



INDUSTRIAL
SCIENTIFIC

**GAS DETECTION AND
MONITORING SOLUTIONS**

SOFTWARE SOLUTIONS



iNet® Solutions Overview

Discover All That iNet® Has to Offer

You're plenty busy focusing on the things that matter to your safety program. Amid your daily tasks is the hefty responsibility of ensuring that your people are protected from workplace hazards so that they go home safely at the end of each day. Buying your fleet of gas detectors was easy, but then the challenges came. How do you get real-time visibility into what's happening in the field? How do you ensure that your instruments are always ready for use? For all of these challenges and more, iNet® is a proven solution that works for thousands of customers worldwide.

See all that iNet has to offer at www.indsci.com/inet



How Does iNet Work?

Gas detection technology is evolving every day. We've come a long way in terms of making gas detectors safer, more intelligent, and more sustainable. Today's gas detectors must be extremely rugged, but also smarter than ever before. Much like purchasing a cell phone that you enhance with apps and services, the way you customize your gas detection experience is no different. iNet provides an integrated solution for gas detection that allows you to choose the equipment, software applications, and services that help to keep your workers safe and your workload manageable.

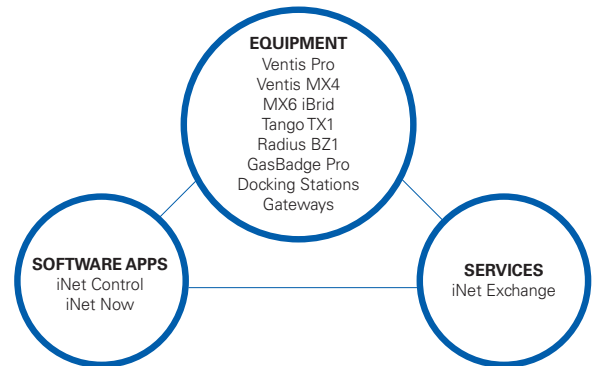
Join the 10,000+ Customer Sites on iNet

Over 45,000,000 Alarm Events | Over 270,000 Gas Detectors
75 Countries | 14 Years of Cloud Experience

Integrated Solution for Gas Detection

iNet is an integrated solution for gas detection that can be easily configured to meet the needs and goals of your gas detection program.

Customers pick equipment, software, and services.



What Combination of iNet Offerings Best Meets Your Needs?

INET SOFTWARE AND SERVICES	REQUIRED EQUIPMENT	DESCRIPTION
iNet Control Software	DSXi*	Gas detection management software including equipment and compliance management, data records and reporting, and worker trends
iNet Exchange Service	DSXi or DSX-L	Gas detection as a service including automatic repair and replacement, and calibration gas replenishment
iNet Now Software	Smart Device, Ventis Pro	Live monitoring software including map of workers and real-time text and email alerts

*DSX Docking Stations in Standalone mode can be upgraded in the field to DSXi.

Customize Your iNet Experience

iNet® Exchange is a subscription-based service for gas detectors covering repair and replacement. iNet Exchange simplifies operations across all aspects of your gas detection program—gas detector availability, cost, and ownership—by delivering equipment on demand. There is no need to worry about instrument warranties, paperwork of processing the claim, or time to wait for new equipment. Parts, equipment, calibration gas, and shipping are covered, and even damaged instruments can be traded in. As an iNet Exchange customer, you will always have the equipment you need, when you need it.

- Ensure gas detectors are always ready for use with proactive replacement
- Pay only for the equipment you need, when you need it
- Eliminate ongoing support and maintenance expenses like shipping, calibration gas, and parts

Streamline gas detector upkeep and repair.

Learn more at

www.indsci.com/inet-exchange



iNet® Control is gas detection management software that provides unparalleled visibility into your gas detection program. Now you can easily manage your hazards, people, and equipment from anywhere with one simple dashboard. For DSXi Docking Station and iNet Exchange customers, access to iNet Control is included at no additional charge.

- Easily manage your gas detection equipment and compliance
- Know how gas detectors are being used and take corrective action
- Track and mitigate the everyday hazards your people face with detailed reports

Bring visibility to your gas detection program.

