



Ever Wonder Why You Smell Gas But Your Gas Detector Doesn't?

It's very common for First Responders to encounter situations during a gas call where they smell explosive gas, but their gas detectors do not respond. The odor could be in the street or yard or inside the house. Both the homeowner and firefighter smell gas, but the detector does not pick it up. Why does this happen?

The short answer is that the level of odorant injected into the natural gas by the utility is at a level that is lower than the minimum detection range of the standard and most widely used four-gas meters. Most four-gas meters (MSA, SENSIT P400, Draeger, Scott, RAE, etc.) use a catalytic bead sensor to detect combustible gases. These are very good sensors for many applications, but they have a "blind spot for explosive gases." At low parts per million, catalytic bead sensors cannot distinguish between sensor "noise" and actual gas detection. To eliminate erroneous readings, software has been incorporated to prevent the meter from responding until concentrations reach about 2,000 to 4,000 parts per million. This causes the "blind spot" at low concentrations and is why the smell of gas may be evident before the detector responds.

This "blind spot" can be eliminated with the use of a detector with a metal oxide sensor, known as an explosive-gas detector. Good examples of this kind of detector are the SENSIT TKX, HXG-2d or HXG-3. Most gas utilities use an explosive-gas detector to find the smallest concentrations of natural gas, propane or other combustibles. Explosive-gas detectors react to combustibles about 10 times faster than typical four-gas meters with catalytic sensors. They react nearly instantaneously to combustibles in concentrations as low as 10 or 20 parts per million.

A better solution for the First Responder is to use both detectors in tandem on a gas call. The four-gas meter provides reliable readings for CO, O₂, H₂S, HCN and the higher concentrations of explosive gases, while the explosive-gas detector provides an instantaneous response to those low-level leaks.

In conclusion, 40% of gas calls are due to explosive gases, so the use of a standard four-gas meter combined with an explosive-gas detector will give a First Responder the most complete data to make the best and safest decision.

The ONLY Three Options When Choosing Your Next Gas Detectors

OPTION 1



Standard Multi-Gas Meter
LEL, CO, O2, H2S, HCN



Used by the majority of Fire Departments in the U.S.

Should be used with an explosive-gas detector. The use of these instruments together allows the user to see the complete picture and make the safest decision.

OPTION 2



Standard Multi-Gas Meter
LEL, CO, O2, H2S, HCN



Explosive-Gas Detectors are 10 times faster at finding explosive gases than the standard multi-gas meter



Used by many of the top 25 FDs, including FDNY, and Los Angeles County.

OPTION 3



Sensit Gold Series
LEL, CO, O2, H2S or HCN



Combines a four-gas meter and an explosive-gas detector in one instrument. Used by more gas utilities than any other brand plus numerous fire departments.



SENSIT Explosive Gas Detectors



	TKX	HXG-2d	HXG-3
			
Unit List Price, 2021	\$257	\$521	\$914
Application	<ul style="list-style-type: none"> • Leak Finder • Arson 	<ul style="list-style-type: none"> • Leak Finder • Arson • Digital Display 	<ul style="list-style-type: none"> • Leak Finder • Pump Option • Data logging • Arson
Unit Life	8–10 years	8–12 years	8–12 years
Warranty	3 years	3 years	3 years
Sensor Life	3–5 years	3–5 years	3–5 years
Sensor List Price, 2021	\$49 LEL	\$49 LEL	\$49 LEL
Gas Leak Detection	Yes	Yes	Yes
4 Gas Unit	No	No	No
5 Gas Unit	No	No	No
Pump	No	No	Yes
OSHA Alarm	No	Yes	Yes
Needs Calibration	No	Yes	Yes
Audible Tick	Yes	Yes	Yes

SENSIT® TKX is a gas leak finder only. It will find a leak or can be used in arson investigation, but **will not alarm in a dangerous environment**. It needs to be used with another gas detector that will alarm. The TKX does not need calibration. Its LEL sensor typically lasts 3–5 years.

SENSIT® HXG-2d is a gas detector with a digital display, and will find a gas leak, assist in arson investigation and will alarm in a dangerous environment. It does require calibration and will need a bottle of gas every 3 years. Its sensor typically lasts 3–5 years.

SENSIT® HXG-3 is a gas detector with a larger digital display than the 2d, and will find a gas leak, assist in arson investigation and will alarm in a dangerous environment. It does require calibration and will need a bottle of gas every 3 years. Its sensor typically lasts 3–5 years. ***This unit would be preferred for a department that needs a pump or data logging.***



Sensit[®] Gas Detectors find eXplosive gas ten times faster and are used by:

Fire Department	State	Gas Company
Arlington FD	VA	Virginia Natural Gas
Atlanta FD	GA	Southern Company/Atlanta Gas
Boca Raton FD	FL	TECO
Boston FD	MA	Columbia of Mass
Bozeman FD	MT	Northwestern Energy
Camden FD	NJ	New Jersey National
Chicago FD	IL	Peoples Gas, Nicor Gas, Northshore Gas
Columbus FD	OH	Columbia Gas
Dallas FD	TX	Atmos Energy
Gwinnett County FD	GA	City of Bufford Gas & City of Lawrenceville Gas
Hobbs FD	NM	New Mexico Gas
Kansas City FD	MO	Spire Gas
Los Angeles County	CA	PG & E
Lexington FD	KY	Columbia Gas
Madison FD	WI	Madison Gas & Electric, Alliant Energy
Minneapolis FD	MN	Xcel Energy
New York City FD	NY	Con Ed
Norfolk FD	VA	Virginia Natural Gas
Philadelphia FD	PA	PECO Gas, Philly Gas
Raleigh FD	NC	PSNC Energy
Seattle FD	WA	Puget Sound Energy
San Francisco FD	CA	PG & E
St. Paul FD	MN	Xcel Energy

**All Sensit meters are available for a
30-day Free Trial through our Try-It Program!**