



 **Panindochina**[®]
Your Safety Solution Provider

Portable Gas Detectors





**INDUSTRIAL
SCIENTIFIC**



SKYLOTEC



KANOX®

Ssekur®

OPGAL
Beyond the Visible

**ZELINSKY
GROUP**

CALGAZ

CHEMDEFEND
PROTECTIVE CLOTHING



3M

**SCOTT
SAFETY**



RESPIREX™
Living + Breathing Personal Protection

ION

CIRLOCK
LOCKOUT / TAGOUT EQUIPMENT

JSP

PRO SAFETY GEAR
prosafetygear.com

Panindochina®

CleanAIR®

STREAMLIGHT

NEWTEX
EXTREME PROTECTIVE APPAREL



MFC International
by RESPIREX
ENGINEERED INFLATABLE PRODUCT SOLUTIONS

THORZT
HYDRATE ENERGISE PERFORM

MAPA®
PROFESSIONNEL

CT
climbing
technology

**CURTISS -
WRIGHT**

ST Protect

Thorogood
SHOES
Since 1892

frontier
SAFETY INDUSTRIAL FOOTWEAR

**INNO
TEX®**

PRATT
SAFETY SYSTEMS

Windsock Company

PIP
PROTECTIVE INDUSTRIAL PRODUCTS


**NEWAGE FIRE PROTECTION
INDUSTRIES PRIVATE LIMITED**

TOBIN
EYEWASH SYSTEM



**KLEVER
INNOVATIONS**

**LW
&
COMPRESSORS**



Being an established provider of safety equipment and its services in Vietnam, our main motivational factor comes from customers' satisfaction via our quality product and services. We aspire to become an integrated Provider/ Partner with a leading presence in Indochine.

VISION

To be a highly valued products and services provider in the manufacturing and services providers market, using progressive management practices and knowledge based skilled employee.

GOALS

To build a core range of safety products with high quality and performances appreciated by users for it's value and meeting the demands by users to protect lives.

To ensure and build the company to be able to translate these values to the general market users.

To explore and introduce other related potential business units which would help customers with their supply chains.

To continuously plan for growth for the company and it's workforce.

MISSIONS

Panindochina aims to set up distribution network of dealers and regional sales team to reach out and service customers in major regions of Vietnam.

Panindochina has set up facilities to support after sales service needs of our customers for the products we supply.

Panindochina has set up growth plans for the company and it's workforce to achieve it's Vision and Mission.

KEY VALUES

Quality product orientated for value and performances.

Teamwork of employees for best customer supports.

Market awareness for best communications between users, manufacturers, supplier and company of market need.

Single Gas Detector

www.panindochina.com.vn



GasBadge® Pro

Built to Industrial Scientific's highest quality and reliability standards, GasBadge Pro provides a lifetime of gas hazard protection. A wide range of sensor types makes it easy to monitor unsafe levels of gases specific to your site.

- Interchangeable "smart" sensors monitor oxygen or any one of many toxic gases
- One-year data logging capacity (minimum)
- Standard STEL and TWA
- iNet® ready and DSX™ Docking Station compatible

Specifications

Case:

- Rugged, water-resistant polycarbonate shell with protective concussion-proof overmold. RFI resistant.

Dimensions:

- 94 mm x 50.8 mm x 27.9 mm.

Weight:

- 85 g.

Display:

- Custom LCD with graphical icons for easy use.
- Segmented display for direct gas readings.
- Backlight for low light conditions.
- "Go/No Go" display mode
- Peak reading indication

Alarms:

- User selectable low and high alarms
- Ultra-bright LEDs, loud audible alarm (95 dB) and vibrating alarm

Battery Run Time:

- User replaceable 3V, CR2 Lithium battery, 2,600 hour run time, typical.

Data Logging:

- 1-year continuous storage of data

Temperature Range:

- -40°C to 60°C.

Humidity Range:

- 0-99% RH (non-condensing) typical.

Event Logger:

- Continually on. Logs last 15 alarm events, stamping how long ago the event occurred, the duration of the event, and the peak reading seen during the event. Event-logger can be viewed on PC or printed directly from the instrument to an infrared printer.

Accessories



GasBadge Datalink



GasBadge Pro with DSX

Application



GasBadge Pro in a Refinery

Certifications

ANZEx:	Ex ia I/IIC T4
ATEX:	Ex ia I/Ex ia IIC T4; Equipment Group/Category I M1/II 1G
CMA:	Ex ia I
CSA:	Cl I, Gr A-D, T4; Ex ia IIC T4
IECEX:	Ex ia I/IIC T4
INMETRO:	Ex ia IIC T4
KC:	Ex ia I/IIC T4
UL:	Cl I, Div 1, Gr A-D, T4; Cl II, Gr E-G

Measuring Ranges

Sensor	Range	Increments
Carbon Monoxide	CO 0-1,500	1 ppm
Hydrogen Sulfide	H ₂ S 0-500 ppm	1 ppm
Oxygen	O ₂ 0-30% vol	0.1 ppm
Nitrogen Dioxide	NO ₂ 0-150 ppm	0.1%
Sulfur Dioxide	SO ₂ 0-150 ppm	0.1 ppm
Ammonia	NH ₃ 0-500 ppm	0.1 ppm
Chlorine	Cl ₂ 0-100 ppm	1 ppm
Chlorine Dioxide	ClO ₂ 0-1 ppm	0.1 ppm
Phosphine	PH ₃ 0-10 ppm	0.01 ppm
Hydrogen Cyanide	HCN 0-30 ppm	0.01 ppm
Hydrogen	H ₂ 0-2,000 ppm	0.1 ppm
CO/H ₂ low	CO/H ₂ low 0-1,500 ppm	1 ppm



Tango® TX2

Protect workers, reduce false alarms, and spend less time managing your gas detector fleet with the Tango TX2.

The Tango TX2 is the most accurate two-gas monitor featuring individual sensors that increase alarm accuracy.

A two-year runtime and replaceable battery simplify gas detection management by eliminating the need for charging infrastructure

Specifications

Instrument Warranty:

- All other sensors are warranted for one year.

Display:

- Segment liquid crystal display (LCD).

Keypad:

- Two buttons.

Case Materials:

- Case top: Polycarbonate with a protective rubber overmold.
- Case bottom: Conductive polycarbonate.

Alarms:

- Three strobe-emitting visual alarm LEDs (two red; one blue).
- 100 decibel (dB) audible alarm at a distance of 10 cm (3.94 in). Vibration alarm

Dimensions:

- 99 x 51 x 35 mm.

Weight:

- 126 g.

Temperature Range:

- -40°C to +50°C

Humidity Range:

- 15%-95% Non-condensing (continuous).

Sensors:

- CO, CO/H₂ low, H₂S, NO₂, SO₂ - Electrochemical sensor technology.

Battery Pack:

- 3.6 V Primary lithium-thionyl chloride (Li-SOCl₂); 1.5AH, 2/3AA; replaceable; nonrechargeable; always on; up to 2-year run time depending on operating conditions.

Data Logging:

- 3 months at 10-second intervals.

Event Logger:

- 60 alarm events.

IP Rating:

- IP66, IP67.

Accessories



Tango TX1 Size Comparison



Tango TX1 with DSX

Application



Tango TX1 Application shott

Measuring Ranges

Sensor	Range	Increments
Carbon Monoxide	CO 1-1,000 ppm	1 ppm
Carbon Monoxide	CO/H ₂ low 0-1,000 ppm	1 ppm
Hydrogen Sulfide	H ₂ S 0-500 ppm	1 ppm
Nitrogen Dioxide	NO ₂ 0-150 ppm	0.1 ppm
Sulfur Dioxide	SO ₂ 0-150 ppm	0.1 ppm

Certifications

Ingress protection	IP66; IP67
	-40°C TO +50°C (-40°F TO +122°F)
ATEX:	Ex ia I Ma; Ex ia IIC T4 Ga; Equipment Group/Category: I M1/II 1G
CSA:	Cl I, Gr A-D, T4; Ex ia IIC T4
IECEX:	Ex ia I Ma; Ex ia IIC T4 Ga
INMETRO:	Ex ia I Ma; Ex ia IIC T4 Ga
UL (C-US):	Cl I, Gr A-D, T4; Cl II, Gr E-G; Cl I, Zone 0, AEx ia IIC T4
	-20°C TO +50°C (-4°F TO +122°F)
CMA:	Ex ia I Ma; H ₂ S, CO
EAC:	PO Ex ia I X; 0 Ex ix IIC T4 X
KC:	Ex ia IIC T4



Ventis[®] MX4

Configured for your safety, the highly configurable and iNet-compatible Ventis[™] MX4 takes your gas detection program to the next level.

- Configure for diffusion applications or with an integral sampling pump for sample draw applications.
- Detect from one to four gases with a wide range of sensor options.
- Gain visibility of the instrument in darker environments with a tough, "Safety Orange" overmold.
- Realize true portability with multi-gas protection in single gas size.
- Utilize the diffusion monitor for 20 hours with a rechargeable lithium-ion extended range battery pack.
- iNet[®] ready and DSX[™] Docking Station compatible.

Specifications

Instrument Warranty:

- One-year warranty, including sensors and battery.

Display/Readout:

- Backlit Liquid Crystal Display (LCD).

Case Materials:

- Polycarbonate w/ protective rubber overmold.

Alarms:

- Ultra-bright LEDs, loud audible alarm (95 dB at 30 cm), and vibrating alarm.

Dimensions:

- 103 mm x 58 mm x 30 mm - Without pump, lithium-ion battery.
- 172 mm x 67 mm x 66 mm - With pump, lithium-ion battery.

Weight:

- 182 g - Without pump, lithium-ion battery.
- 380 g - With pump, lithium-ion battery.

Temperature Range:

- - 20°C to + 50°C.

Humidity Range:

- 15%-95% non-condensing (continuous).

Sensors:

- Combustible gases/methane – Catalytic Bead.
- O₂, CO/H₂ low, CO, H₂S, NO₂, SO₂ – Electrochemical.

Power Source/Run Time:

- Rechargeable Slim Extended Lithium-ion battery (18 hours typical @ 20 °C) without Pump
- Rechargeable Lithium-ion battery (12 hours typical @ 20 °C) without Pump
- Rechargeable Extended-Range Lithium-ion battery (20 hours typical @ 20 °C) without Pump; (12 hours typical @ 20 °C) with Pump
- Replaceable AAA Alkaline battery (8 hours typical @ 20 °C) without Pump; (4 hours typical @ 20 °C) with Pump

Ventis MX4 Confined Space Kits with Slide-on Pump Include:

Ventis MX4 Confined Space Kits with Slide-on Pump Include: Ventis with LEL, CO, H₂S, and O₂ sensors, Ventis Slide-on Pump, 110 VAC desktop charger for each rechargeable instrument ordered (max of 2), calibration cup and tubing with T-fitting, dust filter/water stop, 10 feet of sample tubing, 34 liter cylinder of calibration gas, manual regulator, rugged hard plastic carrying case



Ventis MX4 Confined Space Kits with Integral Pump Include:

Ventis with integral pump, universal charger, soft carrying case, reference guide, calibration tubing, dust filter/water stop, calibration fitting, sample tubing, calibration gas (appropriate mix) with regulator, rugged hard plastic case



Measuring Ranges

Sensor	Range	Increments
Combustible Gases	0-100% LEL	1%
Methane (CH ₄)	0-5% vol	0.01%
Oxygen (O ₂)	0-30% vol	0.1%
Carbon monoxide (CO/H ₂ low)	0-1,000 ppm	1 ppm
Carbon monoxide (CO)	0-1,000 ppm	1 ppm
Hydrogen sulfide (H ₂ S)	0-500 ppm	0.1 ppm
Nitrogen dioxide (NO ₂)	0-150 ppm	0.1 ppm
Sulfur dioxide (SO ₂)	0-150 ppm	0.1 ppm

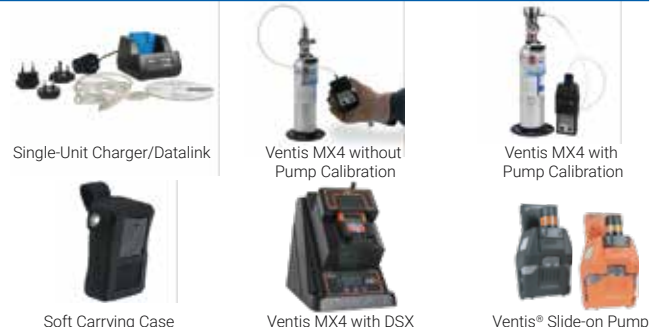
Certifications

Ingress protection IP66/67	
ANZEx:	Ex ia s Zone 0 I/IIC T4
ATEX:	Ex ia IIC T4 Ga and Ex ia I Ma; Equipment Group and Category II 1G/I M1
CMA:	Approved for Underground Mines with CO, H ₂ S, O ₂ and CH ₄ (Note: Diffusion 17144453 pack only)
CSA:	CI I, Div 1, G A-D, T4; Ex d ia IIC T4
EAC:	PBExdial X/1ExdialIIC T4 X
IECEX:	Ex ia IIC T4 Ga
INMETRO:	Ex ia IIC T4 Ga
KC:	Ex d ia IIC T4
KIMM:	Ex d ia IIC T4
MED:	Portable Multi-Gas Detector; Category 2 (MED 96/98/EC; MED 2012/32/EU Marine Directive) Li-ion
MSHA:	30 CFR Part 22; Permissible for underground mines; Li-ion
PA-DEP:	BFE 46-12 Permissible for PA Bituminous Underground Mines; Charger/docking station accessories; Category 1
SANS:	SANS 1515-1; Type A; Ex ia I/IIC T4; Li-ion
TIIS:	Ex ia IIC T4 X
UL:	CI I, Div 1, Groups A-D, T4; Zone 0, AEx ia IIC T4; CI II, Gr F-G (Carbonaceous and Grain dust)

Application



Accessories



Single-Unit Charger/Datalink

Ventis MX4 without Pump Calibration

Ventis MX4 with Pump Calibration

Soft Carrying Case

Ventis MX4 with DSX

Ventis[®] Slide-on Pump



Ventis® Pro5

Detect up to five gases simultaneously with the rugged, wireless, Ventis® Pro5 Multi-Gas Monitor. With Ventis Pro5, safety goes beyond the gas detector whether you need team-based alarm sharing, remote monitoring with location details, or both. The monitor is also backed by a Guaranteed for Life™ warranty.