See for yourself at

www.indsci.com/inet-control

iNet® Now is live monitoring software that provides real-time text and email alerts for gas hazards, panic, and man-down situations allowing you to see and respond to incidents as they happen. A real-time map of workers and instruments helps you pinpoint the location of anyone from lone workers to people working within a facility. With iNet Now, you can have confidence that workers are visible even when you're miles away from the office.

- Receive notification and take immediate action when a worker encounters hazardous conditions
- Eliminate the human error and time it takes for lone workers to complete manual check-in processes
- Improve your gas detection program visibility by viewing worker status in real time
- Get your live monitoring application up and running immediately without IT involvement

Get real-time safety alerts, anytime, anywhere.

Request a demo at

www.indsci.com/inet-now



DSX™ Docking Station

The DSX™ Docking Station is a three-in-one hardware platform that easily transitions from a standalone gas detector maintenance station (standalone mode), to a feature-rich fleet management system accessible from any mobile browser or web-enabled PC (cloud-connected mode).

In addition, it provides a local server mode option that addresses the needs of users who want the docking station functionality but prefer to maintain all information on their own server due to network connection or data storage restrictions.

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 Pro Series, 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 Pro Series: 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.

Do You Prefer to Own and Maintain Your Own Equipment?

DSXi Cloud-connected is your solution to a safer workplace. The DSX in Cloud-connected mode is an automated maintenance, record storage, and fleet management solution.

- Know that your gas detectors are ready for use every day, every shift, without the burden of manual maintenance routines.
- Bump test and calibration schedules can be tracked and set to be performed automatically, ensuring that instruments are ready for use prior to the start of a shift.
- Cloud-based data storage provides peace of mind with automatic file back-up, and easy recovery in case of unexpected data loss.
- Effortlessly manage your fleet, data, and software updates from any web-enabled device.
- Email alerts and notifications provide information on worker exposure and instrument usage, as well as instrument service needs.
- Stop worrying about calibration gas. The optional auto calibration gas replenishment program provides an efficient way to manage your calibration gas usage and needs. New cylinders will be shipped to you when you need them.

What's Your Mode?

DSXi Comparison Chart

	 Standalone	 Cloud-connected	 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

MULTI-GAS MONITORS



MX6 iBrid® Multi-Gas Monitor

- 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

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

The MX6 iBrid® is more than an intelligent hybrid of Industrial Scientific’s best monitoring technologies—it’s 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 is ready to monitor oxygen, toxic and combustible gas, and volatile organic compounds (VOCs).

The rugged MX6 iBrid carries our Guaranteed for Life™ warranty and is compatible with DSX™ Docking Stations. With a DSX Docking Station, maintenance is simplified and data becomes more than a spreadsheet filled with logged readings. Proactively manage your gas detection fleet—track trends, know when instrument maintenance will be required, and understand how your MX6 iBrid instruments are being used.

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 43 mm (5.3 x 3.0 x 1.7 in) without Pump

167 x 77 x 56 mm (6.6 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.



Ventis® MX4 Multi-Gas Monitor

When you need a 4-gas monitor that will adapt to meet your needs, Ventis® MX4 is there. The lightweight instrument offers the portability and size of a single-gas instrument while delivering multi-gas protection. Use the incredibly configurable Ventis MX4 with a DSXi Docking Station to unlock the management tools found only in Industrial Scientific's iNet® Control software.

Ventis MX4 adapts to meet your needs. Start by selecting from a long list of configuration options:

- Choose from one to four gases with a wide range of sensor options, including combustible gases, methane, oxygen, carbon monoxide, hydrogen sulfide, nitrogen dioxide, and sulfur dioxide.
- Whether you're performing daily confined space entries, wearing the instrument for personal protection, or anywhere in between, there is a Ventis MX4 that's right for you. Select from a pumped instrument, a non-pumped instrument, or use the Ventis Slide-on Pump to quickly convert back and forth.
- Select your run time thanks to your choice of three batteries. With 12-hour, 18-hour, or 20-hour batteries available for non-pumped instruments, Ventis MX4 fits your working conditions.
- Better manage your fleet by choosing a safety orange overmold or black overmold.
- Powerful settings options allow the Ventis MX4 to fit with your safety processes. Select your alarm set points, latch alarms, disable the ability to power off while the instrument it is in alarm, and more.

