylydine ((CH₃)₂C₆H₃NH₂)
...and dozens more

Technical Data

G850 Multi-gas monitor

Gases

Ammonia (NH₃)
Carbon monoxide (CO)
Chlorine (Cl₂)
Chlorine dioxide (ClO₂)
DualTox (hydrogen sulfide (H₂S) and carbon monoxide (CO))
Ethylene oxide (C₂H₄O)
Hydrogen chloride (HCl)
Hydrogen cyanide (HCN)
Hydrogen sulfide (H₂S)
Methane (CH₄)
Nitrogen dioxide (NO₂)
Nitrogen monoxide (NO)
Oxygen (O₂)
Phosphine (PH₃)
Silan (SiH₄)
Sulfur dioxide (SO₂)

Detection principles (sensors)

Combustibles, methane Catalytic combustion / thermal conductivity
O₂, toxics Electrochemical
ToxAlert Metal oxide sensor (MOS)

Response time

5 to 60 seconds depending on type of gas

Expected life of sensors

Greater than 2 years

Detection range

C₂H₄O 0-20 ppm
CH₄ 0-100% LEL / 0-100% volume
Cl₂ 0-10 ppm
ClO₂ 0-2 ppm
CO 0-300, 1,000 or 2,000 ppm
DualTox (H₂S) 0-100 ppm and (CO) 0-300 or 500 ppm
H₂S 0-100 ppm
HCl 0-30 ppm
HCN 0-50 ppm
NH₃ 0-200 or 500 ppm
NO 0-100 ppm
NO₂ 0-30 ppm
O₂ 0-25% volume
PH₃ 0-10 ppm
SiH₄ 0-20 ppm
SO₂ 0-10 ppm

Gas supply

Diffusion
Diffusion and sampling pump (optional)

Display

Auto-backlight, graphic alphanumeric display

Operation

Touch keys for on / off, auto zeroing, peak values / display functions

Alarms

Visual - 360° flashing LEDs
Audible - 99 dB at 30 cm / 1 foot
Vibrating alarm - optional

Operational time

In continuous diffusion operation, the monitor will run more than 10 hours. The continuous runtime will be reduced by the alarms and the use of the sample pump.

Power source

NiMH battery pack (four hour charging time)

Temperature range

-4 to +122°F / -20 to +50°C

Ambient pressure

800 to 1,300 hPa

Casing

IP 64, RF resistant

Datalogger

Adjustable intervals of 2 minutes for 55 hours

Weight

21 ounces (600 grams)

Dimensions

3.08x5.56x1.76 inches (77x139x44 mm) (HxWxD)

Ratings and Certifications (intrinsic safety)

UL Class 1, Div.1

Specifications subject to change without notification

Distributed by:



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