- Flexible sensor configurations detect up to five gases.
- See gas readings and alarms from connected peers using LENS™ Wireless.
- With integral pump for confined spaces or without integral pump for personal protection.
- Man-down alarm and dedicated panic button.
- User and site tracking with iAssign™ Technology.
- Rugged IP68 dust and water rating and Guaranteed for Life™ warranty.
- Dock overdue and maintenance reminders
- iNet® ready and DSX™ Docking Station compatible

Measuring Ranges

Sensor	Ranges	Increments
Catalytic bead		
Combustible Gases:	0-100% LEL	1%
Methane (CH ₄):	0-5% vol	0.01%
Catalytic bead		
Ammonia (NH ₃):	0-500 ppm	1 ppm
Carbon Monoxide (CO):	0-2,000 ppm	1 ppm
Carbon Monoxide (CO/H ₂ low):	0-1,000 ppm	1 ppm
Carbon Monoxide/Hydrogen Sulfide (CO/H ₂ S):	CO: 0-1,500 ppm	1 ppm
	H ₂ S: 0-500 ppm	0.1 ppm
Chlorine (Cl ₂):	0-50 ppm	0.1 ppm
Hydrogen Sulfide (H ₂ S):	0-500 ppm	0.1 ppm
Hydrogen Cyanide(HCN):	0-30 ppm	0.1 ppm
Nitrogen Dioxide (NO ₂):	0-150 ppm	0.1 ppm
Oxygen (O ₂) (Standard/Long-Life):	0-30% vol	0.1 %
Phosphine (PH ₃):	0-10 ppm	0.01 ppm
Sulfur Dioxide (SO ₂):	0-150 ppm	0.1 ppm
Infrared		
Carbon Dioxide (CO ₂):	0-5% vol	0.01 %
Methane (CH ₄):	0-5% vol	0.01 %
	5-100% vol	0.1 %
Carbon Dioxide/Combustible:	CO ₂ : 0-5% vol	0.01 %
	LEL: 0-100% LEL	1 %
Carbon Dioxide/Methane:	CO ₂ : 0-5% vol	0.01 %
	CH ₄ : 0-5% vol	0.01 %
	CH ₄ : 5-100% vol	0.1 %
Hydrocarbons:	0-100% LEL	1 %

Certifications

Ingress protection IP68	
ANZEX:	Ex ia I Ma/Ex ia IIC T4 Ga, -40 °C ≤ Ta ≤ 50 °C Ex d ia I Mb/Ex d ia IIC T4 Gb IR sensor, -20 °C ≤ Ta ≤ 50 °C IR sensor
ATEX:	Equipment Group and Category II 1G, Ex ia IIC, Ga, T4 Equipment Group and Category II 2G, Ex d ia IIC, Gb, T4, IR sensor
CSA:	Cl I, Div 1, Gr A-D, T4; Cl I, Zone 1, Ex d ia IIC, T4 C22.2 No. 152 for % LEL reading only
IECEx:	Cl I, Zone 0, Ex ia IIC, Ga, T4; Cl I, Zone 1, Ex d ia IIC, Gb, T4, IR sensor
INMETRO:	Ex ia IIC T4 Ga, -40 °C ≤ Ta ≤ 50 °C Ex d ia IIC T4 Gb IR sensor, -20 °C ≤ Ta ≤ 50 °C IR sensor
KC:	Ex d ia IIC T4
MSHA:	30 CFR Part 22; Permissible for underground mines
PA-DEP:	BFE 46-12 Permissible for PA Bituminous underground mines
UL:	Cl I, Div 1, Gr A-D, T4; Cl II, Div 1, Gr E-G, T4 Cl I, Zone 0, AEx ia IIC, T4; Cl I, Zone 1, AEx d ia IIC, T4, IR sensor

Accessories



Specifications

Warranty:

- All other sensors warranted for one year. Pumps and batteries are warranted for one year.

Display/Readout:

- Backlit liquid crystal display (LCD).

Keypad:

- Two buttons for operation. Dedicated panic button.

Case Materials:

- Polycarbonate with protective rubber overmold.

Alarms:

- Four visual alarm LEDs (two red, two blue); 95 decibel (dB) audible alarm at a distance of 10 cm.
- Vibration alarm.

Dimensions:

- 104 x 58 x 36 mm without Pump
- 172 x 67 x 65 mm with Pump
- 104 x 58 x 61 mm with Wi-fi or Cellular Battery

Weight:

- 200 g (7.05 oz) typical, without Pump
- 390 g (13.76 oz) typical, with Pump
- 243 g (8.5 oz) typical, with Wi-fi Battery
- 244 g (8.6 oz) typical, with Cellular Battery

Temperature Range:

- -40°C to 50°C.

Humidity Range:

- 15%-95% non-condensing (continuous).

Data Log:

- At least 3 months at 10-second intervals.

Event Logging:

- 60 alarm events.

Ingress Protection:

- IP68 (submersion at 1.5 meters for 1 hour).

Supplied With Monitor:

- Calibration Cup (without Pump), Sample Tubing (with Pump), Reference Guide

Reference Guide Language:

- English, French, Spanish, German, Italian, Dutch, Portuguese, Polish

Power Source/Run Time:

- Rechargeable Slim Extended Lithium-ion battery (no Pump option) (18 hours typical @ 20 °C) with LEL (54 hours typical @ 20 °C) with IR
- Rechargeable Lithium-ion battery (no Pump option) (12 hours typical @ 20 °C) with LEL (36 hours typical @ 20 °C) with IR
- Rechargeable Extended-Range Lithium-ion battery with LEL (23 hours typical @ 20 °C) without Pump (18 hours typical @ 20 °C) with Pump
- Rechargeable Extended-Range Lithium-ion battery with IR (72 hours typical @ 20 °C) without Pump (32 hours typical @ 20 °C) with Pump
- Rechargeable Wi-fi Lithium-ion battery (no Pump option) (16 hours typical @ 20 °C) with LEL
- Rechargeable Cellular Lithium-ion battery (no Pump option) (16 hours typical @ 20 °C) with LEL

Sensor:

- Combustible Gases/Methane – Catalytic Bead
- O₂, CO, CO/H₂ low, H₂S, HCN, NH₃, NO₂, PH₃, SO₂, Cl₂ – Electrochemical
- CO₂, CH₄, CO₂/LEL, CO₂/CH₄, HC – Infrared

Communication:

- LENS™ WIRELESS Mesh Network
- Frequency: ISM license-free band (2.405 - 2.480 GHz)
- Max Peers: 25 devices per network group
- Range: 100 m (300 ft) line of sight, face-to-face
- Encryption: AES-128
- Approvals: FCC Part 15, IC, CE/RED, others†
- CELLULAR
- LTE CAT M1
- US: AT&T, Verizon
- Canada: TBD
- Wi-Fi: 802.11 b/g/n 2.4GHz wi-fi with WPA2 security

Wireless Certifications:

- Ventis Pro5 Instruments: FCC, ISED – Canada, EU Radio Equipment Directive (R.E.D.) and many other countries
- Ventis Pro5 with wi-fi: FCC, ISED – Canada, EU Radio Equipment Directive (R.E.D.)
- Ventis Pro5 with LTE Cat M1 Cellular: FCC, ISED-Canada, PTCRB, AT&T and Verizon



MX6 iBrid®

Get ready to see hazardous levels of oxygen, toxic and combustible gas, and volatile organic compounds (VOCs) like never before.

- 24 “Plug-and-Play” field-replaceable sensors including PID and Infrared options
- Up to 6 gases monitored simultaneously
- Simple, user-friendly, customizable, menu-driven navigation
- Five-way navigation button
- Durable, concussion-proof overmold
- Optional integral sampling pump with strong 30.5 meter (100 feet) sample draw
- Full-color graphic LCD is highly visible in a variety of lighting conditions
- Powerful, 95 dB audible alarm

Specifications

Instrument Warranty:

- Warranted for as long as the instrument is supported by Industrial Scientific Corporation.

Case Materials:

- Lexan/ABS/Stainless Steel with protective rubber overmold.

Dimensions:

- 135 mm x 77 mm x 43 mm – without pump.
- 167 mm x 77 mm x 56 mm – with pump.

Weight:

- 409 g typical – without pump.
- 511 g typical – with pump.

Display/Readout:

- Color Graphic Liquid Crystal Display.

Power Source/Run Time:

- Rechargeable, Extended-Range Lithium-ion Battery (36 hours) without Pump
- Rechargeable, Extended-Range Lithium-ion Battery (20 hours) with Pump
- Replaceable AA Alkaline Battery Pack (10.5 hours) - without pump.

Temperature Range:

- -20°C to 55°C.

Humidity Range:

- 15% to 95% non-condensing (continuous).

Certifications

Ingress protection IP64	
ANZEx:	Ex ia s Zone 0 I; Ex ia s Zone 0 IIC T4
ATEX:	Ex ia IIC T4 Ga; II 1G (or Ex d ia IIC T4 Gb IR sensor); Ex ia I; Equipment Group and Category: I M1/II 1G
CMA:	Approval for Mining Products; CH ₄ , O ₂ , CO, CO ₂
CSA:	CI I, Gr A-D T4; Ex d ia IIC T4
EAC:	PBExiadl X; 1ExiadIIC T4 X
IECEX:	Ex ia I (Ex ia d I IR sensor); Ex ia IIC T4 Ga; Ex d ia IIC T4 Gb
INMETRO:	Ex ia IIC T4 Ga
KC:	Ex d ia IIC T4
KIMM:	Ex d ia IIC T4
MDR:	Registration of Plant Design; CH ₄ , O ₂ , CO, H ₂ S, NO ₂
MSHA:	30 CRF, Part 22, Intrinsically safe for methane/air mixtures
PA-DEP:	BFE 114-08 Permissible for PA Bituminous Underground Mines
UL:	CI I, Div 1, Gr A-D, T4; CI II, Groups F G; CI I, Zone LEL 0, AEx ia d IIC T4 (or AEx ia d IIC T4 IR sensor)

Application



Measuring Ranges

Sensor	Range Resolution	Increments
Catalytic bead		
Combustible Gas	0-100% LEL	1%
Methane (CH ₄)	0-5% vol	0.01%
Electrochemical		
Ammonia (NH ₃)	0-500 ppm	1
Carbon Monoxide (CO)	0-1,500 ppm	1
Carbon Monoxide (CO) (High Range)	0-9,999 ppm	1
Carbon Monoxide/Hydrogen low (CO/H ₂ low)	0-1,000 ppm	1
Chlorine (Cl ₂)	0-50 ppm	0.1
Chlorine Dioxide (ClO ₂)	0-1 ppm	0.01
Carbon Monoxide/ Hydrogen Sulfide (COSH)	CO: 0-1,500 ppm H ₂ S: 0-500 ppm	1 0.1
Hydrogen (H ₂)	0-2,000 ppm	1
Hydrogen Chloride (HCL)	0-30 ppm	0.1
Hydrogen Cyanide (HCN)	0-30 ppm	0.1
Hydrogen Sulfide (H ₂ S)	0-500 ppm	0.1
Nitric Oxide (NO)	0-1,000 ppm	1
Nitrogen Dioxide (NO ₂)	0-150 ppm	0.1
Oxygen (O ₂)	0-30% vol	0.1%
Phosphine (PH ₃)	0-5 ppm	0.01
Phosphine (PH ₃) (High Range)	0-1,000 ppm	1
Sulfur Dioxide (SO ₂)	0-150 ppm	0.1
Infrared		
Hydrocarbons	0-100% LEL	1%
Methane (CH ₄) (% vol)	0-100% vol	1%
Methane (CH ₄) (% LEL)	0-100% LEL	1%
Carbon Dioxide (CO ₂)	0-5% vol	0.01%
Photoionization		
VOC	0-2,000 ppm	0.1

Accessories



MX6 Confined Space Kit

Easy Sensor Replacement

MX6 Chargers

SP6 Motorized Sampling Pump

MX6 with DSX



Radius® BZ1

Detect up to seven gases simultaneously and connect your entire worksite with the rugged Radius® BZ1 Area Monitor. Radius BZ1 detects gas hazards 24/7 without the hassle of elaborate wireless setups and maintenance routines. Radius BZ1 just works, no questions asked, so your teams can focus on what's important while knowing that their area monitors are ready for whatever comes their way

- Cut through high-noise environments with alarms that sound at 108 dB
- Know what's happening at a safe distance thanks to the largest display of any area monitor and customizable alarm action messages such as "EVACUATE" or "VENTILATE"
- Keep your monitors in the field while removable SafeCore® Modules automatically bump, calibrate, and update when connected to DSX™ Docking Stations
- Forget false alarms thanks to the 360-degree gas path and all-weather sensor deployment
- Reduce battery swapping with a typical run time of 7 days (168 hours)

Measuring Ranges

Sensor	Range	Increments
Catalytic bead		
Combustible Gases:	0-100% LEL	1%
Electrochemical		
Ammonia (NH ₃):	0-500 ppm	1 ppm
Carbon Monoxide (CO):	0-1,500 ppm	1 ppm
Carbon Monoxide (CO High Range):	0-9,999 ppm	1 ppm
Carbon Monoxide (CO/H ₂ low):	0-1,000 ppm	1 ppm
Carbon Monoxide/Hydrogen Sulfide:	CO: 0-1,500 ppm H ₂ S: 0-500 ppm	1 ppm 0.1 ppm
Chlorine (Cl ₂):	0-50 ppm	0.1 ppm
Hydrogen (H ₂):	0-2,000 ppm	1 ppm
Hydrogen Sulfide (H ₂ S):	0-500 ppm	0.1 ppm
Hydrogen Cyanide (HCN):	0-30 ppm	0.1 ppm
Nitrogen Dioxide (NO ₂):	0-150 ppm	0.1 ppm
Oxygen (O ₂):	0-30% vol	0.1 %
Sulfur Dioxide (SO ₂):	0-150 ppm	0.1 ppm
Phosphine (PH ₃):	0-5 ppm	0.1 ppm
Nitric Oxide (NO):	0-1000 ppm	1 ppm
Electrochemical		
Volatile Organic Compounds (VOC) (10.6 eV):	0-2,000 ppm	0.1 ppm

Certifications

Ingress Protection IP66	
ATEX:	Ex da ia IIC T4 Ga, Equipment Group and Category II 1G
CSA:	Cl I, Div 1, G A-D, T4
	C22.2 No. 152 applies only to %LEL thermo-catalytic reading
IECEX:	Ex da ia IIC T4 Ga
INMETRO:	Ex da ia IIC T4 Ga; Ex db ia IIC T4 Gb IR sensor
KC:	Ex d ia IIC T4
UL:	Cl I, Div 1, Gr A-D, T4; Cl 1 Zone 0 AEx da ia IIC T4 Ga1

Accessories



How Will You Use Your Radius BZ1?

Area monitors are a highly flexible solution because they can be placed in temporary or long-term configurations based on your specific hazards. With the addition of LENS™ Wireless, networks are created out of the box and provide visibility into gas hazards that are happening in any location.

- ① Confined Space Monitoring – Know what's happening in a confined space by using the pumped SafeCore Module and tubing to draw air samples to the monitor.
- ② Perimeter Monitoring – Set up monitors around a tank, hot work, or other known hazardous areas to continuously monitor for gas leaks.
- ③ Fence Line Monitoring – Create a barrier between a safe zone and hazardous work area. Use the hopping capability of LENS™ Wireless to know what is happening up to 1.5 km away.

LENS™ Wireless Highlights:

- No infrastructure required
- Out-of-the-box operation
- No need for IT setup
- Self-forming, self-healing networks

Specifications

Instrument Warranty:

- One-year warranty, including sensors and battery.

Display/Readout:

- 11.2 cm monochrome backlit graphical liquid crystal display (LCD).

Keypad:

- Three buttons.

Case Material:

- Impact-resistant polycarbonate alloys.

Alarms:

- 108 decibel (dB) at 1 m (3.3 ft) redundant audible alarms .
- Redundant visual alarm LEDs (red and blue).

Dimensions:

- 29 x 29 x 55 cm.

Weight:

- 7.5 kg.

Temperature Range:

- -20°C to 55°C.

Humidity Range:

- 15%-95% non-condensing (continuous).

Data Log:

- At least 3 months at 10-second intervals.

Event Logging:

- 60 alarm events.

Reference Guide Language:

- English, French, Spanish, German.

Ingress Protection:

- IP66.

Power Source/Run Time:

- Rechargeable nickel-metal hydride (NiMH) battery pack.
- 7 days (168 hours) typical @ 20 °C, without pump, with wireless.
- 3.5 days (84 hours) typical @ 20 °C, with pump, with wireless.
- 30 days (720 hours) typical @ 20 °C, electrochemical sensors only, without pump, with wireless.
- ≤8 hour recharge time.

