



Personal & Portable Gas Monitors

Eikon

Eikon is a life personal alarm providing two years of maintenance free continuous monitoring. Tough and rugged, Eikon™ is dust and water tight to IP65. Intrinsically safe and available in versions for hydrogen sulphide, carbon monoxide, chlorine, ammonia or for oxygen deficiency monitoring, Eikon™ has outstanding audible and visual alarms providing a truly effective warning of hazardous gas conditions.



Gasman

Intrinsically Safe Personal Gas Monitor

The Gasman full function personal single gas monitor is compact and lightweight yet is fully ruggedised for the toughest of industrial environments. Featuring simple one button operation, it has a large easy to read display of gas concentration, and audible, visual and vibrating alarms.



- Versions available for flammable gas, oxygen and toxic gases
- Rechargeable versions for all gas types
- Non rechargeable versions for oxygen and toxic gases
- Ultra lightweight – just 85g for toxic versions
- Loud 95dBA audible alarm
- Dual color visual alarm, red blue twin flashing LEDs
- Vibrating alarm
- IP65 and IP67 ingress protection
- Real time TWA and Peak display options
- Data and event logging as standard
- Rechargeable battery with a 3000 Alarm Minute capacity

Tetra Automatic Pumped

Intrinsically Safe Personal Multigas Monitor

Tetra, is a unique multigas monitor for the detection of flammable gases, oxygen and toxic gases; Tetra offers flexibility, assurance, robustness and real value for money. Intrinsically safe, Tetra is the only portable gas detector with embedded software designed to the exacting requirements of IEC 61508-3 guaranteeing reliable and dependable operation.



- Up to four gases measured
- Digital interchangeable i-module sensors for full flexibility
- Loud 94dBA audible alarm with selectable tones
- Unique dual colour red/blue visual alarm
- Built in vibrating alarm as standard
- Rugged and robust, IP65 ingress protection
- Simultaneous 4 gas display with automatic backlight
- Peak mode operation
- TWA reading recall
- Data & Event logging
- Simple IR interface to PC

Tetra:3

Intrinsically Safe Personal Multigas Monitor

The Tetra:3 multi-gas monitor is the newest addition to the Tetra family. Tetra:3's single button operation, small size and weight make it the easiest to use gas detector on the market. Based on the proven and highly successful Tetra product, Tetra:3 is designed for use in demanding industrial environments. Despite its compact size the Tetra:3 is ultra-rugged and water proof.



Up to 4 gases in a small and lightweight design

- Single button operation for all functions, can be operated with gloved hands
- Rugged impact resistant design provides extra shock and vibration protection
- Reliable Lithium-ion battery provides over 16 hours continuous operation from a single charge with no memory effects.
- Water and Dust resistant to IP67, can be submerged in water
- Rapid and effective warning with a 95 dBa audible alarm, an extremely bright red/blue visual alarm and vibrating alarm as standard.
- Top mounted, backlit display of all gas readings, diagnostics and battery life.

Triple Plus + IR

Intrinsically Safe Portable Monitors

Triple Plus + IR is the latest version of the Triple Plus + utilising infrared sensing technology for detection and measurement of flammable hydrocarbons. IR sensors are suitable for both high gas concentrations and for use in inert (oxygen free) backgrounds. The unique design of the Crowcon IR sensor module used in Triple Plus + IR allows measurement of hydrocarbons at both %LEL and % volume ranges making this instrument ideal for tank and line purging applications.

A version of Triple Plus Plus IR is also available for carbon dioxide detection in the range of 0-5%.



- Single range IR sensor 0-100%LEL with up to three other gas sensors
- Dual range IR sensor 0-100%LEL/0-100% volume with up to two other gas sensors
- Ideal for purging applications
- Large simultaneous four gas display with backlight
- Loud audible alarm
- Bright visual alarm
- Full timed data-logging file with 100 hour capacity
- User and site names logging
- User menu allows calibration without PC connection

Detective +

Intrinsically Safe Transportable Gas Monitor

The Detective+ transportable area monitor is based on the highly successful Triple Plus+ and Detective models, building on the reputation, reliability and versatility of its forebears. Detective+ is inherently rugged and robust, with a sturdy fixed or folding leg protective frame options. Loud and clear alarms can be transmitted between Detective+ units while an optional built in pump allows faster gas response and better sensor protection. Detective+ may now be equipped with infra-red sensor technology, which provides either CO2 detection, or allows higher flammable gas level monitoring and immunity to the poisoning effects which standard flammable gas sensors can suffer from. There are now two options for battery capacity, either 36 hours or 60 hours with standard configuration, providing remote sites with extended usage in-between charges. Couple these features with the wide range of toxic gas sensors available and it makes Detective+ one of the most versatile area monitors available. 55,000 Detective and TriplePlus+ users can't be wrong.



