



## Infrared Gas Detector

# Xgard IR

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. Xgard IR delivers many advantages of IR technology in an affordable package:

- Fail safe sensor technology
- Immune to poisoning
- No damage by over-gassing
- Fast response
- Does not need oxygen to work

Xgard IR, the gas detector you can trust.

#### Low cost of ownership

- > 5 year sensor life
- Low maintenance requirement
- Simple parts replacement
- Lowest power consumption in class (half the consumption of catalytic beads)

#### Rugged and reliable

- Corrosion resistant aluminium or 316 stainless steel construction
- IP65 ingress protection
- Long-life tungsten IR lamp
- Full temperature compensation
- Accessories available for wet environments
- 2-year warranty

#### Choice of sensors

- Hydrocarbon for detecting HC gases in flammable concentrations.
- Carbon Dioxide for CO<sub>2</sub> detection in toxic concentrations.

#### Highly versatile

- Industry standard 4-20mA output
- Compatible with virtually any control system
- ATEX, UL and IECEx hazardous area approvals ensure global acceptance

## Specifications

## Accessories

Enclosure material	Corrosion resistant Aluminium or 316 stainless steel
Size	156h x 166w x 111d mm (6.1 x 6.5 x 4.3 inches)
Weight	1Kg (2.2lbs) Aluminium, 3.1Kg (6.8lbs) Stainless Steel
Ingress Protection	IP65, IP66 with weatherproof cap
Cable Entries	1 x M20 or 1/2"NPT on right-side
Power	10-30Vdc. 50mA at 24Vdc, 67mA at 10Vdc
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 for up to 2.5mm <sup>2</sup> cable
Sensor Type	Infrared
Repeatability	+/- 2% FSD*
Zero Drift	+/- 2% FSD/month*
Response time	T90 <30 secs.*
Hazardous area zones	Zone 1 or Zone 2, Zone 21/22
Approvals	II 2 GD Exd IIC T6 (Tamb to +50°C) II 2 GD Exd IIC T4 (Tamb to +80°C) UL Class 1 Div. 1 Groups B,C,D IECEX MED Marine (96/98/EC) (PENDING)
EMC compliance	EN 50270, FCC Part 15 ICES-003
Performance	EN 61779:2000 EN 50271:2001

\*As tested in Crowcon laboratories



Sun Shield



Spray deflector  
For outdoor use and protection against wash-down operations



Flow adaptor  
For use in sampling applications



Weatherproof cap  
For use in very wet conditions, such as offshore installations and ships

Gas Type	LTEL LEL (% vol)	STEL UEL (% vol)	Ranges Available
Carbon Dioxide (CO <sub>2</sub> )	0.5% vol.	1.5% vol.	0-2 or 0-5%
Ethylene (C <sub>2</sub> H <sub>4</sub> )	2.7 (2.3)	36 (36)	0-100% lel
Methane (CH <sub>4</sub> )	5 (4.4)	15 (17)	0-100% lel
Propane (C <sub>3</sub> H <sub>8</sub> )	2.2 (1.7)	10 (10.9)	0-100% lel
Butane (C <sub>4</sub> H <sub>10</sub> )	1.8 (1.4)	9 (9.3)	0-100% lel
Ethanol (C <sub>2</sub> H <sub>5</sub> OH)	3.3 (3.1)	19 (19)	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
Pentane (C <sub>5</sub> H <sub>12</sub> )	1.5 (1.4)	8 (7.8)	0-100% lel

LEL figures shown in brackets are taken from EN 61779 Part 1:2000



Collector cone  
For aiding detection of gases which are lighter than air, (eg Methane)



A HALMA COMPANY

P03020 Issue 6 March 09

UK Office  
Crowcon Detection Instruments Ltd  
2 Blacklands Way  
Abingdon Business Park  
Abingdon  
Oxfordshire OX14 1DY  
United Kingdom  
Tel: +44 (0) 1235 557700  
Fax: +44 (0) 1235 557749  
Email: sales@crowcon.com  
Web Site: www.crowcon.com

USA Office  
Crowcon Detection Instruments Ltd  
21 Kenton Lands Road  
Erlanger  
Kentucky 41018-1845  
USA  
Tel: +1 859 957 1039 or  
1-800-5-CROWCON  
Fax: +1 859 957 1044  
Email: salesusa@crowcon.com  
Web Site: www.crowcon.us

Rotterdam Office  
Crowcon Detection Instruments Ltd  
Vlambloem 129  
3068JG, Rotterdam  
Netherlands  
Tel: +31 10 421 1232  
Fax: +31 10 421 0542  
Email: eu@crowcon.com  
Web Site: www.crowcon.com

Singapore Office  
Crowcon Detection Instruments Ltd  
Block 194 Pandan Loop  
#06-20 Pantech Industrial Complex  
Singapore 128383  
Tel: +65 6745 2936  
Fax: +65 6745 0467  
Email: sales@crowcon.com.sg  
Web Site: www.crowcon.com