FIXED SYSTEMS

XGARD **BRIGHT**

Addressable Fixed Point Gas Detector with Display

Non-intrusive calibration
MODBUS, HART & relay options

Xgard Bright is a versatile platform designed for detecting flammable and toxic gases, as well as monitoring oxygen levels.

The 4-wire addressable implementation minimizes cabling requirements, lowering installation costs. The large OLED display ensures users can easily interact with Xgard Bright during installation, calibration, and routine maintenance without opening the housing.

FEATURES

Long-life Sensors
Choose from robust sensor options such as MPS™ (10+ years), O_2 Long-life (5 years), and IR sensors (10+ years) to reduce the frequency of sensor replacements and minimise operational expenses.

Flexible Communication
Xgard Bright supports connection to an addressable network using Modbus RS-485 RTU, alongside analogue 4-20 mA output. This setup reduces cable and installation costs while enhancing system flexibility and functionality. HART communication is also available as an option.

OLED Display
The bright OLED display clearly shows gas levels and units, providing comprehensive menus for setup and diagnostics. In low-light conditions, the OLED display offers a higher contrast ratio than conventional LCDs, making it easier to read.

Non-intrusive Calibration
Zero and calibration functions, along with setup, tests, and adjustments, are performed via the display using a magnetic wand, eliminating the need to open the housing and reducing the requirement for a hot-work permit.

GAS RANGES & ALARMS

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GAS	SENSOR	RANGES AVAILABLE	TEMP. RANGE
Flammable gases*	MPS™	0-100% LEL	-40 to +75 °C
Butane (C_4H_{10})	Infrared	0-100% LEL	-40 to +60°C
Hydrogen (H_2)	Catalytic	0-100% LEL	-40 to +70°C
LPG	Catalytic Infrared	0-100% LEL	-40 to +70°C -40 to +60°C
Methane (CH_4)	Catalytic Infrared	0-100% LEL	-40 to +70°C -40 to +60°C
Pentane (C_5H_{12})	Catalytic Infrared	0-100% LEL	-40 to +70°C -40 to +60°C
Propane (C_3H_8)	Catalytic*** Infrared	0-100% LEL	-40 to +70°C -40 to +60°C
Carbon Monoxide (CO)	Electrochemical	0-25, 50, 100, 200, 250, 300, 1000, 2000 ppm	-30 to +50°C
Hydrogen sulphide (H_2S)	Electrochemical	10, 20, 25, 50, 100, 200 ppm	-40 to +50°C
Oxygen (O_2) - Long Life Lead Free	Electrochemical	0-25% vol	-40 to +60°C
Oxygen (O_2)	Electrochemical	0-25% vol	-20 to +50°C
Carbon Dioxide (CO_2)	Infrared	0-5% vol	-40 to +60°C

* Contact Crowcon for more information
*** Contact Crowcon for availibility

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DETECTING GAS. **SAVING LIVES.**

SPECIFICATIONS

ENCLOSURE MATERIAL	
ENCLOSURE MATERIAL	ADC 12 aluminium alloy or 316 stainless steel
DIMENSIONS	**Aluminium Enclosure** ATEX/IECEx: 156 x 166 x 109 mm (6.1 x 6.5 x 4.3 inch) UL: 162 x 166 x 110 mm (6.4 x 6.5 x 4.3 inch) **Stainless Steel Enclosure** ATEX/IECEx: 165 x 166 x 105 mm (6.1 x 6.5 x 4.1 inch) UL: 162 x 166 x 103 mm (6.4 x 6.5 x 4.1 inch)
WEIGHT	**Aluminium enclosure** ATEX/IECEx: 1kg (2.2 lbs) UL: 1.5 kg (3.31 lbs) **Stainless Steel enclosure** ATEX/IECEx: 3.1 kg (6.8 lbs) UL: 3.5 kg (7.72 lbs)
INGRESS PROTECTION	IP65/66, EN 60529
CABLE ENTRY	2x M20 or 2x ½" NPT (Stopping plug fitted to the left-side entry)
OPERATING VOLTAGE	10-30Vdc. 3W max
POWER	3W max
ELECTRICAL OUTPUT	3-wire 4-20mA (Sink or Source) RS-485 Modbus RTU HART 7 (Optional)
RELAY OUTPUT	Alarm 1, Alarm 2, Fault (SPDT Contacts. Rated 1A, 24Vdc)
SOUNDER	High Side Switch (24V nominal, 12V minimum, 700mA maximum load)
OPERATING TEMPERATURE	ATEX/IECEx: -40°C to +70°C (-40°F to 158°F) UL: -40°C to +60°C (-40°F to 140°F)
HUMIDITY	0 to 95% RH (non-condensing), contact Crowcon for sensor operating humidity range.
REPEATABILITY	Repeatability: +/- 2% FSD Zero drift: +/- <2% FSD per year
EMC COMPLIANCE	EN 50270, EN IEC 61326-1, EN 55011, CISPR 11, EN 61000-4
HAZLOC STANDARDS AND APPROVALS	**ATEX:** EN IEC 60079-0, EN 60079-1, EN 60079-31 **IECEx:** IEC 60079-0, IEC 60079-1, IEC 60079-31 Zone 1 and Zone 2 or Zone 21 and Zone 22 **Aluminium:** Ex II 2 G Ex db IIC T6 Gb Tamb: -40°C≤Ta≤70 °C Ex II 2 D Ex tb IIIC T80°C Db Ex db IIC T6 Gb Tamb: -40°C≤Ta≤70 °C Ex tb IIIC T80°C Db **Stainless Steel:** Ex II 2 G Ex db IIC T3 Gb Tamb: -40°C≤Ta≤70 °C Ex II 2 G Ex db IIC T4 Gb Tamb: -40°C≤Ta≤50°C Ex II 2 D Ex tb IIIC T80°C Db Ex db IIC T3 Gb Tamb: -40°C≤Ta≤70°C Ex db IIC T4 Gb Tamb: -40°C≤Ta≤50°C Ex tb IIIC T80°C Db	**UL:** UL 1203 -40°C≤Ta≤60 °C Class I, Division 1, Groups B, C, D T6 Class II Division 1, Groups E, F, G T6
APPROVALS	UL, IECEx, ATEX, CE, ECAS, PESO, CNEx, UC, CCS TA, MED***
PERFORMANCE	UL 60079-29-1**
WARRANTY	2 years on transmitter 5 years on MPS™ flammable and O_2 Long Life sensor 2 years on IR flammable sensors Refer to GEN067 – Warranty Periods for other sensors

**pending

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