- Up to 4 gases monitored in a rugged and sturdy protective frame
- Ultra-loud 104 dBA sounder and red LED cluster alarms
- Wide range of sensor options including infra-red
- Long 36 or 60 hour battery life
- Raised detectors, coupled with IP65 specification provides excellent sensor protection
- Built-in pump option to provide faster gas response
- 12 Detective+ units may be linked together, up to 100m from adjacent units

LaserMethane

Detect methane at distance

The LaserMethane® units allow methane detection at distance in a choice of two handheld packages. Utilizing Tunable Diode Laser Absorption Spectroscopy (TDLAS) methane column density is measured and displayed on backlit displays in both numerical and graphical formats.



LaserMethane® mini (LMm)



LaserMethane® Detector (LMD)

Gas-Tec

Portable hydrocarbon gas detector

Gas-Tec is a portable hydrocarbon detector for rapid survey and leak localization. This next generation unit includes full data, event and GPS logging allowing operators the ability to easily store and send survey reports and pinpoint areas of significant interest.



- <2 second detection speed
 - Based on the tried and tested Telegas Gas-Tec engine
 - Simple and intuitive functionality
 - Currently 7 language variants available
 - Enhanced electronic controls extending usage times
 - Lightweight, rugged and independently IP tested
 - Over 22 hrs usage following a 2.5 hour battery charge
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- Detection up to 150m in reflect mode
 - Internal data and Event logging with SD card and RS232 interface
 - Earphone socket for noisy environments
 - ATEX approval
 - Detection up to 100m
 - Lightweight at only 600g
 - 5 hour battery
 - Automatic ranging

Fixed Gas Detectors

Xgard and Xsafe

Detectors for flammable, toxic and oxygen gases

The **Xgard** range offers a comprehensive selection of fixed point gas detectors that meet the diverse requirements gas detection in industries throughout the world. Intrinsically Safe (I.S.) or Flameproof (Exd) versions are available for a wide range of applications.

Xsafe is a cost effective solution for flammable gas detection in safe areas such as boiler rooms, kitchens and commercial buildings.

Xgard offers a wide range of sensors:

- Poison resistant pellistors for flammable gas detection
- Electrochemical sensors are used to detect toxic gases and oxygen
- Thermal conductivity sensors to monitor volume concentrations of gases



Features:

Rugged and reliable

- Constructed using corrosion resistant aluminum, 316 stainless steel or glass-reinforced nylon (Type 1 only)
- Ingress protection to IP65 as standard, IP66 with accessory
- **IEC61508 SIL compliant**

Low cost of ownership

- Plug-in sensor modules for quick and simple replacement

- Long-life sensors

Wide range of approvals

- ATEX, UL, IECEx and MED certified

Flexible installation options

- Wall or ceiling mounting as standard
- Accessories are available for duct mounting and sampling applications
- High temperature models available

Xgard IR

Infrared gas detector for flammable gases and carbon dioxide.

Xgard IR is an explosion-proof gas detector which uses a dual-wavelength infrared sensor to provide highly dependable detection of hazardous gases and



vapors.

Xgard IR delivers the many advantages of IR technology in an affordable package:

- Fail safe sensor technology
- Immune to poisoning
- No damage by over-gassing
- Fast response
- Does not need oxygen to work

Xgard IR is also available for protecting personnel against toxic and asphyxiation hazards from carbon dioxide (CO₂). CO₂ presents a hazard in breweries, pubs and restaurants, laboratories, refrigeration plants, buildings on landfill sites, theatres, commercial kitchens and anywhere where it is used in a process or where personnel work in poorly ventilated environments.

