



## Gas Detection Instruments for the Fire Service



[ Confined Space Entry, Home CO Alarm Calls, Natural Gas Leaks, Gasoline Spills, Odor Calls, Overhaul, Hazmat, and Chemical Agent Detection ]





# MSA Specializes in Gas Monitors for YOUR Fire Service Applications

Emergency response crews face two basic challenges when entering dangerous environments. They need to know:

1. If the air is acceptable for normal, unprotected breathing.
2. If the air is safe from potential explosions.

Portable gas detection equipment can help meet this challenge.

Gas detection needs are expanding. Increasingly, fire services are being called on to handle situations where hazardous substances may be present and proper detection equipment is necessary.

MSA provides equipment to meet almost any gas detection need.

## Confined Space Entry

There are many situations when emergency response teams are called to perform emergency services or rescues in confined spaces. While often industrial in nature, a confined space is typically defined as any enclosed area not meant for human habitation, such as a sewer or a storm drain.

MSA's multigas detectors can help ensure the confined space atmosphere is safe before your team enters and while they are working in the area.

## Home Calls

With the advent of carbon monoxide monitoring in the home, the number of calls to fire departments regarding CO alarms in the home has risen dramatically.

The PULSAR<sup>+</sup> Detector, Orion Detector and FiveStar Alarm can detect the presence of CO upon arrival at the call site and determine if the premises are safe for habitation. These units can even be used to locate the source of the gas (often a car in the garage or a leaky furnace vent.)

Fire departments may be called because of natural gas leaks or suspicious odors. The capability to measure several gases at once becomes a distinct advantage in these situations.

## Overhaul

During overhaul operations, you can never be certain of the conditions in a damaged structure. The FiveStar Alarm and Orion Detector can indicate the need to use respiratory protection.

## HAZMAT

For years, fire departments and HazMat teams have been concerned about detecting and identifying hazardous compounds at spills and other emergency situations.

With the ability to detect hundreds of volatile organic compounds, the Passport PID II Organic Vapor Monitor is the ideal instrument to use for the Hazmat applications.

## Chemical Agent Detection

First responders play an important role in domestic preparedness. MSA Detector Tubes are used to detect a wide range of nerve, blister, blood and choking agents.





# Titan™ Combustible Gas Detector

## Features & Benefits

### Reliability

- \* 85 dB, piercing audible alarm
- \* More-than-320 angle, highly visible visual alarm
- \* Optional NiMH battery pack with vibrating alarm
- \* Triple alarms ensure reliable warning

### Ease of Use

- \* Simple, intuitive one-button operation—simply switch it on.
- \* Easy-to-read display is one of the largest of any pocket-sized instrument.
- \* Back-lighting provides exceptional contrast for high visibility from a variety of angles in low-light.
- \* Alkaline batteries provide a minimum of 13 hrs. of continuous operation; NiMH battery pack provides a minimum of 11 hrs.
- \* Full battery charge (under 4 hrs.) with MSA Fast Charger means less instrument downtime
- \* Contoured rubber grips allow unit to fit comfortably and securely in gloved hands

### Durability

- \* IP54 rating for excellent resistance to water and dust penetration and performance in the harshest conditions and toughest environments.
- \* Strong construction enables it to survive accidental drops.
- \* Features the MSA Series 20L Sensor, which provides up to 50x the silicone poison tolerance, and features a considerably expanded sensor life. Sensor is very easy to replace

The TITAN Combustible Gas Detector, for the detection of flammable gases or vapors, features one-button operation, a compact size and a 24-month service life. Reliable, easy to use and durable, the detector stands up to the roughest handling in the harshest environments. Suitable applications include:

- \* home calls
- \* overhaul
- \* perimeter monitoring



## Ordering Information

Part No.	Description
10033144	TITAN with alkaline battery pack
10033387	TITAN with NiMH battery pack
10033388	TITAN with vibrating NiMH battery pack
10040783	Charger



