



Products and Services Guide

Creating healthier and
safer workplaces

 **CROWCON**
Detecting Gas Saving Lives

Our mission statement:

“To combine our expertise with emerging technologies to develop process insights & protection for our customers. Improving their operational efficiency and creating healthier & safer workplaces.”

At Crowcon we recognise that no two implementations are the same. The environmental conditions, detection requirement, user interaction and the information needed to ensure safe and cost efficient deployment should all be considered. Focused on gas sensing solutions, we listen to the market and our customers, delivering solutions that reduce the amount of time people spend in potentially hazardous situations whilst improving operational efficiency.

For almost 50 years, Crowcon has been developing and manufacturing high quality products with a reputation for reliability and technical innovation. The Crowcon portfolio offers both fixed and portable gas detection equipment and services based on a solid foundation of expertise in mechanical, electronic and software design and an understanding of the core physics and chemistry of gas detection.

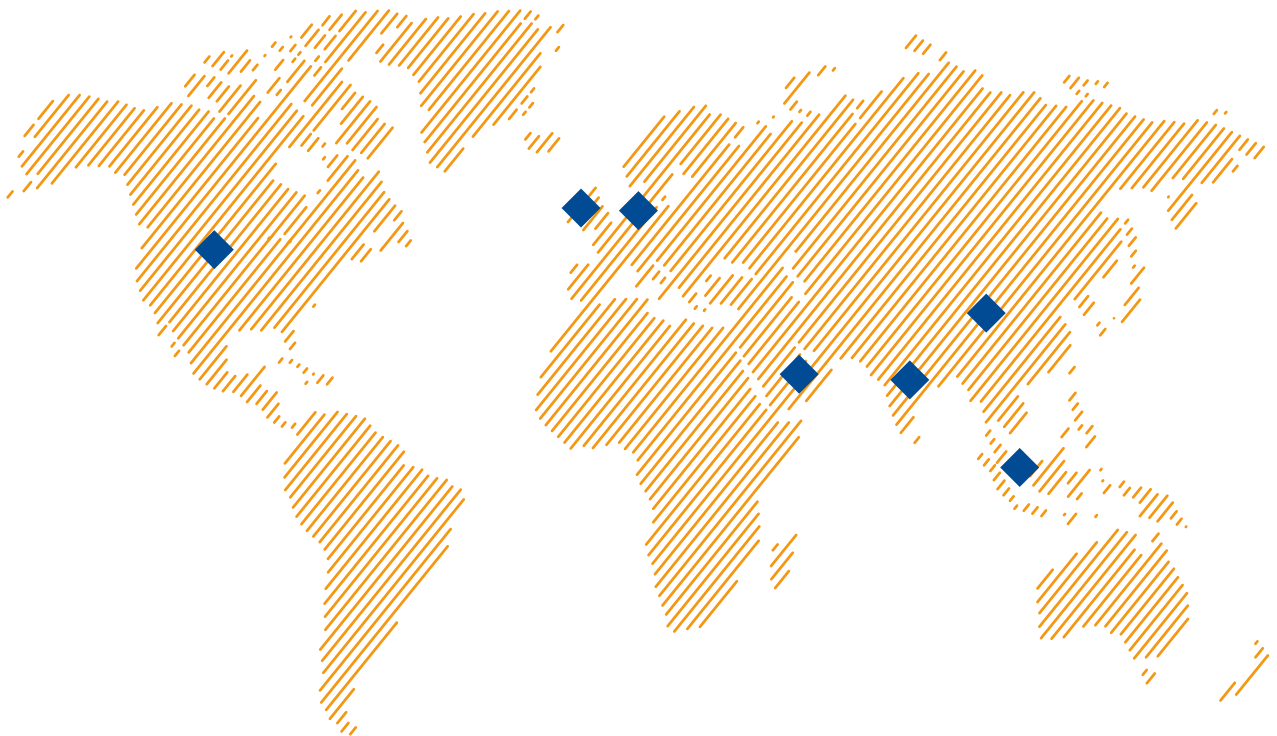


Crowcon Detection
Instruments Limited has a
vision to grow a safer, cleaner,
healthier future for everyone,
every day as a globally respected
company providing best in
class gas safety solutions.



As well as our head office in Milton Park, Abingdon, UK; we have regional offices in the Netherlands, India, China, UAE, Singapore and the USA; supporting end customers and our network of channel partners.

Products are made in Abingdon using Lean and Six-Sigma production principles, in our manufacturing facility. This facility is accredited to ISO 9001:2015, BS EN ISO/IEC 80079-34:2011, ISO 14001:2015, ISO18001:2007 as well as passing regular audits by international bodies such as LRQA, BASEEFA, UL, CSA and Lloyds Register.






Crowcon Detection Instruments is part of the Process Safety sector of Halma plc, a market leader in specialist safety, health and environmental technologies.

