Gas Detection

Gas Detector, a life saving equipment that measure and indicate the concentration of certain gases in the working environment. They are typically employed to prevent toxic exposure, fire and oxygen deficiency. They are manufactured either as portable or fixed units and work by signifying high levels of gases through a series of audible or visible alarms. Standard gas detector could detect from one gas to to four gases, modern multifunctional or multi-gas devices are capable of detecting several gases at once. When the sensors response surpasses a certain pre-set level, an alarm will activate to warn the user. There are various types of detectors available and the mojority serves the same function: to monitor and warn of a dangerous gas level. However, when considering what type of detector to install, it is helpful to consider the different sensor technologies.

Electrochemical sensors are most commonly used in the detection of toxic gases like Carbon Monoxide, Chlorine, Hydrogen Sulfide, Sulfur Dioxide, Nitrogen Dioxide, Hydrogen Cyanide, Nitric Oxide and Ammonia.

Catalytic sensors are used to detect combustible gases such as hydrocarbon, and works via catalytic oxidation. As a combustible gas comes into contact with the catalytic surface, It is oxidized and the wiring resistance is changed by heat that is released. A bridge circuit is typically used to indicate the resistance change.

Photo Ionization Detectors (PID) detect toxic or hazardous vapors in ppm from 0.1 to 2000 ppm and measure low concentration of ionizable chemicals like Volatile Organic Compounds (VOCs), such as hydrocarbons and some inorganic vapors by photoionization. A process that treats chemicals with ultraviolet light to convert their molecules into electrically charged ions.

iTrans 2 One or Two Point Fixed Gas Detector

- Optional HART Communication Protocol
- Smart Infrared Gas Sensor Technology

iTrans 2 is equipped with intelligent electronics to provide one or two points of detection from a single head for maximum flexibility, superior performance and lower installation costs. With the optional HART Communication Protocol, the iTrans 2 offers remote diagnostics, set-up and calibration.

Features:

- **Gases Detected:**
  Toxic, combustible, O2, CO2
- **Sensor Technologies :**
  Electrochemical, catalytic, infrared
- **Power In / Output :**
  12-28VDC / 4-20 mA, RS485 Modbus RTU, relays, optional HART
- **Approvals:**
  ATEX pending, CE, IECEx, NRTL/c and CSA, China Ex, CCCF

AirAware NEMA 4 General Purpose Indoor Monitor

- Light industrial or commercial applications
- Dual alarm LEDs and push-button operation

AirAware is the logical choice for areas that require continuous monitoring without the need of an explotion-proof enclosure. It provides discrete monitoring with enhanced aesthetics becoming the ideal solution for reliable, low-cost fixed point detection. An optionional vanity plate hides the display.

Features:

- **Gases Detected:**
  CO, C12, H2S, NO2, SO2, O2, NH3, NO, or HCl
- **Sensor Technologies :**
  Electrochemical
- **Power In / Output :**
  12-24VDC / RS485 Modbus RTU; 4-20 mA, relays & on board audible alarm optional
- **Approvals:**
  CSA for non hazardous area

MX43 Analog and Digital Controller

- Up to 32 channels via RS-485 Modbus RTU or 4-20 mA (8 max)
- USB for data logging and automated backup of configuration and firmware

MX 43 is a flexible, fully scalable, easy to use control system that allows up to 32 detectors to be distributed on 8 lines for increased cost savings. The COM 43 application makes programming fast and easy on a PC choosing devices from a pre-programmed library which can then be transferred to the MX43 using a USB cable.

- **Input / Output:**
  RS-485 Modbus RTU, 4-20 mA, relays (up to 32), logic input
- **Power In :**
  21-28 VDC, 100-240 VAC, optional on-board battery backup
- **Classification Options :**
  IP55 (wall-mounted), IP31 (rack)
- **Approvals:**
  ATEX, CE, CSA pending, EAC, MED

PS200 Up to Four Gas Personal Monitor GM-PS200-64052Q

- Auto bump / calibration station (Accessory)
- Optional internal pump and easy one button operation

PS200 provides unrivaled protection in confined space applications. Monitoring up to 4 gases simultaneously, it can be configured to detect a combination of Methane, Oxygen, Carbon Monoxide, and Hydrogen Sulfide, as well as other flammable gases. An optional internal pump allows for pre-entry checking.