# Detector Tubes and Pumps/HazMat Response Kit

## Features & Benefits

- Quickly classifies unknown chemical gases and vapors
- Quad-Port Sampler allows simultaneous testing with four detector tubes, meaning less time in IDLH atmosphere
- Flow-limiting orifices ensure even sample flow
- Portable and easy to handle
- Includes simple interpretation guide

## Ordering Information

Part No.	Description
807472	HazMat Response Detector Tube Kit, includes 12 types of detector tubes, multiple tube holder, Kwik-Draw Pump and interpretation guide
485233	Extra Quad-Port Sampler

The HazMat Response Detector Tube Kit can be used by firefighters, HazMat Response Teams and other workers to help classify unknown chemical gases and vapors at accident or spill sites. A Quad-Port Sampler allows four chemical classes to be tested simultaneously.

The portable kit contains 12 types of Detector Tubes (each with sufficient tubes for 10 complete tests), a Kwik-Draw Pump to draw the sample through the tubes, the multiple tube holder and a convenient, easy-to-follow interpretation guide.

MSA also offers a full line of detector tubes for analysis of more than 140 chemical substances, see Data Sheet 08-00-02.



# PULSAR+ Single Gas Detector



The PULSAR+ Single-Gas Detector is reliable, easy-to-use, and durable. With sensor options for CO, H<sub>2</sub>S and O<sub>2</sub>, this unit will provide industry-leading performance and stand up to the roughest handling in the toughest environments.

## Features

- Easy-to-Read Display
- One-Button Autocalibration
- Distinctive Alarm System
- Clip Options
- Replaceable Battery
- Replaceable Sensor
- Durability
- Large Rubber Buttons

PULSAR+ Fire Service Kit is designed specifically for firefighters who must respond quickly to CO calls. The kit contains a CO PULSAR+ Single-Gas Detector with a protective jacket and neck strap, a Squirt® Gas Bump Test Cylinder, and 10 Carbon Monoxide Detector Tube Cards, all packaged for convenience in a durable, compact carrying case. The Squirt Gas Bump Test Cylinder provides a quick and certain means of calibrating the PULSAR+ Single-Gas Detector in the field; the Detector Tube Cards offer homeowners an easy and affordable means of checking their exposure to CO levels after the firefighter has left the home.

## Pulsar+ Single-Gas Detectors for the Fire Service

Instrument Type	Part Number
CO	10040334
CO with vibrating alarm	10040335
CO Fire Service Kit	10041735
CO Fire Service Kit, vibrating	10041736

Gas Type	CO
Range	0-500 ppm
Resolution	1 ppm
Response Time	T90<60 sec

Factory-set Alarm Setpoints	Low Alarm	High Alarm	STEL	TWA
CO	35 ppm	100 ppm	400 ppm	35 ppm



# MiniCO® Carbon Monoxide Detector Tube Cards

MiniCO Carbon Monoxide Detector Tube Cards give firefighters a way to reassure worried homeowners. Placed near the source of a suspected leak, the detector tube card contains a detector tube that changes color if hazardous levels of CO are detected.

## Features & Benefits

- Provide simple and accurate way for homeowners to monitor CO.
- Simple to use — instructions are printed on card
- Provide added peace-of-mind for worried homeowners
- Cost-effective way to enhance community relations efforts for fire departments, utilities, HVAC companies and government agencies
- Organizations can easily customize cards by printing or stamping logo and phone number in space provided

## Ordering Information

Part No.	Description
481954	MiniCO Carbon Monoxide Detector Tube Cards (package of 10)



# Orion® Multigas Detector

The Orion Multigas Detector is a low-cost four-gas portable detector featuring one-button calibration, rugged construction with excellent resistance to dust and water penetration, and a 16- to 20-hour run time.

