

# GAS DETECTOR



- Technical Data Information
- iNet system
- Portable Gas Detector and Accessories
- Hand-Pump Gas Detector

## Technical Data Information

### Is working in a confined space hazardous?

A number of people are killed or seriously injured in confined spaces each year. A confined space can be more hazardous than regular workspaces for many reasons. To effectively control the risks associated with working in a confined space, a Confined Space Hazard Assessment and Control Program should be implemented for your workplace. Before putting together this program, make sure to review specific regulations that apply to your workplace.

If the confined space cannot be made safe for the worker by taking precautions then workers should not enter the confined space until it is made safe to enter by additional means.

**The Confined Space** is an enclosed or partially enclosed space and there is not enough airflow to make the air clear. A confined space is not necessarily small. Examples of confined spaces include silos, vats, hoppers, utility vaults, tanks, sewers, pipes, access shafts, truck or rail tank cars, boilers, manholes, storage bins, etc.

**Dangerous Atmosphere** means the atmosphere can cause danger to the worker.

- Insufficient amount of oxygen: O<sub>2</sub> is less than 19.5% or greater than 23.5%
- All flammable gases, liquids and vapors are over 10% of its Lower Explosive Limit (LEL)
- Surfaces coated with combustible material that can cause ignition
- High density of Toxic Gas.

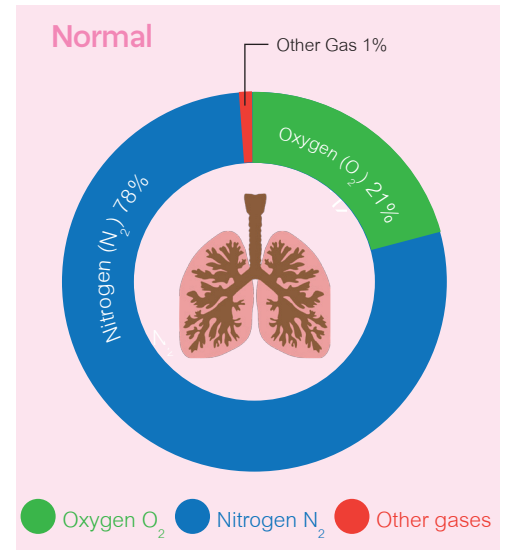
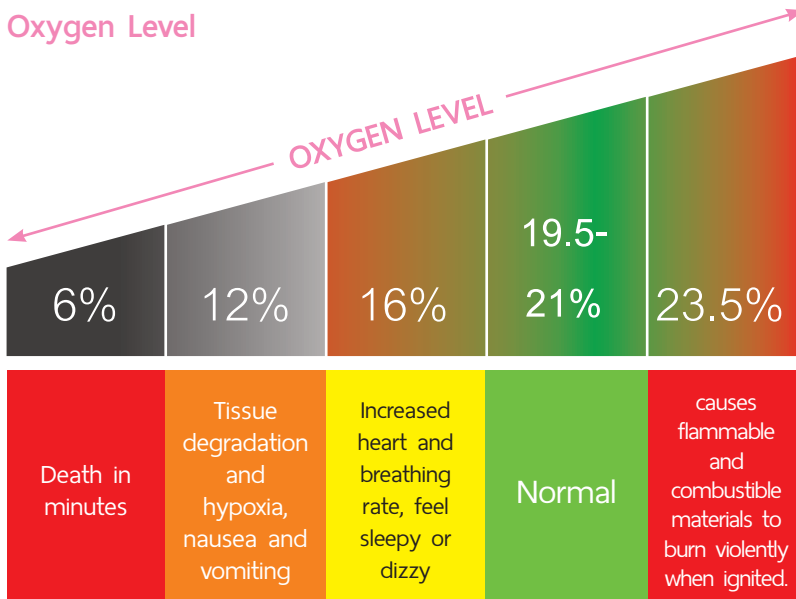
### What are the hazards in a confined space?

- **Poor Air Quality:** There may be an insufficient amount of oxygen for the worker to breathe. The atmosphere might contain a poisonous substance that could make the worker ill or even cause the worker to lose consciousness. Natural ventilation alone will often not be sufficient to maintain breathable quality air.
- **Chemical Exposure:** Due to skin contact or ingestion as well as inhalation of 'bad' air.
- **Fire Hazard:** There may be an explosive/flammable atmosphere due to flammable liquids and gases and combustible dusts which if ignited would lead to fire or explosion.
- **Process-related Hazards**
  - Noise
  - Safety hazards such as moving parts of equipment, structural hazards, entanglement, slips, falls
  - Radiation
  - Temperature extremes including atmospheric and surface
  - Shifting or collapse of bulk material
  - Barrier failure resulting in a flood or release of free-flowing solid
  - Uncontrolled energy including electrical shock
  - Visibility
  - Biological hazards

Symbols	Name	Definition
LEL	Lower Explosive Limit - %LEL	Lowest concentration of a gas or vapor in air capable of producing a flash of fire in presence of an ignition source.
PPM	Part Per Million – toxic gas measurement	This is a way of expressing very dilute concentrations of substances.
TWA	Time Weighted Average – 8hr/ day - ACGIH	Time weighted average concentration for a normal 8 hour workday or 40 hour workweek.
STEL	Short Term Exposure Limit	Maximum concentration of a substance for a continuous 15 minute exposure period.
IDLH	Immediately Dangerous to Life and Health 30 mins - NIOSH	Death occurs after ingestion or exposure to a hazardous substance after 30 minute



## Oxygen Level



### What should be done when preparing to enter the confined space?

Before entering any confined space, a trained and experienced person should identify and evaluate all the existing and potential hazards within the confined spaces. Evaluate activities both inside and outside the confined space.