- **Gases Detected:**
  LEL, H2S, O2, CO
- **Sensor Technologies :**
  Electrochemical, catalytic
- **Run Time :**
  14 hours, 8 hours (pumped)
- **Alarms:**
  Highly visible flashing LED, piercing> 90dB audible
- **Approvals:**
  ATEX, CE, IECEx, cCSAus, MED

PS500 Up to Five Gas Personal Monitor

- Auto bump and calibration station (Accessory)
- Over 15 Plug-&-Play smart sensors to choose from including PID for VOCs

PS500 can be tailored to detect up to five gases and is particularly useful in noisy environments, featuring a piercing 95dBA alarm. An optional internal pump allows for pre-entry checking. PS500 features a high-impact resistance case and on-board data logging for calibration certificates, data management and event logging.

- **Gases Detected:**
  LEL, H2S, O2, CO, SO2, CL2, NH3, NO, NO2, PH3, VOC, C6H6, dual tox CO / H2S
- **Sensor Technologies :**
  Electrochemical, catalytic, PID, NDIR
- **Run Time :**
  12 hours min with pump - rechargable NiMH or 3 AA alkaline
- **Alarms:**
  Visual 360° light bar, piercing 95dB audible, TWA, STEL, low battery
- **Approvals:**
  ATEX, CE, IECEx, UL, MED

GT 1 Instrument, 7 Applications

- Auto bump and calibration station (Accessory)
- Leak detection from PPM to volume gas

GT Series is designed for the gas industry, satisfying all the needs of service technicians within a single unit. Seven modes of operation include: leak test, confined space entry, barhole testing, carbon monoxide, purge, sniffer and pressure leak tighness. Features include data logging, integral flash light and geiger on ppm range.

- **Gases Detected:**
  O2, CO, H2S, dual tox CO/H2S, methane (ppm, LEL,% volume) water gauge
- **Sensor Technologies :**
  Electrochemical, catalytic, semiconductor, thermal conductivity, pressure transducer
- **Battery Life :**
  8 hours: 3´C´ type batteries - LR14 alkaline or rechargeable
- **Alarms:**
  High visibility LEDs, 85dB audible
- **Approvals:**
  ATEX, CE, IECEx, CSA, UL

Protégé ZM Zero Maintenance Single Gas Personal Monitor

- No charging or calibration required
- Display shows life remaining, gas readings or both

Protégé ZM is an easy-to-use, zero-maintenance gas detection solution that delivers high performance in a small package. Once activated, the Protégé ZM monitor will operate for two years, maintenance and hassle free. Additional features include user configurable alarm set points, bump & calibration reminders and data logging.

- **Gases Detected:**
  H2S, O2, CO
- **Sensor Technologies :**
  Electrochemical
- **Battery Life :**
  2years, hibernate mode extends life up to one year on CO and H2S
- **Alarms:**
  95dB audible, red LED visual, vibrating
- **Approvals:**
  ATEX, CE, IECEx, CSA, INMETRO, EAC, IP66/67

Gasurveyor 500

Gas Industry Standard Portable Monitor

- Auto Bump and Calibration Station (Accessory)
- Multiple modes including: Combustible gas indicator / confined space monitor / purge / sweep

Offering highly accurate and reliable instrumentation in an extremely robust, anti-static case, the Gasurveyor 500 series measures combustible gases (ppm, %LEL, %Vol) in many applications and optionally O2, CO and H2S. Features include configurable operation, auto ranging, internal sample pump and data logging.

- **Gases Detected:**
  CO, H2S, combustible (ppm, LEL, %volume), O2
- **Sensor Technologies :**
  Electrochemical, catalytic, semiconductor, thermal conductivity
- **Battery Life :**
  15 hours 4´D´ size alkaline or 9 hours rechargeable battery pack
- **Alarms:**
  Highly visible flashing LED, typically 85dB audible @ 1m
- **Approvals:**
  ATEX, CE, IECEx, CSA, UL, MED

BM 25 / BM 25W

Up to 5 Gas Transportable Monitor (with Wireless Option)

- Network up to 30 wireless devices (up to 1km / .62 mile line of sight
- Intrinsically safe trickle charger for long-term monitoring in classified zones

BM 25 is ideal for mobile or temporary work applications, team protection, area surveillance or locations where fixed detection systems are not suitable. Features include STEL and TWA values, data logging of four months or more and is compatible with the MX 40 controller.

