Specification

Enclosure material	ADC 12 aluminium alloy
Dimensions	156 x 166 x 109mm (6.1 x 6.5 x 4.3inch)
Weight	Aluminium alloy 1kg (2.2lbs)
Ingress protection	IP65 & IP66 (with weatherproof cap)
Cable entry	2x M20 (stopping plug fitted to left-side entry) or supplied with ½" NPT adapters
Power	10-30Vdc. 3W max
Electrical output	4-20mA current sink or source RS-485 Modbus RTU HART (optional)
Relays	Alarm 1, Alarm 2, Fault SPST contacts rated 1A 30Vdc
Sounder out	24Vdc (nominally), 250mA maximum load
Operating temperature	-40°C to +70°C (-40°F to 158°F) Note: sensor operating temperatures vary widely Refer to the sensor module datasheet or contact Crowcon for specific sensor data.
Humidity	0 to 95% RH, non-condensing
Repeatability	+/- 2% FSD
Zero drift	+/- 2% FSD per year maximum
Approval codes	ATEX and IECEx Ex II 2G Ex db IIC T6 Gb Ex II 2D Ex tb IIIC T80°C Db Certificate numbers: TUV 16 ATEX 7908 X IECEx TUR 16.0035 X
Standards	EN60079-0:2012 + A11:2013 EN60079-1:2014 EN60079-31:2014 IEC60079-0:2017 Edition 7 IEC60079-1:2014-06 IEC60079-31:2013
Zones	Certified for use in Zone 1 and Zone 2 areas
EMC compliance	EN50270:2015

Disclaimer

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continued product improvement Crowcon Detection Instruments Limited reserves the right to make product changes without notice. The products are routinely subject to a programme of testing which may result in some changes in the characteristics quoted. Technical information contained in this document or otherwise provided by Crowcon are based upon records, tests, or experience that the company believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed.

Many factors beyond Crowcon Detection Instruments' control and uniquely within user's knowledge and control can affect the use and performance of a Crowcon product in a particular application.

As the products may be used by the client in circumstances beyond the knowledge and control of Crowcon Detection Instruments Limited, we cannot determine the relevance of these to an individual customer's application. It is the clients' sole responsibility to carry out the necessary tests to evaluate the usefulness of the products and review all applicable regulations and standards to ensure their safety of operation in a particular application.

CROWCON
Detecting Gas Saving Lives

Crowcon reserves the right to change the design or specification of the product without notice.
© 2019 Crowcon Detection Instruments Ltd. Copyright to some photographs held separately.

www.crowcon.com

CROWCON
Detecting Gas Saving Lives

Xgard Bright

Addressable Fixed Point Gas Detector with Display

Non-intrusive calibration
MODBUS/HART (option)
Relays for alarm and fault
4-Wire addressable

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 4-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.

Features

Versatile sensor option	Supports flammable, toxic, oxygen, sensor Explosion proof housing IP65 or IP66 rating (with weatherproof cap)
Ease of installation and operation	Plug in type terminal blocks for easy wiring Choice of M20 or ½"NPT conduit connection Configuring via magnetic key Non-intrusive calibration without removing access MODBUS or Hart communication for remote access
Compact size	Low power requirement (-3W max)

Gases and ranges

Gas	Sensor technology	Ranges available
Hydrogen sulphide (H_2S)	Electrochemical	10, 20, 25, 50, 100, 200 ppm
Oxygen (O_2)	Oxygen	0-25% vol.
Carbon Monoxide (CO)	Electrochemical	0-25, 50, 100, 200, 250, 300, 1000, 2000 ppm
Methane (CH_4)	Pellistor	0-100% LEL
Pentane (C_5H_{12})	Pellistor	0-100% LEL
Hydrogen (H_2)	Pellistor	0-100% LEL
LPG	Pellistor	0-100% LEL
Carbon Dioxide (CO_2)	Infra-Red	0-5% vol

Other sensors and ranges will be introduced - contact Crowcon with your requests.

Reducing the time operators spend in potentially hazardous areas:

At Crowcon we recognise the challenges faced and processes required every time an operator enters a facility or site that has been classified as a hazardous area. Permits are needed, specific training and equipment are required and procedures have to be followed. This consumes resource, which ultimately increases the cost of operations.

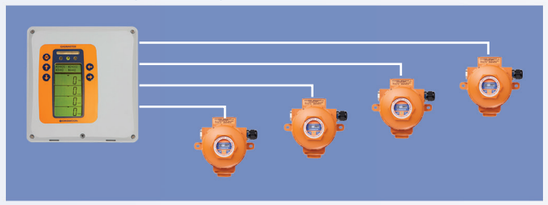
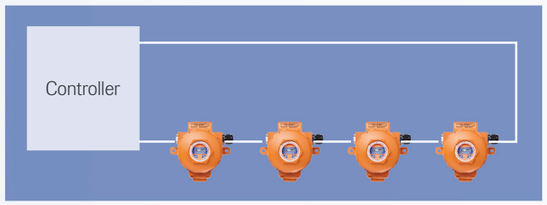
Xgard Bright has been designed with this in mind, making routine calibration and maintenance operations quick and simple to reduce the time operators spend in hazardous areas:

Non-intrusive calibration	Zero and calibration functions (plus set-up, tests and adjustments) are performed via the display using the magnetic wand, without needing to open the housing reducing the need for a hot-work permit.
OLED display	The brightly illuminated "organic light emitting diode" display clearly indicates the gas level and units as well as providing comprehensive menus for set-up and diagnosis. In low ambient light conditions, such as a dark room, the OLED display achieves a much higher contrast ratio than an LCD used on conventional gas detectors.

Lowering the cost of installation and maintenance

Addressable communications	Xgard Bright detectors can be connected on an addressable network using RS-485 Modbus. This option significantly reduces cable and installation costs, whilst increasing the flexibility and functionality of the wider system.

Traditional or point-to-point



Addressable or loop