#### Air Quality Testing:

- The air within the confined space should be tested from the outside of the confined space before entry into the confined space.
- Care should be taken to ensure that air is tested throughout the confined space, side to side and top to bottom.
- A trained worker using detection equipment which has remote probes and sampling lines should do the air quality testing.
- Always ensure the testing equipment is properly calibrated and maintained.

### How to test the atmosphere in confined spaces

- Measuring the air before entering
- Measuring Top-Middle-Bottom position
- Gas Detector or worker should measure time to time during work operations
- Measuring every time entry to the confined space takes place

### Air Quality Measurement Results:

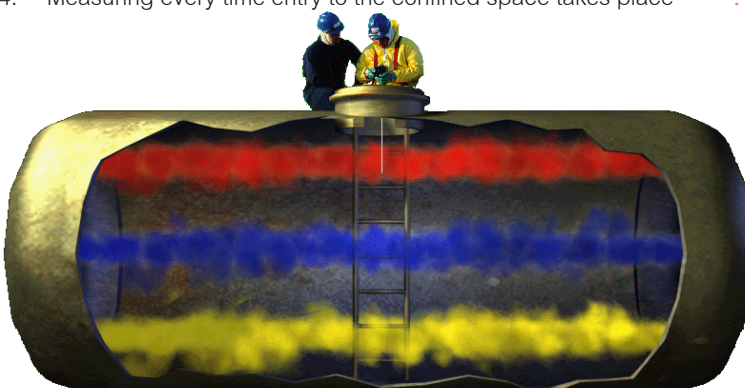
- Make sure that the oxygen content should not less than 19.5% or greater than 23.5%
- Make sure that there is no toxic gas
- Make sure that the concentration of any explosive or flammable hazardous substance less than 10% of its Lower Explosive Limit
- The gas detector must be in the good condition and calibrated correctly

### Air Quality Measurement Methods:

- Use Sampling Tube and Probe in the vertical confined spaces
- Sensor response within 2 seconds per foot
- Measurement at least 2 minutes
- Always use filter to protect dust and water
- Measuring oxygen, flammable gas or Toxic gas
- The workers should have the gas detector with him while working.
- Do not drop the gas detector into the confined spaces directly.



Gas Detector



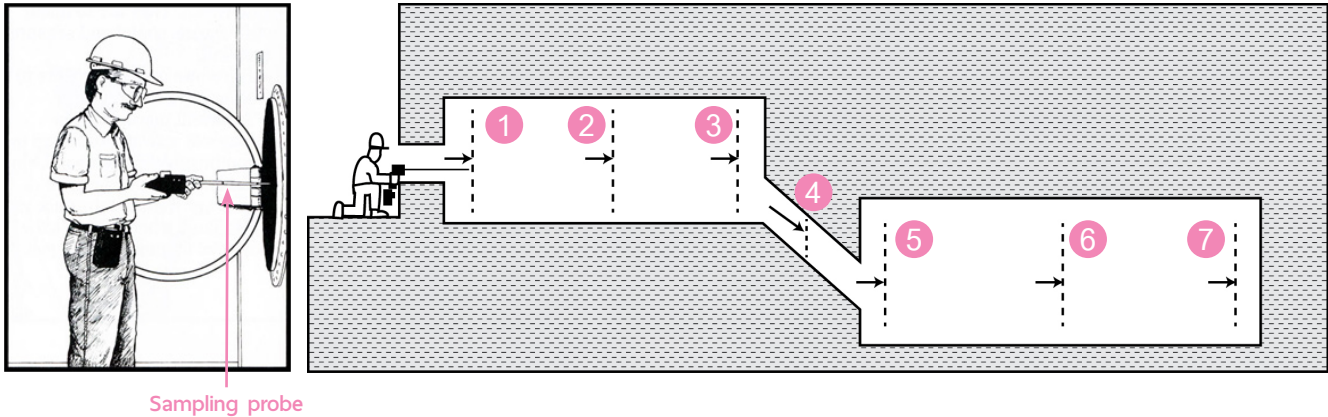
Top METHANE (lighter than air)

Middle CARBON MONOXIDE (slightly lighter than air)

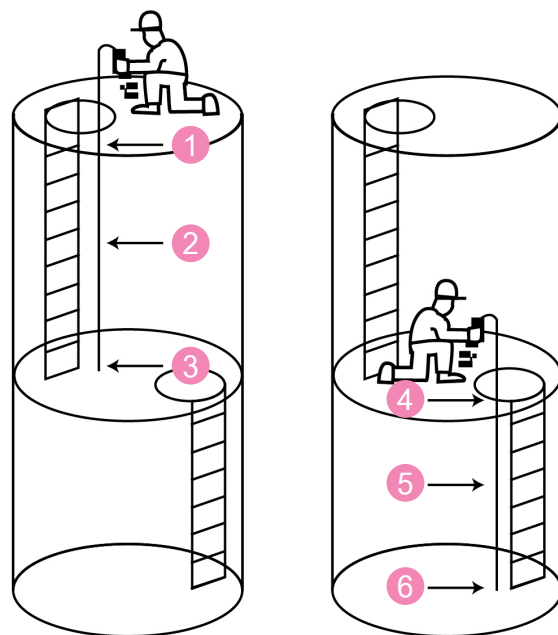
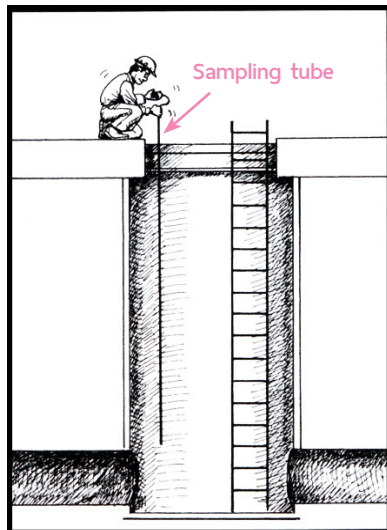
Bottom HYDROGEN SULFIDE (heavier than air)