Designed for reliability, durability and ease of use, the Orion Multigas Detector monitors O<sub>2</sub>, H<sub>2</sub>S, CO and combustible gas and is ideally suited for key Fire Service applications, including:

- \* confined space entry
- \* home calls
- \* overhaul operations



## Features & Benefits

### Reliability

- \* Proven pulsecheck pump technology
- \* 16- to 20-hour run time
- \* Battery recharge time is less than 4 hours

### Ease of Use

- \* Simple, intuitive, 2-button operation for easy use with gloved hands
- \* Large display with great contrast so it's easy to read in low-light conditions and from a variety of angles.
- \* Monitors up to four gases at a time
- \* One-button calibration provides simplified operation and reduced training time
- \* Separate display for alarm icons; alarms displayed directly above gas readings
- \* Alarm lights visible from all angles
- \* Accommodates either NiMH or alkaline battery packs (interchangeable)
- \* Sensors are easy to change—simply remove 3 screws
- \* Case fits your hand comfortably so it's easy use on the job
- \* Optional datalogging feature allows TIM® System compatibility for reduced recordkeeping and to help ensure calibration accuracy

### Durability

- \* Tough, durable construction; passes 6-ft. drop test onto concrete
- \* Weather proof (IP54 rating), for greater resistance to dust and water
- \* Durable sensors have an expanded service life and are easy to maintain

### Additional Features

- \* Low price includes a charger and optional internal pump
- \* Compatible with FiveStar Link™ software, for simplified display functions and data manipulation
- \* Lifetime warranty on non-consumables; two-year warranty on consumables

## Ordering Information

The Orion Multigas Detector is available in a variety of configurations, with multiple sensor and battery options. With MSA's ATO System it's easy to "custom order" your Orion Detector to meet your particular needs. To obtain a copy of the Fire Service Orion Multigas Detector ATO System and Price Guide, request Bulletin No. o816-29-MC. To obtain a copy of the ATO via fax, call MSA QuickLit Information Service at 1-800-672-9010. At the prompt, request QuickLit Document #2288.



## Orion® G Multigas and Leak Detector

The Orion G Multigas and Leak Detector is the only instrument you need for detecting O<sub>2</sub>, H<sub>2</sub>S, CO and combustible gas leaks. And with its flexible probe sensor, it is perfect for residential gas leak calls. It also is great for confined space applications.

### Features

- Multi-functional flexibility
- Superior design
- Long-life battery
- Durable sensors
- One-button calibration
- Tough, durable construction
- Large, easy-to-read display
- TIM® compatibility
- Built-in pump

### Ordering Information

Call 1-877-MSA-FIRE for availability and ordering information.





# FiveStar<sup>®</sup> Alarm

There are many applications for the FiveStar Alarm in the fire service, many of which must be performed on a regular basis—so it pays to be prepared. Some of these applications include:

- Confined space entry
- Home CO alarm calls
- Natural gas leaks
- Gasoline spills
- Odor calls
- Overhaul

There's one flexible product, at the right price, that is the best choice for both daily use and emergencies. The FiveStar Alarm is a unit that can sense several gases at the same time.

## Features & Benefits

- One-button calibration—simplifies instrument calibration and reduces training needs
- Compact, lightweight unit—less intrusive, less to carry
- Large, easy-to-read display—lends to hands-free operation
- Excellent RFI resistance—minimal false alarms triggered by walkie-talkies
- High-impact ABS case—extremely durable with increased impact resistance
- Flexible battery options—rechargeable and/or replaceable
- Battery remaining-time indicator—reduced downtime on the job
- Detects up to five gases simultaneously—fewer instruments to carry

Rely on MSA to provide the most compact, durable, and simplest multigas detector available today.



## Ordering Information

FiveStar Alarm Fire Service Kit, Part No. 711301

Kit includes: 3-gas instrument (LEL, O<sub>2</sub> and CO); NiCad battery pack, 110V charger, 10-foot sample line, 1-foot probe, high-visibility-orange nylon jacket, squirt-gas check kit and a convenient, high-visibility-orange carrying case.

This standard three-gas unit with combustible, oxygen and carbon monoxide sensors is adequate for most needs. However, MSA offers other sensors for your specific needs. Available from most safety products or fire service distributors nationwide, the FiveStar Alarm can help ensure everyone goes home safely.

