



# Fixed Range

# Choosing the fixed gas detector for your needs

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

# The Crowcon Fixed Detector Range

### 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

# **Xgard Bright**

Addressable fixed point gas detector with display



Xgard Bright is a versatile platform offering flammable and toxic gas detection and oxygen monitoring, while providing ease of operation and reduced installation costs.

Lowering the cost of installation, the 3-wire addressable implementation drastically reduces cabling requirements. The large OLED display allows users to easily work with Xgard Bright during install, calibration and routine maintenance without the need to open the housing.

- · Flammable, toxic and oxygen options
- · Non-intrusive calibration
- · 3-wire addressable Modbus RTU
- HART Option
- · On-board relay as standard

### **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.

- · 4-20mA output signal
- · SIL 2 complaint
- · RS 485 Modbus option

### Fixed IR Display



- Lowest power consumption in class
- · 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

# 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.

# XgardIQ



- · 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

# Remote sensor capability



Allows the transmitter to be located for user manipulation and for the sensor to be installed in the optimum position to monitor for gas leaks.

· Available in both 5m and 15m lengths

# 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

# 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

# **Engineered Solutions**

# Fixed systems engineered to specific end user requirements

Engineered solutions provide end users with a bespoke solution, including Crowcon detectors, controllers and third party ancillaries. These systems can be tailor made to include battery back-up, DCS interface and the ability to take executive action.



Sampling Systems provide the ideal solution for permanently monitoring toxic and/or flammable gases in environments where fixed point detectors may prove impractical. A variety of systems are available, which use pumps or compressed air-driven vacuum generators to extract air/gas samples from the area to be monitored and present the samples to one or more gas sensors.

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

# The Crowcon Control System Range

# 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

#### Gasmaster

1 to 4 channel gas detection control panel



The new and improved Gasmaster is a compact but powerful control system that combines simple operation with an extensive array of input and output functions. 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. 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

### 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

# Complementary Products

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

### Open path gas detectors



The SafEye Quasar 900 is an open path detection system. It employs "spectral fingerprint" analysis of the atmosphere using the Differential Optical Absorption Spectroscopy (DOAS) technique. With a range from 7m up to 200m the Quasar 900 detects gas hazards in extremely harsh environments where dust, fog, rain, snow or vibration can cause a high reduction of signal.

The main stainless steel enclosure is Exd flameproof with an integral, segregated, Exe terminal section.

An I.S. communicator can be connected for diagnostic/maintenance purposes.

Includes heated windows to eliminate condensation and icing HART capability for digital communication.

Designed to meet SIL2 per IEC61508 and FM performance approved per FM6325 and tested per EN60079-29-4.

### Flame detectors



Flame Detectors operate in the harshest environmental conditions and are self-contained stand-alone devices designed for direct connection to control and alarm systems or automatic fire extinguishing systems.

The 40/40 range includes IR3, combined UV/IR, single UV types. single IR type as well as a new Multi IR Detector which provides combined hydrocarbon and hydrogen flame detection.

The 20/20 range also includes Mini IR3 and Mini UV/IR detectors which offer a lower cost, lower power, compact design in a general purpose (non-Ex approved) format. The 20/20MI IR3 is also available as intrinsically safe approved.

#### Manual call points Barriers and isolators



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



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 Hazardous area options are available



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#### Lim Kim Hai Electric Co (S) Pte Ltd

Lim Kim Hai Building,

53 Kallang Place, Singapore 339177

(+65) 6292 3711 • (+65) 6490 5000

(+65) 6297 0078

customerservice@limkimhai.com.sq

www.limkimhai.com.sq