

GAS DETECTION and MONITORING SOLUTIONS

GENERAL BROCHURE



SOLUTIONS

- 3 iNet® Platform
- 4 SAFER® One Software
- 5 GDViewer Software
- 6 Solar Power System
- 8 LENS® Wireless

MULTI-GAS DETECTORS

- 9 Tango® TX2 Two-Gas Monitor
- 10 M40 Multi-Gas Monitor
- 11 Ventis® MX4 Multi-Gas Monitor
- 12 Ventis® Pro5 Multi-Gas Monitor
- 13 MX6 iBrid® Multi-Gas Monitor

AREA MONITORS

- 14 Radius® BZ1 Multi-Gas Area Monitor

SINGLE GAS MONITORS

- 15 T40 II Rattler™ Single Gas Monitor
- 16 Tango® TX1 Single Gas Monitor
- 17 GasBadge® Pro Single Gas Monitor

DOCKING STATIONS

- 18 DSX™ Docking Station
- 19 T-DOCK® Gas Detector Management System

CONNECTIVITY GATEWAYS

- 20 RGX® Gateway

ACCESSORIES

- 21 iAssign® Beacon
- 22 Ventis® Slide-on Pump
- 23 BUMP-N-GO Bump Test Gas

TECHNOLOGY

- 24 Connected Safety

SERVICES

- 25 After Sale Support
- 26 GDME Training

REFERENCE LIBRARY

- 27 Electrochemical Sensor Cross Interference Table

CERTIFICATIONS

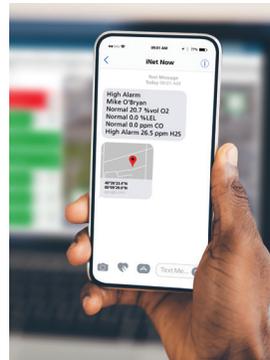
- 28 Gas Monitor Certifications

Industrial Scientific Asia Pacific

3 International Business Park
 #05-23/24 Nordic European Centre
 Singapore 609927
 Phone: +65 6561 7377
 Fax: +65 6561 7787
 Email: info@ap.indsci.com

Industrial Scientific Australia Pty Ltd

Level 19, 180 Lonsdale Street
 Melbourne VIC 3000
 Australia
 Phone: +61 3 9391 3344 | 1800 809 606
 Email: auscustomerservice@ap.indsci.com





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+ is a single platform that uncovers insights you need to increase productivity, streamline processes, and drive impact.



INCREASE PRODUCTIVITY

- Reduce incident reporting times by up to 8 hours with standard report templates and BI-assisted drill downs.
- Reduce unplanned rework of deployment by 2 hours per job with the interactive device placement tool.



STREAMLINE PROCESSES

- Quickly identify and respond to potential threats by tagging alarms and incidents to the functional areas where hazards exist.
- Proactively arm workers with the correct PPE based on hazard proximity.



DRIVE IMPACT

- Increase bump and calibration compliance with root cause analysis layered on interactive BI dashboards.
- Use dashboard data to identify risky behaviors and intervene before it's too late.

See all features and benefits at
www.indsci.com/inet-control



iNet® Exchange is a subscription-based service for gas detectors that covers shipping, repair, calibration gas, docking stations, training, and more. With iNet Exchange, you'll always have the monitors you need, right when you need them. Instead of your team spending valuable time fixing broken monitors, we automatically repair and replace your critical safety equipment, eliminating your maintenance pains.

- Always have the equipment you need, when you need it
- Reduce total cost of ownership of your gas detection program by eliminating unexpected repair, replacement and inventory expenses
- Avoid instrument downtime with proactive replacement, typically within 48 hours
- Simplify your gas detection program by managing all equipment, data and documentation from one simple dashboard

See all features and benefits at
www.indsci.com/inet-exchange

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

See all features and benefits at
www.indsci.com/inet-now

Join 17,888+ Customer Sites on iNet

Over 157,424,870 Alarm Events | Over 510,575 Gas Detectors
 97 Countries



SAFER ONE
SOFTWARE

SAFER One

SAFER One, software for advanced hazard modeling, gives you the real-time information you need to proactively respond to a chemical release and reduce the risk to your people, plant, and community.

Easily identify the source, severity, and community impact of a chemical event by integrating real-time data from on-site gas and weather sensors with Google Maps™. Whether it's for emergency response or everyday use, SAFER One ensures you're prepared for any chemical situation.

- See impacted areas – now and in the future – on a clear map. Aggregate real-time data from gas sensors, weather stations, and local maps to see all vital information in one place.
- Quickly identify the source of the chemical leak so you can stop it faster.
- Generate detailed reports to share with first responders and community stakeholders. Have confidence that your information is up-to-date and accurate, from start to finish.
- Improve efficiency and accuracy by eliminating tedious manual event analysis processes. Allow our proven, patented algorithms to calculate it for you using real-time data.



SAFER One gives you full visibility into your site by integrating with other solutions. See below for some common integrations.

WEATHER STATIONS

PART NO.	DESCRIPTION
18109636-1010	Weather Station, All-Weather Sensor, Communication Box, Ethernet
18109636-2010	Weather Station, All-Weather Sensor, Communication Box, Fiber
18109636-3010	Weather Station, All-Weather Sensor, Communication Box, RF
18109636-3110*	Weather Station, All-Weather Sensor, Communication Box, RF, Includes Yagi Directional Antenna w/ N-Type Connector
18109636-3210*	Weather Station, All-Weather Sensor, Communication Box, RF, Includes Omni Directional Antenna with Mounting Bracket
17159981	Lufft Weather Sensor, WS700, US & CA only, Configured (has the rain gauge and solar radiation)
17160154	Lufft, Weather Station, WS501-UMB
17160157	Lufft, Raing Gauge, Tipping Bucket, WTB100 (this is needed with 17160154)



See how you can take your existing safety processes to the next level with SAFER One at:
www.indsci.com/safer-one

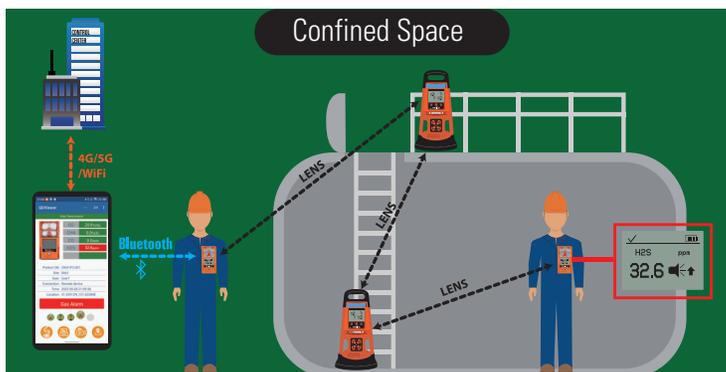


GDVIEWER DIRECT READING GAS DETECTION SYSTEM

- There is no need for additional network equipment, and out-of-the box direct connection allowing simple operation
- Real-time photography, GPS Stamp, and paperless work permit process
- Remote monitoring of the working site and real-time video uploads
- Automated e-forms/emails
- Simultaneous reading of (up to) 5 devices, and active alarm notifications

The Gas Detection Viewer can be wirelessly connected to on-site portable gas detectors and area monitors via the operators' explosion-proof mobile phones, allowing for real-time data reading. When the instrument generates an alarm, you have immediate access to detailed alarm information. When used in conjunction with the camera function and GPS positioning function, the system can generate electronic forms of onsite images and geographic information and send them to the remote monitoring center, allowing for paperless work permit processing. Furthermore, by wirelessly uploading videos of the work site in real time, the system achieves effective video monitoring and management of the entire process on the job site.

TYPICAL APPLICATION



Video Monitoring

Real-time whole-process video monitoring of the working process, video wireless transmission, and real-time upload are all possible without the purchase or installation of additional data transmission equipment.



Photo Documentation

The photo documentation function can collect on-site information by photos/videos taken by the explosion-proof mobile phones and recognizing the operator's on-site presence. The data, which includes the location, time, and identity of a staff, will be uploaded to the cloud.



Electronic Permit

Automatically extract on-site gas sampling readings, operator information, GPS data, and combining the on-site picture upload function to collect, record, and upload on-site working conditions, improving permit signing efficiency and standardizing operator behavior.



Sampling Aid

To ensure the operators' safety, the sampling time is automatically calculated based on the length of the sampling tube; paperless records and on-site photos are taken to ensure that the operators apply for work permits in accordance with regulations.

24/7 AREA MONITORING SOLAR POWER SYSTEM

- 100W Solar Panel
- NEMA4 ingress protection
- 24/7 continuous monitoring*
- Easy to install and use

*depending on configuration

The Solar Power System provides a reliable power source for non-stop monitoring with the Radius® BZ1 Area Monitor and RGX® Gateway. This durable, solar-based system provides 100 watts of continuous power with minimal installation or maintenance. With NEMA 4 protection, it can operate in all weather conditions to provide 24/7 gas detection and ensure maximum worker safety. With the potential to integrate with the iNet® safety platform, it provides automated control and total protection against gas hazards anytime.