TXgard-IS+

Toxic and oxygen gas detector with display

TXgard-IS+ is a Intrinsically Safe (I.S.) toxic and oxygen gas detector with local LCD display. Wide choices of sensors are available for use in a variety of applications.



Features:

Non-intrusive calibration

- Calibration can be performed locally without the need for hot work permits
- Local display and buttons enable calibration without opening the junction box

Flexible output options

- A two-wire 4-20mA signal is provided
- The output can be forced up without applying gas to enable simple checking of control systems and alarms.

Rugged and reliable

- Constructed using highly durable GRP to provide good impact resistance
- Ingress protection to IP65 as standard, IP66 with accessory
- Uses long-life electrochemical cells

IRMAX

State of the art IR Flammable Fixed Gas Detector



Flamgard Plus

Flammable gas detector with display

Flamgard Plus is a Flameproof (Exd) flammable gas detector, which uses poison-resistant pellistors to detect explosive levels of hydrocarbons, hydrogen and other flammable gases and vapours, including aviation fuel and leaded petrol vapours.



Features:

Non-intrusive calibration

- Calibration can be performed locally without the need for hot work permits
- Local display and magnetic key enable calibration without opening the junction box

Flexible output options

- A 4-20mA signal is provided
- Optional alarm and fault relays are available to drive local alarm devices.
- Sensor can be mounted remotely from the display/transmitter enclosure.

Rugged and reliable

- Constructed using highly durable marine-grade alloy with a tough polyester coating
- Ingress protection to IP65 as standard, IP66 with accessory
- Uses long-life poison resistant pellistors.

TXgard Plus

Toxic and oxygen gas detector with display

TXgard Plus is a Flameproof (Exd) toxic and oxygen gas detector with local LCD display. A choice of sensors are available for use in a wide range of applications.



Features:

Non-intrusive calibration

- Calibration can be performed locally without the need for hot work permits
- Local display and magnetic key enable calibration without opening the junction box

Flexible output options

- A 4-20mA signal is provided
- Optional alarm and fault relays are available to drive local alarm devices.

Rugged and reliable

- Constructed using highly durable marine-grade alloy with a tough polyester coating
- Ingress protection to IP65 as standard, IP66 with accessory
- Uses long-life electrochemical cells

Control Systems

Crowcon's 35+ years gas detection expertise has been instrumental in developing a range of control panels to suit all applications. All our fixed gas monitoring systems can be interfaced with any fire and gas detector and distributed control system (DCS). In addition each system can be engineered to drive remote enunciators and mimic panels.

Gasflag - Single Channel Control System

Gasflag is a control system for monitoring any 4-20mA flammable, toxic or oxygen gas detector. Gasflag is ideally suited to light industrial or commercial applications such as LPG monitoring on garage forecourts, chlorine detection in swimming pool dosing rooms, or methane detection in boiler rooms.

Gasflag features a loud sounder, bright LED indicators and relays for switching external devices such as audible visual alarms or valves.



Easy and safe to use - Bright alarm annunciator

- Loud internal audible alarm
- Clear system integrity indication

Fully Flexible

- Accepts industry standard 4-20mA inputs
- Multiple units can be daisy chained
- Variable alarm configurations

No hidden costs

- Integral alarm outputs
- Simple installation
- Minimum maintenance
- One button operation

Gasmaster - 1 to 4 Channel Control System

Gasmaster is the flexible and simple-to-use solution wherever you need a self-contained control panel to monitor gas or fire hazards. It combines extensive features and outstanding performance to suit all applications.

Gasmaster is available in three models:

- Gasmaster 1 for one gas detector or fire zone
- Gasmaster 4 for up to four gas detectors or fire zones
- Gasmaster FP certified Flameproof control system for up to four gas detectors or fire zones. For use in Zone 1 or Zone 2 hazardous areas.



Features and Benefits:

- Large LCD display: provides simultaneous display of all channels and multi-lingual alarm/fault messages.
- Modbus communications: enables fast transfer of all data to SCADA/DCS systems via a two-wire link.
- Event log function: allows previous alarms and faults to be checked.
- Monitored relay coils: enhance the integrity of the product.
- Configurable relays: relays can be set to suit any site operating requirements
- 'Calibration Due' warning: Gasmaster informs when a service is due.
- Full push-button operation: all operation, calibration and test functions are performed using the key pad; to save you time!