- **Gases Detected:**
  Toxic, combustible, O2, CO2, Isobutylene
- **Sensor Technologies :**
  Electrochemical, catalytic, infrared, PID
- **Battery Life :**
  NiMH up to 170 hours operating time, 135 hours in wireless mode
- **Alarms:**
  Ultra bright LED beacon visible 360°, 103dB @ 1 meter, relays
- **Approvals:**
  ATEX, CE, IECEx, CSA, INMETRO, EAC

3M™ Air Monitors are simple and effective devices that collect certain airborne contaminants through the scientific principle of diffusion. They meet or exceed OSHA accuracy requirements of ±25% accuracy at 95% confidence level for many work contaminants. (18 months shelf life)

Organic Vapour Monitors 3M-3520 / 3M-3530 with Back-up Section (Brown)

Primary and back-up sorbent pads for sampling demanding environments. Especially suited for monitoring compounds like vinyl chloride, butadiene and methylene chloride for which activated carbon shows limited capacity

3M-3520 monitor only
3M-3530 monitor only with analysis for up to 3 compounds per monitor

Formaldehyde Monitors

3M-3720 / 3M-3721 (Purple)

Monitors personnel or work areas in health care, laboratories, and in the chemical, pulp/paper, foundry and textile industries. Analysis procedure is available on request. Not acceptable for STEL monitoring

3M-3720 monitor with analysis
3M-3721 monitor only

Ethylene Oxide Monitors

3M-3550 / 3M-3551(Rubia)

Design for sampling personnel or work areas in the pharmaceutical, health care and chemical industries. Analysis procedure is available upon request.

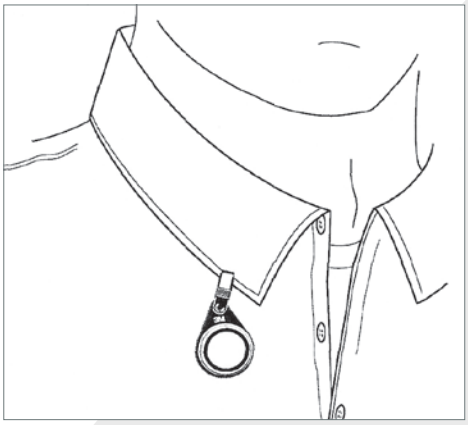
3M-3550 monitor with analysis
3M-3551 monitor only

Organic Vapor Monitors

3M-3500 / 3M-3510 (Orange)

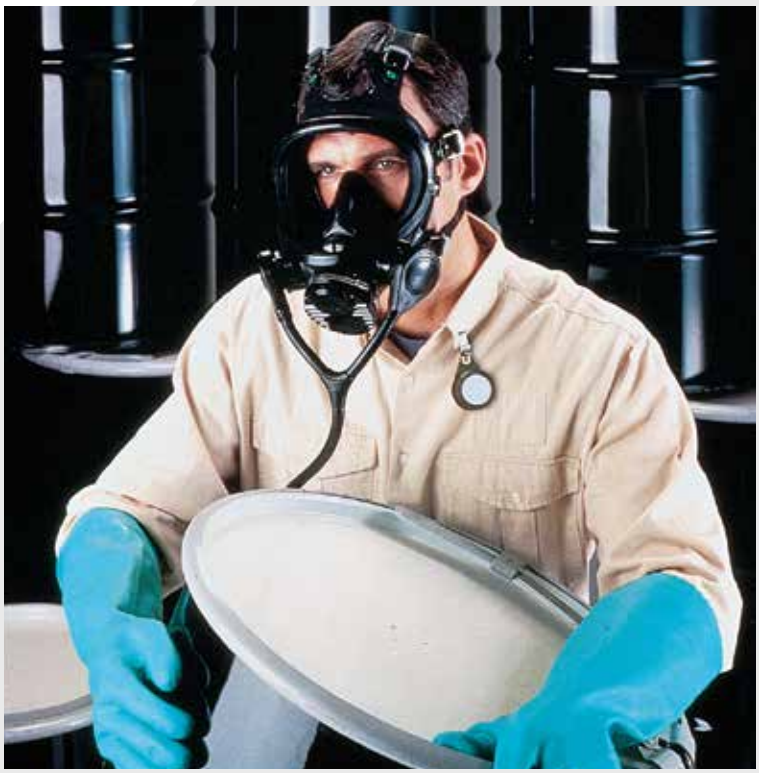
Single charcoal sorbent wafer for easy collection of organic vapours. Analysis by gas chromatography