TYPICAL APPLICATION



Connected Safety



SAFER One

SPECIFICATIONS

VERSION	BASIC	PROFESSIONAL	INTRINSICALLY SAFE
LOCATION	Safe area only	Safe area only	Stand: safe area only Radius BZ1: could be in Zone 0
INSTRUMENT ENCLOSURE	None	Dimension: 700x500x400 mm Material: HDPE Color: Green <i>* In the protective case, we have prepared the space and power inlet for customers to install a mobile cellular WiFi router if needed.</i>	None
CONTROLLER ENCLOSURE	Dimension: 550x460x220 mm Material: Q235 steel Color: Pearl White		
STAND	Height: 170 cm Weight: 30 kg Mounting: Ground Mounting		
SOLAR PANEL	Aluminum Frame: 770x670x30 mm Arrangement: portrait or landscape Maximum Output: 100 W Maximum Power (Pmax): 100 W Maximum Current (Imp): 5.75 A Short Circuit Current (Isc): 6.08 A Open Circuit Voltage (Voc): 21.8 V		
BATTERY SPECIFICATIONS Battery is not part of the purchase.	Type: Rechargeable Lead-Acid Nominal voltage: 12 V Nominal capacity: 75 Ah (900 Wh) <i>*Customers need to purchase a battery that dimension is not larger than 350x178x257mm and capacity is more than 55Ah.</i>		
INGRESS PROTECTION	NEMA4		
OUTPUT1	Rated Voltage (VDC):12 Rated Current (A):10		
OUTPUT2	Rated Voltage (VDC): 12 Rated Current (A): 10		
OUTPUT3 (RADIUS ONLY)	Rated Voltage (VDC): 12 Rated Current (A):10	Rated Voltage (VDC): 12 Rated Current (A):10	Rated Voltage (VDC): 14.7 Rated Current (A): 0.6
SYSTEM RUNTIME: varies depending on configuration	≥31 days	≥31 days	≥7 days
CERTIFICATIONS	CE: Directive 2014/30/EU Directive 2011/65/EU and 2015/863/EU		



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 Multi-Gas 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



SPECIFICATIONS*

Optional LENS Wireless, mesh network
 Frequency: ISM license-free band (2.4 GHz)
 Max Peers: 25 devices per network group
 Range: Ventis Pro5: 100 m (300 ft) line of sight, face-to-face
 Radius BZ1: 300 m (~1,000 ft) line of sight
 Encryption: AES-128
 Approvals: FCC Part 15, IC, CE/RED, others

*See www.indsci.com/wireless-certifications for country-specific wireless approvals and certifications.



TANGO® TX2 TWO-GAS MONITOR

- 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.

INSTRUMENT CONFIGURATIONS

PART NUMBER	DESCRIPTION
TX2-12011	Tango TX2, CO, H ₂ S, English
TX2-14011	Tango TX2, CO, NO ₂ , English
TX2-15011	Tango TX2, CO, SO ₂ , English
TX2-1G011	Tango TX2, CO, CO Low, English
TX2-56011	Tango TX2, SO ₂ , NH ₃ , English
TX2-1B011	Tango TX2, CO, HCN, English
TX2-24011	Tango TX2, H ₂ S, NO ₂ , English
TX2-25011	Tango TX2, H ₂ S, SO ₂ , English
TX2-2G011	Tango TX2, H ₂ S, CO Low, English
TX2-45011	Tango TX2, NO ₂ , SO ₂ , English
TX2-4G011	Tango TX2, NO ₂ , CO Low, English
TX2-5G011	Tango TX2, SO ₂ , CO Low, English
TX2-6B011	Tango TX2, NH ₃ , HCN, English

ACCESSORIES

18109330-ABC	DSX™ Docking Station for Tango TX2 A – DSX Mode: 0 = DSX Standalone, 1 = DSXi Cloud-connected, 2 = DSX-L Local Server B – Number of Gas Inlet Ports: 3 = 3 Ports, 6 = 6 Ports C – Power Cord Type: 1 = North America, 2 = Europe, 3 = Australia, 4 = UK
17154367	Replacement battery
18109171	Soft nylon case, Black
18109239	Soft nylon case, Safety Orange
18109218	Dust barrier kit, 5 pack
18109230	Water barrier kit, 5 pack
18109238	CalCup and tubing kit
17154484	Suspender clip
17154915-0	AlarmAmp, Black
17154915-1	AlarmAmp, Safety Orange



SPECIFICATIONS*

INSTRUMENT WARRANTY

Guaranteed for Life™. Warranted for as long as the instrument is supported by Industrial Scientific Corporation (excludes sensors, batteries, and filters). CO and H₂S sensors are warranted for three years. All other sensors are warranted for two years.

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 (3.9 x 2.0 x 1.4 in)

WEIGHT

126.0 g (4.4 oz)

TEMPERATURE RANGE

-40 °C to 50 °C (-40 °F to 122 °F) **

HUMIDITY RANGE

15% to 95% Non-condensing (continuous)

SENSORS

CO, CO/H₂, H₂S, NO₂, SO₂, NH₃, HCN – Electrochemical sensor technology

SENSOR MEASURING RANGES

Carbon Monoxide (CO): 0 to 1,000 ppm in 1 ppm increments
Carbon Monoxide (CO/H₂ low): 0 to 1,000 ppm in 1 ppm increments
Hydrogen Sulfide (H₂S): 0.0 to 500.0 ppm in 0.1 ppm increments
Nitrogen Dioxide (NO₂): 0.0 to 150.0 ppm in 0.1 ppm increments
Sulfur Dioxide (SO₂): 0.0 to 150.0 ppm in 0.1 ppm increments
Ammonia (NH₃): 0 to 500 ppm in 1 ppm increments
Hydrogen Cyanide (HCN): 0.0 to 30.0 ppm in 0.1 ppm increments

BATTERY

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

DATA LOGGING

3 months at 10-second intervals

EVENT LOGGING

60 alarm events

CERTIFICATIONS

DIRECTIVE OR CB AREA CLASSIFICATION STANDARDS

ATEX¹: Ex ia I Ma;
Ex ia IIC T4 Ga; Equipment Group and Category: I M1 and II 1G,
EN 60079-0: 2012
EN 60079-11: 2012
EN 50303: 2000

IECEx³ Ex ia I Ma, Ex ia IIC T4 Ga
IEC 60079-0: 2011
IEC 60079-11: 2011

UL (C-US)⁴: Class I, Groups A, B, C, and D; Class II, Groups E, F, and G; T4; Exia Class I, Zone 0, AEx ia IIC T4

UL 913 8th Ed.
UL 60079-0 6th Ed.
UL 60079-11 6th Ed.
CSA C22.2 No. 157

* These specifications are based on performance averages and may vary by instrument.

** Operating temperatures above 50 °C (122 °F) may cause reduced instrument accuracy. Operating temperatures below -20 °C (-4 °F) may cause reduced instrument accuracy and affect display and alarm performance.

Patent No. 9,000,910 – DualSense Technology | Patent No. 9,064,386 - AlarmAmp

See all features and benefits at
www.indsci.com/tango-tx2



M40 FOUR-GAS MONITOR

- 1 to 4 gas monitoring for O₂, H₂S, CO & combustible gases
- 18-hour runtime with lithium-ion battery
- Includes vibrating, 90 dB audible, and LED visual alarms
- Two-year, all inclusive warranty

Industrial Scientific is pleased to offer the M40, a versatile multi-gas monitor capable of detecting CO, H₂S, O₂, and combustible gases for a wide variety of hazardous and confined space applications.

The M40 is housed in a rugged, impact-resistant case to provide superior performance and durability in harsh environments and resistance to radio-frequency and electromagnetic interference. Its four-button interface provides simple, intuitive operation and calibration, and the M40's five-second "Off" feature prevents unintentional shut-offs. The unit's compact size and economical price make it an ideal personal monitoring instrument.

Other standard features include a vibrating alarm, lithium-ion battery, peak/hold readings, large LCD, 75 hour datalogging capacity, and belt clip. An optional compact parasitic sampling pump enables remote sampling from up to 50 feet away. The M40 carries a two-year warranty.

SPECIFICATIONS

CASE

High-visibility, impact resistant composite – RFI, EMI and ingress protection tested and approved

DIMENSIONS

11.2 cm x 6.5 cm x 3.6 cm

WEIGHT

243 g
Weight with pump: 326 g

SENSORS

Combustible Gases – Catalytic Diffusion
Oxygen and Toxic Gases – Electrochemical

MEASURING RANGES

Combustibles (LEL)	0 to 100% LEL in 1% increments
Methane (CH ₄)	0 to 5% of volume in 0.1% increments (M40•M only)
Oxygen (O ₂)	0 to 30% of volume in 0.1% increments
Carbon Monoxide (CO)	0 to 999 ppm in 1 ppm increments
Hydrogen Sulfide (H ₂ S)	0 to 500 ppm in 1 ppm increments

The M40 features LEL over-range protection

POWER SOURCE

Rechargeable lithium-ion integral battery

RUNTIME

18 hour – instrument (non-alarm)
12 hour – instrument with pump (non-alarm)

DISPLAY

Large LCD provides simultaneous and continuous readout of up to all four gases. Large, high-contrast characters, graphic icons and unique amber backlight provide clear display visibility in low-light conditions.

ALARMS

Vibrating, 90 dB audible and ultra-bright LED visual alarms. High/low, STEL, TWA and low battery alarms. Flow alarm indicator when used with optional SP40 pump.

TEMPERATURE RANGE

-20° to 50°C (-4° to 122°F)

HUMIDITY RANGE

15 to 95% RH, typical, 0 to 99% RH intermittent (non-condensing)

IP RATING

IP65

CERTIFICATIONS

IECEx: Ex ia IIC T4 Gb; Ex db ia IIC T4 Gb (with Catalytic Sensor)
/ Ex ia IIC T4 Gb; Ex d ia IIC T4 Gb
China Ex; China MA; China CPA





VENTIS® MX4 FOUR-GAS MONITOR

The Ventis® MX4 is a four-gas monitor with the portability and size of a single-gas monitor. Eliminate the need for extra monitors and transition seamlessly from personal monitoring to confined space entry with the Ventis® Slide-on Pump—ideal for operators who wear their gas monitors primarily for personal protection but occasionally require a pump for confined space entries.