Sensors:

- Up to 6 sensors (catalytic bead, photoionization detector, and electrochemical).
- Up to 7 simultaneous readings.

Pump:

- Optional integral pump, up to 30.48 m sampledraw.

Supplied With Monitor:

- Calibration cup (without pump), sample tubing and pump inlet water barrier (with pump), product manual, hand tool, charging power supply and region-specific cord.

Wireless:

- Optional LENS™ Wireless, proprietary mesh network.
- Frequency: ISM license-free band (2.405 - 2.480 GHz).
- Max Peers:
 - + 25 devices per network group.
 - + 10 independent, configurable network groups.
 - + Range: 300 m (~1,000 ft) line of sight
- Encryption: AES-128
- Approvals: FCC Part 15, IC, CE/RED, others**



- Long-range communication up to 300 m (~1,000 ft) without sacrificing run time
- View peer readings from Radius BZ1 Area Monitors and Ventis Pro Series personal monitors within a group

DSX™

The DSX™ Docking Station easily maintains the gas detectors that keep your people safe in hazardous environments.

- Know that your gas detectors are ready for use every day, every shift, without the burden of manual maintenance routines.
- Stop worrying about calibration gas and let DSX monitor and order replacement gas cylinders when you need them.
- Effortlessly manage your fleet, data, and software updates from any web-enabled device.



Specifications

Physical Specifications

Warranty:

- One-year warranty:
- + DSX (Standalone)
- + DSX-L (Local Server)
- Guaranteed For Life™ Program** – DSXi (Cloud-connected).

Instruments Supported:

- GasBadge Pro, MX6 iBrid, Tango TX1, Ventis MX4, Ventis Pro Series, SafeCore

Dimensions:

- GasBadge Pro, Tango TX1: 22.7 x 16.9 x 27.3 cm
- Ventis MX4, Ventis Pro Series: 24.9 x 16.9 x 27.3 cm
- MX6 iBrid: 25.3 x 16.9 x 27.3 cm
- SafeCore: 27.3 x 16.9 x 29.2 cm

Display:

- 128 x 64 Dot Matrix LCD – Multilingual modes English, Spanish, French, German and Portuguese***

Gas Inlets:

- 3-Port Version: One "fresh" air port, two calibration gas ports
- 6-Port Version: One "fresh" air port, five calibration gas ports (for Ventis, MX6 iBrid, and SafeCore only)

Pump Flow Rate:

- 1.2 SCFH (550 mL/min)

Communication:

- 10/100 Ethernet support, RJ-45 Category 5 Connection

Performance Specifications

Temperature Range:

- 0 °C to 50 °C / 32 °F to 122 °F

Humidity Range:

- 0% to 80% relative humidity (RH) up to 30 °C (86 °F), decreasing linearly to 50% RH at 50 °C (122 °F)

External Power Supply Ratings:

- Supply voltage: 100-240 VAC / 12 VDC
- Frequency range: 50-60 Hz
- Current rating: 5A

DSX with device



DSX Ventis for pumped and diffusion instruments



DSX Docking Station with Ventis Pro



DSX with GasBadge Pro



DSX Docking Station for SafeCore Module

Ventis Slide-On Pump

The Ventis® Slide-on Pump is ideally suited for operators who wear their gas monitors for personal protection but occasionally require a pump for confined space entries. Available in black or safety orange and powered by its own battery pack, the slide-on pump is compatible with the Ventis™ MX4 and the Ventis™ Pro Series Multi-Gas Monitors.

- Convenient sampling - Sample draw distance of up to 50 feet provides convenient sampling in a wide range of applications.
- Easy to attach - No tools are required to attach or remove the Ventis Slide-on Pump to or from the monitor
- Uses same battery packs and chargers as Ventis - Monitor and pump each use the same battery packs, and can easily be exchanged between instruments
- Flexible battery options - Three available battery options make this pump extremely flexible in the field.



Specifications

Instrument Warranty:

- One-year warranty, excluding consumables (i.e. filters).

Case Material:

- Polycarbonate with protective rubber overmold

Sample Draw Capability:

- Up to 15.2 meters.

Operating Temperature Range:

- -20°C to 50°C.

Operating Humidity Range:

- 15%-95% non-condensing (continuous).

Power Source/Run Time:

- Rechargeable lithium-ion battery pack, 18 hours @ 20 °C.
- Rechargeable extended range lithium-ion battery pack, 36 hours @ 20 °C.
- Replaceable AAA alkaline battery pack, 10 hours @ 20 °C.

Pump Fault Alarms:

- Ultra-bright LEDs
- Loud audible alarm (90 dB at 30 cm).

IP Rating:

- IP67.

Weight:

- 270 g Lithium-ion battery version.
- 316 g Extended range lithium-ion battery version.
- 284 g Alkaline battery version.

Dimensions:

- 143 x 81 x 73 mm Lithium-ion battery version.
- 143 x 81 x 68 mm Extended range lithium-ion battery version.
- 143 x 81 x 85 mm Alkaline battery version.

Certifications:

UL:	Class I, Division 1, Groups A B C D, T4 Class I, Zone 0, AEx ia IIC T4 Ga Class II, Group F G (Carbonaceous and Grain Dust)
CSA:	Class I, Division 1, Group A B C D, T4 Ex ia IIC T4
ATEX:	Ex ia I Ma and Ex ia IIC T4 Ga; Equipment Group and Category: I M1 v II 1G
IECEX:	Ex ia IIC T4 Ga
INMETRO:	Ex ia IIC T4 Ga; IP66; IP67
GOST-EAC:	0 Ex ia IIC X T4 PO Ex ia I X



iNet® Platform

Whether you need live monitoring with real-time alerts, gas detection management with historical reports, or automatic instrument exchanges, our iNet® platform will help you to be safer and more productive

iNet® Control gives you the power to reduce risk by giving you critical insights and complete control over your equipment, data and worker behavior

- Spend less time updating your gas detection fleet by easily managing everything from monitor settings and firmware to calibration gas in one dashboard
- Access all historical alarm data and generate reports or calibration certificates at any time.
- Manage worker and site safety by tracking critical instrument data
- Reduce risk to your people and your site by identifying and intervening when SOPs aren't followed
- For DSXi Docking Station customers, access to iNet Control is included



iNet® Now live monitoring software provides real-time visibility into worker and site safety so you can proactively address hazards and respond quickly in an emergency with actionable information.

- Respond quickly and effectively in an emergency with real-time alerts that show who is in danger, where they're working and what hazards they face
- Get real-time visibility into what's happening across your site through remote monitoring
- Improve site safety and productivity by making decisions based on insights, not instincts

RGX® GATEWAY

The portable RGX® Gateway transmits location, gas readings, and real-time alerts from anywhere, including hazardous locations, so you can respond faster and improve productivity. The RGX Gateway is suitable for permit tasks that last hours, incidents that last days, or projects that last weeks.

- Receive real-time alerts and location data from personal gas monitors and area monitors
- Monitor hazardous locations and get data out of confined spaces in real time
- Up and running in minutes without the need for costly IT infrastructure
- Compatible with LENS Wireless-enabled Ventis Pro5 MultiGas Monitors and Radius BZ1 Area Monitors
- 168 hours of continuous run time
- Cell, wi-fi, or Ethernet connectivity options
- Automatic configuration and firmware updates without taking the gateway out of the field



iASSIGN® BEACON AND TAGS

Assign® Beacons and Tags allow you to go beyond the basic "what" and "when" data from gas detectors to understand "who" and "where".

Using a pre-programmed iAssign Tag, operators can wirelessly enter a name into a device by simply tapping it with a tag.

Now all data recorded in the instrument will be tagged with the user's name. This allows users to carry different gas monitors each day while still having a clear data record of who had an instrument when it went into alarm. When a worker (and tagged device) approaches an iAssign Beacon on your site, the beacon adds the device location to the data. iAssign

Beacons can also be set with permission levels, allowing you to send automatic alerts to workers entering restricted areas.

- Locate problem sites across your facility
- Alert workers when entering restricted areas with simple-to-program proximity alarms
- Manage worker clearances without the need for separate devices, extra signage, or physical barriers
- Intrinsically-safe beacons can be used indoors or outdoors, and cover areas as small as 1 meter or as large as 30 meters



iAssign Tag Specifications

Tag Type	Standard Tag	Waterproof Tag	All Weather Tag	Keychain Tag
Part Number (Pack of 10)	18109417	18109418	18109419	18109420
Thickness	0.7 mm	1.5 mm	3 mm	4 mm
Adhesive Back	Yes	Yes	No	No

iASSIGN TAG SPECIFICATIONS

Technology
Near Field Communication (NFC)

Programming Method
iAssign app available in Google Play store

Application
iAssign tags may be used to track workers and locations



**LENS®
WIRELESS**

LENS® Wireless is the first gas detection solution that allows personal monitors and area monitors to wirelessly share gas readings and alarms with one another. Now when a gas hazard, man-down, or panic situation causes an instrument to alarm, all peers in the connected group will instantly be notified of the hazard and the person in danger, allowing them to make smarter, faster, safer decisions.

- View gas readings from other peers in your group on any monitor without needing a central controller to relay the information
- Share gas readings and alarms between Ventis® Pro5 MultiGas Monitors and Radius® BZ1 Area Monitors from up to 1.5 km (about 1 mile) away with wireless hopping between instruments
- Enjoy out-of-the-box operation with no site surveys, IT setup, licenses, or additional infrastructure
- Connect up to 25 devices in a group with a simple tap
- Self-healing mesh networks always stay connected, even if a single unit drops off



Average time to deploy 25 LENS Wireless instruments
(Joining 25 instruments into a group)

2 minutes

Average time to implement other wireless solutions
(Instrument, IT, and central controller setup)

2 hours – 2 days

GAS DETECTION meets CONNECTED SAFETY

With the Ventis® Pro5 Personal Gas Monitor and Radius® BZ1 Area Monitor, you have the flexibility to choose how you want your teams to connect. Whether you want peer-to-peer alarm sharing, personal monitor to area monitor connectivity, or remote live monitoring, Industrial Scientific has you covered.

Personal Gas and Arena Monitoring

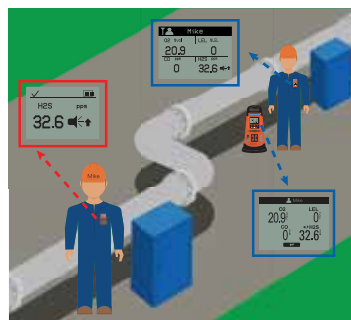
Reliable Ventis Pro 5 and Radius BZ1 gas monitors are key to protecting employees from invisible hazards.



Connect personal and area monitors
across your worksite.

Team and Site-Based Safety

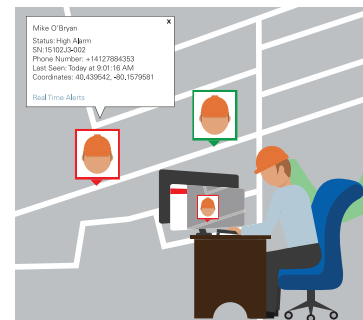
Give workers insight to their surroundings by sharing alarms and notifications between gas monitors.



When Mike is in alarm,
his peers are immediately notified.

Manager Safety and Productivity

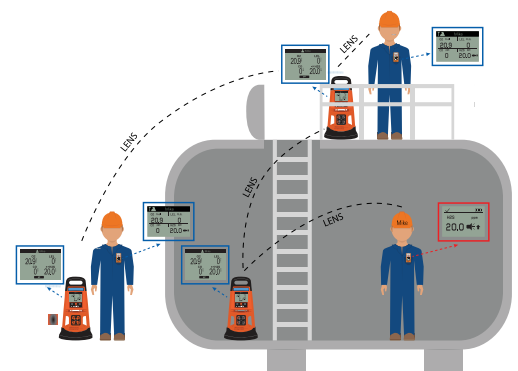
Get data out of any situation and increase productivity by knowing where your workers are and what dangers they may encounter.



With iNet® Now, the safety manager also
knows that Mike is in alarm in real time.

INSTRUMENT-TO-INSTRUMENT WIRELESS

LENS™ Wireless, exclusive to Industrial Scientific, shares hazard exposures, panic, and man-down situations, with other connected instruments using a peer-to-peer network. No central command or complicated set up required. Just turn on the instruments to connect.



VOC Gas Detector

www.panindochina.com.vn

Tiger XT

Rapid, accurate detection of Volatile Organic Compounds (VOCs), within the most challenging environments. The Tiger XT's photoionisation detection (PID) technology has been independently verified as best performing on the market for speed, accuracy, resistance to humidity and contamination, thanks to its patented Fence Electrode Technology. Its patented Fence Electrode Technology and anti-contamination design ensures optimal performance within humid and heavily contaminated atmospheres, extending run time in the field. The Tiger XT is the most advanced handheld VOC detector on the market with the widest measurement range, accurately detecting gases down to 1 part per billion (ppb) up to 20,000 part per million (ppm). Tiger has the fastest response time on the market of just two seconds, and is as quick to clear down. The Tiger XT handheld VOC gas detector can detect over 750 VOCs and toxic compounds!



Specifications

Minimum Resolution	10.6 eV: 1 ppb or 0.001 mg/m ³ 11.7 eV: 0.6 ppm (600 ppb)
Maximum Reading (Range)	10.6 eV: 20,000 ppm or 20,000 mg/m ³ 11.7 eV: 9,000 ppm
Response Time	10.6 eV: < 2 seconds 11.7 eV: < 6 seconds
Accuracy	10.6 eV: 5% or ± one digit 11.7 eV: ± 12% display reading
Lamp Lifetime	10.6 eV: 10,000 hours 11.7 eV: ≥500 hours
Battery Life	Li-ion: Typical operating time of up to 24 hours Charge time: Typically 8 hours Alkaline: 3 x AA, typically 8.5 hours life
Calibration	2 and 3 point calibration (via calibration kit accessory)
Alarm	Flashing LEDs Amber (low alarm) Red (high alarm) Sounder 95 dBA at 300 mm (12") Vibration on alarm • Pre-programmed TWA and STEL*
Data Logging	120,000 points including date and time stamp
Lamps	10.6 eV Krypton PID lamp (standard.) 10.0 eV and 11.7 eV lamps available
Communication	Direct USB 1.1 connection
Flow Rate	≥ 220 ml/min (with blocked flow alarm)
Temperature	10.6 eV: -20°C to +60°C 11.7 eV: 0°C to +60°C
Weight & Dimensions	Width: 91 x Height: 370 x Depth: 60 mm (instrument without probe) Instrument Weight: 870g
Protection	Designed to IP65 EMC tested to EN61326-1:2013 & EN50270:2015 & CFR 47:2008 Class A
Intrinsically Safe Approvals	II 1G Ex ia IIC T4 Ga Tamb = - 15°C ≤ Ta ≤ +45 °C (Khi sử dụng với pin lithium ion) Tamb = - 15 °C ≤ Ta ≤ +40 °C (Khi sử dụng với pin alkaline) ITS-I22ATEX35111X IECEX ITS 22.0025X ITS22UKEX0635X 3193491 conforms to UL Std. 913, 61010-1 Certified to CAN/CSA Std. C22.2 No. 61010-1 Class 1 Division 1. Approval for Groups A, B, C & D, T4

Tiger XTL

Low cost Volatile Organic Compound (VOC) detector with reliable market leading accuracy! The Tiger XTL is a ground breaking low cost entry level VOC detector with all the essential functions you need to detect VOCs. The instrument has the lowest running costs on the market with inexpensive disposable parts, lamps and filters. This variant of the hugely popular Tiger XT VOC detector is low on cost but high on performance. Its revolutionary, patented PID sensor technology with resistance and anti-contamination design provides market leading accuracy and run time. Combined with 24 hour battery life, these features maximise field time by minimising erroneous readings in high humidity and drift in hard environments. The Tiger XTL portable VOC gas detector is ETL (Electrical Testing Laboratories), KGS (Korean Gas Safety), IECEX (International Electrotechnical Commission System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres) certified. It is also ATEX approved meaning the instrument is intrinsically-safe.



