

# Fixed Range

## Fixed Gas Detection Equipment



Field mounted gas detection solutions for the protection of plant and personnel



# Fixed Range

## The Crowcon Fixed Gas Detector Range

When lives and property are at risk and you need gas detection equipment that is totally reliable, you need Crowcon. For over 40 years Crowcon has been developing and manufacturing high quality products with a reputation for reliability and technical innovation.

Crowcon fixed detectors have been proven in many arduous environments, including oil and gas exploration, water treatment, chemical plants and steel mills. They are however also chosen in many other applications where reliability and dependability are valued, for example in the automotive and aerospace manufacturing sectors, on scientific and research facilities and in high-utilisation medical, civil or commercial plants.



## Choosing the fixed gas detector for your needs

Crowcon use a variety of measurement, protection and communications technologies to offer a flexible range of products able to measure flammable, toxic and oxygen gases, report their presence and activate alarms.

### IRmax

#### Infrared hydrocarbon gas detector

IRmax is an advanced hydrocarbon detector that incorporates the latest in NDIR technology and patented 'STAY-CLIR' low maintenance optics. Constructed from stainless steel and with a variety of outputs IRmax sets new standards for ease of installation and cost of ownership in oil and gas, chemical, utility and other industrial applications.

### IRmax

- 4-20mA output signal
- SIL 2 compliant
- RS 485 Modbus option
- Lowest power consumption in class



### Fixed IR Display

- Large, clear display shows gas level and other status information
- Simple non-intrusive calibration
- Enables connection of hand-held HART communicators



### Remote IR Display

- Can be mounted up to 30 metres from IRmax
- Removes the need to directly access the IRmax detector
- Choice of connection lead lengths



### Intrinsically Safe Hand-Held Calibrator

- Enables calibration and interrogation of IRmax detectors without a Fixed or Remote IR Display
- Only one I.S. hand-held calibrator required per IRmax detector fleet
- Suitable for use in Zone 1 or 2 hazardous areas



### IREX

#### Infrared pellistor replacement gas detector

IREX is based on the same optical system as IRmax and offers a cost effective approach for customers wishing to exchange existing pellistor based detectors for IR technology without having to replace their legacy mV control systems.

- Low current requirement and mV output, like pellistors
- Eliminates zero drift problems associated with pellistors
- Suitability for offshore use proven by test agency Micropack





# The Crowcon Control System Range

## Crowcon Gasmaster

### 1 to 4 channel gas detection control panel

The new and improved Crowcon Gasmaster is a compact but powerful control system that combines simple operation with an extensive array of input and output functions. Crowcon Gasmaster provides all the information you need about your gas and fire detectors at a glance. The large multi-lingual display shows gas levels from all detectors simultaneously and enables system adjustment and testing using buttons on the front panel. Crowcon Gasmaster can operate 'stand-alone' or interface with any alarm devices and control systems using a selection of outputs.

- Large display
- User friendly
- Versatile input and output functions
- Modular design
- Up to four detectors



## Gasflag

### Single channel control panel

Entry-level control panel for monitoring any 4-20mA flammable, toxic or oxygen gas detector. Includes bright alarm LEDs and a loud sounder. Relays are fitted for switching external devices such as audible / visual alarms or valves. Applications include boiler rooms (flammable gas), swimming pools (chlorine) and vehicle filling stations (LPG/CNG).

- Cost effective
- Easy one button operation
- Simple installation
- Integrated indicators and sounder
- Alarm and fault relays for switching external devices



## Vortex

### Multiple detector control panel

Control panel for monitoring one to twelve gas detectors. Versatile modular system available with up to 32 programmable relays. Includes a gas display, battery back up, internal alarm, one-man calibration feature, RS-485 Modbus communications, event logging and PC software for configuration and monitoring. Available in wall mount, 19" rack, panel mounting or Ex d Flameproof formats.

- Proven reliability
- Modular design
- IP65 Ingress protection
- RS-485 Modbus communications



## Gasmonitor Plus

### Rack based control system

Gasmonitor Plus is a 19" rack based control system for monitoring up to 16 gas detectors or 32 fire zones per rack. Gasmonitor Plus racks can be supplied separately or built into wall mounting or floor standing cabinets and can be engineered into large systems to suit any site requirement. Gas detectors are independently powered and monitored, with a separate gas level display for each.

- Modular, limitlessly expandable design
- Individual display for each detector
- 3 alarm levels with software voting function
- Up to 84 relays can be fitted per rack
- 4-20mA output per channel



## Xgard

Detectors for oxygen, flammable and toxic gases

Xgard is a comprehensive range of fixed-point gas detectors that meet the diverse requirements for gas detection in industries throughout the world. Intrinsically Safe (I.S.) or flameproof (Ex d) versions are available for a wide range of applications.