- Detect up to four gases with a wide range of sensor options
- Select alarm set points, set latch alarms, disable instrument shutdown while in alarm, and more
- Save time and reduce human error with maintenance and usage data available from iNet Control software
- Available with or without an integral pump, or with the Ventis Slide-on Pump for ultimate flexibility
- Non-pumped instruments compatible with 12-hour, 18-hour, or 20-hour batteries

See all features and benefits at
www.indsci.com/ventis-mx4

SPECIFICATIONS*

WARRANTY

Two-year warranty, including sensors and battery

CASE MATERIAL

Polycarbonate with protective rubber overmold

DIMENSIONS

103 x 58 x 30 mm (4.1 x 2.3 x 1.2 in) without Pump, Lithium-ion battery version
172 x 67 x 66 mm (6.8 x 2.6 x 2.6 in) with Pump, Lithium-ion battery version

WEIGHT

182 g (6.4 oz) without Pump, Lithium-ion battery version
380 g (13.4 oz) with Pump, Lithium-ion battery version

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

ALARMS

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

DISPLAY/READOUT

Backlit Liquid Crystal Display (LCD)

TEMPERATURE RANGE

-20 °C to 50 °C (-4 °F to 122 °F) **

HUMIDITY RANGE

15% to 95% non-condensing (continuous)

SENSORS AND MEASURING RANGES

Combustible Gases:	0-100% LEL in 1% increments
Methane (CH ₄):	0-5% of vol in 0.01% increments
Oxygen (O ₂):	0-30% of vol in 0.1% increments
Carbon Monoxide (CO):	0-1,000 ppm in 1 ppm increments
Hydrogen Sulfide (H ₂ S):	0-500 ppm in 0.1 ppm increments
Nitrogen Dioxide (NO ₂):	0-150 ppm in 0.1 ppm increments
Sulfur Dioxide (SO ₂):	0-150 ppm in 0.1 ppm increments

CERTIFICATIONS

INGRESS PROTECTION IP66/67

ANZEX,ATEX,CSA,EAC,IECEX,INMETRO,KC,KIMM,MSHA,PA-DEP,SANS,TIIS,UL MED

*These specifications are based on performance averages and may vary by instrument.

** Operating temperatures above 50 °C (122 °F) may cause reduced instrument accuracy. Operating temperatures below -20 °C (-4 °F) may cause reduced instrument accuracy and affect display and alarm performance. See Product Manual for details.





VENTIS® PRO5 MULTI-GAS MONITOR

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, man-down and motion alerts, or all of the above. The monitor is also backed by a Guaranteed for Life™ warranty.

- Eliminate the need for two pieces of equipment by using Ventis Pro5 for personal monitoring and confined space entry.
- Improve team and site safety by sharing gas readings, man-down, motion, and gas alarms locally between monitors, directly to the cloud, or both.
- Ensure workers always have help when they need it with real-time gas, man down, and motion alarms.
- Get real-time location and alarm data directly from Ventis Pro5 gas monitors to a designated safety contact with the optional cellular or wi-fi battery pack.
- Reinforce safe behavior with programmable alarm action messages like "EVACUATE" or "VENTILATE" based on alarm level.
- Simplify the user experience with the ability to hide unnecessary screens based on user needs, role, industry, or site.

See all features and benefits at
www.indsci.com/ventis-pro5

Sensor & Configuration Options

The Ventis Pro5 offers sensor and configuration options for multiple industries and applications, including standard and non-standard 4-gas, 5-gas, and a methane IR sensor, making it a cost-effective option for personal protection and confined space applications.

LEL (CH ₄ % Vol)	CO	IR CH ₄	ULP IR HC
LEL (Methane)	CO High	IR CO ₂	HCN
LEL (Pentane)	CO/H ₂ Low	IR CO ₂ /CH ₄	NH ₃
O ₂	CO/H ₂ S	IR CO ₂ /LEL	PH ₃
H ₂ S	SO ₂	IR HC	H ₂
Cl ₂	NO ₂	ULP IR CH ₄	VOC(PID)

SPECIFICATIONS*

WARRANTY

PID sensor warranted for one year. All other sensors, batteries and pump are warranted for two years.

CASE MATERIAL

Polycarbonate with protective rubber overmold

DIMENSIONS

104 x 58 x 36 mm (4.1 x 2.3 x 1.4 in) without Pump
172 x 67 x 65 mm (6.8 x 2.6 x 2.6 in) with Pump
104 x 58 x 61 mm (4.1 x 2.3 x 2.4 in) with wi-fi Battery

WEIGHT

217 g (7.7 oz); 407 g (14.41 oz), Pump; 243 g (8.5 oz), with wi-fi Battery

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 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

ALARMS

Four visual alarm LEDs (two red, two blue)
95 decibel (dB) audible alarm at a distance of 10 cm (3.94 in) vibration alarms

DISPLAY/READOUT

Backlit liquid crystal display (LCD)

KEYPAD

Two buttons for operation, dedicated panic button

INGRESS PROTECTION

IP68 (submersion at 1.5 meters for 1 hour)

TEMPERATURE RANGE

-40 °C to 50 °C (-40 °F to 122 °F) **

HUMIDITY RANGE

15% to 95% non-condensing (continuous)

EVENT LOGGING

60 alarm events

DATA LOG

At least 3 months at 10-second intervals

SENSOR RANGES

CATALYTIC BEAD	
Combustible Gases:	0-100% LEL in 1% increments
Methane (CH ₄):	0-5% of vol in 0.01% increments
ELECTROCHEMICAL	
Ammonia (NH ₃):	0-500 ppm in 1 ppm increments
Carbon Monoxide (CO):	0-2,000 ppm in 1 ppm increments
Carbon Monoxide High (CO High):	0-9,999ppm in 1 ppm increments
Carbon Monoxide (CO/H ₂ low):	0-1,000 ppm in 1 ppm increments
Carbon Monoxide/Hydrogen Sulfide:	CO: 0-1,500 ppm in 1 ppm increments H ₂ S: 0-500 ppm in 0.1 ppm increments
Chlorine (Cl ₂):	0-50ppm in 0.1 ppm increments
Hydrogen Sulfide (H ₂ S):	0-500 ppm in 0.1 ppm increments
Hydrogen Cyanide (HCN):	0-30 ppm in 0.1 ppm increments
Nitrogen Dioxide (NO ₂):	0-150 ppm in 0.1 ppm increments
Oxygen (O ₂) (Standard/Long-Life):	0-30% of vol in 0.1% increments
Phosphine (PH ₃):	0-10 ppm in 0.01 ppm increments
Sulfur Dioxide (SO ₂):	0-150 ppm in 0.1 ppm increments
Hydrogen (H ₂):	0-2000 ppm in 1 ppm increments
INFRARED	
Carbon Dioxide (CO ₂):	0-5% vol in 0.01% increments
Methane (CH ₄):	0-5% vol in 0.01% increments 5-100% vol in 0.1% increments
Carbon Dioxide/Combustible	CO ₂ : 0-5% vol in 0.01% increments LEL: 0-100% LEL in 1% increments
Carbon Dioxide/Methane:	CO ₂ : 0-5% vol in 0.01% increments CH ₄ : 0-5% vol in 0.01% increments CH ₄ : 5-100% vol in 0.1% increments
Hydrocarbons	0-100% LEL in 1% increments
Hydrocarbon (HC ULP)	0-100% LEL in 1% increments
Methane (CH ₄ ULP)	0-100% LEL in 0.1% increments 5.1-100% vol in 0.1% increments
PHOTOIONIZATION	
VOC (10.6 eV):	0-2,000 ppm in 0.1 ppm increments

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†
Wi-Fi: 802.11 b/g/n 2.4GHz wi-fi with WPA2 security

*These specifications are based on performance averages and may vary by instrument.
** Operating temperatures above 50 °C (122 °F) may cause reduced instrument accuracy. Operating temperatures below -20 °C (-4 °F) may cause reduced instrument accuracy and affect display and alarm performance. See Product Manual for details.

† See www.indsci.com/wireless-certifications for country-specific wireless approvals and certifications.



MX6 iBRID® MULTI-GAS MONITOR

The MX6 iBrid® is the most adaptable six-gas monitor on the market. With hundreds of possible sensor combinations and a robust list of available configuration settings, the MX6 iBrid gas detector is ready to monitor oxygen, toxic and combustible gases, and volatile organic compounds (VOCs).

- Flexible sensor configurations monitor up to six gases simultaneously
- Prescreen entries for benzene with an optional convertible kit
- Optional integral sampling pump with strong 30.5 meter (100 feet) sample draw
- Full-color LCD for easy visibility in all lighting conditions

See all features and benefits at
www.indsci.com/mx6



SPECIFICATIONS*

WARRANTY

Guaranteed for Life™** Warranted for as long as the instrument is supported by Industrial Scientific Corporation

CASE MATERIAL

Lexan/ABS/stainless steel with protective rubber overmold

DIMENSIONS

135 x 77 x 48 mm (5.3 x 3.0 x 1.9 in) without Pump

193 x 77 x 56 mm (7.6 x 3.1 x 2.2 in) with Pump

WEIGHT

409 g (14.4 oz) typical without Pump; 511 g (18.0 oz) typical with Pump

POWER SOURCE/RUN TIMES

Rechargeable Extended-Range Lithium-ion Battery (36 hours) without Pump

Rechargeable Extended-Range Lithium-ion Battery (20 hours) with Pump

Replaceable AA Alkaline Battery (10.5 hours) without Pump

DISPLAY/READOUT

Color Graphic Liquid Crystal Display

TEMPERATURE RANGE

-20 °C to 55 °C (-4 °F to 131 °F)

HUMIDITY RANGE

15% to 95% non-condensing (continuous)

SENSORS AND MEASURING RANGES

SENSOR	RANGE	RESOLUTION
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 (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

SUPPLIED WITH MONITOR

Universal Charger, Nylon Carrying Case, Belt Clip, Calibration Cup, Wrist Strap, Quick Start Guide, Dust Filter/Water Stop (with Pump), Sample Tubing (with Pump).