Once you've selected your Ventis MX4 options, use a DSXi Docking Station to simplify maintenance and better manage your fleet of instruments. With iNet Control, track alarm history, know if your instruments are properly maintained, and use data to prevent incidents while maximizing efficiencies. Let the gas detection professionals at Industrial Scientific show you a better way to manage gas detection.

www.indsci.com/ventis

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

SUPPLIED WITH MONITOR

Calibration Cup (without Pump), Sample Tubing (with Pump)

*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® Pro Series

- 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
- Custom start-up messages, alarm action messages, and acknowledgeable gas alerts
- 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**
- Compatible with most Ventis® MX4 accessories
- Dock overdue and maintenance reminders

What Gases Will You Need to Monitor?

DETECTION CAPABILITIES	VENTIS® PRO4	VENTIS® PRO5
Simultaneous Gases	Four	Five
O ₂	✓	✓
LEL/CH ₄	✓	✓
CO	✓	✓
H ₂ S	✓	✓
SO ₂	✓	✓
NO ₂	✓	✓
CO/H ₂ Low	✓	✓
HCN	✓	✓
PH ₃		✓
NH ₃		✓
CO/H ₂ S		✓
CH ₄ IR		✓
CO ₂ /LEL IR		✓
CO ₂ /CH ₄ IR		✓

SPECIFICATIONS*

WARRANTY

Guaranteed for Life™. Warranted for as long as the instrument is supported by Industrial Scientific Corporation (excludes sensors, batteries, and filters). O₂, LEL, CO, and H₂S sensors warranted for three years. All other sensors warranted for two years. Pumps and batteries 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

WEIGHT

200 g (7.05 oz) typical without Pump
390 g (13.76 oz) typical with Pump

POWER SOURCE/RUN TIME

Rechargeable Slim Extended Lithium-Ion Battery (18 hours typical @ 20 °C) without Pump
Rechargeable Lithium-ion Battery with LEL (12 hours typical @ 20 °C) without pump
Rechargeable Extended-Range Lithium-ion Battery with LEL (23 hours typical @ 20 °C) without pump (18 hours typical @ 20 °C) with pump
Rechargeable Lithium-ion Battery with IR (36 hours typical @ 20 °C) without pump
Rechargeable Extended-Range Lithium-ion Battery with IR (72 hours typical @ 20 °C) without Pump (32 hours typical @ 20 °C) with Pump

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 (CH₄): 0-5% of vol in 0.01% increments

ELECTROCHEMICAL

Ammonia (NH₃): 0-500 ppm in 1 ppm increments
Carbon Monoxide (CO): 0-2,000 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
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) (Standard/Long-Life): 0-30% of vol in 0.1% increments
Phosphine (PH₃): 0-10 ppm in 0.01 ppm increments
Sulfur Dioxide (SO₂): 0-150 ppm in 0.1 ppm increments

INFRARED

Methane (CH₄): 0-5% vol in 0.01% increments
5-100% vol in 0.1% increments
Carbon Dioxide/Combustible: CO₂: 0-5% vol in 0.01% increments
LEL: 0-100% LEL in 1% increments
Carbon Dioxide/Methane: CO₂: 0-5% vol in 0.01% increments
CH₄: 0-5% vol in 0.01% increments
CH₄: 5-100% vol in 0.1% increments

WIRELESS

Optional LENS™ Wireless, proprietary 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†

LANGUAGE

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

*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.