The Crowcon business is broadly split into three key areas:

- ◆ Portable and personal monitors
- ◆ Fixed detectors, controllers, engineered and sampling systems
- ◆ Service, spares, training and installation

The Engineered Systems team at Crowcon is able to design bespoke systems to specific customer requirements. Systems are configured using Crowcon detectors and control panels and incorporate industrial instrumentation devices to provide cost effective and dependable solutions.



Personal, portable and temporary area monitors

Single and multigas solutions for the monitoring of oxygen, flammable and toxic gases.

Delivering uninterrupted working in the most demanding environments, making everyday use easier and safer.

Clip SGD



Capability:

1 gas

Target gases:

CO, H₂S, O₂

Sensing technology:

Electrochemical

Sampling:

Diffusion

Approvals:

ATEX, IECEx, cCSAus

Customer value:

2 year fixed life delivers low cost of ownership

Gasman



Capability:

1 gas

Target gases:

C₂H₄O, Cl₂, ClO₂, CO, CO₂*, COCl₂, F₂, H₂, HCN, HF, H₂S, NO, NO₂, NH₃, O₂, O₃, PH₃, SO₂, flammables

Sensing technology:

Electrochemical, pellistor, infrared*

Sampling:

Diffusion

Approvals:

ATEX, IECEx, CSA

Customer value:

Full function, rugged & compact. Extensive range of target gases

T4



Capability:

1 – 4 gases

Target gases:

CO, H₂S, O₂, flammables

Sensing technology:

Electrochemical, pellistor, flammables

Sampling:

Diffusion

Approvals:

ATEX, IECEx, UL, INMETRO, MED

Customer value:

Delivers compliance, offering unique TWA resume functionality

T3



Capability:

1 – 4 gases

Target gases:

CO, CO₂*, H₂S, HCN, NH₃, O₂, O₃, SO₂

Sensing technology:

Electrochemical, pellistor, infrared*

Sampling:

Diffusion

Approvals:

ATEX, IECEx, CSA

Customer value:

Top mount display for ease of viewing

Gas-Pro



Capability:

1 – 5 gases

Target gases:

Cl₂, ClO₂, CO, CO₂, H₂S, NH₃, NO, NO₂, O₂, O₃, SO₂, flammables, VOC

Sensing technology:

Electrochemical, pellistor, infrared, PID

Sampling:

Diffusion or pumped

Approvals:

ATEX, IECEx, UL, INMETRO, MED

Customer value:

CSE & PEC modes guide users through defined processes

Gas-Pro TK



Capability:

1 – 4 gases

Target gases:

CO, H₂S, O₂, flammables (%LEL & %vol)

Sensing technology:

Electrochemical, pellistor, infrared

Sampling:

Diffusion or pumped

Approvals:

ATEX, IECEx, UL, INMETRO, MED

Customer value:

Inert atmosphere monitoring including Tank Check mode

Detective+



Capability:

1 – 4 gases

Target gases:

AsH₃, C₂H₄O, Cl₂, ClO₂, CO, CO₂, F₂, H₂, H₂S, HCL, HCN, HF, NH₃, NO, NO₂, O₂, PH₃, SO₂, flammables, VOC

Sensing technology:

Electrochemical, pellistor, infrared

Sampling:

Diffusion or pumped

Approvals:

ATEX, IECEx (being clarified)

Customer value:

Perimeter monitoring wired or wireless, raised sensors prevent water ingress

LMm



Capability:

1 gas

Target gases:

CH₄ (specific)

Sensing technology:

TDLAS

Sampling:

Detection from distance

Approvals:


ATEX, IECEx

Customer value:

Locate leaks without the need to enter a potentially hazardous area

* Safe area use (not hazardous area certified)

Where 'flammables' are listed multiple calibrations are usually available (e.g. butane, propane, pentane) please check the website for further details

A diagonal split image. The top-left portion is a solid blue triangle. The bottom-right portion shows a worker in a blue uniform and orange helmet, wearing white gloves, operating a large industrial valve with a handwheel. The background is a light, textured surface.

Fixed detectors, controllers and sampling systems

Crowcon offers a flexible range of products which are able to measure flammable, toxic and oxygen gases, report their presence and activate alarms or associated equipment. We use a variety of measurement, protection and communications technologies and our fixed detectors have been proven in many arduous environments, including oil and gas exploration, water treatment, chemical plants and steel mills.

They are used in many other applications where reliability, dependability and lack of false alarms are valued. These include within the automotive and aerospace manufacturing sectors, on scientific and research facilities and in high-utilisation medical, civil or commercial plants.