## Assemble-to-Order (ATO) System: You Make the Choices

The ATO System makes it easy to “custom order” the FiveStar Alarm, configured exactly the way you want it. To obtain a copy of the ATO System and Price Information for the FiveStar, request Bulletin No. 0816-07-MC. To obtain a copy of the ATO via FAX, call MSA QuickLit Information Service at 1-800-672-9010. At the prompt, request QuickLit Document #2454 (ATO for FiveStar Alarm).





# Passport® PID II Organic Vapor Monitor

The Passport PID II Organic Vapor Monitor is a convenient, portable instrument for detecting low concentrations of volatile organic compounds (VOCs). The Passport PID II Monitor's compact design supports a variety of monitoring applications:

- Leak Detection
- Perimeter Monitoring
- Spill Delineation
- Remediation
- Determining the Level of Personal Protective Equipment (PPE) Required
- Decontamination
- Arson Investigation

## Features & Benefits

- Operating range from 0.1-10,000 parts per million (ppm) isobutylene
- Humidity insensitivity
- NRTL Class I, Div 1 Intrinsic Safety Approval
- Unique auto-ranging capability
- Personal and survey monitor
- 69 pre-programmed, plus 10 user-defined response factors
- Three push buttons for simplified operation
- Graphic and numeric data display
- Peak, short-term exposure (STEL) and time-weighted average (TWA) measurements
- Simple Fresh Air Setup
- Labeling feature identifies sampling locations

## Ordering Information

Passport PID II Fire Service Kit Part No. 711143

Kit includes: Passport PID II Organic Vapor Monitor, Rechargeable Nickel Cadmium Battery with 120 VAC charger; additional alkaline battery pack, 8-inch probe for remote area sampling, pistol grip for secure attachment, calibration gas (Squirt Gas Cylinder) with "bump test" kit for on-the-go instrument checks, carrying case to keep it all together in one convenient package.

## Assemble-to-Order (ATO) System: You Make the Choices

The Passport PID II Monitor and accessories can be ordered conveniently and easily by using MSA's Assemble-to-Order (ATO) system for Portable Instruments.

To obtain a copy of the "ATO System Ordering Selection Matrix and Price List for the Passport PID II Monitor," see Bulletin No. 0804-28.



# MSA

## Chemical Warfare Agent Detector Tubes

Detect a wide range of nerve, blister, blood, and choking agents.

### Features & Benefits

- Quick, simple to use; easy to interpret results
- "Go/No Go" style
- Unparalleled flexibility and ease of sampling
- Can be used with MSA's full line of pumps, including the Kwik-Draw, Gas-Tester II, and Toximeter II pumps
- Economically priced
- All sold as box of 10 tubes

### Ordering Information

Part No.	Agent Types, Examples	Sensitivity
10007654	Nerve-Sarin, VX, GA, GD, etc.	1x10 <sup>-5</sup> mg/l
10007653	Blister-Mustard Gas	1x10 <sup>-3</sup> mg/l
10007650	Blister-Lewisite	1x10 <sup>-3</sup> mg/l
10007652	Blister-variety, including Mustard Gas	1x10 <sup>-3</sup> mg/l
10007651	Blood and Choking—CG, DP, AC, CK	5x10 <sup>-3</sup> mg/l

For more information, request Bulletin PR-08-0014



### Toximeter™ II Automatic Detector Tube Pump

Allows the user to preset the number of pump strokes (from 1 to 250 strokes), which makes the sampling process easier. Menu program can be set in 8 different languages. Intrinsically safe.

### Ordering Information

Part No.	Description
655585	Toximeter II Pump

### Kwik-Draw® Deluxe Pump

Designed for accurate, one-hand operation and consistent delivery of a sample draw volume of 100 ml. Includes state-of-the-art end-of-stroke indicator and stroke counter.

### Ordering Information

Part No.	Description
487500	Kwik-Draw Deluxe Pump, with remote sampling adapter carrying pouch, & end-of-stroke indicator
488543	Kwik-Draw Basic Pump, with remote sampling adapter & carrying pouch



**Note:** This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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