AREA MONITORS

Radius® BZ1 Area Monitor



- Detect up to seven gases using 15 sensor options including PID
- Longest running area monitor with a typical run time of 7 days (168 hours)
- Extended Run Time Power Supply can extend battery to over 1 month
- Intrinsically Safe Extended Run Time Power Supply can provide indefinite run time in hazardous locations
- Ultra-bright blue and red lights and attention-grabbing alarms with distinctive tones
- Audible alarms sound at 108 dB at 1 m to cut through high-noise environments
- Largest display of any area monitor on the market
- Customizable alarm action messages such as "EVACUATE" or "VENTILATE"
- LENS™ Wireless enables communication between area monitors and Ventis® Pro Series personal monitors
- DualSense® Technology increases worker safety by using two sensors to detect the same gas



With the Radius® BZ1, all critical technology pieces such as sensors, software, pumps, and wireless, live inside the patented SafeCore® Module. Smart sensors are positioned face down to prevent the elements from interfering with gas readings, resulting in fewer false alarms.

The module slides out from the Radius Base for easy docking and automated maintenance, ensuring that your sensors are always ready to provide accurate gas detection.



The Radius Base is made of a durable, weather-resistant plastic. The base has built-in audio and visual alarms that grab workers attention, even in high-noise environments. A large battery keeps the unit working as long as you do, and side-grip handles help make the base easy to move from location to location.

It has never been easier to keep your area monitors up and running in the field. The SafeCore® Module and Radius Base work together to provide maximum gas detection ability, while simplifying the job of maintaining your area monitors.

www.indsci.com/radius

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
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

ALARMS

108 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 (NH ₃):	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/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):	0-50 ppm in 0.1 ppm increments
Hydrogen (H ₂):	0-2,000 ppm in 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):	0-30% vol in 0.1% increments
Sulfur Dioxide (SO ₂):	0-150 ppm in 0.1 ppm increments
PHOTOIONIZATION	
Volatiles Organic Compounds (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, 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 **

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.



SINGLE GAS MONITORS



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 extend the life of the instrument
- Optional AlarmAmp™ increases audible alarms to 110dB
- Acknowledgeable gas alerts

By wearing the Tango® TX1, workers will be the safest single gas monitor users in the world. A patented DualSense Technology increases worker safety, regardless of bump test frequency, while reducing overall costs. Let the Tango TX1 show you why two is better than one.

DualSense Technology

The Tango® TX1 and Ventis® Pro Series incorporate revolutionary patented DualSense® Technology, which includes two of the same type of sensor to detect a single gas. The two sensor readings are processed through a proprietary algorithm and displayed as a single reading to the user. DualSense Technology was developed to address the major challenge of making sure workers are always using fully functioning, reliable instruments in the field. DualSense Technology ensures that regardless of your current bump test policy, you will be significantly safer than you would be using an instrument without redundant sensors*.

*Based on iNet data

AlarmAmp

For higher-noise environments, the Tango TX1 alarm volume, typically 100 dB at 10 cm, can be increased nearly 10 dB with the addition of the optional patented AlarmAmp™. The Tango TX1 alarm is louder than that of any other single gas instrument on the market. The AlarmAmp is available in black and safety orange.



www.indsci.com/TangoTX1

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.

CASE MATERIALS

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

DIMENSIONS

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

WEIGHT

126.0 g (4.4 oz)

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

DISPLAY

Segment Liquid Crystal Display (LCD)

INGRESS PROTECTION

IP66; IP67

TEMPERATURE RANGE

-40 °C to 50 °C (-40 °F to 122 °F) ** ATEX, IECEx, CSA, INMETRO and UL (C-US)

HUMIDITY RANGE

15% to 95% non-condensing (continuous)

EVENT LOGGING

60 alarm events

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

DATA LOGGING

Three months at 10-second intervals

BATTERY

3.6 V Primary Lithium-Thionyl Chloride (Li-SOCl₂); 1.5AH, 2/3AA; replaceable; nonrechargeable; always on; two-year run time depending on operating conditions

* 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.





GasBadge® Pro Single Gas Monitor

- Interchangeable “smart” sensors monitor oxygen or any one of many toxic gases
- One year data logging capacity (minimum)
- Standard STEL and TWA

Built to Industrial Scientific's highest quality and reliability standards, GasBadge® Pro provides a lifetime of gas hazard protection for more applications than any other single gas monitor available. With communication directly through an infrared interface, optional accessories like the DSX™ Docking Station and Datalink, automated calibrations, bump tests, and data log download could not be easier.