### Measurement of the atmosphere in the distance (Horizontal)



### Measurement of the atmosphere in the distance (Vertical)



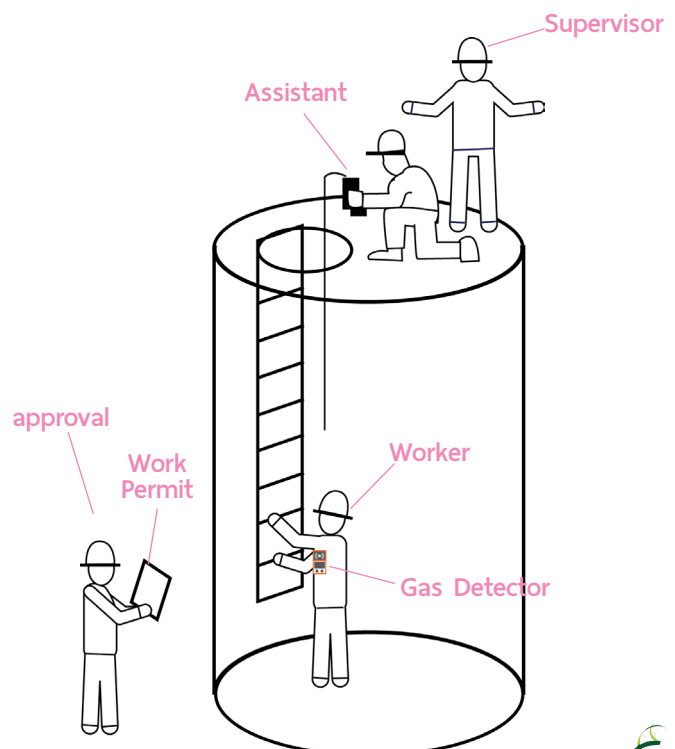
### Performance of the worker who works in the confined place

**Approval:** the person who is appointed by the employer can approve the permission to work in the confined place.

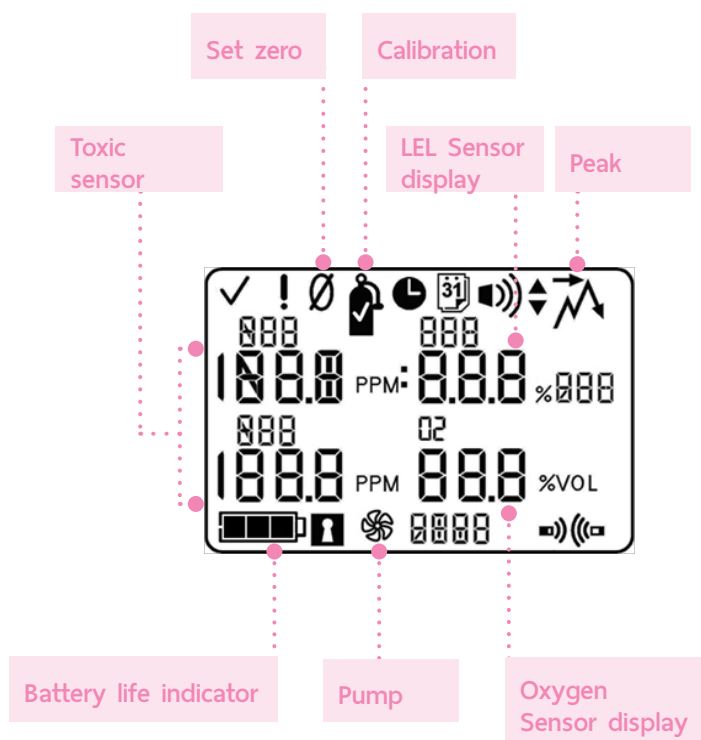
**Supervisor:** the person who is appointed by the employer will supervise the worker who works in the confined place.

**Assistant:** one or number of persons who stay at the entrance, contact to the worker who works in the confined space all the time and assist the worker as and when necessary.

**Worker or Gas detector:** the person who works in the confined place.



## Gas Detector



## Calibration

The use of an un-calibrated gas detector is exceedingly dangerous. We recommend that every gas detector should be calibrated monthly, by a trained and competent specialist. Gas detection instruments are potentially life-saving devices.

To extend the efficiency of Gas Detector, we also recommend the users prepare it ready as follows:

1. Turn on mode
2. Set zero means each installed sensor recognizes the ambient air is clean and safe.
3. Bump Test checks for sensor and alarm functionality. (In testing: always need sampling gas)
4. Clear peak means erasing the peak readings.

## Bump test

1. Turn on mode
2. Drawing sampling gas into the tube
3. Operate Sensor
4. Identify the gas number at the monitor and warning symbol
5. Remove all Bump Test equipment and wait for the monitor to set back to normal
6. If sensor works incorrectly, check the following:
  - 6.1. Make sure that the gas cylinder is not empty
  - 6.2 Make sure that valve for drawing sampling gas is open
  - 6.3 Make sure that the rubber band is in place and not clogged
  - 6.4 Make sure that all parts are installed correctly