3M-3500 monitor only
3M-3510 monitor with analysis for up to 3 compounds per monitor



Features & Benefits:

- **Simple and Convenient**
  There are no batteries, hoses, pumps or equipment to operate
- **Easy to Use**
  Just clip the monitor to shirt lapel, collar or pocket
- **Versatile**
  3M monitors can also be used for area monitoring, it sufficient air flow exists
- **Product Support**
  3M provides reference information needed to use the monitors
- **Analysis Options**
  3M monitors can be analysed in the lab of your choice or returned for analysis
- **Confidence**
  3M's manufacturing operation is ISO9002 certified and our testing facilities are accredited by the American Industrial Hygiene Association
- **Comfort**
  3M monitors are small and lightweight and will not interfere with employee activities



Traffic Cone

- Highly visible traffic cone help to warn hazards on site and roads. It offers an economical and convenient way of barricading off a stretch of work site or road.
- Color: Orange with reflective sleeve
- Size: 18”, 24”, 30”

Utility Catcher® Clip KE-OMS/UHC

- The Utility Catcher® clip slips over a belt or heavy waistband
- Originally designed as an easy and convenient way to keep up with a hard hat when not in use
- A multipurpose clip that can be used to keep up with tools or other PPE items

- Color: Orange, Yellow, Green, Blue

1939 Glove Guard® Glove Clip KE-1939

- The Glove Guard® clip is the original glove clip and the only one with the patented safety breakaway design. It’s implementation can drastically reduce glove replacement costs and hand injuries because workers will have their gloves with them when needed.
- It weights just 3/4oz and measures 5.25" long and is made from an engineered grade material that holds its memory, resists flex fatigue, is non-conductive and non-corrosive.

- Color: Blue, Red, Green, Yellow

Safety sign

Industrial safety sign spell out the specific actions to avoid, to look out for and action to be taken to ensure safety.

Available in:
- Self-adhesive vinyl
- Aluminium
- Acrylic plastic

Support Belt SW-2910-SB-9308

Safeware back support belt provides comfortable relief from lower back strain when proper lifting techniques is adopt

- Extra wide 1.2” width suspenders
- Fully enclosed spring steel for flexible, contoured support
- Easy adjustable elastic outer panels for added lower back support
- Comfortable
- Ergonomically designed

Color:	**Black**	
Size:	S	(28” - 36”)
	M	(34” - 38”)
	L	(36” - 42”)
	XL	(40” - 45”)
	XXL	(45” - 47”)

Tel : 6745 2966 · Fax: 6841 2966 · Email: sales@qss-safety.com · Website: www.qss-safety.com

Zetex® Fire Blanket 3732

- Zetex® 3732 Fire Blankets are used extensively on board ships, in factories, and in commercial buildings. It is an ideal fire suppression tool in the household, especially for kitchen, dustbin, and other small fires
- The blanket is a woven fiberglass fabric and comes in a satin weave (i.e. smooth, soft, and tightly weaved), which protects against skin irritation
- The fabric is only 0.45mm thick and can be easily wrapped around uneven surfaces. It provides an effective outer layer protection against unwanted contact with heat
- All Zetex Fire Blankets meet or exceed British Standards (BS) 476 Part 6. The blanket comes in sewn standard sizes of 4' x 4', 4' x 6', 6' x 6'
- Zetex® fire blankets come in compact PVC bags rectangular or containers for easy mounting at a convenient location

CPE shoes cover SW-CN506

- Made of low density CPE film making them liquid impervious and lint-free
- An economical alternative when a low particulate material is needed to protect against splash

1 or 2 ply pleat nurse mask

SW-CN103-1P ***(Single ply)*** / SW-CN103-2P ***(Double ply)***

- Made of paper
- With comfortable ear loops

Disposable Dust mask SW123-CN104

- Light weight & easy to breathe
- Good filtering efficiency
- Comfortable to wear
- Weight: 240 gms

Non-Woven 3-Ply Mask-Ear-Loop SW-CN102-3P

- Without glass fibers
- Hypoallergenic
- Very low resistance to breathing
- Nose filtration capacity
- Perfect fitting

Tyvek fabric is tough, yet extremely light and soft. Tyvek is made for millions of fine, continuous fibres of high density polyethylene that flash-spum and head-bonded into a fabric that is permeable to air and water vapour. Tyvek breathes, yet repels water based liquids and aerosols. It blocks particles and fibres down to sub micron sizes. Plus it's non-linting and silicon free.

