Specification

Size	XgardIQ transmitter	H278 x W140 x D89mm (10.9 x 5.5 x 3.5ins)
Weight	XgardIQ transmitter	4.1kg (9lbs, stainless steel)
Enclosure material		316 stainless steel
Ingress protection		IP66
Connection		Three M20 or 1/2"NPT cable gland entries. Certified, removable plugs are fitted to left-hand and lower right-hand entries
Power		14-30Vdc. < 4W
Display	Main display	OLED 128 x 64 pixels, yellow text on black background
	Indicators	Amber, Red and Green LEDs for detector status Blue Positive Safety LED
Electrical output		4-20mA current sink or source (auto-sense or manual selection) Warning and fault signals are configurable NAMUR NE 43 compliant RS-485 Modbus RTU HART 7 over 4-20mA signal and via local I.S. test points (optional)
	Relays (optional)	Alarm 1, Alarm 2, Fault SPDT contacts rated 5A, 230Vac (Fault relay: SPST contacts)
	Relay configuration options	Energised or de-energised Latching or non-latching Rising or falling Configurable On and Off delays for alarm relays
Event logging		Records alarm, fault and maintenance events. Events can be viewed on-screen and downloaded to a PC
Operating temperature		Transmitter only: -40°C to +75°C (-40°F to 167°F) Sensor type Oxygen (-20°C to +50°C ambient) Toxic (-40°C to +50°C ambient) Toxic (a high temperature H2S sensor -40°C to +75°C ambient) Pellistor (-40°C to +75°C ambient) Infra-red (IR) (-20°C to +55°C ambient)
Humidity		Transmitter only: 0 to 95% RH non-condensing Note: sensor humidity operating range may vary. Contact Crowcon for specific sensor data
Repeatability		+/- 2% FSD
Zero drift		+/- 2% FSD per year maximum
Response time		Sensor dependent: contact Crowcon for specific sensor data
Performance	Tested in accordance with:	EN60079-29-1 (flammable gas sensors)* EN50104 (oxygen sensors)*
Functional safety		IEC61508, EN50402, SIL 2*
Approvals		ATEX and IECEx, SGS Ex II 2 G Ex db ia IIC T4 Gb (see above for ambient temperature ranges) CU-EAC certificate
EMC compliance		EN50270, EN61000-6-4 FCC CFR47 Part 15B

* Features outstanding at the time of issue, contact Crowcon for details.

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XgardIQ

Intelligent Gas Detector and Transmitter

- Smart sensor modules
- Non-intrusive calibration
- Clear user friendly display
- Remote sensor option

XgardIQ

Intelligent Gas Detector and Transmitter

Minimise the time operators spend in hazardous areas.

XgardIQ offers powerful features which minimise the time operators spend in hazardous areas performing routine maintenance.

Easy to use

Positive Safety indicator	Status checking at a glance and from a distance.
OLED display	Bright, clear display indicates gas level even in dark locations.
Buttons	Functions performed via buttons, without the need for special magnets or tools.
Event log	Clear history of detector use.

Simple installation and maintenance

Hot-swap sensor modules	Easily removed or replaced using the tool provided without requiring hot work permit or special tools.
Auto-sense function	Automatically detects whether the control system is 4-20mA current sink or source, saving time and faults.
Auto-configure function	Detects when sensor module is plugged in and uploads the appropriate gas type, range, units and alarm levels.
Smart Bump and Speedy Bump test	Sensor health and response verified quickly and easily following simple on-screen instructions. Detector automatically provides a reminder when next bump test is due.
Calibration due warning	Automatically reminds the user when calibration is due to ensure sensors remain accurate at all times.
Sensor range selection	Users can set the full-scale range of the sensor via the display menu according to site or specific location requirements.

Product description

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 and oxygen gas sensors and provides a bright OLED display with clear and comprehensive status information in a range of languages.

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Gases and ranges

Gas	Sensor Type	Units	Max range*	Standard range	Alarm level 1+	Alarm level 2+	Temp range °C
Oxygen (O_2)	Electrochemical	%Vol	30	25	19 (falling)	17 (falling)	-20 to +50
Ammonia (NH_3)	Electrochemical	ppm	100/1000	50	25	35	-20 to +40
Carbon Monoxide (CO)	Electrochemical	ppm	1000	250	30	200	-30 to +50
Hydrogen Fluoride (HF)	Electrochemical	ppm	10	10	1.8	3	+5 to +40
Hydrogen Sulphide (H_2S)	Electrochemical	ppm	100/200	25	5	10	-30 to +50
Hight Temp (H2S)	Electrochemical	ppm	100	100	5	10	-30 to +70
Chlorine (Cl_2)	Electrochemical	ppm	20	5, 10 or 20	0.5	1	-20 to +50
Ozone (O_3)	Electrochemical	ppm	1	1	0.1	0.2	-20 to +40
Sulphur dioxide (SO_2)	Electrochemical	ppm	100	10	1	1	-30 to +50
Hydrogen (H_2)	Pellistor	%LEL	100	100	20	40	-40 to +75
Methane (CH_4)	Pellistor	%LEL	100	100	20	40	-40 to +75
Pentane (C_5H_12)	Pellistor	%LEL	100	100	20	40	-40 to +75
Propane (C_3H_8)	Pellistor	%LEL	100	100	20	40	-40 to +75
Ethanol (C_2H_6O)	IR	%LEL	100	100	20	40	-20 to +55
LPG	IR	%LEL	100	100	20	40	-20 to +55
Methane (CH_4)	IR	%LEL	100	100	20	40	-20 to +55
Pentane (C_5H_{12})	IR	%LEL	100	100	20	40	-20 to +55
Propane (C_3H_8)	IR	%LEL	100	100	20	40	-20 to +55

* NOTE: Measuring ranges are user-selectable on the XgardIQ transmitter

+ NOTE: Alarm levels are user-adjustable on the XgardIQ transmitter

Further gas types will be available - contact Crowcon with your requests.

Disclaimer

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