# Pump up your gas detection program

## VENTIS™ MX4

*Configured for your safety, the Ventis™ MX4 multi-gas detector takes your gas detection program to the next level.*

- Detect from one to four gases with a wide range of sensor options

- Draw samples from up to 100 feet with an optional, integrated sampling pump

- Gain increased instrument visibility with a safety orange overmold

- Realize true portability with multi-gas protection in single-gas size

- Use the extended range battery for up to 20 hours (without pump)

- Discover a better way to do gas detection with the Ventis on iNet®

**Build your Ventis today at**
**www.indsci.com/ventisbuilder**

## INDUSTRIAL SCIENTIFIC

**www.indsci.com**

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

No matter the industry, workplaces are becoming more complex. Demands for increased productivity and efficiency persist to become the focal point of operations. In order to meet such high demands, employees working in potentially hazardous environments require a high-quality, reliable gas detector that above all else, keeps them safe.

The highly configurable Ventis is specifically designed to meet unique gas detection needs while maintaining worker safety. Available with or without an optional, integral pump, the Ventis is ideal for confined space or personal monitoring. In addition to multiple sensor and battery configurations, you can choose from a robust suite of accessories. Each of these options for configuration ensures that when you receive your monitor, you receive only what you need. Best of all, the Ventis is compatible with iNet, enabling increased efficiency, safety and reduced costs.

### Increased efficiency
Focus on what is core to your business while we handle your gas detection program. As the Gas Detection People, gas detection is not only what we do - it's what we love to do.

### Increased safety
On average, gas detectors go into high alarm once every ten days. Do you know how many high alarms your facility had? iNet gives you information and tools to fix problems before they happen.

### Reduced costs
A gas detector's purchase price does not include continuous maintenance and servicing expenses. Eliminate unnecessary ownership and maintenance costs by subscribing to Gas Detection as a Service.

## How Gas Detection as a Service Works

1. Operators dock gas detectors owned by Industrial Scientific.

2. Docking stations perform bump tests, calibrations and record keeping.

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

4. iNet emails real-time alerts and status reports.

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

iNet®

| BASE INSTRUMENT | SENSOR OPTIONS | BATTERY OPTIONS | VERSION OPTIONS | COLOR OPTIONS | AGENCY CERTIFICATIONS | REFERENCE GUIDE LANGUAGE | |
|---|---|---|---|---|---|---|---|
| **VENTIS™ MX4**<br><br>**Supplied with Monitor:**<br>Calibration Cup (Ventis), Sample Tubing (Ventis with Pump), Ventis MX4 Reference Guide | **Combustible Gases (sensor position 1):**<br>LEL (Pentane)<br>LEL (Methane)<br>$CH_4$ (0-5%) | Lithium-ion Battery Pack | Ventis | Black | UL/CSA | English + (1) | Russian (9) |
| | | Lithium-ion Extended Range Battery Pack* | Ventis with Pump** | Safety Orange | ATEX/IECEx/INMETRO | French + (2) | Polish (A) |
| | **Toxic Gases (sensor position 2 & 3):**<br>CO    $H_2S$<br>$SO_2$    $NO_2$ | Alkaline Battery Pack | Ventis with Pump and Conversion Kit** | | MSHA† | Spanish (3) | Czech (B) |
| | | | | | CHINA EX | German + (4) | Chinese (C) |
| | | | | | CHINA MA‡ | Italian (5) | Danish (D) |
| | **Oxygen (sensor position 4):**<br>$O_2$ | | | | ANZEx | Dutch (6) | Norwegian (E) |
| | | | | | KOSHA | Portuguese (7) | Finnish (F) |
| | | | | | GOST-R/GOST-K | | Swedish (G) |

*Required for units with a pump
**Requires extended range battery pack
+ Instrument language can be configured to English, French or German. If one of these languages is selected, instrument will be configured to that language.
†MSHA approval applies to lithium-ion versions only.
‡CHINA MA approval applies to Ventis (no pump) with lithium-ion battery pack only.