Tyvek Boot Cover
DP-14444

- Height: 16.5" elastic top
- White colour
- One size fits all

Tyvek Shoe Cover
DP-14440

- Come with elastic top
- White colour
- One size fits all

Tyvek Lab Coat
DP-14300

- Snap closure
- Long sleeves
- White colour
- Size: S,M,L,XL

Vinyl powdered & powder free disposable gloves PD-PV281-039

- Perfect for the latex-sensitive
- These vinyl gloves contain no allergens
- Excellent sensitivity and barrier protection
- Treated with absorbable dusting powder

Non-woven accordion clip bouffant cap SW-CN215

- Non-woven polypropylene spun bounded material
- Elastic headband offers a light weight, comfortable and non-slip fit

Non-woven peaked cap with elasticated snood SW-CN201

- Made of spun bonded polypropylene
- Back-elastic cap with snood for total hair cover

Non-woven bouffant cap with peak SW-CN202

- Made of spun bonded polypropylene
- With non-woven peak

First Aid Kits for Industrial Health

Contents	Box A For 25 Workers 30.5 x 21 x 12 cm Quantity	Box B For 50 Workers 35 x 26.5 x 12 cm Quantity	Box C For 100 Workers 39.3 x 30.5 x 12 cm Quantity
Absorbent Gauze 10's	5	10	15
Basic advice on First Aid at work	1	1	1
Crepe Bandage 2" (5cm)	1	2	4
Crepe Bandage 4" (10cm)	1	3	6
Disposable Gloves (Pairs)	2	2	4
Disposable Resuscitation pack	1	1	2
Europlast 10's	2	4	4
Eye Pad (Sterile)	2	4	6
Eye Shield	2	4	6
Hypoallergenic Tape	1	1	2
Pen Torch Light	1	1	1
Safety Pin 12's	4	4	6
Dressing Scissors	1	1	1
Triangular Bandage	4	4	6

NB. Sterile saline/ water is only recommended for places with no water supply

Recommended minimum contents of First Aid Box by the Ministry of Manpower (MOM)

Box A - For use where the no. of workers does not exceed 25
Box B - For use by every 50 workers
Box C - For use by every 100 workers

First Aid Kits for Workplace

Contents	Box No 1F For 10 Workers 30.5 x 21 x 12 cm Quantity	Box No 2F Exceed 10 but does not more than 50 35 x 26.5 x 12 cm Quantity	Box No 51F Not exceed 50 39.3 x 30.5 x 12 cm Quantity
Absorbent gauze 10's	1	2	2
Acriflavine solution	1	1	1
Antiseptic cream	1	1	1
Antiseptic solution	1	1	1
Basic advice on first aid at work	1	1	1
Constrictive bandage	1	1	1
Cotton ball 10's	1	2	2
Crepe bandage 2"	1	2	2
Crepe bandage 3"	1	1	1
Disposable glove (Pair)	2	3	1
Disposable resuscitation pack	1	1	1
Dressing forceps	1	1	1
Dressing scissors	1	1	1
Europlast 10's	2	3	4
Hypoallergenic tape 1/2"	1	1	1
Povidone iodine solution	1	1	1
Safety pin 12's	1	2	2
Singlefix finger dressing (Sterile)	2	4	2
Surgifix size 1-2	2	4	2
Surgifix size 3-4	1	2	1
Surgifix size 5-6	1	2	1
Triangular bandage	2	4	4

* Sterile saline/ water is only recommended for places with no water supply

Box 1F - For use in work place where the number of person employed does not exceed 10
Box 2F - This complete kit is for use in work place where the number of persons employed exceed 10 but does not exceed 50. Where more than 50 persons are employed, an additional cabinet for every additional 50 persons should be provided
Box 51F - This complete kit is for use in work place where the number of persons employed does not exceed 50- where First Aiders are available and where a comprehensive First Aid kit is required. This portable kit is recommended for building sites, road construction sites, quarries and oil and gas explosion sites

Box A
LC-FA-BOX-A-NEW

Box B
LC-FA-BOX-B-NEW

Box C
LC-FA-BOX-C-NEW

No 1F
LC-FA-BOX-1F

No 2F
LC-FA-BOX-2F