Vortex

Vortex now available with Profibus Communications, contact Crowcon for details.

Vortex is our most flexible control package that can be customised to meet your site requirements, however complex, without the need for extensive cabling.

Vortex is available in three formats: wall mounted, 19" rack mounted or panel mounted.

Vortex Panel, comprises just the essential input, output and controller modules mounted on a DIN rail. An optional display panel is available. This configuration is ideal for incorporation into a variety of specialist enclosures, such as flameproof housings or those with high ingress protection.



Features:

Simple to Use

- All the day to day operations can be completed via push buttons on the front panel
- Fault and alarm LEDs on the front panel provide instant indication of system status
- Alarm and channel settings can be adjusted at the panel

Ultimate Flexibility

- Each channel has one fault and three levels of alarm which can be combined in any pattern to operate up to 24 output relays.
- Customisation is easy with the VortexPC software, our user friendly Windows™ package
- Vortex uses industry standard Modbus RTU or Profibus communications links making it simple to integrate with PLC, DCS or SCADA control systems.

Robust and Reliable

- Tested to the highest standards, Vortex is water and dust resistant to IP65
- All the relays are monitored continuously ensuring full functionality, always
- The internal battery backup is monitored continuously for connection integrity and charge levels

Easy Maintenance

- The modular construction of Vortex means that system expansion is simplicity itself
- Termination to the panel is made easy due to the space available in the wall mounted panel
- Each zone can be inhibited separately, to allow work on a specific area without affecting the rest of the system

Cellarsafe Integrated Sensor/Control System

Cellarsafe - carbon dioxide and oxygen detection



From fermentation through to distribution, Carbon Dioxide is one of the most common hazards to health in wineries, breweries, cellars and drinks outlets.

Long term exposure to as little 0.5% volume CO₂ represents a toxic health hazard. Concentrations greater than 15% volume can lead to death.

CO₂ is also now recognized to potentially pose a health hazard to workers in commercial kitchens and educational facilities.

CellarSafe has been specifically designed to warn personnel of these hazards.

Features

- Simple installation and operation

- Long sensor life
- Optional oxygen sensor for protection against asphyxiation due to nitrogen leaks
- Minimal maintenance

ESU (Environmental Sampling Unit)



The Environmental Sampling Unit provides a cost-effective solution for monitoring high-density gases such as chlorine, sulphur dioxide and flammable vapours, in environments where the positioning of conventional sensors is not practical.

The sampling chamber is fitted with an electric fan, which draws an air sample via a pipe. Xgard gas detectors are fitted to the chamber to monitor for the presence of flammable or toxic gases.

Features:

- Can monitor up to 12 metres of perforated pipe using a fan-aspirated single sensor.
- Flameproof fan available for flammable gas applications.
- Fan-fail monitoring is available for up to four units using a Gasmaster control panel.
- Typical applications include gas detection in LPG and chlorine stores, flammable gas detection in wet wells.

ASU (Air Sampling Unit)



The Air Sampling Unit (ASU) is designed to be used with Crowcon's Xgard range of detectors for monitoring potentially hazardous gases within ventilation ducts.

Features:

- Enables air ducts to be monitored without requiring the detector to be mounted within the duct.
- Avoid sensor drift due to air-flow effects.
- Simple, easy to install design.
- Simple detector maintenance: there is no need to access the duct for calibration purposes.
- Extremely reliable; ASU has no moving parts.

Multi Point Sequential Sample System

The multi point sequential sample system can monitor up to 16 sample lines sequentially. Up to four gas sensors can be fitted to monitor flammable, toxic or oxygen gases. A Gasmaster control panel can be fitted as an option to display gas levels and provide relay outputs.



Features:

- Sequential monitoring of up to 16 sample points.
- Can monitor up to 4 gas sensors.
- Sample lines can be up to 1Km in length.
- Contains dust and moisture filters with self cleaning operation.
- Option for 'back-purge' facility to clear blockages from sample lines.
- Optional built-in Gasmaster unit to display gas levels and provide outputs via relay and RS-485 Modbus interfaces.