

TXgard & Flamgard Plus

Fixed point gas detectors

Non-intrusive calibration

Intuitive display

Flexible output options

Low cost of ownership

Rugged and reliable

Wide range of sensors



TXgard & Flamgard Plus

Toxic and oxygen gas detector with display

With 3 models available, we have a detector to suit your requirements.



Flamgard Plus



Flamgard Plus is a Flameproof (Ex d), ATEX and IECEx certified flammable gas detector, which uses poison-resistant pellistors to detect explosive levels of hydrocarbons, hydrogen and other flammable gases and vapours, including aviation fuel and leaded petrol vapours.

TXgard Plus



TXgard Plus is a Flameproof (Ex d), ATEX and IECEx certified toxic or oxygen gas detector with local LCD display. A choice of sensors are available enabling use in a wide range of applications, including water treatment, oil and gas exploration, chemical plants and steel production.

TXgard-IS+



TXgard-IS+ is an Intrinsically Safe (I.S.), 2-wire, toxic and oxygen gas detector with local LCD display. A wide choice of sensors is available for use in a variety of applications. TXgard-IS+ is ATEX and IECEx certified for use in Zone 0,1 or 2 hazardous areas.

Low cost of ownership

| | |
|-----------------------------------|-----------------------------------------------------|
| Non-intrusive one man calibration | Easy to operate and maintain |
| Long life sensors | Keeps interruption to on-site activity to a minimum |
| Simple parts replacement | |
| Wide range of sensor options | Reduced training requirements |

Gases and ranges

| Gas | LTEL (ppm) | STEL (ppm) | Range available: TXgard-IS+ | Range available: TXgard Plus |
|--------------------------------------|-----------------------------|---------------------|-------------------------------|------------------------------|
| Ammonia (NH ₃) | 25 | 35 | 50, 100, 1000ppm | - |
| Carbon monoxide (CO) | 20 | 100 | 250, 500ppm | 100, 250, 500, 1000ppm |
| Chlorine (Cl ₂) | - | 0.5 | 5, 10, 20ppm | - |
| Chlorine dioxide (ClO ₂) | 0.1 | 0.3 | 1 ppm | - |
| Hydrogen (H ₂) | - | - | 2000ppm, 50% LEL, 100% LEL | - |
| Hydrogen cyanide (HCN) | 0.9 | 4.5 (MEL) | 25ppm | - |
| Hydrogen fluoride (HF) | 1.8 | 3 | 10ppm | - |
| Hydrogen sulphide (H ₂ S) | 5 | 10 | 25, 50, 100, 200ppm | 15, 20, 25, 50, 100, 200ppm |
| Nitrogen dioxide (NO ₂) | 0.5 | 1 | 10ppm | - |
| Oxygen (O ₂) | 19.5% Vol. typical alarm | 23.5% typical alarm | 25% Vol. | 25% Vol. |
| Ozone (O ₃) | - | 0.2 | 1ppm | - |
| Phosgene (COCl ₂) | 0.02 | 0.06 | 1ppm | - |
| Phosphine (PH ₃) | 0.1 | 0.2 | 2ppm | - |
| Sulphur dioxide (SO ₂) | 0.5 | 1 | 10, 20, 30ppm | - |

STEL & LTEL figures are derived from the UK HSE document: EH40. Other thresholds may apply in countries outside the UK.

| Gas | LEL (%vol.) | Range available: Flamgard Plus |
|---------------------------------------------|-------------|--------------------------------|
| Acetylene (C ₂ H ₂)* | 2.3 | 0-100% LEL |
| Ammonia (NH ₃) | 15 | |
| Butane (C ₄ H ₁₀) | 1.4 | |
| Ethanol (C ₂ H ₅ OH) | 3.1 | |
| Ethane (C ₂ H ₆) | 2.4 | |
| Ethylene (C ₂ H ₄) | 2.3 | |
| Hexane (C ₆ H ₁₄) | 1.0 | |
| Hydrogen (H ₂) | 4 | |
| LPG | 2 | |
| Methane (CH ₄) | 4.4 | |
| Methanol (CH ₃ OH) | 6 | |
| Pentane (C ₅ H ₁₂) | 1.1 | |
| Petrol vapor | 1.4 | |
| Propane (C ₃ H ₈) | 1.7 | |
| Propanol (C ₃ H ₈ O) | 2.1 | |

LEL figures derived from EN60079-20-1:2010

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

Specification

| | Flamgard Plus | TXgard Plus | TXgard-IS+ |
|-----------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------|
| Size | 200 x 115 x 115mm (7.9 x 6.1 x 6.1ins) | | 160 x 123 x 92mm (6.3 x 4.8 x 4.5ins) |
| Weight | 2.2kg (4.9lbs) | | 0.7kg (1.5lbs) |
| Enclosure material | Junction box: Marine grade alloy Sensor housing: 316 stainless steel | | Junction box: Carbon loaded nylon Sensor housing: ABD Plastic |
| Ingress protection | IP65 | | |
| Cable entries | 2 x M20 or 1/2" NPT | | 1 x M20 or 1/2" NPT with adaptor |
| Power | 10-30Vdc, 210mA max (relay version) 160mA max (non relay) | | 8-32Vdc, 4-20mA loop-powered |
| Operating temperature | -10°C to +55°C (14°F to 131°F) | -10°C to +55°C (14°F to 131°F) * | -20°C to +55°C (-4°F to 131°F) * |
| Humidity | 0-99% RH non-condensing | 15 to 90% RH non-condensing | |
| Relays (optional) | SPNO or SPNC contacts rated 30Vdc 1A (non-inductive load) for Alarm 1, Alarm 2, Fault | | N/A |
| Display | 3-digit LCD back-lit display, LED status indicator | | 2-Line, 16 character LCD |
| Calibration method | Via magnetically operated buttons | | Via push-buttons |
| Electrical output | 3 wire 4-20mA, sink or source | | 2 wire 4-20mA sink |
| Terminals | Suitable for up to 1.5mm ² cable | | Suitable for up to 2.5mm ² cable |
| Sensor type | Catalytic bead | Electrochemical | |
| Repeatability | +/- 2% FSD typically | | |
| Zero drift | +/-2% FSD, 6 months typically | | |
| Response time | T90 <15 seconds typically | Contact Crowcon for a full list of sensor response times | |
| Hazardous area zones | Zone 1 or 2 | | Zone 0, 1 or 2, Division 1 or 2 (when connected via an isolation device) |
| Approvals | Ex II 2G Ex db IIC T6 Gb Tamb -20°C/+55°C | | Ex II 1G Ex ia IIC T4 (-40°C to +65°C) |
| EMC compliance | EN50270, FCC: CFR 47 Part 15; ICES-003 | | |

* Figures shown exclude the sensors - Please contact Crowcon for a full list of sensor operating temperatures

Disclaimer

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