Interchangeable “smart” sensors enable the GasBadge Pro to be quickly adapted to monitor unsafe levels of oxygen or any one of the following toxic gases: carbon monoxide, hydrogen sulfide, nitrogen dioxide, sulfur dioxide, chlorine, chlorine dioxide, phosphine, ammonia, hydrogen cyanide, and hydrogen.

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 volume 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



TECHNOLOGIES



Experience the Power of the Connected Worker

LENS™ Wireless is the first gas detection solution that allows personal monitors and area monitors to 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. When seconds matter, you can rely on help from workers nearby, rather than a control room or call center hundreds of miles away.

The LENS Wireless Difference

- Share gas readings and alarms between Ventis Pro Series personal monitors and Radius BZ1 Area Monitors
- Enjoy out-of-the-box operation with no site surveys, IT setup, licenses, or additional infrastructure needed
- Identify peer alarm types in real time, enabling a faster, more appropriate response
- View gas readings from other peers in your group on any monitor without needing a central controller to relay the information
- Receive readings from up to 1.5 km (~1 mi) away with wireless hopping between instruments
- Activate the panic alarm on your personal monitor to notify all peers in your group of an emergency
- Depend on self-healing mesh networks to always stay connected, even if a single unit drops off



Safety Made Simple

Many wireless gas detection products on the market require site surveys, IT setup, extra equipment and license purchases, and extensive training. It's no wonder why many organizations have not even considered wireless as an option.

With LENS Wireless, forming a connected group of monitors is as simple as tapping two Ventis Pro instruments together, or a Ventis Pro to a Radius BZ1 Area Monitor. Connect up to 25 devices to create a dynamic safety web across your worksite. LENS Wireless adapts for organizations large and small within minutes. No IT setup. No infrastructure. No configuration.



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

VENTIS PRO WIRELESS UPGRADE CARD

PART NO.	DESCRIPTION
18109494	Twenty-Instrument Upgrade Card
18109493	Five-Instrument Upgrade Card
18109492	One-Instrument Upgrade Card

SPECIFICATIONS*

Optional LENS™ Wireless, proprietary mesh network
Frequency: ISM license-free band (2.405 - 2.480 GHz)
Max Peers: 25 devices per network group
Range: Ventis Pro: 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.



iAssign® Technology

Gas detectors record basic information about gas hazards, but they don't help you understand who was exposed and where. iAssign® Beacons continuously broadcast a programmable site identifier and permission level, which enables Ventis Pro Series Multi-Gas Monitors to automatically record locations in real time.

iAssign Beacons allow you to send out real-time, site-specific reminders to your team, set access permission reminders, and automatically track data logged events, making it easier to analyze your data and prevent hazards in the future.

Spend less time investigating problems by knowing who & where

- Locate problem sites across your facility
- Add worker and location names to your data logs
- Stay compliant with clear and accurate record keeping
- Collect consistent site recordings when technology like GPS is not available

Keep workers out of restricted areas

- Alert workers when entering restricted areas with simple-to-program proximity alarms
- Reduce the need for separate devices, extra signage, or physical barriers to manage worker clearances

Install & maintain iAssign Beacons with ease

- Configure the coverage areas of your beacons from 1 to 30 m
- Install intrinsically safe beacons in indoor or outdoor locations

iAssign Tags

Allow workers to assign their names to their gas monitors with a simple tap.

iAssign Beacons

Automatically assign location names to Ventis® Pro Series Multi-Gas Monitors based on proximity, helping safety managers see where hazards occurred and who was involved.