## Technical Data Information

### Gas Types

Name	Chemical Symbol	Characteristic	Industry
Ammonia	NH <sub>3</sub>	Pungent smell, colorless	Water Treatment, Cooler, Frozen Food and Electronics
Carbon Dioxide	CO <sub>2</sub>	Colorless, odorless	Beverages, Food industry
Carbon Monoxide	CO	Colorless, odorless, tasteless	Firefighting, Mining, Parking Lot
Chlorine	Cl <sub>2</sub>	Yellow-green gas, sharp smell Irritation	Paper Industry, Water treatment, electricity Nuclear
Chlorine Dioxide	ClO <sub>2</sub>	Bright Orange crystals, Odor	Paper Industry, Water treatment
Hydrogen	H <sub>2</sub>	Colorless, odorless	Chemical, Dangerous material, electricity
Hydrogen Chloride	HCl	Light Yellow, sharp Smell	Metals, Vinyl, Petro-fiber
Hydrogen Cyanide	HCN	Colorless, Almond like smell	Gold, Mining, Nylon
Hydrogen Sulfide	H <sub>2</sub> S	Foul Odor of rotten eggs, Colorless	Paper Industry, Water treatment, Mining, Drilling and refining oil
Nitric Oxide	NO	Colorless, odorless	Electronics, automobile engines, fossil fuel power plants,
Nitrogen Dioxide	NO <sub>2</sub>	Sharp biting odor, reddish-brown	Boiler, Kiln, Electronics, automobile engines, fossil fuel power plants
Ozone	O <sub>3</sub>	Pungent smell, colorless	Water treatment, Electricity, Welding
Phosphine	PH <sub>3</sub>	Colorless, Garlic-like smell	Pesticides, Stimulant drug
Sulfur Dioxide	SO <sub>2</sub>	Pungent smell, colorless	Water treatment, Electricity, Paper Industry, Coal power plant



Gas Detector

INDUSTRY	HAZARDOUS GAS																
	Combustible Gases	O2 Deficient/Enrichment	Ammonia (NH3)	Carbon Dioxide (CO2)	Carbon Monoxide (CO)	Chlorine (Cl2)	Chlorine Dioxide (ClO2)	Hydrogen (H2)	Hydrogen Chloride (HCl)	Hydrogen Cyanide (HCN)	Hydrogen Sulfide (H2S)	Nitric Oxide (NO)	Nitrogen Dioxide (NO2)	Ozone (O3)	Phosphine (PH3)	Sulfer Dioxide (SO2)	Volatile Organic Compounds (VOCs)
Agriculture																	
Aviation																	
Chemical																	
Construction																	
Electric utilities																	
Fire Service																	
Food & Beverage processing																	
Gas utilities																	
HazMat																	
Iron & Steel production																	
Manufacturing																	
Marine shipyard																	
Mining																	
Oil & Gas production																	
Petrochemical																	
Paper & Pulp																	
Pharmaceutical/Research labs																	
Power plants																	
Public works																	
Water/Wastewater treatment																	
Welding																	







## Don't Buy Gas Detectors Subscribe to Gas Detection as a Service

**iNet System** The iNet system protects workers with a complete warning system. It supports interpreted direct reading and recorded data. iNet eliminates unnecessary ownership and maintenance costs, the user will receive a full service and technical support 24/7.



### iNet gives you help from the Gas Detection People

Let us handle your gas detection program. Gas detection is probably not the core of what you do. But, it's all that we do. It's what we love to do.

### iNet solves the Shortage of personnel problem

Outsourcing specialized knowhow for Gas detection is one of the most suitable and necessary options. iNet is a software-based service that manages your fleet of gas detectors.

### Cost Savings and Productivity

iNet keeps people safe by providing visibility into alarms, exposure and usage. It keeps gas detectors working without costly and time-consuming maintenance. With this package, your team will work efficiently and smoothly.

## How Gas Detection as a Service Works

**1** Operators dock gas detectors owned by Industrial Scientific.



**2** Docking Stations perform bump tests, calibrations and record-keeping.



**3** **iNet Control** provides visibility into your gas detection program via the Web.

**4** **iNet** iNet e-mails real-time alerts and status reports.

**5** When **iNet** detects a problem Industrial Scientific rushes a replacement gas detector to you.







## It gives you a safer workplace.

On average, gas detectors go into high alarm once every ten days. How many high alarms did your facility have? iNet gives you information and tools to fix problems before then happen.

### • Useful & Effective Data

iNet helps you to connect your gas detector to the effective software. iNet will operate your data and analysis and convert to useful information.

### • Reliable Gas Detector

Your gas detectors will always be ready and maintained and gives you and your staff complete peace of mind

### • Audit

Documentation from the iNet system is a guarantee from an outside auditor. iNet responds to all standard requirements.

## Upgrade iNet

Upgrading iNet will provide the latest technology. It is very easy to continue the service and maintenance contract of iNet. This will allow you to continuously use the newest equipment at all times.

## Exchange gas detector

If you upgrade, you can increase the number of gas detector, type of sensors, docking stations and other equipment for a short period of time. There are weekly rental contracts and monthly to meet the needs and convenience of users.

- iNet customers reduce 20% of amount of equipment.
- iNet controls on website and upgrades included there. (no add devices or software)



With iNet Control, users can configure and continuously manage their gas detection program.

- Follow up the report
- Compare the result with industrial average mean
- Keep control of forecasted problem
- Motivate workers to follow up standard
- Prepare information and report
- Provide required records on demand with minimal effort

## E-mail Report

### Weekly Report

- Calibration status
- How many days from the last calibration
- Overdue calibration review
- Sensors life time
- Sensors and Marginal reserves
- Gas pressure in calibration

### Warning Report

Reports: If any detector has not been calibrated or undergone a bump test the user will be warned and a report sent.

### Summary Report

Warning report on demand: Gas detector, users, factory, types of Gas, Date and time, Density etc.

### Emergency Warning

- Failure or close to failure after calibration
- Oxygen Sensor failure in Bump test
- Status of calibration gas pressure



## iNet® Save Your Cost

Buying a gas detector is only a part of the cost. It also has the cost of maintenance, time to wait for repair and service. There is no need to worry about instrument warranties, paperwork of processing the claim, or time to wait for new equipment. Parts, equipment and shipping are covered and even damaged instruments can be traded in. As an iNet Exchange customer, you will always have the equipment you need, when you need it.

