

# Xgard IR

## Infrared Gas Detector

Fail safe technology  
Low cost of ownership  
Fast response  
Highly versatile



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Xgard IR is an explosion-proof gas detector which uses a dual-wavelength infrared sensor to provide highly dependable detection of hazardous gases and vapours. Based on Crowcon's hugely successful Xgard design, Xgard IR offers the many advantages of infrared sensor technology in a rugged and versatile package including; fail safe sensor technology, immune to poisoning, no damage by over-gasing, fast response and suitable for use in inert atmospheres.

### Gases and ranges

Gas	LTEL LEL (% vol)	STEL UEL (% vol)	Ranges available
Butane (C <sub>4</sub> H <sub>10</sub> )	1.8 (1.4)	9 (9.3)	0-100% LEL
Butene (C <sub>4</sub> H <sub>8</sub> )	1.6	-	0-100% LEL
Carbon Dioxide (CO <sub>2</sub> )	0.5% vol.	1.5% vol.	0-2 or 0-5%
Ethanol (C <sub>2</sub> H <sub>6</sub> O)	3.3 (3.1)	19 (19)	0-100% LEL
Ethylene (C <sub>2</sub> H <sub>4</sub> )	2.7 (2.3)	36 (36)	0-100% LEL
Hexane (C <sub>6</sub> H <sub>14</sub> )	1.2 (1)	7.4 (8.4)	0-100% LEL
LPG	2	10	0-100% LEL
Methane (CH <sub>4</sub> )	5 (4.4)	15 (17)	0-100% LEL
Methanol (CH <sub>3</sub> OH)	6.0	-	0-100% LEL
Pentane (C <sub>5</sub> H <sub>12</sub> )	1.5 (1.4)	8 (7.8)	0-100% LEL
Propane (C <sub>3</sub> H <sub>8</sub> )	2.2 (1.7)	10 (10.9)	0-100% LEL

### Specification

Size	H156 x W166 x D111mm (6.1 x 6.5 x 4.3 inches)
Weight	1kg (2.2lbs) Aluminium; 3.1kg (6.8lbs) Stainless Steel
Enclosure material	Corrosion resistant Aluminium or 316 Stainless Steel
Ingress protection	IP65
Cable entries	1 x M20 or 1/2"NPT on right side.
Power	14-32Vdc. < 4W
Operating temperature	-20°C to +55°C (-4°F to 131°F)
Humidity	0 to 95% RH non-condensing
Electrical output	3-wire 4-20mA (current sink or source)
Terminals	Suitable up to 2.5mm <sup>2</sup> cable
Sensor type	Infrared
Repeatability	+/- 2% FSD
Zero drift	+/- 2% FSD per year maximum
Response time	T90 <30 secs
Hazardous area zones	Zone 1 and Zone 2, Zone 21 and 22
Approvals	Baseefa04ATEX0024X Ex II 2GD Ex d IIC T6 Gb Ex tb IIIC T80°C Db (-40°C ≤ Tamb ≤ + 50°C) Ex d IIC T4 Gb Ex tb IIIC T110°C Db (-40°C ≤ Tamb ≤ + 80°C) IECEx BAS 05.0043X Ex d IIC T6 Gb Ex tb IIIC T80°C Db (-40°C ≤ Tamb ≤ + 50°C) Ex d IIC T4 Gb Ex tb IIIC T110°C Db (-40°C ≤ Tamb ≤ + 80°C) UL Class 1 Div 1, Groups B, C, D
EMC compliance	EN 50270 FCC Part 15 ICES-003
Performance	EN60079-29-1

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