Xgard

**Enclosure:**

Stainless steel, Aluminium alloy, Nylon

Display:

No

Target gases:

AsH₃, B₂H₆, Br₂, C₂H₄O, Cl₂, ClO₂, CO, CO₂, COCl₂, GeH₄, F₂, H₂, H₂S, HCL, HCN, HF, NH₃, NO, NO₂, O₂, O₃, PH₃, SO₂, flammables (pellistor & IR)

Sensing technology:

Electrochemical, pellistor, infrared, PID

Output:

mA, mV

Relay:

No

Approvals:

ATEX, IECEx, UL

Customer value:

Comprehensive options providing cross-site compliance from a single platform

Xgard Bright

**Enclosure:**

Aluminium Alloy

Display:

Yes

Target gases:

CO, H₂S, O₂, flammables

Sensing technology:

Electrochemical, pellistor

Output:

mA, Hart, RS-485

Relay:

Yes

Approvals:

ATEX, IECEx, UL (pending)

Customer value:

Delivering reduced installation and maintenance costs

TXgard IS+

**Enclosure:**

Nylon

Display:

Yes

Target gases:

Cl₂, ClO₂, CO, COCl₂, H₂, H₂S, HF, HCN, NH₃, NO₂, O₂, O₃, PH₃, SO₂,

Sensing technology:

Electrochemical

Output:

mA

Relay:

No

Approvals:

ATEX, IECEx, UL

Customer value:

Delivering reduced installation and maintenance costs

Xgard IQ

**Enclosure:**

Stainless Steel

Display:

Yes

Target gases:

Cl₂, CO, H₂S, HF, NH₃, O₂, O₃, SO₂, flammables (pellistor & IR)

Sensing technology:

Electrochemical, pellistor, infrared

Output:

mA, Hart, Fieldbus, RS-485

Relay:

Yes

Approvals:

ATEX, IECEx

Customer value:

Remote and hot swap sensor options ensure optimal sensor placement and reduced maintenance times

IRmax

**Enclosure:**

Stainless Steel

Display:

Yes (optional)

Sensing technology:

Infrared

Output:

mA, Hart, RS-485

Relay:

No

Approvals:

ATEX, IECEx

Customer value:

Remote or localised display options ensure optimal sensor placement and reduced maintenance times

Open Path

**Enclosure:**

Stainless Steel

Display:

1 gas

Target gases:

Flammables

Sensing technology:

Infrared (open path)

Output:

mA, Hart

Relay:


No

Approvals:

ATEX, IECEx, UL

Customer value:

Fast detection of combustible gases and vapours over a line-of-sight up to 200m long



Fixed detectors, controllers and sampling systems

Crowcon fixed gas monitoring systems are designed to be interfaced with manual call points, fire and gas detectors and distributed control systems (DCS). In addition each system can be engineered to drive remote annunciators and mimic panels.

Engineered and sampling systems are used to deliver solutions to difficult detection problems for permanently monitoring an environment or process.

Crowcon can tailor, build and install engineered fixed systems from single point to large scale projects

Hot, cold, humid or dry sample conditioning can help extend the life of sensors deployed, reduce maintenance overheads and ensure safe operation.

Crowcon are specialists in this area and have a dedicated team to work with our customers from initial discussion to configuration and installation support.

Gasflag



Channel input:

1 input

Input:

mA

Output:

No

Event logging:

No

Battery backup:

No

Relay option:

Yes

Approvals:

None

Customer value:

Compact and standalone monitoring with onboard audible and visual indicators

Gasmaster



Channel input:

1-4 input

Input:

mA, mV, Fire

Output:

mA, RS-485

Event logging:

Yes

Battery backup:

Yes

Relay option:

Yes

Approvals:

ATEX: May be used in a non-hazardous area as part of an Intrinsically Safe System

Customer value:

Large display delivers user friendly system status and maintenance functionality

GM16 & GM64



Channel input:

1-128 input

Input:

mV, mA, RS-485

Output:

mA, RS-485, TCP IP

Battery backup:

Yes

Approvals:

May be used in a non-hazardous area as part of an intrinsically safe system.

Customer value:

Addressable solution reducing installation cabling requirements delivering reductions in time and cost

Vortex



Channel input:

1-12 input

Input:

mA, mV, fire

Output:

RS-485, Profibus

Event logging:

Yes

Battery backup:

Yes

Relay option:

Yes

Approvals:

ATEX: May be used in a non-hazardous area as part of an Intrinsically Safe System

Customer value:

Flexible control package for single or multi-controller requirements

Gasmonitor Plus



Channel input:

1-16 input

Input:

mA, mV, fire

Output:

mA

Battery backup:

Yes

Relay option:

Yes

Approvals:

ATEX: May be used in a non-hazardous area as part of an Intrinsically Safe System

Customer value:

Rack based system offers the ability to engineer complex systems from standard controllers

Crowcon HMI



Channel input:

1-6 Vortex or 1-10 Gasmaster

Input:

Ethernet

Battery backup:

Yes

Output:

None

Relay option:

Visual and Audio

Approvals:

None

Customer value:

Remote visibility of multiple controllers

Regional Offices

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Crowcon reserves the right to change the design or specification of the product without notice. August 2019