Specifications

Minimum Resolution	0.1 ppm
Maximum Reading	5,000 ppm
Response Time	T90 < 2 seconds
Accuracy	± 5% display reading ± one digit
Linearity	± 5% display reading ± one digit
Data Logging	Push-to-log, 128 zones, 80,000 data points
Calibration	Standard calibration 100 ppm isobutylene Custom calibration capability
Alarm	Flashing LED and 95 dBA at 300mm (12") audible sounder Selectable vibrating alarm
Flow Rate	≥ 220 ml/min (with blocked flow alarm)
Battery Life	Li-ion: life up to 24 hours continual use
Lamps	10.6 eV Krypton PID lamp
Temperature	Operating: -20°C to 60°C Humidity: 0-99% RH (non condensing)
Weight & Dimensions	Height: 370 mm x Width: 91 mm x Depth: 60 mm 870 g
Protection	Designed to IP65 (heavy rain) CE 1180 EEMC tested to EN61326-1:2006 EN 50270:2006 & CFR 47:2008 Class A.
Intrinsically Safe Approvals	II 1G Ex ia IIC T4 Ga Tamb = - 15 0C ≤ Ta ≤ +45 0C (with lithium ion battery pack) Tamb = - 15 0C ≤ Ta ≤ +40 0C (with alkaline battery pack) ITS-I22ATEX35111X IECEX ITS 22.0025X ITS22UKEX0635X 3193491 conforms to UL Std. 913, 61010-1 Certified to CAN/CSA Std. C22.2 No. 61010-1

Tiger XT Select

Rapidly detects Benzene & Total Aromatic Compounds (TACs) providing the most accurate reliable data available!

Utilising the high output ION Science 10.0 eV lamp, the Tiger XT Select (XTS) portable benzene gas detector is capable of detecting Total Aromatic Compounds (TACs) including Benzene, Toluene and Acetone. The instrument is supplied with a pack of benzene pre-filter tubes to detect benzene selectively. The tube can be easily attached to ensure rapid detection and selective measurement of benzene. Throughout the measurement process, Tiger XT Select benzene gas detector continuously displays real time data. Tiger XT Select can also provide 15 minute short term exposure limits (STELs) and 8 hour time weighted averages (TWAs) for Total Aromatic Compounds (TACs).

The Tiger XT Select handheld benzene gas detector can be used in standard operational mode without the use of a benzene pre-filter tube to deliver active indications of volatile organic compounds (VOCs).



Specifications

Minimum Sensitivity (PPM model)	Standard running mode 0.1 ppm TAC 0.01 ppm Tube mode 0.01 ppm (res. 0.001 ppm)
Minimum Sensitivity (PPB model)	Standard running mode 0.001 ppm TAC 0.001 ppm Tube mode 0.01 ppm (res. 0.001 ppm)
Maximum Reading	Standard mode up to 20,000 ppm or 20,000 mg/m ³ Tube mode 200 ppm or 639 mg/m ³ benzene
Response Time	130 seconds at 20 °C (variable) Progressive indication of benzene breakthrough is displayed in real time
Accuracy	± 10% display reading ± one digit Benzene (tube mode)
Calibration	2 and 3 point calibration (via calibration kit accessory)
Battery Life	Li-ion: life up to 24 hours, charge time 8 hours Alkaline: 3 x AA, typically 8.5 hours life
Alarm	Flashing LEDs Amber (low alarm) Red (high alarm) Sounder 95 dBA at 300 mm (12") Vibration on alarm Pre-programmed TWA and STEL*
Data Logging	120,000 data log points including date and time stamp
Lamps	10.0 eV Krypton PID lamp
Communication	Direct USB 1.1
Flow Rate	≥ 220 ml/min (with blocked flow alarm)
Temperature	Operating: -20 to 60 °C, -4 to 140 °F Humidity: 0-99% RH (non condensing)
Dimensions & Weight	Height: 370 mm x Width: 91 mm x Depth: 60 mm 870 g
Protection	Designed to IP65 EMC tested to EN61326-1:2013 & EN50270:2015 & CFR 47:2008 Class A
Intrinsically Safe Approvals	II 1G Ex ia IIC T4 Ga Tamb = - 15 oC ≤ Ta ≤ +45 oC (with lithium ion battery pack) Tamb = - 15 oC ≤ Ta ≤ +40 oC (with alkaline battery pack) ITS-I22ATEX35111X IECEX ITS 22.0025X ITS22UKEX0635X 3193491 conforms to UL Std. 913, 61010-1 Certified to CAN/CSA std. C22.2 No. 61010-1 Class 1 Division 1. Approval for Groups A, B, C & D, T4

MVI

The Mercury Vapour Indicator utilises dual beam UV absorption technology, which means that the portable mercury vapour indicator does not saturate or need regenerating between readings – like traditional gold film detection methods – eliminating the mercury indicators downtime.

Fast and accurate, the portable mercury vapour indicator gives a real-time response and is ready to detect instantly. The Mercury Indicator provides continuous readings and offers two detection ranges: 0.1 to 199 and 1 to 1999 microgram/cubic meter.



Specifications

Detector	Dual Beam Ultraviolet Absorption Module
Accuracy	± micrograms or ± 10 % reading
Operation	After warm up MVI gives real time mercury vapour concentrations
Instrument Range	0.1 to 199 and 1 to 1999 microgram cubic meter
Power	NiMH
Batteries	NiMH – last up to 5 1/2 hours from full charge
Alarm	Audible Alarm Factory pre-set to 20 microgram/cubic meter
Temperature	10°C to 50°C
Weight & Dimensions	3 kg, 145 x 295 x 80 mm
Repeatability	± 5% FSD @ 1 µg/m ³
Response	3 seconds

Cub VOC

Our VOC detector, Cub, has a patented photoionisation detection (PID) sensor technology has been independently verified as best performing for speed, accuracy, and humidity resistant operation.

The Cub 10.6 eV personal VOC gas detector is available as a standard instrument with 10.6 eV lamp for accurately detecting a wide range of volatile organic compounds (VOCs) to parts-per-million (ppm) levels.



Specifications

Sensitivity	0.001 ppm (isobutylene equivalent)* 0.002 mg/m ³ (isobutylene equivalent)*
Range	0 ppm – 5,000 ppm
Response Time	< 13 seconds (T90)
Accuracy	±5% display reading + one digit
LCD Display	Back lit multi colour
Battery	Battery life up to 16 hours Battery charge time 4 hours
Calibration	2 point calibration via Docking Station
Alarm	LEDs, audio and vibrate Sounder 95 dB @ 300mm. Pre-programmed TWA & STEL Work exposure alarm levels on all models
Data Logging	30,000 readings
PID Lamp Options	10.6 eV, 10.0 eV
Communication	USB 2.0
Resolution	PPM 0.1 ppm PPB 0.001 ppm TAC 0.01 ppm
Temperature	Operating: -20°C to 60°C Certified: -20°C to 55°C
Weight & Dimensions	111 g 61 x 66 x 59 mm
Upgradeable	Upgrade ppm to ppb
IP Rating	IP65** (heavy rain)
Docking Station Options	Charge only Charge and USB communication Charge, USB communication and calibration
Approvals	Europe: ATEX: CE, Ex II 1G IECEX: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C IECEX: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C US and Canadian: Class I, II and III, Division I, Hazardous

Cub TAC 10.0 eV

Cub TAC 10.0 eV personal benzene gas monitor has a dynamic benzene detection range of 0 to 5000 parts per million (ppm), with its market-leading ppb sensitivity. This personal benzene gas monitor comes with all the benefits of the Cub 10.6 eV personal VOC detector but has a 10.0 eV lamp utilising a unique light filtering technology to give a reliable aromatic hydrocarbon concentration.



Specifications

Sensitivity	0.01 ppm (isobutylene equivalent) 0.002 mg/m ³ (isobutylene equivalent)
Resolution	0 ppm – 5,000 ppm
Response Time	< 13 seconds (T90)
Accuracy	±5% display reading + one digit
LCD Display	Back lit multi colour
Battery	Battery life up to 16 hours Battery charge time 4 hours
Calibration	2 point calibration via Docking Station
Alarm	LEDs, audio and vibrate Sounder 95 dB @ 300mm. Pre-programmed TWA & STEL Work exposure alarm levels on all models
Data Logging	30,000 readings
PID Lamp Options	10.0 eV
Communication	USB 2.0
Flow Rate	N/A (no pump)
Temperature	Operating: -20°C to 60°C Certified: -20°C to 55°C
Weight & Dimensions	111 g 61 x 66 x 59 mm
Upgradeable	Upgrade ppm to ppb
IP Rating	IP65** (heavy rain)
Docking Station Options	Charge only Charge and USB communication Charge, USB communication and calibration
Approvals	Europe: ATEX: CE, Ex II 1G, Ex ia IIC T4; -20°C ≤ Ta ≤ 55°C IECEX: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C China: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C US and Canadian approvals: Class I, II and III, Division I, Hazardous

Gascheck G

The GasCheck handheld helium gas leak detector represents the latest in gas detection technology. Its advanced system of micro thermal conductivity enables advanced sensitivity for the rapid, effective detection of gas leaks down to cc/sec, mg/m³ or ppm levels.

Designed for the search and location of gas leaks, the GasCheck handheld helium gas leak detector provides you with effective detection of almost any gas or gas mixture. Robust and reliable, the handheld gas leak detector gives stable, repeatable readings of the detected gas.



Specifications

Detector	Micro thermal conductivity detector (MTCD) Sensor is poison resistant with over range protection
Sensitivity (cc/sec)	He 1x10 ⁻⁵ , CH ₄ 5x10 ⁻⁵ , R12 5x10 ⁻⁵ , Ar 1x10 ⁻⁴
Accuracy	± 5% Displayed reading – One digit
Response	T90 = 1 second rise and clear down
Alarms	Flashing LED and 90 dBA (at 10 cm) audible sounder
Data Logging	10 data points (available for G3 only)
Operation	Battery Type: 4 x alkaline AA size or NiMH (rechargeable) Typically 40 hours life
Flow rate	2 cc/min
Calibration	Factory calibrated to fully documented procedures in accordance with our ISO 9001:2008 Quality Management System
Weight & Dimensions	Instrument with probe: 390 x 60 x 49 mm Case: 420 x 320 x 97 mm Instrument: 0.45 kg. Packed 1.6 kg
Temperature	Operating: -20°C to +60°C Storage: -20°C to +70°C Humidity: 0 to 99% RH (non-condensing)

	G1	G2	G3
Rapid detection of gas leaks	•	•	•
Measures gas leaks (single gas)		•	
Measures gas leaks (up to 20 gases)			•
Audible sounder	•	•	•
Flashing back-lit display	•	•	•
Peak hold readings		•	•
Factory or custom calibration available		•	•
Data logging (store up to 10 readings)			•
Readings displayed in cc/sec, g/yr, ppm hoặc mg/m ³			•
Selectable battery type			•
Upgradeable	•	•	

* EMC tested EN50081-1 & EN50082-1 July 98.

Gascheck Tesla

The GasCheck Tesla portable helium leak detector provides stable, repeatable readings. The instrument's LCD display, LED indicator and audible sounder clearly detect & indicate the helium leaks present.

The portable helium leak detector automatically zeros to the ambient air around it when switched on, and is ready to detect immediately. The portable detector has an easy to use graphical interface and intuitive keypad that allows simple function, selection, and adjustment.



Specifications

Detector	Micro thermal conductivity detector (MTCD) Sensor is poison resistant with over range protection
Sensitivity (cc/sec)	He 1x10 ⁻⁵
Accuracy	± 5% Displayed reading – One digit
Response	T90 = 1 second rise and clear down
Alarms	Flashing LED and 90 dBA (at 10 cm) audible sounder
Calibration	Factory calibrated to fully documented procedures in accordance with our ISO 9001:2008 Quality Management System
Operation	Battery Type: 4 x alkaline AA size or NiMH (rechargeable) Typically 40 hours life
Flow Rate	2 cc/min
Calibration	Factory calibrated to fully documented procedures in accordance with our ISO 9001:2008 Quality Management System
Weight & Dimensions	Instrument with probe: 390 x 60 x 49 mm Case: 420 x 320 x 97mm Instrument: 0.45 kg. Packed 1.6 kg
Temperature	Operating: -20°C to +60°C Storage: -20°C to +70°C Humidity: 0 to 99% RH (non-condensing)

SF6 Leakmate

The SF6 Leakmate, portable SF6 leak detector is a great device for mobile SF6 leak detection. In practical use, it has a SF6 detection threshold of 1×10^{-6} mbar l/s, which makes it perfectly suitable for simple SF6 leak detection applications on SF6 switchgear. The easy to use, processor controlled portable SF6 leak detector, features both an audible alarm and an LED bar graph display, allowing estimation if a small, medium or big SF6 leak is being detected.



Specifications

Detector	High voltage ionisation
Sensitivity	1×10^{-6} mbar l/s for SF6
Display	8 position LED bar
Response Time	Approximately 1 second
Audio	Sound pitch proportionally follows leak rate
Sniffing Probe	355 mm flexible pipe
Operating Temperature	-20°C to +50°C
Weight & Dimensions	2.1 kg including accessories 330 x 280 x 125 mm including transport case
EMC Rating	CE declaration of conformity

SF6 LeakCheck P1:p

The SF6 LeakCheck P1:p is an award winning SF6 gas leak detector that uses negative Ion Capture (NIC) technology designed for location, leak testing and detection of SF6 leaks in high electrical switchgear.

The SF6 gas leak detector rapidly detects SF6 gas leaks down to 1×10^{-8} ml/sec with a quick clear down of less than 1 second. The SF6 gas leak detector is unaffected by the exposure to large SF6 gas leaks and will continue to remain uncontaminated even after the exposure to 100% SF6 gas.



Specifications

Measurement Principles	Negative Ion Capture (NIC): a non radioactive, non-restricting carriage and no licensing required
Sensitivity	Standard SF6 GasCheck p1 and LeakCheck P1:p 1×10^{-7} ml/sec, 1 ppm, 0.01 gm/yr SF6 Highsense option 1×10^{-8} ml/sec, 0.1 ppm, 0.001 gm/yr SF6
Response	T90 = < 1 second rise and clear down
Operation	Lead acid battery, internal and fully protected Recharge between 85-265 AC V, 50/60 Hz
Alarm	Audio and visual with an optional handset alarm
Measurement Units	Measurement in l/sec, gm/yr and ppm Range: Each unit 1 – 500 Accuracy: $\pm 5\%$ of displayed leak rate or ± 2 digits Repeatability: ± 1 digit
Calibration	Via CalCheck calibration accessory
Data Logging	Over 500 data points with date and time stamp Download via RS232 to a PC
Temperature	Storage: - 10 to 60 °C (14 to 140 °F) Operating: 0 – 50 °C (32 to 122 °F)
Weight and Dimensions	Consol: 500 x 400 x 190 mm (19.7 x 15.7 x 7.5")
Docking Station Options	Shipped: 520 x 430 x 10 mm (20.5 x 6.9 x 8.3") Shipped 15 kg (33lbs)

SF6 AreaCheck P2

This fixed SF6 gas detector utilizes relay output for immediate awareness of detected leaks and presents no cross sensitivity with any other gas or moisture in the air. The SF6 gas detector has a built-in low flow alarm and self-diagnostic testing.