LANGUAGE

English, Portuguese, French, Indonesian, Spanish, Russian, German, Polish, Italian, Czech, and Dutch

* These specifications are based on performance averages and may vary by instrument.

** Specific terms of the Guaranteed for Life™ Program are included with all products and are available upon request.



RADIUS® BZ1 AREA MONITOR

Built for the world's harshest environments, the Radius® BZ1 Area Monitor is always working – even when you're not. With the ability to leave the area monitor in the field for nearly two months on battery or indefinitely with external power supplies you can control and monitor up to seven hazards anywhere across your site – ensuring the right level of response when workers are exposed to those dangers. Plus, with the ability to seamlessly share alarms between monitors, you can rest assured that someone's always got your back.

Up and Running, Even When You Aren't

- Runtime up to 50 days on battery (based on configuration)*
- Unlimited runtime with external power supply options
- Removable sensor module – leave the device in the field and minimize downtime by swapping ready-to-use sensor modules without removing the entire device from its location

RADIUS BZ1 EXPECTED RUNTIME

Configuration	Power Source	Expected Run Time
Standard 4-Gas (LEL-IR, H ₂ S, CO, O ₂)	Built-in Battery	Up to 50 days
Standard 4-Gas with Wireless Communication (LEL-IR, H ₂ S, CO, O ₂)	Built-in Battery	Up to 30 days
Standard 4-Gas (LEL-IR, H ₂ S, CO, O ₂)	External Power Supplies (Solar, IS, Non-IS)	Unlimited
Standard 4-Gas with Wireless Communication (LEL-IR, H ₂ S, CO, O ₂)	External Power Supplies (Solar, IS, Non-IS)	Unlimited

* Devices relying on a wireless connection feature a runtime up to 30 days; devices without a wireless connection feature a runtime up to 50 days. Additional configurations may affect runtime depending on your site and application.

Trusted Reliability to Keep Teams Safe

- Detect up to seven gases simultaneously (including PID)
- Get more accurate detection with all-weather sensor options and the ability to detect gases across a 360-degree path
- Reliably alert workers to all hazards with:
 - o Bold LED lights
 - o Alarms that sound at 108dB, cutting right through any high-noise environment
 - o Large, easy-to-read display

Make Quicker Decisions

- Customizable alarm messages such as "EVACUATE" or "VENTILATE"
- Seamlessly share alarms between personal and area monitors across an entire site with our LENS™ Wireless technology
- Ensure accurate readings and reduces false alarms by relying on two sensors to detect the same gas with DualSense® technology

SPECIFICATIONS*

WARRANTY

Two-year warranty, including Sensors and Battery

CASE MATERIAL Impact-resistant polycarbonate alloys

DIMENSIONS 29 x 29 x 55 cm (11.5 x 11.5 x 21.5 in)

WEIGHT 7.5 kg (16.5 lb)

POWER SOURCE/RUN TIME

Rechargeable Nickel-Metal Hydride (NiMH) Battery
≤8 hour recharge time

ALARMS

105 decibel (dB) at 1 m (3.3 ft) redundant audible alarms
Redundant, visual alarm LEDs (red and blue)

DISPLAY/READOUT

11.2 cm (4.4 in) monochrome backlit graphical Liquid Crystal Display (LCD)

KEYPAD Three buttons

INGRESS PROTECTION IP66

TEMPERATURE RANGE -20 °C to 55 °C (-4 °F to 131 °F)

HUMIDITY RANGE

15% to 95% non-condensing (continuous)

MEASURING RANGES

CATALYTIC BEAD

Combustible Gases: 0-100% LEL in 1% increments

ELECTROCHEMICAL

Ammonia (NH₃): 0-500 ppm in 1 ppm increments
Carbon Monoxide (CO): 0-1,500 ppm in 1 ppm increments
Carbon Monoxide (CO High Range): 0-9,999 ppm in 1 ppm increments
Carbon Monoxide (CO/H₂ Low): 0-1,000 ppm in 1 ppm increments
Carbon Monoxide/Hydrogen Sulfide: CO: 0-1,500 ppm in 1 ppm increments
H₂S: 0-500 ppm in 0.1 ppm increments
Chlorine (Cl₂): 0-50 ppm in 0.1 ppm increments
Hydrogen (H₂): 0-2,000 ppm in 1 ppm increments
Hydrogen Sulfide (H₂S): 0-500 ppm in 0.1 ppm increments
Hydrogen Cyanide (HCN): 0-30 ppm in 0.1 ppm increments
Nitrogen Dioxide (NO₂): 0-150 ppm in 0.1 ppm increments
Oxygen (O₂): 0-30% vol in 0.1% increments
Sulfur Dioxide (SO₂): 0-150 ppm in 0.1 ppm increments
Phosphine (PH₃): 0-5 ppm in 0.01 ppm increments
Nitric Oxide (NO): 0-1000 ppm in 1 ppm increments
Chlorine Dioxide (ClO₂): 0-30 ppm in 0.1 ppm increments
Hydrogen Chloride (HCl): 0-30 ppm in 0.1 ppm increments

INFRARED

Carbon Dioxide (CO₂): 0-5% vol in 0.01% increments
Hydrocarbon (HC): 0-100% LEL in 1% LEL increments
Methane (CH₄): 0-100% LEL in 1% LEL increments

PHOTOIONIZATION

VOC (10.6 eV): 0-2,000 ppm in 0.1 ppm increments

EVENT LOGGING: 60 alarm events

DATA LOG: At least 3 months at 10-second intervals

PUMP: Optional integral pump, up to 30.48 m (100 ft) sample draw

WIRELESS

Optional LENS Wireless, 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 **

SUPPLIED WITH MONITOR

Calibration Cup (without Pump), Sample Tubing and Pump Inlet Water Barrier (with Pump), Hand Tool, Charging Power Supply and Region-Specific Cord

* These specifications are based on performance averages and may vary by instrument.

** See www.indsci.com/wireless-certifications for country-specific wireless approvals and certifications.

See all features and benefits at
www.indsci.com/radius



T40 II SINGLE GAS MONITOR

- Robust, compact, and light
- Fast sensor response
- Multiple sensor range options with high accuracy
- Replaceable battery with two-year runtime

The T40 II single gas monitor is primarily used to protect personnel lives by detecting the presence of hydrogen sulfide, carbon monoxide or oxygen.

The T40 II instrument is robust and light, with an IP68 level of ingress protection, and is suitable for working in changing, hazardous environment. The industry-leading ultra-fast T90 response time can detect gas hazards on the job in real time to ensure worker safety, saving valuable time. To meet the needs of long-term operation, the high-performance lithium battery can operate under extreme weather conditions continuously for two years.

There are two visual red alarm LEDs, in addition to both an audible and vibration alarm when the gas concentrations exceed the high, low, TWA, or STEL alarm preset values.



SPECIFICATIONS

INSTRUMENT WARRANTY

T40 II monitor carries a two-year warranty from the date of shipment and is supported by Industrial Scientific Corporation (excludes batteries, clips, calibration caps and filters).

DISPLAY

Segment LCD

KEYPAD

Two buttons

CASE MATERIALS

Polycarbonate with a protective rubber over-mold

ALARMS

Visual (two red LEDs); Audible (95db); Vibration, TWA, STEL

DIMENSIONS / WEIGHT

82 x 60 x 27 mm (3.23" x 2.36" x 1.07") / 85g (3oz)

EVENT LOGGING

Up to 100 alarm events and 30 error events

INGRESS PROTECTION

IP 66/68

TEMPERATURE RANGE

-40 °C to 50 °C (-40 °F to 122 °F)

HUMIDITY RANGE

5% to 95% Non-condensing

SENSORS

CO, H₂S, O₂ – Electrochemical sensor technology

SENSOR MEASURING RANGES

Gas Type	Range	Resolution	T90
CO	0-1000 ppm	1 ppm	<10s
CO	0-2000 ppm	1 ppm	<10s
H ₂ S	0-20 ppm	0.1 ppm	<10s
H ₂ S	0-40 ppm	0.1 ppm	<10s
H ₂ S	0-50 ppm	0.1 ppm	<10s
H ₂ S	0-80 ppm	0.1 ppm	<10s
H ₂ S	0-100 ppm	0.1 ppm	<10s
H ₂ S	0-150 ppm	0.1 ppm	<10s
H ₂ S	0-200 ppm	0.1 ppm	<10s
H ₂ S	0-300 ppm	0.1 ppm	<10s
H ₂ S	0-500 ppm	0.1 ppm	<10s
O ₂	0-30 %vol	0.1 %vol	<10s

BATTERY

3.6 V Primary Lithium-thionyl chloride (Li-SOCl₂), 1.5AH, 2/3AA , replaceable

RUN TIME

Up to two years of runtime, depending on operating conditions, the amount of time the unit is in alarm, and the use of the unit's confidence indicator.

