

Xgard IR

Infrared Gas Detector

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 ₄ H ₁₀)	1.8 (1.4)	9 (9.3)	0-100% LEL
Butene (C ₄ H ₈)	1.6	-	0-100% LEL
Carbon Dioxide (CO ₂)	0.5% vol.	1.5% vol.	0-2 or 0-5%
Ethanol (C ₂ H ₆ O)	3.3 (3.1)	19 (19)	0-100% LEL
Ethylene (C ₂ H ₄)	2.7 (2.3)	36 (36)	0-100% LEL
Hexane (C ₆ H ₁₄)	1.2 (1)	7.4 (8.4)	0-100% LEL
LPG	2	10	0-100% LEL
Methane (CH ₄)	5 (4.4)	15 (17)	0-100% LEL
Methanol (CH ₃ OH)	6.0	-	0-100% LEL
Pentane (C ₅ H ₁₂)	1.5 (1.4)	8 (7.8)	0-100% LEL
Propane (C ₃ H ₈)	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 ² cable	
Sensor type	Infrared	<p>Disclaimer</p> <p>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.</p> <p>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.</p> <p>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.</p>
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	

Crowcon reserves the right to change the design or specification of the product without notice.