Using tags and beacons, anyone reviewing the data can easily see who had the instrument and where the measurements were taken, making the information more actionable.

www.indsci.com/iassign

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 3 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: Pending
 CSA:** Class I, Div 1, Groups A-D, T4; Class I, Zone 0, Ex d ia IIC T4
 IECEx: Pending
 UL: Class I, Div 1, Groups A-D, T4; Class II, Groups E-G
 Class I, Zone 0, AEx ia IIC T4
 Wireless: FCC Part 15, IC

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

** Certified by UL to CSA standards.

iAssign Tag Specifications

Tag Type	Standard Tag	Waterproof Tag	All Weather Tag	Keychain Tag
Part Number	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



Training Services

How does an electrochemical sensor work? What do I need to know if I work with toxic gases? How will new regulations impact my daily activities? How can proper maintenance make it easier to use my instruments and save money? Industrial Scientific's training department can answer all of these questions, and more.

Industrial Scientific holds training workshops designed specifically to make gas detection easier for its users. The courses are led by a team of Industrial Scientific trainers who are experts in instrument use, regulations, fire prevention, hazardous materials, and confined spaces.

These workshops provide participants the skills needed to identify potential gas hazards that may exist in their workplaces. Gas characteristics, and the calibration and maintenance of gas detection equipment, will also be covered.

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



Participants in our Gas Detection Made Easy courses have the opportunity to receive a certificate of competency. More than just a certificate of your attendance, you must pass a test to earn this "Certificate of Competency" required by certain regulatory standards.

End User Training Classes

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

Online Video Training

Industrial Scientific's Free Online Video Training allows end users to learn at their own pace. Videos are chaptered so that end users can hone in on the elements that are important to them. To learn more, visit www.indsci.com/training-videos.

Products Covered by Our Online Video Training

- | | |
|--------------|---------------------|
| GasBadge Pro | Tango TX1 |
| Ventis MX4 | Ventis Pro Series |
| 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.

To learn more, visit: www.indsci.com/training

Sensor Cross Interference Table

	SENSOR												
	Carbon Monoxide	Hydrogen Sulfide	Sulfur Dioxide	Nitrogen Dioxide	Chlorine	Chlorine Dioxide	Hydrogen Cyanide	Hydrogen Chloride	Phosphine	Nitric Oxide	Hydrogen	Ammonia	
GAS	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%	1%	100%	0%	0%	0%	—	40%	-1	0%	0%	-40%	
Nitrogen Dioxide	-5%	-24%	-165%	100%	45%	—	-70%	—	-11	30%	0%	-10%	
Chlorine	-10%	-17%	-25%	10%	100%	60%	-20%	6%	-20%	0%	0%	-50%	
Chlorine Dioxide	—	—	—	—	20%	100%	—	—	—	—	—	—	
Hydrogen Cyanide	15%	10%	50%	1%	0%	0%	100%	35%	4%	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%	-0.2%	1%	5%	—	—	-5%	—	—	100%	30%	0%	
Hydrogen	22%	0.1%	0.5%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
Ammonia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
Acetylene	202%	0%	138%	0%	—	—	—	—	—	0%	—	—	

1. 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. “—” means no data available.
2. The specified cross interference numbers apply to new sensors only and may vary from sensor to sensor.
3. The numbers are measured under environment of 20 °C, 50% RH and 1 atm.
4. This table is given as a reference only and is subject to change.

LEL Correlation Factors

	CALIBRATION GAS							
	LEL (% vol)	Butane	Hexane	Hydrogen *	Methane *	Pentane *	Propane *	
GAS BEING SAMPLED	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 | <input type="checkbox"/> Intrinsically Safe External 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 Pro Series	Ventis MX4	Radius BZ1	Tango TX1	GasBadge Pro	T40 Rattler
ANZEx	•	•	•			•	•
ATEX	•	•	•	•	•	•	•
China CMC			•				•
China CPC	•	•	•				
China Ex	•	•	•	•	•	•	•
China KA			•				
China MA	•		•		•	•	•
CSA	•	•	•	•	•	•	•
EAC/GOST	•		•		•		
IECEX	•	•	•	•	•	•	•
INMETRO	•	•	•	•	•	•	
KC	•		•		•	•	
KIMM	•		•				
MED			•				
MDR	•						
MSHA	•	•	•				
PA-DEP	•	•	•				
SANS 1515			•				
TIIS			•				
UL	•	•	•	•	•	•	•

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



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