CERTIFICATIONS

International:

IECEX: Ex ia IIC T4 Ga; Ex ia I Ma

America:

UL: Class I, Division 1, Groups A, B, C, D T4
Class I, Zone 0, AEx ia IIC T4 Ga

CSA:

Ex ia IIC T4
Class I, Division 1, Groups A, B, C, D T4

INMETRO: Ex ia I Ma; Ex ia IIC T4 Ga

Europe:

ATEX: Ex ia IIC T4 Ga; Ex ia I Ma
CE: Directive 2014/30/EU, EN50270
Directive 2011/65/EU and 2015/863/EU

MED:

Asia:

China Ex: Ex ia IIC T4 Ga
China MA: Ex ia I Ma
China CPA
PESO: Ex ia IIC T4 Ga



See all features and benefits at
www.indsci.com/t40ii

T-DOCK[®]
AUTOMATED GAS DETECTOR
MANAGEMENT SYSTEM



TANGO® TX1 SINGLE GAS MONITOR

- DualSense® Technology increases worker safety by using two sensors to detect the same gas
- Guaranteed for Life™ with replaceable sensors and batteries that extends the life of the instrument
- Optional AlarmAmp™ increases audible alarms to 110 dB
- Acknowledgeable gas alerts

INSTRUMENT CONFIGURATIONS

PART NUMBER	DESCRIPTION
TX1-1	Tango TX1, CO
TX1-2	Tango TX1, H ₂ S
TX1-4	Tango TX1, NO ₂
TX1-5	Tango TX1, SO ₂
TX1-6	Tango TX1, NH ₃
TX1-B	Tango TX1, HCN
TX1-G	Tango TX1, CO/H ₂ low

ACCESSORIES

18109330-ABC	DSX™ Docking Station for Tango TX1 A – DSX Mode: 0 = DSX Standalone, 1 = DSXi Cloud-connected, 2 = DSX-L Local Server B – Number of Gas Inlet Ports: 3 = 3 Ports, 6 = 6 Ports C – Power Cord Type: 1 = North America, 2 = Europe, 3 = Australia, 4 = UK
17154367	Replacement battery
18109171	Soft nylon case, Black
18109239	Soft nylon case, Safety Orange
18109218	Dust barrier kit, 5 pack
18109230	Water barrier kit, 5 pack
18109238	CalCup and tubing kit
17154484	Suspender clip
17154915-0	AlarmAmp, Black
17154915-1	AlarmAmp, Safety Orange
17154916	Black nameplate
17154917	Green nameplate
17154918	Yellow nameplate
17154919	Blue nameplate
17154920	White nameplate

* These specifications are based on performance averages and may vary by instrument.

** Operating temperatures above 50 °C (122 °F) may cause reduced instrument accuracy. Operating temperatures below -20 °C (-4 °F) may cause reduced instrument accuracy and affect display and alarm performance.

Patent No. 9,000,910 – DualSense Technology | Patent No. 9,064,386 - AlarmAmp

SPECIFICATIONS*

WARRANTY

Guaranteed for Life™. Warranted for as long as the instrument is supported by Industrial Scientific Corporation (excludes sensors, batteries, and filters). CO and H₂S sensors are warranted for three years. All other sensors are warranted for two years.

DISPLAY

Segment Liquid Crystal Display (LCD)

DIMENSIONS

99 x 51 x 35 mm (3.9 x 2.0 x 1.4 in)

WEIGHT

126.0 g (4.4 oz)

CASE MATERIALS

Case top – polycarbonate with a protective rubber overmold
Case bottom – conductive polycarbonate

KEYPAD

Two buttons

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

TEMPERATURE RANGE

-40 °C to 50 °C (-40 °F to 122 °F) **

HUMIDITY RANGE

15% to 95% non-condensing (continuous)

EVENT LOGGING

60 alarm events

SENSORS

CO, CO/H₂, H₂S, NO₂, SO₂, NH₃, HCN – Electrochemical sensor technology

SENSORS AND MEASURING RANGES

Carbon Monoxide (CO):	0 to 1,000 ppm in 1 ppm increments
Carbon Monoxide (CO/H ₂ low):	0 to 1,000 ppm in 1 ppm increments
Hydrogen Sulfide (H ₂ S):	0.0 to 500.0 ppm in 0.1 ppm increments
Nitrogen Dioxide (NO ₂):	0.0 to 150.0 ppm in 0.1 ppm increments
Sulfur Dioxide (SO ₂):	0.0 to 150.0 ppm in 0.1 ppm increments
Ammonia (NH ₃):	0 to 500 ppm in 1 ppm increments
Hydrogen Cyanide (HCN):	0.0 to 30.0 ppm in 0.1 ppm increments

DATA LOGGING

3 months at 10-second intervals

BATTERY

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

CERTIFICATIONS

INGRESS PROTECTION IP66/67

-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

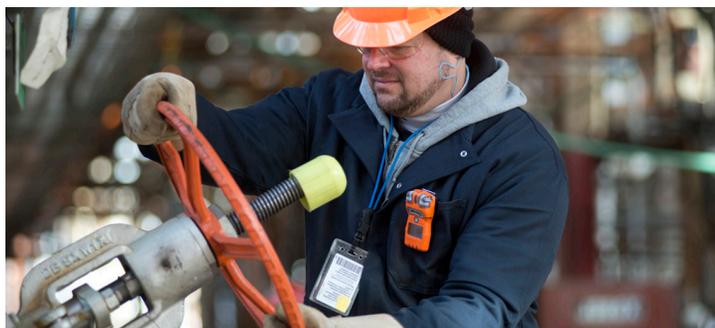
-20 °C to 50 °C (-4 °F to 122 °F)

China Ex: Ex ia IIC T4 Ga

CMA: Ex ia I Ma; H₂S, CO

EAC: PO Ex ia I X; 0 Ex iX IIC T4 X

KC: Ex ia IIC T4



See all features and benefits at
www.indsci.com/tango-tx1



GASBADGE® PRO SINGLE GAS MONITOR

GasBadge® Pro is a single gas monitor built to Industrial Scientific's highest quality and reliability standards, providing a lifetime of gas hazard protection.

- Interchangeable sensors quickly adapt to monitor unsafe levels of oxygen or toxic gases
- Infrared interface
- Pair with GasBadge® Datalink to configure preferences and instantly download alarm events and instrument details
- Guaranteed for Life™ warranty

See all features and benefits at
www.indsci.com/gasbadgepro



SPECIFICATIONS

WARRANTY

Guaranteed for Life™. Instrument is warranted for as long as supported by Industrial Scientific Corporation (excluding sensors, batteries, and filters). CO, H₂S, and O₂ sensors are warranted for 2 years. All other sensors warranted for 1 year.

CASE MATERIAL

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

DIMENSIONS

9.4 x 5.08 x 2.79 mm (3.7 x 2 x 1.1 in)

WEIGHT

85 g (3 oz)

ALARMS

User selectable low and high alarms

Ultra-bright LEDs, loud audible alarm (95 dB) and vibrating alarm

SENSORS AND MEASURING RANGES

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

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

INGRESS PROTECTION

Third-party certified IP64

TEMPERATURE RANGE

-40 °C to 60 °C (-40 °F to 140 °F) typical

HUMIDITY RANGE

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

EVENT LOGGING

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.

DATA LOGGING

1-year continuous storage of data

BATTERY RUN TIME

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

SUPPLIED WITH MONITOR

Attached Cuspender Clip, Calibration Adapter and Tubing



GASBADGE® DATALINK

- Instantly download alarm events and instrument details
- Quickly and easily configure instrument preferences



DSX™ DOCKING STATION

The DSX™ Docking Station is an automated gas detector maintenance, record storage, and fleet management solution that flexes with the needs of your business. Choose from DSX-L, DSXi, or DSX Standalone based on your data access requirements. All DSX Docking Stations offer automatic charging, bump testing, and calibration.

PRODUCT SPECIFICATIONS*

WARRANTY

Two-year warranty – DSX (Standalone) and DSX-L (Local Server)
Guaranteed For Life™ Program* – DSXi (Cloud-connected)

INSTRUMENTS SUPPORTED

Ventis MX4, Ventis Pro5, MX6 iBrid, Tango TX1, GasBadge Pro, SafeCore

DIMENSIONS

GasBadge Pro, Tango TX1: 22.7 x 16.9 x 27.3 cm (8.92 x 6.65 x 10.75 in)

Ventis MX4, Ventis Pro5: 24.9 x 16.9 x 27.3 cm (9.83 x 6.65 x 10.75 in)

MX6 iBrid: 25.3 x 16.9 x 27.3 cm (9.96 x 6.65 x 10.75 in)

SafeCore: 27.3 x 16.9 x 29.2 cm (10.75 x 6.65 x 11.5 in)

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

DISPLAY

128 x 64 Dot Matrix LCD – multilingual modes

English, Spanish, French, German and Portuguese**

OPERATING TEMPERATURE RANGE

0 °C to 50 °C / 32 °F to 122 °F

OPERATING 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

*Specific terms of the Guaranteed for Life™ Program are included with all products and are available upon request.

**DSX-L (Local Server) does not support Portuguese.

Auto Replenishment

The calibration gas auto replenishment program is the most efficient way for customers to manage their calibration gas usage and needs. For those who elect to have the program as part of their iNet subscription, a new cylinder of gas will automatically be sent when iNet Control detects a low gas cylinder.