**Build and price your Ventis online with the Ventis MX4 instrument builder.**
**www.indsci.com/ventisbuilder**

## The Ventis is particularly useful in the following industries:

- Chemical
- Construction
- Electrical / Gas Utilities
- Fire Service
- Oil and Gas
- Public Works
- Steel Production
- Water / Waste Water Treatment

**DS2 DOCKING STATION™**

- Stand-alone operation
- Link up to 100 IDS modules – dock thousands of instruments
- Automatic instrument calibration, record keeping, diagnostics and recharging
- Utilizes one central database
- Multilingual display
- iNet® compatible

### MOST COMMON INSTRUMENT CONFIGURATIONS

| PART NO. | DESCRIPTION |
|---|---|
| VTS-K1231100y0z | Ventis - LEL, CO, $H_2S$, $O_2$, Li-ion, desktop charger, Black |
| VTS-K1231201y0z | Ventis - LEL, CO, $H_2S$, $O_2$, Li-ion, desktop charger/datalink, Safety Orange |
| VTS-K5231300y1z | Ventis - LEL, $SO_2$, $H_2S$, $O_2$, Li-ion, auto charger, soft case, Black |
| VTS-K1031301y0z | Ventis - LEL, CO, $O_2$, Li-ion, auto charger, Safety Orange |
| VTS-K1431000y1z | Ventis - LEL, CO, $NO_2$, $O_2$, Li-ion, no charger, soft case, Black |
| VTS-K1232111y0z | Ventis with pump - LEL, CO, $H_2S$, $O_2$, Extended Li-ion, desktop charger, Safety Orange |
| VTS-K1232110y1z | Ventis with pump - LEL, CO, $H_2S$, $O_2$, Extended Li-ion, desktop charger, soft case, Black |
| VTS-L1232110y2z | Ventis with pump - LEL (methane), CO, $H_2S$, $O_2$, Extended Li-ion, desktop charger, hard case with display window, Black |
| VTS-K5232111y0z | Ventis with Pump - LEL, $SO_2$, $H_2S$, $O_2$, Extended Li-ion, desktop charger, Safety Orange |

y = Agency Certification: 1 = UL/CSA, 2 = ATEX/IECEx/INMETRO, 3 = MSHA, 4 = ANZEx, 5 = CHINA EX, 7 = GOST-R/GOST-K, 8 = KOSHA
z = Language for included Reference Guide: 1 = EN, 2 = FR, 3 = ES, 4 = DE, 5 = ITA, 6 = DUT, 7 = PT, 9 = RUS, A = POL, B = CZE, C = CN, D = DAN, E = NOR, F = FIN, G = SWE

VTSP-2011 PUMP


VTSP-0011 PUMP


VTSB-201 EXTENDED RANGE LITHIUM-ION BATTERY KIT


VTSB-301 ALKALINE BATTERY KIT


VTSB-101 LITHIUM-ION BATTERY KIT

## VENTIS MX4 PUMP MATRIX

| EXAMPLE: VTSP-0011 - Ventis MX4 Pump, No Battery, Black, UL/CSA, English | VTSP- | 0 | 0 | 1 | 1 |
|---|---|---|---|---|---|
| DESCRIPTION | Base | Battery | Color | Approvals | Language |
| Ventis MX4 Pump | VTSP- | | | | |
| **Select options below in addition to base price** | | | | | |
| **BATTERY** | | | | | |
| None | | 0 | | | |
| Lithium-ion extended range battery pack (required for units with a pump) | | 2 | | | |
| Alkaline battery pack | | 3 | | | |
| **COLOR** | | | | | |
| Black | | | 0 | | |
| Safety Orange | | | 1 | | |
| **CERTIFICATIONS** | | | | | |
| UL/CSA | | | | 1 | |
| ATEX/IECEx/INMETRO | | | | 2 | |
| MSHA | | | | 3 | |
| ANZEx | | | | 4 | |
| CHINA EX | | | | 5 | |
| GOST-R/GOST-K | | | | 7 | |
| KOSHA | | | | 8 | |
| **PUMP ASSEMBLY KIT GUIDE LANGUAGE** | | | | | |
| English | | | | | 1 |
| French | | | | | 2 |
| Spanish | | | | | 3 |
| German | | | | | 4 |
| Italian | | | | | 5 |
| Dutch | | | | | 6 |
| Portuguese | | | | | 7 |
| Russian | | | | | 9 |
| Polish | | | | | A |
| Czech | | | | | B |
| Chinese | | | | | C |
| Danish | | | | | D |
| Norwegian | | | | | E |
| Finnish | | | | | F |
| Swedish | | | | | G |

