

Xgard Bright

Addressable Fixed-Point Gas Detector with Display

Non-intrusive calibration MODBUS/HART (option)

Relays for alarm and fault

4-Wire addressable



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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.



Gases and ranges

| Gas | Sensor Technology | Ranges Available |
|---|-------------------|--|
| Range of flammable gases | MPS | 0-100% LEL |
| Hydrogen sulphide (H ₂ S) | 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 ₅ H 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 |
| VOC* | PID | 0-1000 PPM |
| Methane (CH ₄) | Infra-Red | 0-100% LEL |
| Propane (C ₃ H ₈) | Infra-Red | 0-100% LEL |
| Ammonia (NH ₃)* | Electrochemical | 0-50, 100 ppm |
| Chlorine (CL ₂)* | Electrochemical | 0-5, 10 ppm |
| Ozone (O ₃)* | Electrochemical | 0-1 ppm |
| Sulpur dioxide (SO ₂)* | Electrochemical | 0-10 ppm |
| Butane (C ₄ H ₁₀) | Infra-Red | 0-100% LEL |
| Pentane (C ₅ H ₁₂) | Infra-Red | 0-100% LEL |
| LPG | Infra-Red | 0-100% LEL |
| Hydrogen Cyanide (HCN)* | Electrochemical | 0-25 ppm |
| Hydrogen Peroxide (H ₂ O ₂)* | Electrochemical | 0-5 ppm |



Reducing the time operators spend in potentially hazardous areas:

At Crowcon we recognize 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 resources, 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 setup, 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

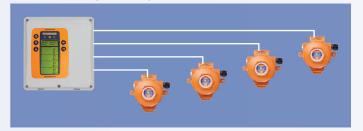
The brightly illuminated "organic light-emitting diode" display clearly indicates the gas level and units as well as providing comprehensive menus for setup and diagnosis. In low ambient light conditions, such as a dark room, the OLED display achieves a much higher contrast ratio than an LCD used on conventional gas detectors.

Lowering the cost of installation and maintenance

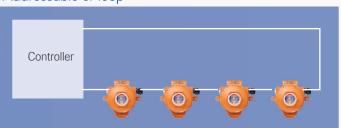
Addressable communications

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

Traditional or point-to-point



Addressable or loop



Specification

| Enclosure material | ADC 12 aluminum alloy | |
|-----------------------|--|--|
| Dimensions | 156 x 166 x 109mm (6.1 x 6.5 x 4.3inch) | |
| Weight | Aluminum 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 | |

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