- Huge range of sensors available
- Choice of 4 sensor technologies
- Glass Reinforced Nylon, aluminium or 316 stainless steel enclosure
- ATEX, UL, Inmetro and IECEx approved
- Xgard models validated to IEC 61508 (SIL 1 to SIL 3)
- Xsafe for flammable gas detection in non hazardous areas



## XgardIQ

Intelligent gas detector and transmitter



XgardIQ is an intelligent and versatile gas detector and transmitter compatible with Crowcon's full range of sensor technologies. XgardIQ is available fitted with a variety of flammable, toxic or oxygen gas sensors or may be installed with a remote sensor housing up to 30 metres from the transmitter. Providing analogue 4-20mA and RS-485 Modbus signals as standard, XgardIQ is optionally available with Alarm and Fault relays and HART communications.

The stainless steel enclosure is available with three M20 or 1/2"NPT cable entries.

- Highly visible OLED display
- Hot-swap flammable, toxic or oxygen gas sensor modules
- Automatic configuration for a variety of sensor types
- Easy bump-test and calibration in the hazardous area without tools
- Unique +ve Safety function for assured safe operation



## TXgard-IS+

Intrinsically Safe gas detector with display

TXgard-IS+ is an intrinsically Safe (I.S.) toxic or oxygen gas detector with local LCD display and non-intrusive calibration.

- 2-wire 4-20mA output
- Suitable for oxygen or a wide range of toxic gases
- Tough, carbon loaded nylon enclosure
- Non intrusive one-man calibration
- Proven track record
- ATEX, IECEx and UL approved



## Crowcon F-Gas Detector

Refrigerant Gas and SF<sub>6</sub> Detector

The Crowcon F-Gas detector is a high quality infrared (IR) fixed-point detector that delivers dependable detection of freon gases. Available for detecting a range of different refrigerant gases and also sulphur hexafluoride (SF<sub>6</sub>), the Crowcon F-Gas detector can be connected to any control system that accepts an analogue signal.

- Superior IR sensor technology
- LED indicators
- IP54 rated enclosure
- Environmental protection
- F-Gas regulations compatible



# Complementary Products

## TXgard Plus & Flamgard Plus

Flameproof gas detector with display

TXgard Plus is a flameproof (Ex d) toxic, or oxygen gas detector with local LCD display. A choice of sensors is available for use in a wide range of applications. Flamgard Plus is a flameproof (Ex d) flammable gas detector with an LCD display. It uses poison resistant pellistors to detect % LEL levels of hydrocarbons, hydrogen and other flammable gases and vapours, including aviation fuel and leaded petrol vapours.



- 3 colour LED status indicator
- Non-intrusive one-man calibration
- Back-lit LCD display
- Relays for stand alone operation
- ATEX and UL approved

## Sample Systems

Permanent remote monitoring

Sampling Systems provide the ideal solution for permanently monitoring toxic and/or flammable gases in environments where fixed point detectors may prove impractical. Typical applications include: landfill boreholes, biogas pipelines, CO<sub>2</sub> monitoring in breweries/distilleries, building protection, coal-gas monitoring and coal mill fire detection.

- Wide variety of standard and bespoke systems
- Pumped or air driven systems
- High integrity design
- Fast response time
- Hazardous area systems



Crowcon also offers a wide range of additional gas detection products:

### Open path gas detectors

Available in a choice of operating ranges

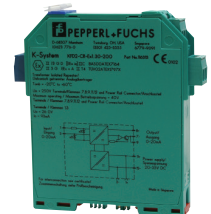


### Flame detectors

UV, IR, UV/IR and Triple IR models available to suit any application

### Barriers and Isolators

Zener barriers and galvanic isolators available for use with I.S. detectors and indicators



### Manual call points

Safe area, intrinsically safe, or flameproof options

### Sounders and beacons

Safe area, intrinsically safe, or flameproof options



### Smoke and heat detectors

Wide selection available which are compatible with most Crowcon control panels

**Crowcon also manufactures a wide range of portable gas detection products:**



**Crowcon Clip**  
Personal maintenance free  
single gas monitor



**Detective+ and Detective Net**  
Transportable wireless area  
gas monitor



**I-Test**  
Bump and calibration station



**Gas-Pro IR**  
Infrared 5-gas monitor



**Gasman**  
Single gas  
personal monitor

Crowcon reserves the right to change the design or specification of the product without notice.  
Check [www.crowcon.com](http://www.crowcon.com) for updates.

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Detecting Gas Saving Lives