## VENTIS MX4 BATTERY KIT MATRIX

| EXAMPLE: VTSB-101 - Ventis MX4 Li-ion Battery Kit, Black, UL/CSA/ATEX/IECEx | VTSB- | 1 | 0 | 1 |
|---|---|---|---|---|
| DESCRIPTION | Base | Battery | Color | Approvals |
| Ventis MX4 Battery Kit | VTSB- | | | |
| **Select options below in addition to base price** | | | | |
| Lithium-ion battery | | 1 | | |
| Lithium-ion extended range battery (required for units with a pump) | | 2 | | |
| Alkaline battery | | 3 | | |
| **COLOR** | | | | |
| Black | | | 0 | |
| Safety Orange | | | 1 | |
| **CERTIFICATIONS** | | | | |
| UL/CSA/ATEX/IECEx/INMETRO/GOST-R/GOST-K/ KOSHA | | | | 1 |
| MSHA* | | | | 2 |
| CHINA EX / CHINA MA** | | | | 3 |
| ANZEx | | | | 4 |

Battery kits include: Battery pack, battery cover with appropriate label and screws.
*Alkaline Battery Kit is not MSHA approved
** Alkaline and Lithium-ion Extended Range Battery Kits are not CHINA MA approved

## CONFINED SPACE KITS

| PART NO. | DESCRIPTION |
|---|---|
| VK-K123211xy1z | Ventis Confined Space Kit - LEL, CO, $H_2S$, $O_2$ |
| VK-K103211xy1z | Ventis Confined Space Kit - LEL, CO, $O_2$ |
| VK-K023211xy1z | Ventis Confined Space Kit - LEL, $H2S$, $O_2$ |
| VK-K003211xy1z | Ventis Confined Space Kit - LEL, $O_2$ |

x = Instrument Color: 0 = Black, 1 = Safety Orange
y = Agency Certification: 1 = UL/CSA, 2 = ATEX/IECEx/INMETRO, 3 = MSHA, 4 = ANZEx, 5 = CHINA EX, 8 = KOSHA
z = Language for included Reference Guide: 1 = EN, 2 = FR, 3 = ES, 4 = DE, 5 = ITA, 6 = DUT, 7 = PT, 9 = RUS, A = POL, B = CZE, C = CN, D = DAN, E = NOR, F = FIN, G = SWE

**Ventis Confined Space Kits Include:** Ventis with pump, universal charger, soft carrying case, reference guide, calibration tubing, dust filter/water stop, calibration fitting, sample tubing, calibration gas (appropriate mix) with regulator, rugged hard plastic case.