Specifications

Detection Principle	SF6: NIC
Range	0 – 2000 ppm SF6
Resolution	500 ppm SF6 / 10 ppm
Mains Power	100 – 240 VAC, 50/60 Hz
Power Consumption	18 VA
Operating Temperature	– 5 to 45 °C
Storage Temperature	– 20 to 60 °C
Operating Humidity Range	10 – 90 % non condensing
Fuse	T 1A (slow blow)
Max Load, Relay Output	2.5 A / 230 VAC
Size	H 280 x B 165 x T 125 mm
Protection Class	IP52
Audible Alarms	> 75 dbA, 1m
Weight	1.5 kg (w/o wall mounting bracket)

Falco

Falco is the latest generation of fixed VOC detectors that continuously detect a wide range of volatile organic compounds (VOCs) using patented photoionisation detection (PID) technology.

Unique to this fixed VOC detector is its revolutionary ‘typhoon technology’ safeguarding the PID sensor from condensing moisture for added reliability in severe weather conditions. In addition, the PID sensor incorporates patented Fence Electrode Technology, which virtually removes the effects of airborne humidity and protects from contamination.



Specifications

Sensor	Photoionisation with 10.6 eV lamp
Detection ranges and sensitivity	10.0 ppm - 0.001 ppm 50.0 ppm - 0.01 ppm 1,000 ppm - 0.1 ppm 3,000 ppm - 1 ppm
Detection time	T90 <<30 seconds (diffused)
User interface	Display: OLED high contrast white on black 128 (w) x 64 (h) pixels Screen, size: 35 mm (w) x 17.5 mm (h)
Buttons	5 magnetic switches with LED confirmation (up, down, left, right & enter) Magnetic actuator supplied
Status indicator	Bright visible status indicator: Red, Amber, Green
Input power	Working voltage: 12 to 40 Vdc Max. power: 7 watts
Outputs	4 to 20 mA (active and passive) RS485 supports Modbus® protocol Relay x 2 SPST (60 Vdc 2A) – configurable
Mounting points	2 x M8.
Environmental specification	Without pump: -40°C to 60°C With pump: -20°C to 60°C 0-100% RH and condensing humidity
Mechanical interface	2 x cable entry points with 3/4" NPT threads (left and right) 2 x 3/4" NPT to M20 Stainless steel (supplied)
Dimensions	Without pump: 200 (H) x 190 (W) x 125 (D) mm With pump: 290 (H) x 190 (W) x 125 (D) mm
Certification	II 2G Ex d ib IIC T4 Gb ISO9001:2008

TVOC 2

This robust fixed continuous VOC gas detector has a selectable detection range of 0 – 10 ppm, 0 – 100 ppm or 0 – 1000 ppm and is ideal for use in manufacturing and process industries where VOCs are typically present. With a 4-20 mA analogue output, the fixed continuous VOC gas detector can be simply integrated into a Distributed Control System (DCS) to provide warnings and enable control of high VOC levels in your working environment.



Specifications

Power	5 – 28 VDC Max 130 mA
Output	4-20 mA requires a 8-35 VDC power supply For IS requirements 8-30 VDC power supply
Range	Diffusion (can be pumped if required using an adaptor)
Display	7 segment, 4 digit LCD, 4 colour LEDs
Response	Sensor – T90 < 5 secs
Accuracy	0 to 100 ppm: ± 5 % calibration point 100 to 1000 ppm: ± 10 % at calibration points
Calibration	Accessed via magnetic switch 100 ppm isobutylene via calibration kit accessory
Temperature	Operating: – 20 to 50 °C (- 4 to 122 °F) Humidity: 0-95% RH (non-condensing)
Weight and Dimensions	Instrument: 1.4 kg (3.1 lb) Packed: 1.6 kg (3.5 lb) Dimensions: 188 x 126 x 78 mm (7.4 x 4.9 x 3")
4 – 20 mA Alarm Levels	Selectable 2 mA & 3.5 mA options
Ingress Protection	Designed to IP65 Sensor ingress protection IP54
Approvals	II 2G Ex ia IIC T4 Gb (-20 °C ≤ Ta ≤ +50 °C) II 3G Ex nA IIC T4 (-40 °C ≤ Ta ≤ +50 °C) Baseefa05ATEX0277X IECEx BAS 06.0057X

Titan

The fixed benzene specific gas monitor is wall-mounted with a dynamic monitor range of 0 – 20 ppm with 0.1 ppm sensitivity to benzene. Our fixed benzene gas monitor samples gas from the environment once per minute and within just 60 seconds an accurate benzene measurement is displayed. The Titan fixed benzene specific gas monitor provides an immediate warning alarm system with two operator configurable levels, ensuring your workers are kept safe and protected to the standards required on site.



Specifications

Sensor Type	PID, 10.6 eV lamp coupled with selective filtering
Selectivity	Benzene specific within typical petrol chemical matrix
Range	0 – 20 ppm
Measuring Frequency	One minute
Lower Limit of Detection	0.1 ppm
Accuracy	± 0.1 ppm or ± 10 %, whichever is greater
Temperature Stability	Internally heated
Display	Graphical BW LCD 64 x 128 pixels with back light Bright LEDs for normal operation, fault and alarm Two magnetic switches for menu operation
Flow Rate	≥ 160 ml/min in Ambient conditions
Ingress Protection Rating	Designed to IP65 (cable gland dependant)
Humidity	0 – 99 % RH
Minimum Service Period	6 months – Hydrophobic & carbon filter replacement 12 months – PID lamp, electrode stack, pump and column replacement
Cable Entry	Two 3/4 NPT gland threads
Power	Vin (nom) 24 V DC @ 3.2 A (recommended) Vin (max) 32 V DC @ 2.4 A Vin (min) 19 V DC @ 4.0 A
Communication	Isolated 4 – 20 mA output Isolated RS 485 Modbus (simplex/half duplex or fully duplex) USB when lid removed with PC software
Data Storage	On board MMC, minimum of 6 months
Relay Output	Two isolated outputs, voltage free, 24 V DC @ 1.25 A
Weight and Dimensions	15 kg (33 lb) 219 x 219 x 17 mm (8.6 x 8.6 x 6.8 " approx)
Gas Sample Line	10 m max length, PTFE, 6 mm OD, 4 mm ID
Ingress Protection Rating	Designed to IP65 (cable gland dependant)
Ingress Protection Rating	II 2G Ex d II B+H2 T4 Gb Tamb. = -20 oC to +55 oC IECEx FTZU 140030X ATEX, EMC Conforms to UL 61010-1, UL 60079-0, UL 60079-1 Certified to CAN/CSA-C22.2

GasTec

Gastec Detector Tubes indicate concentrations directly by way of a calibrated scale printed on the tubes. At Gastec, we endeavour to achieve highest quality detector tubes for analysing airborne gases/vapours, as well as pollutants in soil and water through our advanced state-of-the-art research and development. Through our efforts we have acquired a solid reputation among our customers in virtually all sectors of industry, commerce and society. Tubes are now available for more than 500 different applications.



1 Break off the both ends of the detector tube by using the built-in diamond tip breaker. Confirm the pump handle is fully pushed in. Then insert the detector tube into the rubber inlet with G mark towards the gas sampling pump.



2 Align the guide marks on the pump shaft (▲)100 or 50 mL, and pull out the handle until it is locked. Wait until the sampling time has elapsed.

With an easy-to-see flow finish indicator (white disk pops out when the prescribed volume has been fully drawn), the operator is assured that the sampling is complete.



3 The colour in the detector tube changes as the gas is drawn in.

Wait the required sampling time and read the measurement at the end of the coloured layer. (Please note the concentration or mark the colour change demarcation on the glass tube with a pen immediately).

GASTEC Set



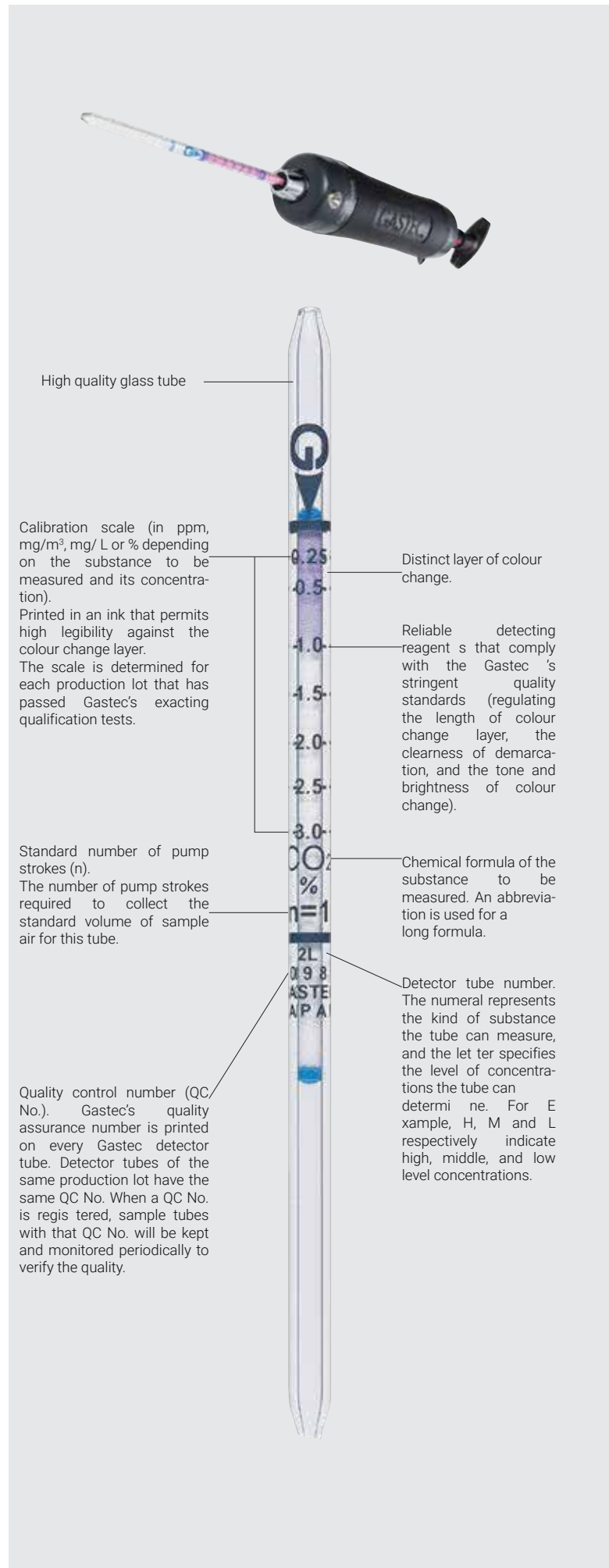
GV-100S



GV-110S

Commonly Requested Gastec Tubes

Type	Description
121L	Benzene Tube
2L	Carbon Dioxide
8LL	Chlorine Tube
163TP	Ethylene Oxide Tube
91LL	Formaldehyde Tube
101	Gasoline (Petrol) Tube
14L	Hydrogen Chloride Tube
7LA	Phosphine Tube
27	Polytec Tube
122L	Toluene Tube
6LLP	Water Vapour Tube



High quality glass tube

Calibration scale (in ppm, mg/m³, mg/L or % depending on the substance to be measured and its concentration).

Printed in an ink that permits high legibility against the colour change layer. The scale is determined for each production lot that has passed Gastec's exacting qualification tests.

Distinct layer of colour change.

Reliable detecting reagents that comply with the Gastec's stringent quality standards (regulating the length of colour change layer, the clearness of demarcation, and the tone and brightness of colour change).

Standard number of pump strokes (n).

The number of pump strokes required to collect the standard volume of sample air for this tube.

Chemical formula of the substance to be measured. An abbreviation is used for a long formula.

Detector tube number. The numeral represents the kind of substance the tube can measure, and the letter specifies the level of concentrations the tube can determine. For example, H, M and L respectively indicate high, middle, and low level concentrations.

Quality control number (QC No.). Gastec's quality assurance number is printed on every Gastec detector tube. Detector tubes of the same production lot have the same QC No. When a QC No. is registered, sample tubes with that QC No. will be kept and monitored periodically to verify the quality.

Gas Leak Detection Cameras

www.panindochina.com.vn

EyeCGas® 2.0

Fast and effective gas leak detection is essential for keeping employees, the environment and property safe. EyeCGas® 2.0 ensures quick identification of methane and volatile organic compound (VOC) leaks for rapid and effective repair, guaranteeing safety while saving time and costs.

Designed and engineered based on customer inputs and industry needs:

Wireless

Built-in WiFi enables live video streaming and video download for better connectivity.

Safety Certifications

CSA C22.2 No. 213-M1987, Non-Incendive Electrical Equipment for Use in Class I, Division 2
ANSI/ISA-12.12.01 - Class I and II, Division 2, and Class III
ATEX intrinsically safe for Zone 2 ratings as: Ex II 3 GD; Ex ic nA nC IIC T6 Gc; Ex ic IIIC T85°C Dc

High Sensitivity

Improved sensitivity for small leak detection, 3rd party certification for EPA 0000 a compliance.

Thermographic Imaging

Temperature measurement capabilities and color pallets for better versatility.

Ldar Ready

Innovative built-in LDAR capabilities provide better operability.

1. Integration with leading LDAR software during inspection routes
2. Real time component tag synchronization
3. Built-in for geo-tagging
4. Patent protected integration with PID/FID Method 21 analyzers to enable Smart LDAR

EyeCGas Backward Compatibility

Easy upgradability from older EyeCGas® cameras into EyeCGas® 2.0 enables better maintainability.

Media Recording and Storage

Integral 64Gb solid-state memory, snapshot button, and HD color camera enable better usability.



EyeCGas® CO

EyeCGas® CO is a handheld OGI camera for CO gas leak detection. With this camera you can safely and remotely detect and locate carbon monoxide as well as other harmful gas emissions. Whether these toxic gases are part of the manufacturing process, or a byproduct of the production line, EyeCGas® CO helps increase safety and protect the environment.

Specialized

EyeCGas® CO is an infrared camera specially designed for high sensitivity CO detection for Steel, Chemical and Power Generation market requirements.

Field productivity

EyeCGas® CO allows for routine and on-demand inspections in the steel manufacturing operations and other industries where CO emissions need to be closely monitored. EyeCGas® CO helps you detect and repair toxic gas leaks inside the facility, while maintaining safety.

Powerful but simple

The EyeCGas® CO allows for fast inspection of vast areas with a simple and intuitive user interface.

No more guesswork

The EyeCGas® CO includes a large LCD display and a digital CCD camera for fast recognition of the components being inspected or leaking.

Safety

- UL1604 - Electrical Equipment for Use in Class I & II, Division 2, & Class III (Classified) Locations.
- CSA C22.2 No. 213-M1987 - Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.
- ANSI/ISA-12.12.01 - Non-incendive Electrical Equipment for Use in Class I & II, Division 2 & Class III Hazardous (Classified) Locations.
- ATEX II 3G Ex nL IIC T6.