- **Reduce the number of gas detector**

iNet help you don't wait for gas detector when repair. It is not necessary to buy another for backup.

- **Reduce costs**

Including iNet's cost-effective services helps reduce procurement costs, transportation costs, and inventory costs.

- **Increase productivity at work**

Automated maintenance, save time and reduce labor costs as well.

- **Training**

Employees trained using multiple type of gas detectors make them confuse and it's costs a lot but iNet makes easier by having the same standard for gas detectors.



Ready Detectors

Notice the symbol



on any devices



Ventis MX4



Ventis Pro 4



Ventis Pro 5



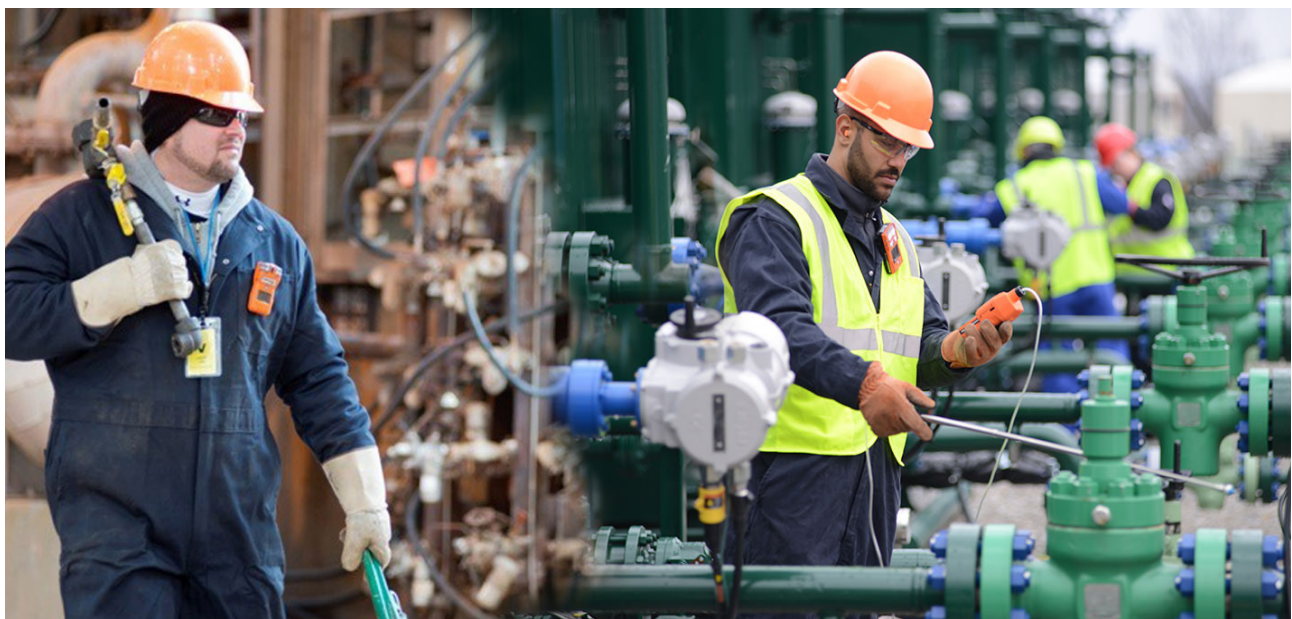
iBRID MX6



GasBadge Pro

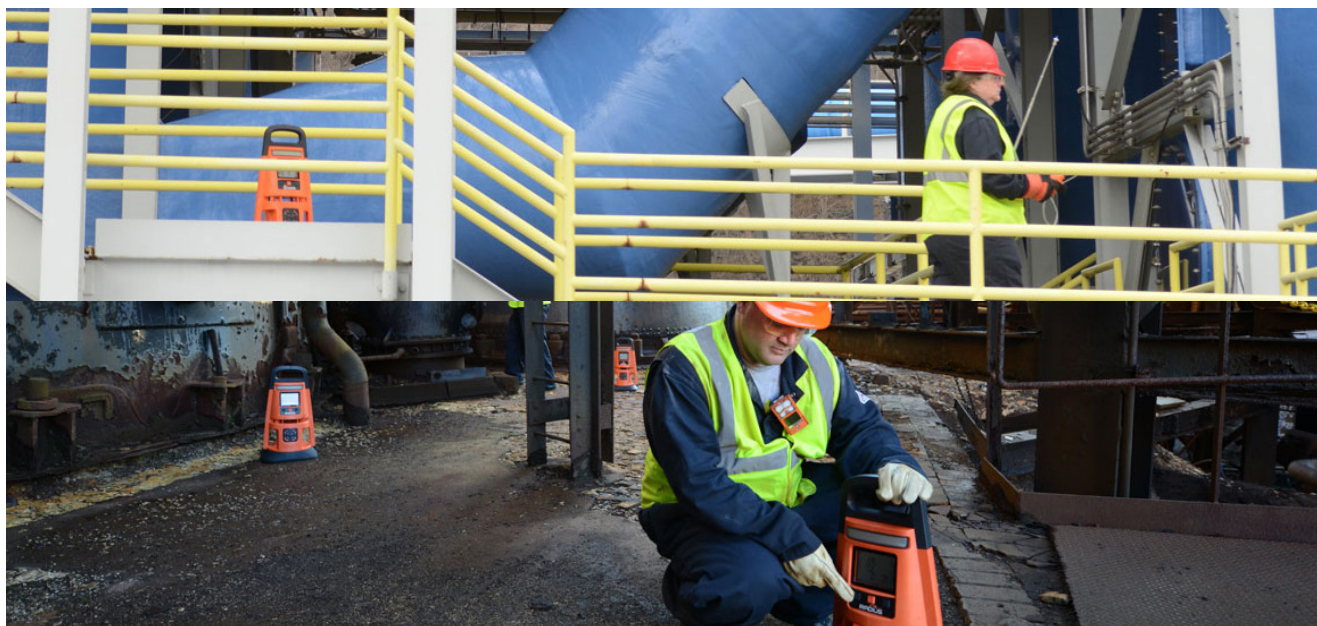


Tango TX1





## Portable Gas Detector


**RADIUS** BZ1™

**RADIUS**

- Monitors 1-7 gases. Detect from one to four gases with a wide range of sensor options. Exp: LEL  $\text{NH}_3$ , CO, CO (high range), CO/ $\text{H}_2$  Low, CO/ $\text{H}_2\text{S}$  Low, CO/ $\text{H}_2\text{S}$ ,  $\text{CL}_2$ ,  $\text{H}_2$ , HCN,  $\text{NO}_2$ ,  $\text{O}_2$ ,  $\text{SO}_2$ , VOC
- Size 29x29x55 cm suitable for construction, outdoor & indoor
- Full-color graphic LCD (width 11.2 cm) is highly visible in a variety of lighting conditions
- Ultra-bright LEDs, loud audible alarm (95dB at 30 cm) and vibrating alarm
- Sample draw distance of up to 100 feet provides convenient sampling in a wide range of applications
- DualSense® Technology increases worker safety by using two sensors to detect the same gas
- Rugged IP66 (against powerful water jets and dust)



Gas Detector

Code	Description	UOM	Package
ISC-BZ1-K123000101	Radius BZ1, LEL (Pentane), CO, H2S, O2	1 piece	1 piece
ISC-BZ1-K123001101	Radius BZ1, LEL (Pentane), CO, H2S, O2, with Pump	1 piece	1 piece

Gas Detector

IBRID™  
MX6



iBRID MX6

- 24 “Plug-and Play” field-replaceable sensors including PID and Infrared options O<sub>2</sub>, LEL CO, H<sub>2</sub>S, Cl<sub>2</sub>, NO, NH<sub>3</sub>, CO<sub>2</sub>, NH<sub>3</sub>, CO<sub>2</sub>, PH<sub>3</sub>, HCN, ETO, VOCs
- 1-6 Gas monitor
- Draw samples from up to 100 feet with an optional, integrated sampling pump.
- Full-color graphic LCD is highly visible in a variety of lighting conditions