## INDUSTRIAL SCIENTIFIC

**www.indsci.com**

**18108631-00 V·CAL WITH VENTIS INSTRUMENT*** (*monitor not included)

**18108631-10 V·CAL WITH VENTIS WITH PUMP INSTRUMENT*** (*monitor not included)

**18108191 VENTIS CHARGER**



**18108650-0 6-UNIT CHARGER**

**18108209 CHARGER/ DATALINK**



**18107763 PRINTER**

**18108653 TRUCK-MOUNT CHARGER, HARD WIRED**

**18108652 TRUCK-MOUNT CHARGER, WITH PLUG**

**18108651 AUTOMOTIVE CHARGER**

**18108811 VENTIS WITH PUMP HARD CARRYING CASE WITH DISPLAY**

**18108175 VENTIS WITHOUT PUMP SOFT CARRYING CASE, LI-ION BATTERY**

| PART NO. | DESCRIPTION |
|---|---|
| 18108630-0BC | DS2 Docking Station™ for Ventis MX4<br>B = Quantity of iGas® Reader:<br>    0 = None<br>    1 = 1 iGas® Reader<br>    2 = 2 iGas Readers<br>    3 = 3 iGas Readers<br>C = Power cord: 0 = US, 1 = UK, 2 = EU, 3 = AUS,<br>    4 = ITA, 5 = DEN, 6 = SWZ |
| 18108631-AB | V·Cal™ Calibration Station<br>A = Instrument type: 0 = Ventis, 1 = Ventis with pump<br>B = Power cord: 0 = US, 1 = UK, 2 = EU, 3 = AUS,<br>    4 = ITA, 5 = DEN, 6 = SWZ |
| 18107664-ABC | V·Cal™ 6-Unit Calibration Station<br>AB = Number of Ventis (A) and Ventis with pump<br>        (B) Instruments<br>    06 = 0 Ventis and 6 Ventis with pump<br>    33 = 3 Ventis and 3 Ventis with pump<br>    60 = 6 Ventis and 0 Ventis with pump<br>C = Power cord: 0 = Universal with US, UK, EU, AUS Plug adapters |
| 18107763 | Serial data dot matrix printer for V·Cal™ – 5 volts powered by the Cal Station |
| 18108191 | Single-unit charger |
| 18108209 | Single-unit charger/Datalink |
| 18108651 | Single-unit automotive charger, 12VDVC, with plug |
| 18108652 | Single-unit truck-mount charger, 12VDC, with plug |
| 18108653 | Single-unit truck-mount charger, 12VDC, hard wired |
| 18108650-A | 6-Unit charger – A = Power cord: 0 = US, 1 = UK, 2 = EU, 3 = AUS, 4 = ITA, 5 = DEN, 6 = SWZ |
| 18108950 | MX4 External battery charge adaptor |
| 18108175 | Ventis without pump, soft carrying case, Li-ion battery |
| 18108183 | Ventis without pump, soft carrying case, extended range Li-ion battery or alkaline |
| 18108813 | Ventis without pump, hard carrying case with display, Li-ion battery |
| 18108814 | Ventis without pump, hard carrying case with display, extended range Li-ion battery or alkaline |
| 18108815 | Ventis without pump, hard carrying case without display, Li-ion battery |
| 18108816 | Ventis without pump, hard carrying case without display, extended range Li-ion battery or alkaline |
| 18108810 | Ventis with pump, soft carrying case |
| 18108811 | Ventis with pump, hard carrying case with display |
| 18108812 | Ventis with pump, hard carrying case without display |
| 17134461 | Replacement sensor, oxygen ($O_2$) |
| 17134479 | Replacement sensor, hydrogen sulfide ($H_2S$) |
| 17134487 | Replacement sensor, carbon monoxide (CO) |
| 17134495 | Replacement sensor, combustible gas ($LEL/CH_4$) |
| 17134503 | Replacement sensor, nitrogen dioxide ($NO_2$) |
| 17143595 | Replacement sensor, sulfur dioxide ($SO_2$) |
| 17148313-1 | Replacement extended range Li-ion battery pack, UL/CSA/ATEX/IECEx/INMETRO/GOST-R/GOST-K/KOSHA |
| 17148313-2 | Replacement extended range Li-ion battery pack, MSHA |
| 17148313-3 | Replacement extended range Li-ion battery pack, CHINA EX |
| 17148313-4 | Replacement extended range Li-ion battery pack, ANZEx |
| 17150608 | Replacement alkaline battery pack |
| 17152828-01 | Ventis conversion kit, Ventis with pump to Ventis without pump, Black, UL/CSA/ATEX/IECEx/INMETRO/GOST-R/GOST-K/KOSHA |
| 17152828-04 | Ventis conversion kit, Ventis with pump to Ventis without pump, Black, ANZEx |
| 17152828-11 | Ventis conversion kit, Ventis with pump to Ventis without pump, Safety Orange, UL/CSA/ATEX/IECEx/INMETRO/GOST-R/GOST-K/KOSHA |
| 17152828-14 | Ventis conversion kit, Ventis with pump to Ventis without pump, Safety Orange, ANZEx |