EyeCGas® CO2

With the EyeCGas® CO₂ OGI camera, you can safely and easily locate very small concentrations of CO₂ leaks, whether as a tracer gas used to find leaks during plant and Enhanced Oil Recovery (EOR) machinery inspections, or to verify completed repairs. Save time with fast and accurate detection, and cut operating downtime to a minimum while avoiding fines and lost profits.

Specialized

EyeCGas® CO₂ is an infrared camera specially designed for high sensitivity CO₂ detection for oil & gas, utilities, nuclear energy, and steel market requirements.

Field productivity

Ruggedized and hazardous environment certified, the EyeCGas® CO₂ broadens opportunities for use within the facility limits while maintaining safety, without the need of a "hot work" permit.

Powerful but simple

The EyeCGas® CO₂ allows for fast inspection of vast areas with a simple and intuitive user interface.

No more guesswork

The EyeCGas® CO₂ includes a large LCD display and a digital CCD camera for fast recognition of the components being inspected or leaking.

Safety

- UL1604 - Electrical Equipment for Use in Class I & II, Division 2, & Class III (Classified) Locations.
- CSA C22.2 No. 213-M1987 - Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.
- ANSI/ISA-12.12.01 - Non-incendive Electrical Equipment for Use in Class I & II, Division 2 & Class III Hazardous (Classified) Locations.
- ATEX II 3G Ex nL IIC T6.



EyeCGas® FX

Gas leak detection equipment is vital to keeping your employees, products and environment safe. EyeCGas® FX finds leaks from a safe distance and automatically alerts plant personnel. Building on the success of the handheld EyeCGas® camera, EyeCGas® FX is the next generation automatic camera for installation in factories, as well as offshore platforms and rigs. This highly reliable system responds to the demands of 24/7 monitoring. EyeCGas® FX is specially designed for the natural gas, oil and petrochemical industries.



Automatic Leak Detection

EyeCGas® FX includes a highly sensitive IR camera and an HD color camera for fast recognition of the areas being inspected. The camera allows safe and ongoing monitoring of all areas of the plant, including remote and inaccessible areas. Video can be saved locally (on the camera) or remotely (feed sent to control room).



EyeCGas Mini

A compact, uncooled handheld OGI camera. Available in multiple models for Methane, SF6, Ammonia, HFC Refrigerants and more. This Feature-rich OGI camera revolutionizes the way inspections are held

Cost-Effective

Uncooled technology makes for low maintenance.

Cost-Effective

Uncooled technology makes for low maintenance.

Thermography

Thermographic imaging mode, also in the day camera

Automatic Gas Detection

Detecting gas in real-time overlaid on the visible image

Automatic Gas Detection

Detecting gas in real-time overlaid on the visible image

Multiple Models

Available for Methane, SF6, Ammonia & HFC Refrigerants

User-Friendly Interface

Simple and easy to operate with minimal training.

Connectivity

Wi-Fi, Bluetooth and USB C connectivity



EyeCGas 24/7

Uncooled continuous monitoring OGI camera for Methane leak detection, with automatic alerts via a control room and dedicated EyeCSite Pro software system.

Continues Monitoring

24/7 monitoring with multiple functionalities tailored to each customer.

Pan & Tilt Mounting

Pan & Tilt mounting allows wide coverage and surveillance of multiple area with a single camera.

Gas Leak Detection

Quickly identifies Methane.

Automated Alerts (Software)

Real-time indicators using alarms and visual signal alerts

Smart Software (EyeCSite Pro)

Dedicated management software for logs and statistics.

Versatile Communication (Software)

Modbus/OPC/ONVIF/HART communication..



EyeCGas 24/7 Pro

Cooled continuous monitoring OGI camera for Methane and over 400 VOC's, with automatic alerts via a control room and dedicated EyeCSite Pro software system. Cooled OGI technology enabling detection of small to large leaks from a far distance

Continues Monitoring

24/7 monitoring with multiple functionalities tailored to each customer.

Pan & Tilt Mounting

Pan & Tilt mounting allows wide coverage and surveillance of multiple area with a single camera.

Gas Leak Detection

Quickly identifies Methane.

Wide coverage

Monitor of multiple areas and configurations with a single PT camera from longer distances.

Automated Alerts (Software)

Real-time indicators using alarms and visual signal alerts

Smart Software (EyeCSite Pro)

Dedicated management software for logs and statistics.

Versatile Communication (Software)

Modbus/OPC/ONVIF/HART communication..



EyeCSite

Quantification (QOGI) and Alert software for handled OGI cameras for the oil and gas industry

Quantification

Quantification in leak rate (g/hr) and max concentration (e.g. ppm) values

Realtime & Offline

On-location and remote quantitative measurement of leak rates for Methane and VOC's..

Multiple Compound Quantification

Calibrated to accurately quantify most compounds

Wireless

Easily connect via Wi-Fi to the EyeCGas camera

Plume Coloring

For optimizing of sampling scene and pin pointing leak source.

Logs & Reporting

Quickly pull out reports of your inspections (logs) and review the history of events.

Safe & Rugged

EyeCSite is available in a rugged, portable, powerful and fully certified tablet or laptop.



EyeCSite Pro

Automated video management software for EyeCGas 24/7 Fixed OGI Solutions

Gas Detection

Detection of fugitive gas in a configured Region of Interest (ROI).

Gas Quantification

Quantifies the rate of the fugitive gas leaks into the atmosphere.

Gas Leak Detection

Easily integrate 3rd party lasers for increased quantification accuracy.

Anomalies Detection

Detection of abnormality related to movement or liquids.

Presets & Tour

Configure different presets positions combining them into a singular tour.

Multi-Camera Layout

View multiple cameras connected to the system using different viewing modes.

As you know, many of you have purchased instruments only to find out that your vendor can't service them. You have become painfully aware that the time and cost to send your instrument back to the factory are unacceptable.

Panindochina® being an Authorized Service Center of Industrial Scientific, our technicians are factory-trained to service all of gas detectors of Industrial Scientific.

Panindochina® provides the highest level of service for gas detector repairs, calibrations, and warranty sensor replacement. Our technicians are committed to quality service and offer quick and efficient turnaround for all repairs and calibrations conducted at our facility.

Panindochina® is always confident being a bridge between Industrial Scientific and customers in Vietnam

Gas detector service:

- Inspection
- Calibration and certification
- Repair and replace spare parts
- Technical training
- Rental service



Recommendations from the manufacturer when use gas detectors:

- Do zeroing before use. Zeroing must be done in the clean environment
- Do bump test before each day's use
- Do calibration before first use and monthly thereafter

Sensor Replacement Guidelines

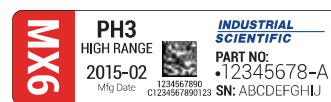
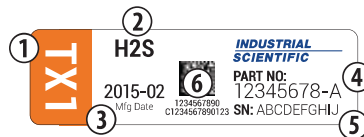
Sensor: HCN, HCl, ClO₂, PH₃, và Cl₂:

Manufactured on or after January 1, 2014 SIN xxxxxxxx-MMY, MM= Month and Y = Year (i.e. S/N 12345678014; indicates January 2014).

Manufactured prior to January 1, 2014 S/N xxxxxxxxY-WW, Y = Year and WW = Week (i.e. S/N 12345678014; indicates the 14th week of 2010)

PID Sensors: SN YYMMxxxx-xxx, YY = Year and MM= Month (i.e. S/N 1209375681 indicates September 2012)

Infrared Sensors: S/N YYMMxxxxxxxx, YY = Year and MM= Month (i.e. S/N 1305277678 indicates May 2013)



1. Color-coded instrument name
2. Sensor gas type
3. Date of manufacture (YYYY-MM)

4. Part number/ reorder number
5. Part number/ reorder number
6. Industrial Scientific use only

Typical Life Span Of Sensors

Combustible Sensors	All units	2-3 years normal usage
Toxic Sensors	All units	1-3 years normal usage (varies with type)
Oxygen Sensors	All units	2 years
Infrared Sensors	MX6 iBrid	5 years
PID Sensors	MX6 iBrid	Approximately 6,000 hours

Operator's Four Steps to a Successful Gas Detection Program

Manual Operations

1. Turn on instrument and check battery level and type of installed sensors.
2. Zero the instrument.
3. Bump Test (functional test) instrument.
4. Clear the Peaks.

Docking Station

1. Dock the instrument.
2. Turn on instrument and check battery level and type of installed sensors.
3. Zero the instrument.
4. Clear the Peaks.



Sampling Probes

Industrial Scientific sampling probes are available in many sizes and types to best fit the needs of most any remote sampling requirement. Probes are used in conjunction with Industrial Scientific sampling pumps or instruments with internal pumps.

Part Number	Description
18102111 (f)	4.5-Ft. Polycarbonate Probe w/ Tubing
18101428 (g)	4-Ft. Polycarbonate Probe w/ Tubing
18101386 (m)	6-Ft. Extendible Stainless Steel Probe
18102306 (i)	3' Stainless Steel Bar Hole Probe w/Filter
18102309 (h)	1.5-Ft. Polycarbonate Probe w/Filter
18102276 (j)	1.5-Ft. Stainless Steel Flue Gas Probe w/ Filter (to 1,500°F)
18102246 (k)	3-Ft. Extendible Probe w/ Teflon Tubing Insert
18103309	Aluminum Coiled Probe (800-900°F) (not pictured)
18104299 (l)	3-Ft. Polycarbonate Probe w/ High Capacity Filter
18105239	ATX 90° Quick Disconnect Probe Kit (not pictured)

Sample Tubing Kits

The universal urethane sample tubing kit is for use with all gases EXCEPT: Cl_2 , ClO_2 , HCl, and Volatile Organic Compounds (VOCs, measured using the MX6 PID sensor). This tubing kit will be offered in specific lengths of 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 feet. Below are the part numbers and descriptions for the 10 available versions of this universal urethane sample tubing kit.



Universal Urethane Sample Tubing Kit

Part Number	Description
18109207-10	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 10 ft/3 m length
18109207-20	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 20 ft/6.1 m length
18109207-30	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 30 ft/9. m length
18109207-40	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 40 ft/12.2 m length
18109207-50	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 50 ft/15.2 m length
18109207-60	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 60 ft/18.3 m length
18109207-70	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 70 ft/21.3 m length
18109207-80	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 80 ft/24.4 m length
18109207-90	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 90 ft/27.4 m length
18109207-100	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 100 ft/30.5 m length

Universal Teflon Lined Sample Tubing Kit

The universal Teflon lined sample tubing kit is primarily for use with specific exotic gases that are susceptible to being absorbed by certain types of tubing. These exotic gases include: Cl_2 , ClO_2 , HCl, and Volatile Organic Compounds (VOCs, measured using the MX6 PID sensor). While this Teflon lined tubing kit is primarily for use with these exotic gases, it may be used to take samples of any gas. If you are unsure of the gases that your sample tubing will be used with, it is recommended that you use this tubing. Teflon lined tubing offers excellent instrument response and resistance to gas absorption, but may be difficult to attach to the pump inlet or attach filters to if the proper fittings are not available. For this reason, Industrial Scientific does not recommend using bulk Teflon lined tubing. Rather, the ISC Teflon lined tubing kits include small sections of urethane tubing at each end so the tubing can easily be attached to the pump inlet and the dust filter/water stop. The kits will be offered in specific lengths of 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 feet. Below are the part numbers and descriptions for the 10 available versions of this universal Teflon lined sample tubing kit.

Part Number	Description
18109206-10	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 10 ft/3 m length
18109206-20	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 20 ft/6.1 m length
18109206-30	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 30 ft/9.1 m length
18109206-40	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 40 ft/12.2 m length
18109206-50	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 50 ft/15.2 m length
18109206-60	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 60 ft/18.3 m length
18109206-70	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 70 ft/21.3 m length
18109206-80	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 80 ft/24.4 m length
18109206-90	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 90 ft/27.4 m length
18109206-100	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 100 ft/30.52 m length

Regulators

Regulators provide the proper flow rate for calibrating your Industrial Scientific instrument. Always make certain to use the appropriate regulator for the application as recommended in the Instruction Manual.



- a. 18100933 - 34 L Regulator (1/2 L/min flow)
- b. 18102509 - 58/103 L Demand Flow Regulator
- c. 18103564 - 34 L Demand Flow Regulator
- d. 18102260 - 552 L Regulator (1/2 L/min flow)
- e. 18100883 - 58/103 L Regulator (1/2 L/min flow)
- f. 18102155 - 58/103 L Ammonia Regulator
- g. 18103580 - 58/103 L Bump Test Regulator



- h. 18105841 - 58/103/34L Demand Flow Regulator w/iGas Pressure Switch
- i. 18105833 - 552L Demand Flow Regulator, 590 CGA w/iGas Pressure Switch
- j. 18105858 - 650L Demand Flow Regulator, 330 CGA w/iGas Pressure Switch
- k. 18106740 - Demand Flow Regulator, 660 CGA w/iGas Pressure Switch



MX6 iBrid DSX Docking Station shown (l) 18105924 - 5-port Clamp-on Gas Manifold with a Demand Flow Regulator (18105841) and cylinder connected to an iGas® Reader (18105684).



(l) 18105924 - 5-port Clamp-on Gas Manifold

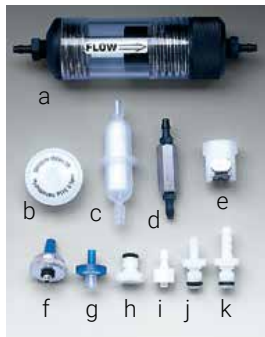
Demand Flow Regulators

Regulators

Part No.	Description
18100933	(a) 34L Regulator (1/2L/min flow)
18102509	(b) 58/103L Demand Flow Regulator (and 34L Aluminum Cylinders)
18103564	(c) 34L Demand Flow Regulator, CGA 600
18103549	552L Demand Flow Regulator, CGA 590
18103556	650L Demand Flow Regulator, CGA 330
18104158	Demand Flow Regulator, CGA 660
18106708	Demand Flow Regulator, CGA 705
18102260	(d) 552L Regulator (1/2 L/min flow), CGA 590
18100883	(e) 58/103L Regulator (and 34L Aluminum Cylinders) (1/2 L/min flow)
18102155	(f) 58/103L Ammonia Regulator (1 L/min flow)
18103580	(g) 58/103L Bump Test Regulator w/Trigger
18103374	650L Regulator (1/2L/min flow), CGA 330
18104695	Regulator w/Bump Test Trigger, CGA 330
18104356	Regulator w/Bump Test Trigger, CGA 590
18105924	5-Port Clamp-on Gas Manifold

Part No.	Description
18105841	(h) 58/103/34L Demand Flow Regulator w/iGas 150 PSI Pressure Switch
18109244	(h) 58/103/34L Demand Flow Regulator w/iGas 250 PSI Pressure Switch
18105866	34L Demand Flow Regulator, 600 CGA w/iGas 150 PSI Pressure Switch
18109243	34L Demand Flow Regulator, 600 CGA w/iGas 250 PSI Pressure Switch
18105833	(i) 552L Demand Flow Regulator, 590 CGA w/iGas 200 PSI Pressure Switch
18109241	(i) 552L Demand Flow Regulator, 590 CGA w/iGas 500 PSI Pressure Switch
18105858	(j) 650L Demand Flow Regulator, 330 CGA w/iGas 200 PSI Pressure Switch
18109242	(j) 650L Demand Flow Regulator, 330 CGA w/iGas 500 PSI Pressure Switch
18106740	(k) Demand Flow Regulator, 660 CGA w/iGas 200 PSI Pressure Switch
18109246	(k) Demand Flow Regulator, 660 CGA w/iGas 500 PSI Pressure Switch
18106757	Demand Flow Regulator, 705 CGA w/iGas Pressure Switch
18101766	58/103L Regulator (1 L/min flow)

Remote sampling allows employees to assess air samples from an unknown and potentially toxic or combustible atmosphere using a pumped gas monitor before they enter the area. Adequate air flow is critical for proper remote sampling. All filters should be replaced when dirt or water inhibits air flow. Quick disconnect fittings allow easy connection to secure tubing to sampling pumps.