- Email alerts and notifications provide information on worker exposure, instrument usage, and instrument service needs
- Print bump test and calibration certificates for hot work and confined space entry
- Auto detect calibration gas type and expiration date upon cylinder connection
- Calibration gas status indicators provide warning to order replacement gas before a cylinder is empty
- DSX Standalone requires no PC or network connection
- DSXi Cloud-connected provides cloud-based record storage with automatic file back-up, fleet management, and automated maintenance and notifications through iNet Control
- DSX-L Local Server provides server-based record storage, fleet management, and automated maintenance and custom data reporting

	DSX Standalone	DSXi Cloud-connected	DSX-L Local Server
Record Storage	USB	Cloud	PC, Server
Bump and Cal	✓	✓	✓
Print Certificates	✓	✓	✓
6-Ports (Optional)	✓	✓	✓
Reports		✓	✓
Fleet Management		✓	✓
Event Scheduling		✓	✓
Email Alerts		✓	
Auto Software Updates		✓	
Auto Cal Gas Replenishment (Optional)		✓	
Price	\$	\$\$	\$\$\$
Software	Not Applicable	Included	Included

See all features and benefits at www.indsci.com/dsx





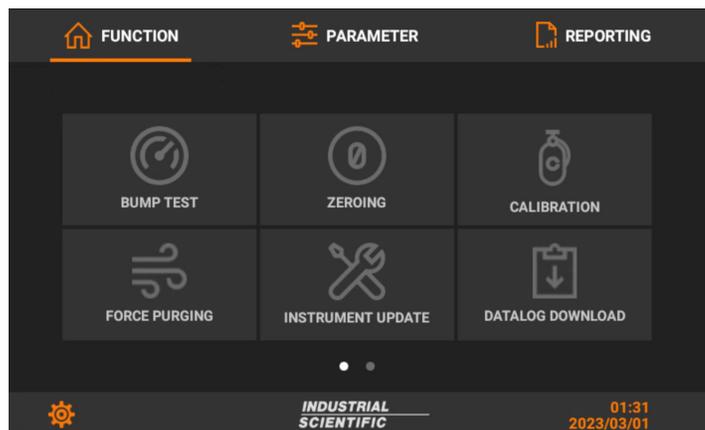
T-DOCK® AUTOMATED GAS DETECTOR MANAGEMENT SYSTEM

- Maintain up to eight instruments simultaneously
- Bump test T40 II Rattler™ monitors in just 15 seconds
- No training needed - simple interface is intuitive, one button starts all bump tests
- Automate device management with programmable settings
- Enhance productivity and safety with ultra-fast gas monitor maintenance
- Easily download event logs

The T-DOCK® is an intelligent, automated instrument management station for T40 II Rattler™ Single-Gas Monitors. It enables ultra-fast bump testing for 8 instruments simultaneously, saving space, time, span gas, and enhancing productivity for safety teams.

The T-DOCK® is easy to install and its capacitive touchscreen guides the user through an easy-to-follow process. Download data from T40 II Rattlers via a USB memory stick or directly connect to a USB printer to print reports and certificates.

The T-DOCK® is ideal for turnarounds, shutdowns, and mobile applications where power outlets are unavailable thanks to a USB-C power bank.



SPECIFICATIONS

INSTRUMENT WARRANTY

3-Year Warranty

DISPLAY

5" Color LCD Touchscreen

PHYSICAL BUTTON

1 'Quick Bump' button, 1 'Fn' button, 1 reset button

POWER SUPPLY

Input: USB-C, DC20V/3.25A

GAS PORTS

3 independent gas inlets (including 1 dedicated for quick bump test)
1 fresh-air inlet
1 exhaust outlet

DIMENSIONS

368 x 310 x 110 mm

WEIGHT

2.71kg

AUTOMATIC TESTS

Automatic bump test, calibration, zeroing, and purging

PUMP

2 pumps
Flow rate: 2000ml/min, 500 ml/min per cradle (Max)

DATA OUTPUT

USB memory stick,
Printer PCL5 or above

SOFTWARE MANAGEMENT

T40 II Rattler™ Instrument Firmware Upgrade
T-DOCK® Operating System (Android 7.1)

COMPATIBLE INSTRUMENTS

T40 II Rattler™

BATTERY

Compatible with USB TYPE-C PD Power Bank Min Power 65 W

DATASTORAGE

16 GB Memory

RATING

EMC Directive 2014/30/EU, EN IEC 61326-1:2021
FCC Part 15
IP20





RGX® GATEWAY

Remove Live Monitoring Barriers

- Receive real-time alerts from personal gas monitors and area monitors when alarms occur
- Locate workers faster when an incident happens using a live map
- Monitor hazardous locations and get data from confined spaces in real time
- Set up in minutes without the need for costly IT infrastructure

Connect and Integrate with Your Existing Control Systems

- Connect up to eight external devices, such as alarms and sirens, with relay control
- Seamlessly integrate with your internal systems with modbus to improve safety processes
- Combine these features to automate hazard awareness and response protocols at your site

SPECIFICATIONS

WARRANTY: 2 years

DIMENSIONS: 11 x 9 x 6 in (28 x 23 x 15 cm)

WEIGHT: 5.6 lb (2.5 kg)

CASE MATERIAL: Polycarbonate | Leather external case

RUN TIME / POWER SOURCE

Rechargeable Battery Pack: 168 hours at 25 °C (77 °F), 5 minute non-critical data interval

Charge Time: Up to 8 hours

Power Voltage Inputs: 9-30 VDC (for operation in industrial facility, vehicle, and office)

TEMPERATURE RANGE -20 °C to 55 °C (-4 °F to 134 °F)

HUMIDITY RANGE: 5% to 95% non-condensing (continuous)

INGRESS PROTECTION: IP65

LOCATION: GPS Radio; Antenna: Internal; Accuracy: ~10 m (32 ft) outdoors

SUPPLIED WITH GATEWAY: Charging Power Cord

OPTIONAL ACCESSORIES

Extended Run Time Power Supply (intrinsically safe or standard)

Mounting Kits (wall or magnet)

USER INTERACTION

Power Button with Status Indicator

Configuration: Locally over Ethernet or wi-fi, or remotely over-the-air (iNet® Control)

Firmware Upgrades: Over-the-air

COMMUNICATION*

LENS™ WIRELESS, MESH NETWORK

Frequency: ISM license-free band (2.4 GHz)

Max Instruments: 25 devices (including RGX)



RANGE

World Mode, RGX Gateway to RGX Gateway 300 m (~1,000 ft) line of sight

CE/RED Compliant Mode, RGX Gateway to RGX Gateway 185 m (~600 ft) line of sight

World Mode, RGX Gateway to Radius® BZ1 300 m (~1,000 ft) line of sight

CE/RED Compliant Mode, RGX Gateway to Radius BZ1 185 m (~600 ft) line of sight

World Mode, RGX Gateway to Ventis® Pro5 100 m (~300 ft) line of sight

CE/RED Compliant Mode, RGX Gateway to Ventis Pro5 100 m (~300 ft) line of sight

ENCRYPTION: AES-128

APPROVALS: FCC Part 15, IC, CE/RED, Others*

CELLULAR

Australia & New Zealand: ACMA 4G

Singapore: IMDA 4G

Thailand: NBTC 4G

Indonesia: SDPPI 4G

Modbus Communication:

RTU RS-485 3 Wire (Slave)

Relay Connectivity:

9600



Wi-Fi

802.11 b/g/n 2.4 GHz wi-fi

with WPA2 Enterprise security

ETHERNET (INTERNAL ONLY)

Ethernet 10/100 Mb

HAZARDOUS CERTIFICATIONS

ATEX** : Zone 2: Ex ec ic IIC T6 Gc; RoHS Compliant

China Ex: Zone 2: Ex ec ic IIC T6 Gc (CN)

cULus: Class I, Division 2, Groups A, B, C, D, T6; Zone 2: Ex ec ic IIC T6 Gc (CA)

AEx ec ic IIC T6 Gc (US)

IECEx** : Zone 2: Ex ec ic IIC T6 Gc

* See www.indsci.com/wireless-certifications for country-specific wireless approvals and certifications

** Requires leather case

COMMON INSTRUMENT CONFIGURATIONS

PART NO.	DESCRIPTION
18109509-001	RGX Gateway, No SIM, wi-fi/Ethernet compatible, LENS Repeater Mode, cULus, North American Power Cord
18109509-011	RGX Gateway, USA, LTE (Verizon compatible), cULus, North American Power Cord
18109509-021	RGX Gateway, USA, LTE (AT&T compatible), cULus, North American Power Cord
18109509-041	RGX Gateway, Canada, LTE, (Telus/Bell/Rogers compatible), cULus, North American Power Cord
18109509-062	RGX Gateway, EMEA, 3G (Tele2 compatible), ATEX/IECEx, EU Power Cord
18109509-075	RGX Gateway, Asia Pacific, 3G (Telefonica compatible), China Ex, Australian Power Cord



iASSIGN® BEACON AND TAGS

iAssign® 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 and App Store

APPLICATION

iAssign tags may be used to track workers and locations

iASSIGN BEACON SPECIFICATIONS*

PART NUMBER

18109491

RUN TIME

Four years

WARRANTY

One year

INGRESS PROTECTION

IP65

TEMPERATURE RANGE

-40 °C to 50 °C

HUMIDITY RANGE

0% to 100% RH

DIMENSIONS

125 x 85 x 43mm (5 x 3.3 x 1.68 in)

WEIGHT

9 oz (250 g)

RANGE

Configurable from 1 to 30 m (3 to 100 ft)

TECHNOLOGY

Bluetooth, Near Field Communication (NFC)

PROGRAMMING METHOD

iAssign app available in Google Play store

ACCESSORIES

Instruction card, drywall anchors, screws

APPLICATION

iAssign beacons may be used to track locations only

CERTIFICATIONS

ATEX: II 1 G, Ex ia IIC T4 Ga

c UL us: CI I, Div 1 Gr A, B, C, D, T4; CI II, Div 1, Gr E, F, G; CI I Zone 0, AEx ia IIC T4; Ex ia IIC T4

IECEX: Ex ia IIC T4 Ga

Wireless: FCC Part 15, IC

BLUETOOTH LOW ENERGY

Frequency: 2402 to 2480 MHz

Transmit power: +4 dBm

Based upon standard: Bluetooth v4.1

Contains FCC ID#: RYYEYSGJN (Taiyo Yuden)

* These specifications are based on performance averages and may vary by instrument.