# VENTIS™ MX4

**INSTRUMENT WARRANTY:**
Two-year warranty, including sensors and battery

**CASE MATERIAL:**
Polycarbonate with protective rubber overmold

**DIMENSIONS:**
103 mm x 58 mm x 30 mm (4.1" X 2.3" X 1.2") - Ventis, lithium-ion battery version
172 mm x 67 mm x 66 mm (6.8" X 2.6" X 2.6") - Ventis with pump, lithium-ion battery version

**WEIGHT:**
182 g (6.4 oz) - Ventis, lithium-ion battery version
380 g (13.4 oz) - Ventis with Pump, lithium-ion battery version

**OPERATING TEMPERATURE RANGE:**
-20°C- 50°C (-4°F-122°F)

**OPERATING HUMIDITY RANGE:**
15%-95% Non-condensing (continuous)

**DISPLAY/READOUT:**
Backlit liquid crystal display (LCD)

**POWER SOURCE/RUN TIME:**
Rechargeable lithium-ion battery pack
    (12 hours typical @ 20ºC) - Ventis
Rechargeable extended-range lithium-ion battery pack
    (20 hours typical @ 20ºC) - Ventis
    (12 hours typical @ 20ºC) - Ventis with pump
Replaceable AAA alkaline battery pack
    (8 hours typical @ 20ºC) - Ventis
    (4 hours typical @ 20ºC) - Ventis with pump

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

**SENSORS:**
Combustible gases/methane - Catalytic diffusion
$O_2$, CO, $H_2S$, $NO_2$, $SO_2$ - Electrochemical

**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 ($H_2S$): | 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 |

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

**CERTIFICATIONS:**

| | |
|---|---|
| UL: | Class I, Division 1, Groups A B C D, T4; Zone 0, AEx ia IIC T4 Class II, Groups F G (Carbonaceous & Grain dust); IP66; IP67 |
| ATEX: | Ex ia IIC T4 Ga and Ex ia I Ma; Equipment Group and Category II 1G and I M1; IP66; IP67 |
| IECEx: | Ex ia IIC T4 Ga; IP66; IP67 |
| CSA: | Class I, Division 1, Groups A B C D, T4; Ex d ia IIC T4 C22.2 No. 152 for %LEL reading only |
| ANZEx: | Ex ia s Zone 0 I/IIC T4; IP66; IP67 |
| INMETRO: | Ex d ia IIC T4 Gb; IP66; IP67 |
| KOSHA: | Ex d ia IIC T4 |
| MSHA: | 30 CFR Part 22; Permissible for underground mines; Li-ion versions only |
| PA-DEP: | Permissible for PA Bituminous Underground Mines |
| CHINA EX: | Ex ia d IIC T4 Gb |
| CHINA CMC: | Metrology approval |
| CHINA MA: | Approved for underground mines; diffusion (without pump) standard Li-ion version only |
| GOST- K: | PBExdiaI X / 1ExdiaIICT4 X |
| GOST-R: | PBExdiaI X / 1ExdiaIICT4 X |

ISO 9001:2008 CERTIFIED ✔

ISO 14001:2004 CERTIFIED ✔

# INDUSTRIAL SCIENTIFIC

www.indsci.com