- Additional Remote Sampling Equipment:**
- Inline High Capacity Water Stop
 - Dust Filter/WaterStop for Docking Station Fresh Air Inlet
 - Inline Dust Filter for ISP/SP402/SP202/SP100 Pumps
 - Dilution Tube
 - Quick Disconnect Fitting, Female
 - Replacement Filters (Package of 5)
 - Internal Dust Filter/WaterStop for MX6/ATX Series
 - Quick Disconnect Fitting, Male, Threaded
 - Luer Fitting, Male, 1/8 in or 3/16 in Barb
 - Quick Disconnect Fitting, Male, 1/8 in Barb
 - Quick Disconnect Fitting, Male, 3/16 in Barb



- 17037961 – Carrying Case for 2 Cylinders (58 L)
- 17124348 – Wall/Desk Mount Cylinder Holder for use with 34, 58, 116, and 552 liter cylinders (cylinder not included)

Additional Remote Sampling Equipment

Part No.	Description
18102277	(a) Inline High Capacity Water Stop
17057803	Replacement Gortex Filter Insert for 18102277
17027152	(b) White Disc Filter
18109558	(b) White Disc Filter (pack of 10)
17050908	(c) Inline Dust Filter 10 micron, with adaptors for MX6 iBrid Ventis, VSP pumps
17041740	(d) Dilution Tube (for use with Sampling Pumps)
17050688	(e) Quick Disconnect Fitting, Female
17024597	(f) Replacement Filter for 6' Extendible Probe
18109559	(f) Replacement Filters for 6' Extendible Probe (Pack of 5)
17058157	(g) Internal Dust Filter/WaterStop for MX6 iBrid
17051611	(h) Quick Disconnect Fitting, Male, Threaded
17048273	(i) Luer Fitting, Male, 3.175 mm (1/8 in)
17050698	(j) Luer Fitting, Male, 3.175 mm (1/8 in) Barb
17050689	(j) Quick Disconnect Fitting, Male, 3.175 mm (1/8 in) Barb
17050775	(k) Quick Disconnect Fitting, Male, 4.7625 mm (3/16 in) Barb
17051319	Dust Filter/WaterStop for Docking Station Fresh Air Inlet
17051701	Replacement Probe Fitting for 18101386
17136540	SP6 Filter Cap (used with 18105155-X)
17152395	Internal Dust Filter/Water Stop for Ventis Slide-on Pump
17068099	3/16" To 1/8" Reducer
17129909	MX6 iBrid/Ventis Filter cap

Universal Urethane Sample Tubing Kit With Dust Filter/Water Stop

Part No.	Length	Part No.	Length
18109207-10	3 m / 10 ft	18109207-60	18.3 m / 60 ft
18109207-20	6.1 m / 20 ft	18109207-70	21.3 m / 70 ft
18109207-30	9.1 m / 30 ft	18109207-80	24.4 m / 80 ft
18109207-40	12.2 m / 40 ft	18109207-90	27.4 m / 90 ft
18109207-50	15.2 m / 50 ft	18109207-100	30.5 m / 100 ft

NOTE: Not for use with Cl₂, ClO₂, HCl, or PID Sensors

Universal Teflon Lined Sample Tubing Kit With Dust Filter/Water Stop

Part No.	Length	Part No.	Length
18109206-10	3 m / 10 ft	18109206-60	18.3 m / 60 ft
18109206-20	6.1 m / 20 ft	18109206-70	21.3 m / 70 ft
18109206-30	9.1 m / 30 ft	18109206-80	24.4 m / 80 ft
18109206-40	12.2 m / 40 ft	18109206-90	27.4 m / 90 ft
18109206-50	15.2 m / 50 ft	18109206-100	30.5 m / 100 ft

NOTE: For use with all sensors

Probe Tubing Kits - for use with 18101386 probe

18108043	Probe Tubing Kit for MX6 iBrid/Ventis – Urethane (Not for use with Cl ₂ , ClO ₂ , HCl, or PID sensors)
18108093	Probe Tubing Kit for MX6 iBrid/Ventis – Teflon lined (For use with all sensors)



Bump Test Where The Work Is

Bump testing gas detectors before each day's use is the only way to be sure that the sensors respond to gas. But if your team works on the go, they might not have access to a docking station or calibration gas to check their monitors. By the time they enter hazardous areas, they may not even realize something is wrong with the monitor, until it is too late. Your team needs a solution that goes where the work is, so they can test their gas detectors regardless of location.

Introducing the Ultra-Portable Bump-N-Go™

- Bump test anytime, anywhere with the pocket-sized gas cylinder.
- Get 250 bumps out of one bottle, at a lower cost-per-bump, thanks to a pushbutton regulator that eliminates wasted gas.
- Enjoy lower shipping costs because there are no hazardous material fees for ground shipments
- Save time and money by ordering the six-pack option.



INDIVIDUAL CYLINDERS

Part No.	Description
18109566	Bump-N-Go Cylinder, 100 ppm CO
18109567	Bump-N-Go Cylinder, 40 ppm H ₂ S
18109568	Bump-N-Go Cylinder, 100 ppm CO, 75 ppm H ₂ S, 15% O ₂ , 25% LEL (Methane)

SIX-PACK CYLINDERS

18109579	Bump-N-Go Cylinder, 6-pack, 100 ppm CO
18109578	Bump-N-Go Cylinder, 6-pack, 40 ppm H ₂ S
18109577	Bump-N-Go Cylinder, 6-pack, 100 ppm CO, 75 ppm H ₂ S, 15% O ₂ , 25% LEL (Methane)

REGULATOR

18109565	Pushbutton regulator for use with Bump-N-Go Cylinders
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Calibration gas ensures that your gas detector is functioning properly and responding to gas exposures as expected. Gas detection equipment should be calibrated monthly to ensure the sensors in your gas detector are functioning properly. All Industrial Scientific calibration cylinders are manufactured to the highest quality standards and include NIST-traceable blend techniques, analytical leak testing of every cylinder, certified component concentrations, and clearly marked lot numbers and expiration dates. Replacement cylinders are available in a variety of sizes and concentrations for all gases detected by Industrial Scientific instruments.



DEMAND FLOW REGULATORS

PART NO.	DESCRIPTION	Vol	0.5LPM Regulator	Demand Flow	with iGas Pressure Switch
18105825	CYL, 200 ppm CO, 75 ppm H2S, 15% O2, 25% LEL Methane (For bump testing only)	11L	18100883	18102509	18105841
18109173	CYL, 18% O2, 25% LEL Pentane	103L	18100883	18102509	18105841
18109174	CYL, 100 ppm CO, 18% O2, 2.5% Methane	103L	18100883	18102509	18105841
18109187	CYL, 100 ppm CO, 18% O2, 2.5% Methane	552L	18102260	18103549	18105833
18109199	CYL, 100 ppm CO, 18% O2, 2.5% Methane	4,000L	n/a	18103556	18105858
18109165	CYL, 100 ppm CO, 18% O2, 25% LEL Pentane	103L	18100883	18102509	18105841
18109161	CYL, 100 ppm CO, 18% O2, 25% LEL Pentane	552L	18102260	18103549	18105833
18109156	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	58L	18100883	18102509	18105841
18109158	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	116L	18100883	18102509	18105841
18109160	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	650L	18103374	18103556	18105858
18109198	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 50% LEL Methane	4,000L	n/a	18103556	18105858
18109155	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	58L	18100883	18102509	18105841
18109157	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	116L	18100883	18102509	18105841
18109159	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	650L	18103374	18103556	18105858
18109194	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	4,000L	n/a	18103556	18105858
18109176	CYL, 100 ppm CO, 2.5% CO2, 18% O2, 25% LEL Pentane	103L	18100883	18102509	18105841
18109186	CYL, 100 ppm CO, 2.5% CO2, 18% O2, 25% LEL Pentane	552L	18102260	18103549	18105833
18109269	CYL, 250 ppm CO, 2.5% CO2, 18% O2, 50% LEL Methane	103L	18100883	18102509	18105841
18109251	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 2.0% (40% LEL) Methane	116L	18100883	18102509	18105841
18109363	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 2.0% (40% LEL) Methane	650L	18103374	18103556	18105858
18109250	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 25% LEL Pentane	116L	18100883	18102509	18105841
18109362	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 25% LEL Pentane	650L	18103374	18103556	18105858
18109236	CYL, 100 ppm CO, 5 ppm NO2, 18% O2, 25% LEL Pentane	116L	18100883	18102509	18105841
18109235	CYL, 100 ppm CO, 5 ppm NO2, 18% O2, 25% LEL Pentane	650L	n/a	n/a	18106740
18109184	CYL, 100 ppm CO, 5 ppm NO2, 18% O2, 2.5% Methane	58L	18100883	18102509	18105841
18109324	CYL, 5 ppm SO2, 18% O2, 2.5% Methane	116L	18100883	18102509	18105841



Automatic Calibration Gas Replenishment Program

By joining the Auto Replenishment Program, you ensure that you and your team are never without calibration gas and therefore never without a properly calibrated instrument. For those who register for the program, a new cylinder of gas will automatically be sent when iNet Control detects a low gas cylinder.

NOTE: Calibration gas cylinder expiration times vary due to gas type. Please contact Panindochina for detailed information.

PART NO.	DESCRIPTION	Vol	0.5LPM Regulator	Demand Flow	with iGas Pressure Switch
18102151	CYL, 25 ppm Ammonia (NH3)	58L	18100883	18102509	18105841
18109081	CYL, 25ppm Ammonia (NH3)	116L	18100883	18102509	18105841
18106658	CYL, 25 ppm Ammonia (NH3)	650L	n/a	n/a	18106740
78103868	CYL, 50 ppm Ammonia (NH3)	58L	18100883	18102509	18105841
18109106	CYL, 50 ppm Ammonia (NH3)	116L	18100883	18102509	18105841
18109392	CYL, 50 ppm Ammonia (NH3)	650L	n/a	n/a	18106740
18102913	CYL, 2.5% Carbon Dioxide (CO2)	103L	18100883	18102509	18105841
18104208	CYL, 5.0% Carbon Dioxide (CO2)	103L	18100883	18102509	18105841
18102163	CYL, 100 ppm Carbon Monoxide (CO)	103L	18100883	18102509	18105841
18103101	CYL, 100 ppm Carbon Monoxide (CO)	552L	18102260	18103549	18105833
18101758	CYL, 10 ppm Chlorine (Cl2)	58L	18100883	18102509	18105841
18109082	CYL, 10 ppm Chlorine (Cl2)	116L	18100883	18102509	18105841
18106955	CYL, 10 ppm Chlorine (Cl2)	650L	18103374	18103556	18105858
18102996	CYL, 500 ppm Hydrogen (H2)	103L	18100883	18102509	18105841
18102154	CYL, 10 ppm Hydrogen Chloride (HCl)	58L	18100883	18102509	18105841
18109088	CYL, 10 ppm Hydrogen Chloride (HCl)	116L	18100883	18102509	18105841
18106963	CYL, 10 ppm Hydrogen Chloride (HCl)	650L	18103374	18103556	18105858
18100859	CYL, 25 ppm Hydrogen Sulfide (H2S)	58L	18100883	18102509	18105841
18109078	CYL, 25 ppm Hydrogen Sulfide (H2S)	116L	18100883	18102509	18105841
18106633	CYL, 25 ppm Hydrogen Sulfide (H2S)	650L	18103374	18103556	18105858
18109132	CYL, 25 ppm Hydrogen Sulfide (H2S)	4,000L	n/a	18103556	18105858
18102152	CYL, 10 ppm Hydrogen Cyanide (HCN)	58L	18100883	18102509	18105841
18109085	CYL, 10 ppm Hydrogen Cyanide (HCN)	116L	18100883	18102509	18105841
18107839	CYL, 10 ppm Hydrogen Cyanide (HCN)	650L	n/a	n/a	18106740
18102939	CYL, 100 ppm Isobutylene	103L	18100883	18102509	18105841
18107375	CYL, 100 ppm Isobutylene	552L	18102260	18103549	18105833
18101378	CYL, 2.5% Methane (CH4)	103L	18100883	18102509	18105841
18104778	CYL, 99% Methane (CH4)	34L	18100883	18102509	18105841
18102153	CYL, 25 ppm Nitric Oxide (NO)	58L	18100883	18102509	18105841
18109091	CYL, 25 ppm Nitric Oxide (NO)	116L	18100883	18102509	18105841
18107722	CYL, 25 ppm Nitric Oxide (NO)	650L	n/a	n/a	18106740
18102219	CYL, 5 ppm Nitrogen Dioxide (NO2)	58L	18100883	18102509	18105841
18109087	CYL, 5 ppm Nitrogen Dioxide (NO2)	116L	18100883	18102509	18105841
18105882	CYL, 5 ppm Nitrogen Dioxide (NO2)	650L	n/a	n/a	18106740
18101477	CYL, 25 ppm Nitrogen Dioxide (NO2)	58L	18100883	18102509	18105841
18109084	CYL, 25 ppm Nitrogen Dioxide (NO2)	116L	18100883	18102509	18105841
18107730	CYL, 25 ppm Nitrogen Dioxide (NO2)	650L	n/a	n/a	18106740
18104059	CYL, 1.0 ppm Phosphine (PH3)	58L	18100883	18102509	18105841
18102222	CYL, 5 ppm Sulfur Dioxide (SO2)	58L	18100883	18102509	18105841
18109086	CYL, 5 ppm Sulfur Dioxide (SO2)	116L	18100883	18102509	18105841
18108126	CYL, 5 ppm Sulfur Dioxide (SO2)	650L	n/a	n/a	18106740
18101220	CYL, 10 ppm Sulfur Dioxide (SO2)	58L	18100883	18102509	18105841
18109079	CYL, 10 ppm Sulfur Dioxide (SO2))	116L	18100883	18102509	18105841
18105817	CYL, 10 ppm Sulfur Dioxide (SO2)	650L	n/a	n/a	18106740
18109414	CYL, 10 ppm Sulfur Dioxide (SO2)	4,000L	n/a	n/a	18106740
18101584	CYL, Zero Grade Air (20.9% Oxygen)	103L	18100883	18102509	18105841
18102320	CYL, Zero Grade Air (20.9% Oxygen)	552L	18102260	18103549	18105833
18109247	CYL, Zero Grade Air (20.9% Oxygen)	4,000L	n/a	18103549	18105833

NOTE: Calibration gas cylinder expiration times vary due to gas type. Please contact Panindochina for detailed information.