- Five-way navigation button
- Powerful, 95 dB audible alarm and vibrating alarm
- Rechargeable Lithium-ion battery pack
- The MX6 iBrid is our most rugged instrument ever. It is compatible with our DSX™ Docking Station and iNet
- Lifetime guarantee
- Sensor Pump and Battery warranty 1 year

Code	Description	UOM	Package
ISC-MX6-L9006211	MX6 w/Pump LEL(CH4),PH3,NH3:	1 set	1 set

BASE INSTRUMENT	SENSOR OPTIONS	BATTERY OPTIONS	VERSION OPTIONS	LANGUAGE OPTIONS
<p><b>IBRID™</b> MX6</p> <p>Supplied with Monitor: universal charger, nylon carrying case, belt clip, calibration cup, wrist strap, maintenance tool, manual, quick start guide, calibration tubing, dust filter/water stop (aspirated), calibration fitting (aspirated), sample tubing (aspirated).</p>	<p>Combustible Gases: LEL (Pentane) LEL (Methane) CH 4 IR (0-100% vol.) CH 4 (0-5%) Hydrocarbons IR (0-100% LEL) Volatile Organic Compounds: PID Toxic Gases: H<sub>2</sub>S, O<sub>2</sub>, NO<sub>2</sub>, CO, CO/H<sub>2</sub>S, NH<sub>3</sub>, Cl<sub>2</sub>, ClO<sub>2</sub>, PH<sub>2</sub>, CO High, SO<sub>2</sub>, HCl, HCN, H<sub>2</sub>, PH<sub>2</sub> High, NO, CO/H<sub>2</sub> low interference, CO<sub>2</sub> IR</p>	Li-ion	Diffusion	English
		Li-ion/Ext. Range	Pump	French
		Alkaline		Spanish
		Li-ion MSHA/AUS		German
		Li-ion/Ext. Range MSHA/AUS		Italian
		Alkaline MSHA/AUS		Dutch
		Li-ion GOST		Portuguese
		Li-ion/Ext. Range GOST		Indonesian
		Alkaline GOST		Russian
				Polish
				Czech







#### Ventis MX4

- Monitors 1-4 gases. Detect from one to four gases with a wide range of sensor options  $O_2$ , LEL, CO,  $H_2S$ ,  $NO_2$ , and  $SO_2$
- Draw samples from up to 100 feet with an optional, integrated sampling pump.
- Gain increased instrument visibility with a safety orange over mould.
- Ultra-bright LEDs, loud audible alarm (95dB at 30 cm) and vibrating alarm.
- Rechargeable Lithium-ion battery pack: 4 hours charging for 20 hours without pump or 12 hours with pump.
- Replaceable AAA Alkaline battery pack: 8 hours or 4 hours with pump
- Realize true portability with multi-gas protection in single-gas size.
- Discover a better way to do gas detection on iNet.

#### Slide-On Pump



- Sample draw distance of up to 100 feet provides convenient sampling in a wide range of applications
- Accessory for drawing surrounding gas.