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 Ventis® Pro5 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

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

CASE MATERIAL

Polycarbonate with protective rubber overmold

SAMPLE DRAW CAPABILITY

Up to 15.2 m (50 ft)

DIMENSIONS

143 x 81 x 68 mm (5.6 x 3.2 x 2.7 in) Lithium-ion battery version

143 x 81 x 85 mm (5.6 x 3.2 x 3.3 in) Extended range lithium-ion battery version

143 x 81 x 73 mm (5.6 x 3.2 x 2.9 in) Alkaline battery version

WEIGHT

270 g (9.5 oz) Lithium-ion battery version

316 g (11.2 oz) Extended range lithium-ion battery version

284 g (10.0 oz) Alkaline battery version

OPERATING TEMPERATURE RANGE

-20 °C to 50 °C (-4 °F to 122 °F)

OPERATING HUMIDITY RANGE

15% to 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

Third-party certified IP67

CERTIFICATIONS

ATEX: Ex ia I Ma and Ex ia IIC T4 Ga;
Equipment Group and Category: I M1 and II 1G

China Ex: Ex ia IIC T4 Ga

CSA: Class I, Division 1, Group A-D, T4; Ex ia IIC T4

GOST-EAC: 0 Ex ia IIC X T4; PO Ex ia I X

IECEx: Ex ia IIC T4 Ga

INMETRO: Ex ia IIC T4 Ga; IP66; IP67

UL: Class I, Division 1, Groups A-D, T4;

Class I, Zone 0, AEx ia IIC T4 Ga;

Class II, Group F-G (Carbonaceous and Grain Dust)

*All specifications are based on a typical instrument and typical performance of the instrument, and are subject to variability.





BUMP-N-GO BUMP TEST GAS

Bump testing gas detectors before each day's use is the only way to be sure that the sensors respond to gas. Bump-N-Go is a portable bump test cylinder that goes where the work is, so you can still bump test without access to a docking station or calibration gas.

- Bump test any time, anywhere with a 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 with no hazardous material fees for ground shipments
- Convenient six-pack option saves time and money

SPECIFICATIONS

CYLINDER SHELF LIFE

1 year

CYLINDER HEIGHT

97.5 mm (3.84 in)

CYLINDER DIAMETER

48 mm (1.90 in)

CYLINDER WEIGHT

204 g (7.2 oz)

TEMPERATURE

Protect from sunlight and do not expose to temperatures exceeding 50 °C (122 °F)

CYLINDER STORAGE

Remove regulator prior to storage. Cylinders should be firmly secured to prevent falling or being knocked over. Store in a dry, well-ventilated area, away from sources of heat, ignition, and direct sunlight.

USE

Bump-N-Go Cylinders are for bump testing only. Do not use for calibration.

INDIVIDUAL CYLINDERS

PART NUMBER	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)
18109597	Bump-N-Go Cylinder, 100 ppm CO, 75 ppm H ₂ S, 15% O ₂ , 50% 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)
18109598	Bump-N-Go Cylinder, 6-pack, 100 ppm CO, 75 ppm H ₂ S, 15% O ₂ , 50% LEL (Methane)

REGULATOR

18109565	Pushbutton regulator for use with Bump-N-Go Cylinders
----------	---



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 AREA MONITORING

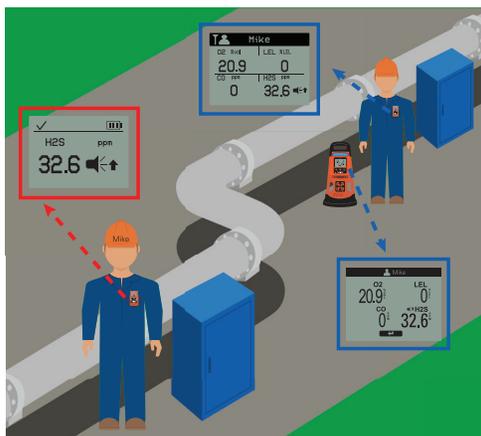
Reliable Ventis Pro5 and Radius BZ1 gas monitors are key to protecting employees from invisible hazards.



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.

MANAGE SAFETY and PRODUCTIVITY

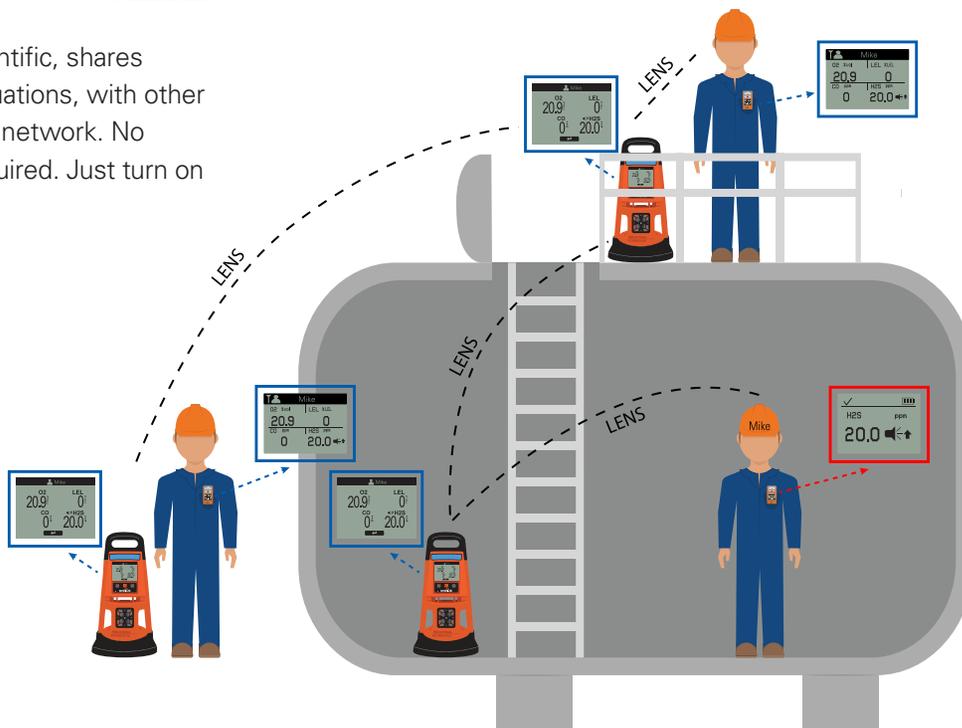
Get data out of any situation and increase productivity by knowing where your workers are and what dangers they may encounter.



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.



Ownership Options

Industrial Scientific offers a variety of purchase plans to meet your specific needs and budget.

Purchase

All products are available for purchase through our worldwide network of distributors. To find a local distributor, visit www.indsci.com and click "where to buy" or contact a regional office in your area.

Certified Pre-Owned

Every Industrial Scientific certified pre-owned monitor gives you virtually all the durability and reliability of a new monitor. Only instruments that pass a rigorous multi-point inspection, including intrinsic safety approvals, are included in this program. Our certified pre-owned instruments are backed by a one-year warranty. Visit www.indsci.com/gas-detectors/certified-pre-owned/ for more information.

Gas Detection as a Service

iNet® Exchange is a subscription-based service that covers repair and replacement of gas detectors. iNet Exchange simplifies your gas detection program by allowing you to build a flexible fleet of instruments, avoid instrument downtime, and eliminate the cost of extra equipment.

Gas Detection Rental Program

When you need gas detectors and need them quickly, renting is the most efficient route. Gas detectors can be readied for same-day or next-day delivery, or pick up is available at our Pittsburgh, Houston, and Edmonton facilities.

- Fully-stocked inventory of over 25,000 pieces of fully-inspected rental equipment, including all accessories
- Gas detectors arrive ready to use with guaranteed reliability out of the box
- Pre-calibrated to NIST standards
- Chargers provided at no additional cost
- iNet customers automatically receive a special discount and rentals are pre-configured to match existing fleet
- Rental units added to iNet Exchange accounts will be monitored for service needs and exchange monitors will be sent immediately



To learn more, email: rental@indsci.com
or visit: www.indsci.com/rental



Start-up and Commissioning Services

Industrial Scientific can install your systems, ensure they work properly, and train your employees. Contact us or your local distributor for a customized program and quote that works for your employees, resources, and budget.

Maintenance and Repair

To ensure your instruments remain at their highest-quality performance, we provide preventative maintenance and repair through mobile service programs and regional service centers.

If your instrument needs repair, visit
www.indsci.com/repair

Warranty

Industrial Scientific designs and manufactures the highest quality instruments to preserve life and property. Industrial Scientific warrants our monitors to be free from defects in material and workmanship under normal and proper use and service (consumable items excluded). Contact Industrial Scientific for additional warranty information, including warranty duration for each specific instrument. Warranty registration ensures valid warranty coverage.