Industrial Scientific Calibration Kits come equipped with everything you need to keep your gas monitoring devices operating accurately and reliably. Kits contain certified NIST-traceable (National Institute of Standards & Technology) span gases for safe, reliable instrument calibration. Complete kits are available for all installed sensors and include:

- Convenient carrying case
- Non-refillable cylinders
- Flow regulator



PART NO.	DESCRIPTION	Vol
18102269	KIT, 100 ppm CO, 18% O2, 25% LEL Pentane	103L
18102270	KIT, 100 ppm CO, 19% O2, 2.5% Methane	103L
18109137	KIT, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	116L
18109139	KIT, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane with Demand Flow Regulator	116L
18109138	KIT, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	116L
18103317	KIT, 100 ppm CO, 2.5% CO2, 18% O2, 25% LEL Pentane	103L
18102147	KIT, 25 ppm Ammonia (NH3)	58L
18103275	KIT, 5.0% Carbon Dioxide (CO2)	34L
18102162	KIT, 100 ppm Carbon Monoxide (CO)	103L
18101741	KIT, 10 ppm Chlorine (Cl2)	58L
18102148	KIT, 10 ppm Hydrogen Chloride (HCl)	58L
18102149	KIT, 10 ppm Hydrogen Cyanide (HCN)	58L
18109135	KIT, 25 ppm Hydrogen Sulfide (H2S)	116L
18101303	KIT, 2.5% Methane	34L
18102491	KIT, 99% Methane	34L
18102150	KIT, 25 ppm Nitric Oxide (NO)	58L
18102238	KIT, 5 ppm Nitrogen Dioxide (NO2)	58L
18101469	KIT, 25 ppm Nitrogen Dioxide (NO2)	58L
18101261	KIT, 25% LEL Pentane	34L
18102239	KIT, 5 ppm Sulfur Dioxide (SO2)	58L
18101212	KIT, 10 ppm Sulfur Dioxide (SO2)	58L

Glossary of Occupational Safety and Health Terms

dB: Decibel – A unit used to measure the relative power of sound. A 3 dB increase in sound output power represents a doubling of the perceptible volume.

eV: Electron Volt – A measurement of energy equal to the amount of energy it takes to move 1 electron through 1 volt of potential.

IDLH: Immediately Dangerous to Life and Health - The maximum concentration of gas (in ppm) from which a worker could escape within 30 minutes with-out experiencing any escape-impairing or irreversible health effects.

LEL/LFL: Lower Explosive Limit/Lower Flammable Limit - The minimum concentration at which a gas will explode. A common unit of measurement is a percent of the LEL

mA: Milliamp - A unit of electric current expressed in amperes.

PEL: Permissible Exposure Limit - Level of gas (in ppm) a worker can be exposed to 8 hours a day/40 hours a week for the rest of their life with no long term health effects.

PID: Photoionization Detector – An instrument that utilizes ultra-violet light energy to ionize and detect the presence of an unknown gas or vapor.

ppm: Part Per Million - A common unit of measurement for toxic gases. This term literally means one part out of one million possible parts.

TLV-STEL: Short Term Exposure Limit - The average amount of gas (in ppm) a worker can be exposed to in a 15 minute period with no long term health effects. This may occur 4 times a shift with one hour between 15 minute exposures.

TLV-TWA: Time Weighted Average - The average amount of gas (in ppm) a worker can be exposed to over a certain time period. This time is defined as 8 hours to represent a normal work day.

TLV: Threshold Limit Value – A term used to signify limits in gas exposure. TLV is used as a prefix for TWA and STEL.

UEL/UFL: Upper Explosive Limit/Upper Flammable Limit – The maximum concentration at which a gas will explode.

VAC: Volts Alternating Current – An electric current that reverses direction at regular intervals.

VDC: Volts Direct Current – An electric current of constant direction.

VOC: Volatile Organic Compound – Any compound containing carbon, except methane, that can be readily vaporized.

Lower Explosive Limits of Combustible Gases

The following are the lower explosive limits of selected gases which should be useful:

Aceton	2.5% of volume	Hydrogen	4.0% of volume
Aceylene	2.5% of volume	Isopropyl Alcohol (Isopropanol)	2.0% of volume
Benzene	1.2% of volume	Methane	5.0% of volume
Butane	1.9% of volume	Methyl Alcohol (Methanol)	6.0% of volume
Butyl Alcohol (Butanol)	1.4% of volume	n-Pentane	1.4% of volume
Diethyl Ether	1.9% of volume	Propane	2.1% of volume
Ethane	3% of volume	Propylene	2.0% of volume
Ethyl Alcohol (Ethanol)	3.3% of volume	Styrene	0.9% of volume
Ethylene	2.7% of volume	Toluene	1.1% of volume
Ethylene Oxide	2.7% of volume	Xylene	1.1% of volume
Hexane	1.1% of volume		

Gas	Low	High	TWA	STEL	Gas	Low	High	TWA	STEL
O ₂	19.5% vol	23.5% vol	N/A	N/A	H ₂	50 ppm	100 ppm	N/A	N/A
CO	35 ppm	70 ppm	35 ppm	200 ppm	NH ₃	25 ppm	50 ppm	25 ppm	35 ppm
H ₂ S	10 ppm	20 ppm	10 ppm	15 ppm	SO ₂	2 ppm	4 ppm	2 ppm	5 ppm
CH ₄	1% vol	1.5% vol	N/A	N/A	PID	100 ppm	200 ppm	N/A	N/A
LEL	10% LEL	20% LEL	N/A	N/A	CO ₂	0.5% vol	1% vol	0.5% vol	3% vol
NO ₂	3 ppm	6 ppm	3 ppm	5 ppm	PH ₃	0.3 ppm	0.6 ppm	0.3 ppm	0.1 ppm

Sensor Cross Interference Table

SENSOR

GAS	SENSOR											
	Carbon Monoxide	Hydrogen Sulfide	Sulfur Dioxide	Nitrogen Dioxide	Chlorine	Chlorine Dioxide	Hydrogen Cyanide	Hydrogen Chloride	Phosphine	Nitric Oxide	Hydrogen	Ammonia
Carbon Monoxide	100	1	1	0	0	0	0	0	0	0	20	0
Hydrogen Sulfide	5	100	1	-40	-3	-25	10	300	25	10	20	25
Sulfur Dioxide	0	5	100	0	0	0	-	40	-	0	0	-40
Nitrogen Dioxide	-5	-25	-165	100	45	-	-70	-	-	30	0	-10
Chlorine	-10	-20	-25	10	100	60	-20	6	-20	0	0	-50
Chlorine Dioxide	-	-	-	-	20	100	-	-	-	-	-	-
Hydrogen Cyanide	15	10	50	1	0	0	100	35	1	0	30	5
Hydrogen Chloride	3	0	5	0	2	0	0	100	0	15	0	0
Phosphine	-	-	-	-	-	-100	425	300	100	-	-	-
Nitric Oxide	25	1	1	5	5	-	-5	-	-	100	30	0
Hydrogen	22	0.03	0.5	0	0	0	0	0	0	0	100	0
Ammonia	0	0	0	0	-	0	0	0	0	0	0	100
Acetylene	150	<1	15	<1	-	-	-	-	-	<1	-	-

Hazardous Gases Found in Common Industrial Environments

(All values listed are established by HSE unless otherwise noted.)

Ammonia: NH₃

Colorless toxic gas with a pungent suffocating odor.

PEL/TWA: 25.0 ppm STEL: 35.0 ppm
IDLH: 300.0 ppm LEL: 15.0 % of volume

- Fertilizer Plants
- Water and Wastewater Treatment Plants
- Refrigeration Facilities and Cold Storage
- Semiconductor Industry

Carbon Dioxide: CO₂

Colorless, odorless gas.

PEL/TWA: 5,000.0 ppm STEL: 30,000.0 ppm
IDLH: 40,000.0 ppm

- Breweries and Wineries.
- Carbonated Beverage Bottling Plants.
- Food Processing Plants.
- Landfills.

Carbon Monoxide: CO

Colorless, odorless gas – most abundant toxic gas.

OSHA PEL/TWA: 50.0 ppm NIOSH PEL/TWA: 35.0 ppm
STEL: 200.0 ppm IDLH: 1,200.0 ppm

LEL: 12.5% of volume

- Fire Fighting.
- Steel Mills.
- Mining and Minerals.
- Parking Garages.

Chlorine: Cl₂

Green-yellow gas with a pungent, irritating odor.

PEL/TWA: 0.5 ppm STEL: 1.0 ppm
IDLH: 30.0 ppm

- Pulp and Paper Mills.
- Water Treatment Plants.
- Swimming Pools and Chlorination Plants.
- Nuclear Reactors.

Chlorine Dioxide: ClO₂

Red-yellow or orange-green, irritating odor.

PEL/TWA: 0.1 ppm STEL: 0.3 ppm
IDLH: 5.0 ppm

- Pulp and Paper Mills.
- Wastewater Treatment Plants.

Hydrogen: H₂

Colorless, odorless gas.

PEL/TWA: No limit set by OSHA STEL: N/A
IDLH: No limit set by NIOSH LEL: 4% of volume

Hydrogen Chloride: HCl

Colorless to slight yellow corrosive gas with a pungent, irritating odor.

OSHA PEL/TWA: 5.0 ppm STEL: N/A
LEL: 12.5 % vol IDLH: 50.0 ppm

- Vinyl Production.
- Cotton Production.
- Petroleum and Gas Wells.
- Steel Manufacturing.

Hydrogen Cyanide: HCN

Colorless toxic gas with a bitter, almond-like odor.

OSHA PEL/TWA: 10.0 ppm ACGIH PEL/TWA: 4.7 ppm
STEL: 35.0 ppm IDLH: 50.0 ppm

LEL: 5.6% of volume

- Gold Plating Industries.
- Precious Metal Mining and Recovery.
- Nylon Manufacturing.

Hydrogen Sulfide: H₂S

Colorless toxic gas with a strong odor of rotten eggs.

PEL/TWA: 10.0 ppm STEL: 15.0 ppm
IDLH: 100.0 ppm LEL: 4.0% of volume

TWA value by the ACGIH: 1 ppm

STEL value by the ACGIH: 5 ppm

- Oil Fields and Refineries.
- Mining and Metals Industries.
- Paper Mills and Leather Tanneries.
- Water Treatment and Sewer Maintenance.

Nitric Oxide: NO

Colorless toxic gas.

PEL/TWA: 25.0 ppm STEL: 5.0 ppm
IDLH: 20.0 ppm

- Diesel Emissions.
- Underground Mining.
- Agriculture – Silos.
- Semiconductor Plants.

Nitrogen Dioxide: NO₂

Reddish-brown toxic gas with a pungent odor.

PEL/TWA: 3.0 ppm STEL: 5.0 ppm
IDLH: 20.0 ppm

- Boilers and Furnaces.
- Diesel Emissions.
- Underground Mining.
- Semiconductor Plants.

Ozone: O₃

Colorless, blue gas with a very pungent odor.

PEL/TWA: 0.1 ppm STEL: 0.3 ppm
IDLH: 5.0 ppm

- Wastewater Treatment Plants.
- Power Generation
- Welding.

Phosphine: PH₃

Colorless gas, garlic-like odor.

PEL/TWA: 0.3 ppm STEL: 1.0 ppm
IDLH: 5.0 ppm LEL: 1.79% vol

- Pesticides-Agricultural Fumigant.
- Doping Agent.

Sulfur Dioxide : SO₂

Colorless toxic gas with a pungent odor.

PEL/TWA: 2.0 ppm STEL: 5.0 ppm
IDLH: 100.0 ppm

STEL value by the ACGIH: 0.25 ppm

- Pulp and Paper Mills
- Coal Fired Generation Stations
- Water Treatment.
- Circuit Board (Etching) Industry

Volatile Organic Compounds Detected by a PID <10.6 eV

10.6 eV lamp	Dimethylamine	Methyl Bromide	Not Detected by a PID
Acetaldehyde	Dimethylaniline	Methyl Cellosolve Acetate	Acetonitrile
(Acetic acid)	Dimethylformamide	Methyl Ethyl Ketone	Carbon Dioxide
Acetic Anhydride	Dimethylhydrazine	Methyl Hydrazine	Carbon Monoxide
Acetone	Dimethyloacetamide	Methyl Iodide	Ethane
Acrolein	Dimethylphthalate	Methyl Mercaptan	Freons
Acrylamide	Dinitrotoluene	Methyl Methacrylate	Hydrogen
Allyl Alcohol	Dinitro Cresol	Methyl Methacrylate	Hydrogen Bromide
Allyl Chloride	Dinitro Aniline	Methyl Styrene	Hydrogen Chloride
Allyl Glycidyl Ether	Dinitro Benzene	Methylamine	Hydrogen Cyanide
Allyl Propyl Disulfide	Dioxane	Methylcyclohexane	Hydrogen Fluoride
Amino Pyridine	Diphenyl	Methylcyclohexone	Methane
Amyl Acetate	Dipropylene Glycol Methyl Ether	Methylcyclohexanol	Nitric Acid
Aniline	(Epichlorohydrin)	Monomethylaniline	Nitrogen
Benzene	(Ethanol)	Morpholine	Oxygen
Benzyl Chloride	Ethanolamine	Naphthalene	Ozone
Bromoform	Ethoxyethyl Acetate	Naphthylamine	Sulfur Dioxide
Butadiene	Ethyl Acetate	Nitroaniline	Water
Butoxyethanol	Ethyl Acrylate	Nitrobenzene	
Butyl Acetate	Ethyl Amyl Ketone	Nitromethane	
Butyl Alcohol	Ethyl Benzene	Nitrosodimethylamine	
Butyl Mercaptan	Ethyl Bromide	Nitrotoluene	
Butylamine	Ethyl Butyl Ketone	Octane	
Butyl Glycidyl Ether	Ethyl Ether	Pentaborane	
Butyl Toluene	Ethyl Mercaptan	Pentane	
Camphor Vapor	Ethyl Silicate	Pentanone	
Carbon Disulfide	Ethylamine	Perchloroethylene	
Chloroacetaldehyde	Ethylene Dibromide	Phenol	
Chloroacetophenone	Ethylenediamine	Phenyl Ether	
Chlorobenzene	Ethyleneimine	Phenylene Diamine	
Chloromethyl Methyl Ether	Furfural	Phenylhydrazine	
Chloronitropropane	Furfuryl Alcohol	Propyl Acetate	
Chloroprene	Gasoline	Propyl Alcohol	
Chrysene	Glycidol	Propylene Dichloride	
Cresol	Heptane	Propylene Imine	
Crotonaldehyde	Hexane	Propylene Oxide	
Cumene	Hexanone	Pyridine	
Cyclohexane	Hexone	Quinone	
Cyclohexanol	Hexylacetate	Stibine	
Cyclohexanone	Hydroquinone	Stoddard Solvent Vapor	
Cyclohexene	Isoamyl Acetate	Styrene	
Cyclopentadiene	Isobutyl Acetate	Terphenyls	
Di-ethylhexyl Phthalate	Isobutyl Alcohol	Tetrachloroethylene	
Diacetone Alcohol	Isophorone	Tetrachloronaphthelene	
Diazomethane	Isopropyl Acetate	Tetrahydrofuran	
Dibutylphthalate	Isopropyl Alcohol	Tetramethyl Lead	
Dichlorobenzene	Isopropyl Ether	Toluene	
Dichloroethyl Ether	Isopropylamine	Toluidine	
Dichloroethylene	Isopropyl Glycidyl Ether	Toner Fluid Vapor	
Dichlorvos	JP 4, 6, 8	Trichloroethylene	
Diesel	Ketene	Triethylamine	
Diethylamino Ethanol	Mesityl Oxide	Turpentine Vapor	
Diethylamine	Methyl Acetate	Vinyl Chloride	
Diglycidyl Ether	Methyl Acetylene	Vinyl Toluene	
Diisobutyl Ketone	Methyl Acrylate	White Spirit	
Diisopropylamine	Methyl Amyl Ketone	Xylene	

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