Code	Description	UOM	Package
ISC-MX4-K0031101111	2 Sensor MX4 LEL O2 Ext-Li Case OR+	1 set	1 set
ISC-MX4-K0032111111	2 SensorWithPumpMX4w/PLEL02Ext-Li-ERCaseOR+	1 set	1 set
ISC-MX4-K0232111111	MX4 w/P LEL H2S O2 Ext-Li-ER Case OR+	1 set	1 set
ISC-MX4-K1231101111	4 Sensor MX4 LEL CO H2S O2 Ext-Li Case OR+	1 set	1 set
ISC-MX4-K1232111111	MX4 w/P LEL CO H2S O2 Ext-Li-ER Case OR+	1 set	1 set
ISC-MX4-18109162-1111	Ventis MX4 Slide-On Pump Li OR+	1 piece	1 piece





**VENTIS<sup>™</sup> PRO4** **VENTIS<sup>™</sup> PRO5**

## Ventis Pro 4 / Pro 5

- Monitors 1-5 gases. Detect from one to four gases with a wide range of sensor options. Exp: O<sub>2</sub>, LEL/CH<sub>4</sub>, CO<sub>2</sub>, H<sub>2</sub>S, SO<sub>2</sub>, CO/H<sub>2</sub> low, HCN, and NH<sub>3</sub>, CO/H<sub>2</sub>S, CO<sub>2</sub>/HC IR, CO<sub>2</sub>/CH<sub>4</sub> IR for Pro5
- LENS<sup>™</sup> Wireless allows personal monitors to communicate with area monitors
- Rugged IP68 water and dust rating and Guaranteed for Life<sup>™</sup> warranty
- Lifetime warranty PC-Board and LCD
- Man-down alarm and dedicated panic button in 3 sec
- Alarm alert when worker stopped ( adjust 30-300 sec)
- See gas readings and alarms from connected peers in LENS Wireless groups
- User and site tracking with iAssign<sup>™</sup> Technology
- Available with or without a pump
- Dock overdue and maintenance reminders
- iNet<sup>®</sup> and DSX<sup>™</sup> Docking Station ready

Detection Capabilities	VENTIS <sup>™</sup> MX4	VENTIS <sup>™</sup> PRO4	VENTIS <sup>™</sup> PRO5
Simultaneous Gases	Four	Four	Five
O <sub>2</sub>	✓	✓	✓
LEL/CH <sub>4</sub>	✓	✓	✓
CO	✓	✓	✓
H <sub>2</sub> S	✓	✓	✓
SO <sub>2</sub>	✓	✓	✓
NO <sub>2</sub>	✓	✓	✓
CO/H <sub>2</sub> Low	✓	✓	✓
HCN		✓	✓
NH <sub>3</sub>			✓
CO/H <sub>2</sub> S			✓
CO <sub>2</sub> /HC IR			✓
CO <sub>2</sub> /CH <sub>4</sub> IR			✓



Code	Description	UOM	Package
ISC-VP4-K0031101101	2Sensor VP4 LEL, O <sub>2</sub> Ext-Li CaseOR	1 set	1 set
ISC-VP4-K0032111101	2Sensor VP4 W/Pump LEL, O <sub>2</sub> Ext-Li-ER CaseOR	1 set	1 set
ISC-VP4-K1231101101	4Sensor VP4 LEL, CO, H <sub>2</sub> S, O <sub>2</sub> Ext-Li CaseOR	1 set	1 set
ISC-VP4-K1232111101	4Sensor VP4 W/Pump LEL, CO, H <sub>2</sub> S, O <sub>2</sub> Ext-Li-ER CaseOR	1 set	1 set

Code	Description	UOM	Package
ISC-VP5-KJ631101101	5Sensor VP5 LEL, CO/H <sub>2</sub> S, O <sub>2</sub> , NH <sub>3</sub> Ext-Li CaseOR	1 set	1 set
ISC-VP5-KJ632111101	5Sensor VP5 W/Pump LEL, CO/H <sub>2</sub> S, O <sub>2</sub> , NH <sub>3</sub> Ext-Li-ER CaseOR	1 set	1 set
ISC-VP5-06001101101	1Sensor VP5 NH <sub>3</sub> Ext-Li CaseOR	1 set	1 set
ISC-VP5-06002111101	1Sensor VP5 W/Pump NH <sub>3</sub> Ext-Li-ER CaseOR	1 set	1 set
ISC-VP5-K6031101101	3Sensor VP5 LEL, NH <sub>3</sub> , O <sub>2</sub> Ext-Li CaseOR	1 set	1 set
ISC-VP5-K6032111101	3Sensor VP5 W/Pump LEL, NH <sub>3</sub> , O <sub>2</sub> Ext-Li-ER CaseOR	1 set	1 set






**GASBADGE<sup>PRO</sup>**

### GasBadge Pro

- Single-gas detector, portable
- Lifetime warranty PC-Board
- Smart Interchangeable sensors: Toxic Gases, Oxygen, or other gas (except flammable gas)
- Light weight: 85 grams.
- Reduced radio Interference. Water and dust resistant and extremely durable. Standard: IP64
- Standard STEL and TWA reading
- Datalogging of up to one year of survey data are featured along with an event-logger that records the past 15 alarm events.
- 1 year guarantee Sensor.

Code	Description	UOM	Package
ISC-18100060-2	GasBadge Pro-Hydrogen Sulfide	1 piece	1 piece
ISC-18100060-3	GasBadge Pro-Oxygen+	1 piece	1 piece
ISC-18100060-6	GasBadge Pro NH3-Ammonia+	1 piece	1 piece

### TANGO TX1

- First-ever single gas monitor that uses two sensors to detect the same gas.
- Toxic Gases detector: CO, H<sub>2</sub>S, NO<sub>2</sub> and SO<sub>2</sub>
- Patent pending DualSense™ Technology makes users safer
- Alarms at 100dB at 10 centimeters making it twice the volume of Industrial Scientific's GasBadge units and louder than any single gas instrument on the market.
- DualSense Technology ensures safe use whatever your current bump test policy.
- 3 years of continuous battery runtime.