Register your products at
www.indsci.com/gas-detectors/warranty

Extended Warranty

Extended warranty programs provide additional coverage after the initial product warranty expires. The extended warranty is all-inclusive and designed to provide consistent maintenance costs for the length of the program.

Training Services

Gas Detection Made Easy seminars are presented monthly by Industrial Scientific's experienced training department in a hands-on learning environment. Customer-site training is also available to meet your corporate needs for gas hazard education, confined space awareness, and instrument training. Product training videos for users and supervisors are also available in various formats for instrument operation, calibration, and maintenance.

Industrial Scientific is committed to educating workers on the proper use of gas detection equipment and services while empowering them to enhance their culture of safety. We offer a variety of solutions to meet your training needs.

Who Should Attend?

- Safety and health professionals
- Firefighters and emergency responders
- Contractors

Face to Face Training Classes Include

- Gas Detection Made Easy Program – For novices or individuals with years of gas detection experience
- Hazardous Gases – Overview of commonly used gases, their properties, and effects
- Use of Instruments in Confined Spaces – Overview of applicable laws and instruction for the use of gas detection instruments in compliance with government regulations

- Sensor Technology – Description of catalytic bead sensors, electrochemical sensors, infrared sensors, and more
- Presentation of the Instruments – Overview of Industrial Scientific's portable instruments and docking stations
- Calibration and Maintenance – Instruction on the most important components of a safe, reliable gas detection program
- Hands-On Activities – Learning by doing

End User Training Classes

Gas Detection 101 – Gas Detection Introduction
 Gas Detection 102 – How to Use Gas Detectors
 Gas Detection 103 – How to Service and Repair Gas Detectors
 iNet Control Training
 On-site Custom Courses
 T3 – Train the Trainer

Products Covered by Our Online Video Training

GasBadge Pro	Tango TX1
Ventis MX4	Ventis Pro5
MX6 iBrid	Radius BZ1
iNet Control	DSX Docking Station

Download the Gas Detection Made Easy App

Learn about hazardous gas types, detection methods, sensor technologies, regulations, and more.



See our full library of training resources at
www.indsci.com/training



Electrochemical Sensor Cross Interference Table

GAS	SENSOR													
	Carbon Monoxide	Carbon Monoxide/ Hydrogen Low	Hydrogen Sulfide (Ventis)	Hydrogen Sulfide (TX1, MX6)	Sulfur Dioxide	Nitrogen Dioxide	Chlorine	Chlorine Dioxide	Hydrogen Cyanide	Hydrogen Chloride	Phosphine	Nitric Oxide	Hydrogen	Ammonia
Carbon Monoxide	100	100	1	1	1	0	0	0	0	0	0	0	20	0
Hydrogen Sulfide	5	5	100	100	1	-40	-3	-25	10	300	25	10	20	25
Sulfur Dioxide	0	5	5	5	100	0	0	-5	10	40	-1	0	0	-40
Nitrogen Dioxide	-5	5	-25	-25	-165	100	45	50	-70	—	-11	30	0	-10
Chlorine	-10	0	-20	-20	-25	10	100	60	-20	6	-20	0	0	-50
Chlorine Dioxide	—	—	—	—	—	—	20	100	—	—	—	—	—	—
Hydrogen Cyanide	15	5	-1	-5	50	1	0	0	100	35	4	0	30	5
Hydrogen Chloride	3	—	0	0	5	0	2	0	0	100	0	15	0	0
Phosphine	80	415	60	55	20	-130	-225	-100	425	300	100	10	-30	15
Nitric Oxide	25	40	1	-0.2	1	5	10	—	-5	—	-1	100	30	0
Hydrogen	22	3	0.3	0.08	0.5	0	0	0	0	0	0	0	100	0
Ammonia	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Acetylene	202	177	0	0	138	0	—	—	—	8	—	—	—	—

NOTES: The table above reflects the percentage response provided by the sensor listed across the top of the chart when exposed to a known concentration of the target gas listed in the left hand column.
 -The specified cross interference numbers apply to new sensors only and may vary with time and vary from sensor to sensor.
 -The numbers are measured under environment of 20 °C, 50% RH and 1 atm
 -This table is given as a guide only and is subject to change

LEL Correlation Factors

GAS BEING SAMPLED	CALIBRATION GAS						
	LEL (% vol)	Butane	Hexane	Hydrogen *	Methane *	Pentane *	Propane *
Acetone	2.5%	1.06	0.70	1.70	1.70	0.90	1.10
Acetylene	2.5%	0.74	0.60	1.30	1.30	0.70	0.80
Benzene	1.2%	1.16	0.80	1.90	1.90	1.00	1.20
Butane	1.8%	1.00	0.55	1.69	1.58	0.79	0.98
Ethane	3.0%	0.84	0.60	1.30	1.30	0.70	0.80
Ethanol	3.3%	0.94	0.52	1.59	1.49	0.74	0.92
Ethylene	2.7%	0.84	0.60	1.40	1.30	0.70	0.90
Hexane	1.1%	1.81	1.00	3.04	2.86	1.42	1.77
Hydrogen	4.0%	0.59	0.33	1.00	0.94	0.47	0.58
Isopropanol	2.0%	1.16	0.90	2.00	1.90	1.00	1.20
Methane	5.0%	0.63	0.35	1.06	1.00	0.50	0.62
Methanol	6.0%	0.63	0.50	1.10	1.10	0.60	0.70
Nonane	0.8%	2.34	1.30	3.95	3.71	1.84	2.29
Pentane	1.4%	1.28	0.71	2.15	2.02	1.00	1.25
Propane	2.1%	1.02	0.57	1.72	1.62	0.80	1.00
Styrene	0.9%	1.30	1.00	2.20	2.20	1.10	1.40
Toluene	1.1%	1.62	0.89	2.71	2.55	1.26	1.57
Xylene	1.1%	1.58	1.10	2.60	2.50	1.30	1.60
JP-4	—	—	—	—	—	1.20	—
JP-5	—	—	—	—	—	0.90	—
JP-8	—	—	—	—	—	1.50	—

Accuracy +/- 25% error / NOTE: Calibration gases available from Industrial Scientific Corporation. * Preferred gases
 1. The correlation factors in the table are averaged results for estimation use only. It's not recommended for analytical application with high accuracy expectation.
 2. The correlation factors may vary from sensor to sensor with tolerance of +/- 25% for new sensors. The number could further shift for old sensors.
 3. To get a more accurate result, it's recommended to calibrate the instrument with a gas that has CF close to 1. The closer, the better.
 4. It's not recommended to use correlation factors if the target gas is methane and the sensor is old.
 5. Expect more deviation when an old sensor is calibrated with methane gas.

What Accessories Best Fit Your Needs?

CHECKLIST

- | | |
|--|--|
| <input type="checkbox"/> Accessory Labels for Asset Management | <input type="checkbox"/> Extended Run Time Power Supply |
| <input type="checkbox"/> Calibration Gas / Bump-N-Go Bump Test Gas | <input type="checkbox"/> Intrinsically Safe External Run Time Power Supply |
| <input type="checkbox"/> Calibration Stations | <input type="checkbox"/> Probes |
| <input type="checkbox"/> Carrying Cases | <input type="checkbox"/> Filters |
| <input type="checkbox"/> Chargers (Desktop, Multi-Unit, Vehicle) | <input type="checkbox"/> Regulators |
| <input type="checkbox"/> Compliance Tracking Software (iNet Control) | <input type="checkbox"/> Replacement Sensors |
| <input type="checkbox"/> Confined Space Kits | <input type="checkbox"/> Sampling Pumps |
| <input type="checkbox"/> Docking Stations | <input type="checkbox"/> Sample Tubing |
| <input type="checkbox"/> Extra Modules or Bases | <input type="checkbox"/> Spare Batteries |

For a list of all accessories, visit www.indsci.com

Certifications

AGENCY	MULTI-GAS MONITORS						SINGLE GAS MONITORS		
	MX6 iBrid	Ventis Pro5	Ventis MX4	M40	Tango TX2	Radius BZ1	Tango TX1	GasBadge Pro	T40 II
ANZEx	•	•	•					•	•
ATEX	•	•	•		•	•	•	•	•
China CMC			•	•	•				•
China CPC	•	•	•			•	•		
China Ex	•	•	•	•	•	•	•	•	•
China KA		•	•						
China MA		•	•	•				•	•
CSA	•	•	•			•	•	•	•
EAC/GOST	•	•	•				•		
IECEX	•	•	•		•	•	•	•	•
INMETRO	•	•	•			•	•	•	•
KC	•	•	•			•	•	•	•
KIMM			•						
MDR	•								
MSHA	•	•	•						
PA-DEP	•	•	•						
SANS 1515/MASC-IA		•	•			•			
TIIS			•						
UL	•	•	•		•	•	•	•	•

Certain limits apply to the number of sensor configurations. Call for details.



Join the conversation
@IndSci



Watch training videos
indsci



Follow Industrial Scientific
@IndSci_Corp



See what's happening
@industrial_scientific



Connect with us
Industrial Scientific



Get educational articles & submit questions
www.indsci.com/the-monitor-blog

**INDUSTRIAL
SCIENTIFIC**

www.indsci.com REV 0125

AMERICAS

Phone: +1-412-788-4353
1-800-DETECTS (338-3287) | info@indsci.com

ASIA PACIFIC

Phone: +65-6561-7377
Fax: +65-6561-7787 | info@ap.indsci.com

AUSTRALIA

Phone: 1800 809 606
auscustomerservice@ap.indsci.com