Code	Description	UOM	Package
ISC-TANGO TX1	Tango TX1,CO	1 piece	1 piece



### Accessories

#### Probe (ISC-18101386)

- Accessory for distance gas detection example: Gas Tube or Gas Detector attached on the wall
- Distance: 1.8 metres
- Probe must be connected to Pump system Gas Detector

#### Filter (ISC-17024597)

- For dust and water filter
- For Probe (ISC-18101386)



#### Tubing (ISC-18109207-70)

- Rubber tube will detect gas in the distance vertical areas such as water treatment plants etc.

#### Filter (ISC-17027152)

- For dust and water filter
- For Tubing (ISC-18109207-70)

Code	Description	Size	UOM	Package
ISC-18101386	6' Extendible Stainless Steel Probe+	-	1 piece	1 piece
ISC-17024597	Replacement Filter for Extendible Probe:	-	1 piece	1 piece
ISC-18109207-70	TubingKitw/DustFilter/WaterStop,21.3m(70ft)+	21.3 m	1 piece	1 piece
ISC-17027152	Dust Filter/Water Stop Motorize SamplingPump+	-	1 piece	1 piece

## Gas Sampling Pumps

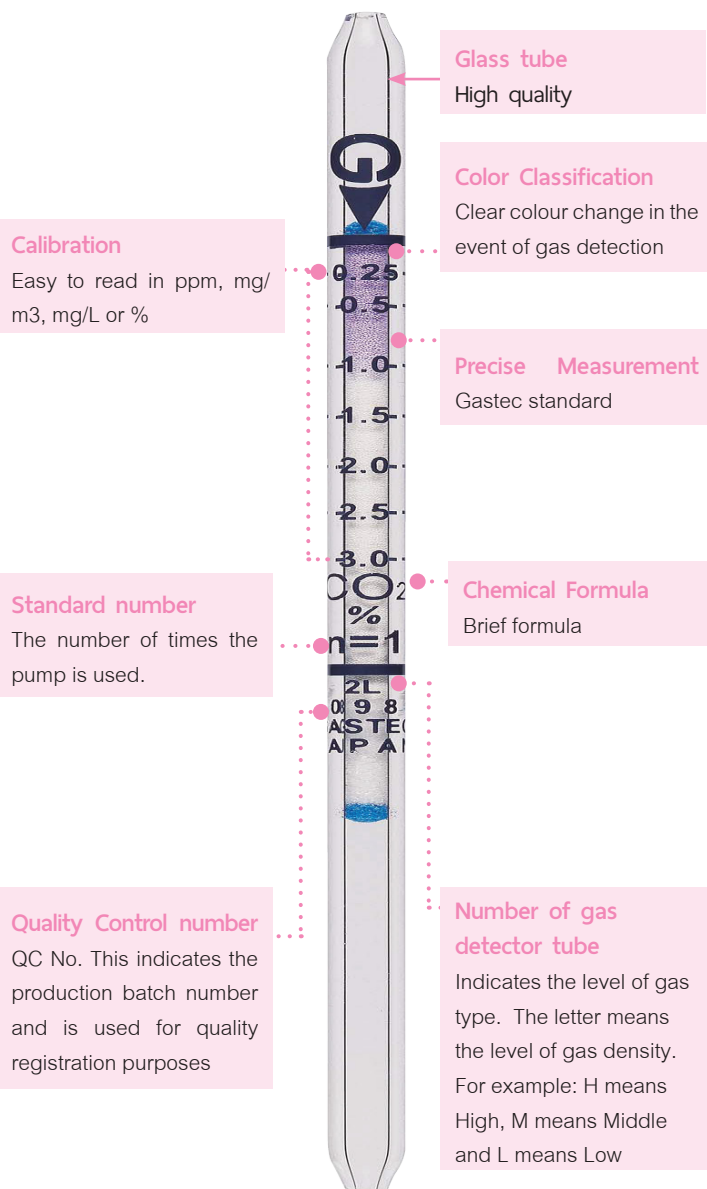


### Gas Sampling Pump

- A gas sample pumping system shall be supplied for the purpose of extracting gas samples from air ducts, vent stacks, enclosed spaces or other areas where direct gas detection and measurement might be difficult.
- Capacity: 500 types of gases.
- Easy to use.
- The housing is manufactured from a plastic and synthetic rubber compound enclosed in a soft elastomer for a comfortable grip.
- Made of ABS material.
- A smaller diameter pump shaft to reduce the effort required to pull the handle, a built-in thermal ring for ambient temperature readings, and a tip breaker with a diamond edge cutting blade increase both usability and safety.
- When sampling the pump shaft can lock into two clearly defined positions, allowing accurate and consistent sample volumes.
- Conforms to standard EN1231.
- Use with Detector Tube

### Detector Tube

- High Quality Glass tube
- Detector Tube will keep sample analysis and read concentration of the substances being measured.
- Report scales in ppm., mg/m3 or %
- Shows the precise chemical formula
- Show the number of times the pump is pulled.
- Able to analysis the gas in sewage pipe/tube/drum or other area.
- Changes colour according to the density of gas or vapor
- Use with Gas Sampling Pump



Code	Description	UOM	package
ISC-TUV110S	GASTEC PUMP GV-110S WITH STOKES COUNTER	1 Piece	1 Piece
ISC-TU0002L	TUBE CO2-L 2L 0.13-6 %	1 box	10 tubes/box
ISC-TU004LL	TUBE HYDROGEN SULFIDE-LL 0.25-120 PPM	1 box	10 tubes/box
ISC-TU008LA	TUBE CHLORINE-LA 0.1-16 PPM	1 box	10 tubes/box
ISC-TU0091LL	TUBE FORMALDEHYDE 0.05-1 PPM	1 box	10 tubes/box
ISC-TU0121L	TUBE BENZENE L 121L 0.1-65 PPM	1 box	10 tubes/box