



Detectors  
Infrared flammable gas detector

# Nimbus

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Nimbus is compact and lightweight but rugged. Maintenance is simple and because it is compatible with Windows CE and MTL611B platforms units can be checked by a single engineer even in hazardous areas.

It can be integrated into existing systems with ease.

In short, Nimbus protects staff and property without making your life complicated.

## Rugged & reliable

Nimbus has been designed to be **lightweight but rugged**.

**Even in the dirtiest conditions Nimbus still functions.** The optics operate at up to 90% obscuration. While still detecting gas, at 75% obscuration a dirty optics warning flashes **so you know when to clean Nimbus**.

Dust and water ingress are not a problem either as **Nimbus is rated IP66 and IP67**. Allied to this Nimbus has full approvals from both **CENELEC and UL**.

Nimbus has a **MTBF of 10 years**. This figure has been independently assessed using the MIL Handbook 217F/2/12/91

**In short you can rely on Nimbus to protect you.**

## Simple maintenance

**Nimbus has a local external status light** which shows, at a glance, if the unit is in normal function or fault. When a hazard is detected it indicates both rising gas and alarm levels.

The status light clearly indicates 22 further conditions for **instant diagnosis**.

**Nimbus is simple to use even in inaccessible areas.** When duct mounted, the **remote gassing device and IS connector** make calibration easy.

## One man calibration

Nimbus is compatible with both Windows CE and MTL611B software. This means that **both Windows compatible and IS handheld devices can be used to check gas levels**, find faults and change the gas type in the field. **Only one person** is required to do this.

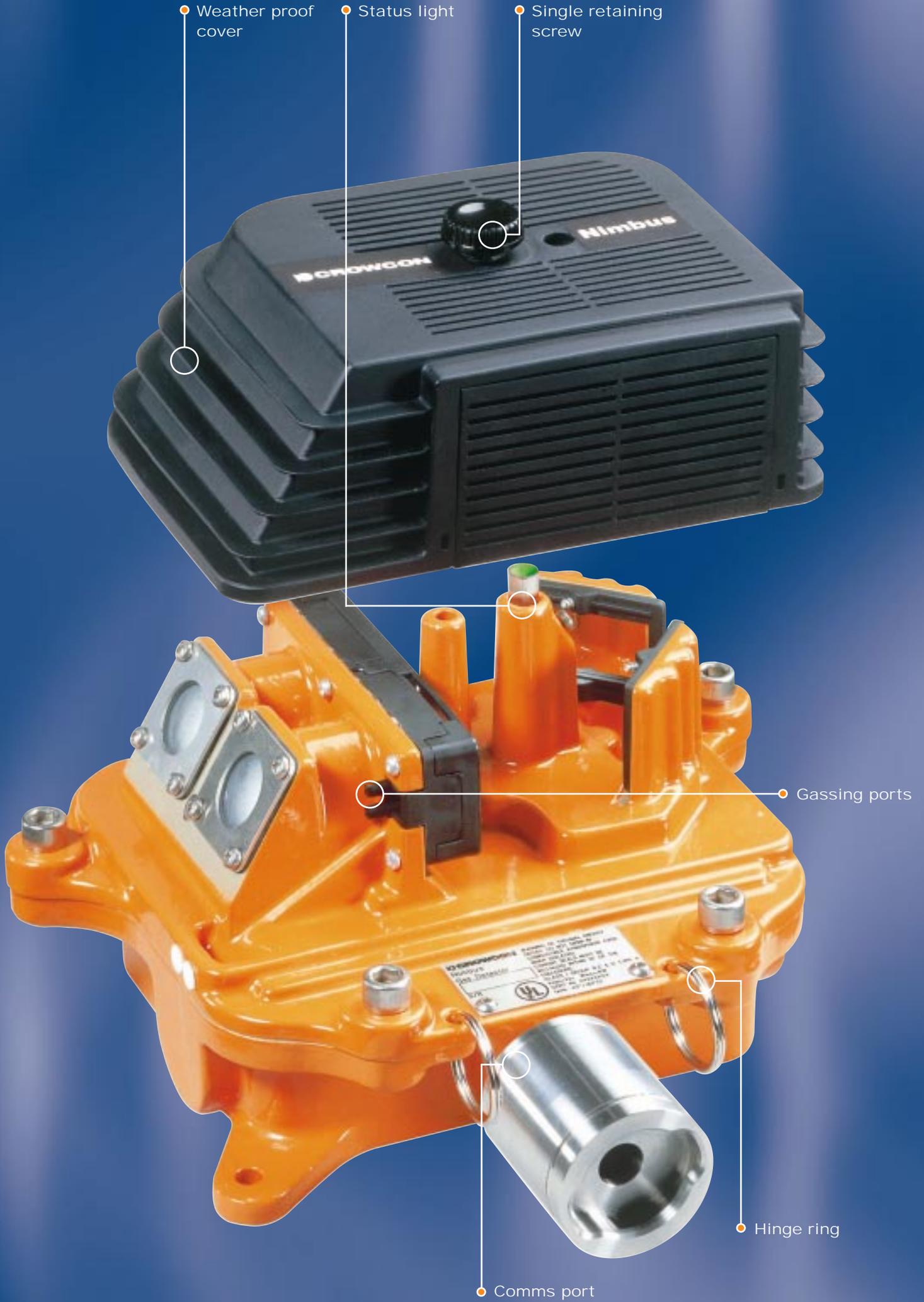
**Nimbus also has an intrinsically safe connector** so even when hazardous gas is present all the time maintenance work can be carried out safely without a 'hot work permit' and without opening the detector.

## Flexible installation

**Nimbus can be integrated into existing situations with ease.** It has both 4-20mA and RS485 outputs and is compatible with steel wire armoured cable and conduit.

The **Modbus serial link** allows addressable detectors to be looped **providing a remote control and interrogation facility**.

For facilities where Nimbus is replacing a pellistor based detector the **pellistor mimic means that existing cabling can be retained to reduce upgrade costs**.



# Fixed Detector Range

Crowcon has developed a range of detectors with your problems in mind. The Flamgard range offers pellistor-based detection of most flammable gases including mixtures. The complementary TXgard range detects oxygen plus a very wide range of toxic gases. Both come in a range of options to suit specific locations.

Nimbus and Cirrus provide infrared detection of hydrocarbon gases. Nimbus is lightweight and compact with Windows CE and MTL611B platforms while Cirrus is ideal for inaccessible areas as it never requires calibration and has an automatic test function.

## Nimbus



### Infrared flammable gas detector

Nimbus is a lightweight, compact detector providing infrared detection of hydrocarbon gases.

It is rugged with an MTBF of 10 years and its flexible design means it is compatible with both Windows CE and MTL611B platforms. This with the IS connector means that maintenance can be carried out, even in hazardous areas, by a single engineer.

## Flamgard



### Flammable gas detector

The Flamgard range offers pellistor based flammable gas detection for even the most rugged areas. The five models in the range include flameproof options, very high temperature operation and one-man, non-intrusive calibration.

All models use poison resistant sensors to detect explosive levels of hydrocarbons, organics, hydrogen and ammonia, including aviation fuel and leaded petrol vapours.

## Cirrus



### Infrared flammable gas detector

Cirrus has been specifically developed to provide infrared detection of hydrocarbon gasses in inaccessible areas.

Its unique and robust design means it is resistant to knocks or vibration and it never requires zero or span gas calibration. Cirrus is so stable that it shows only  $\pm 2\%$  drift over five years.

All this and the remote automatic functional test capability make Cirrus ideal for inaccessible areas.

## TXgard



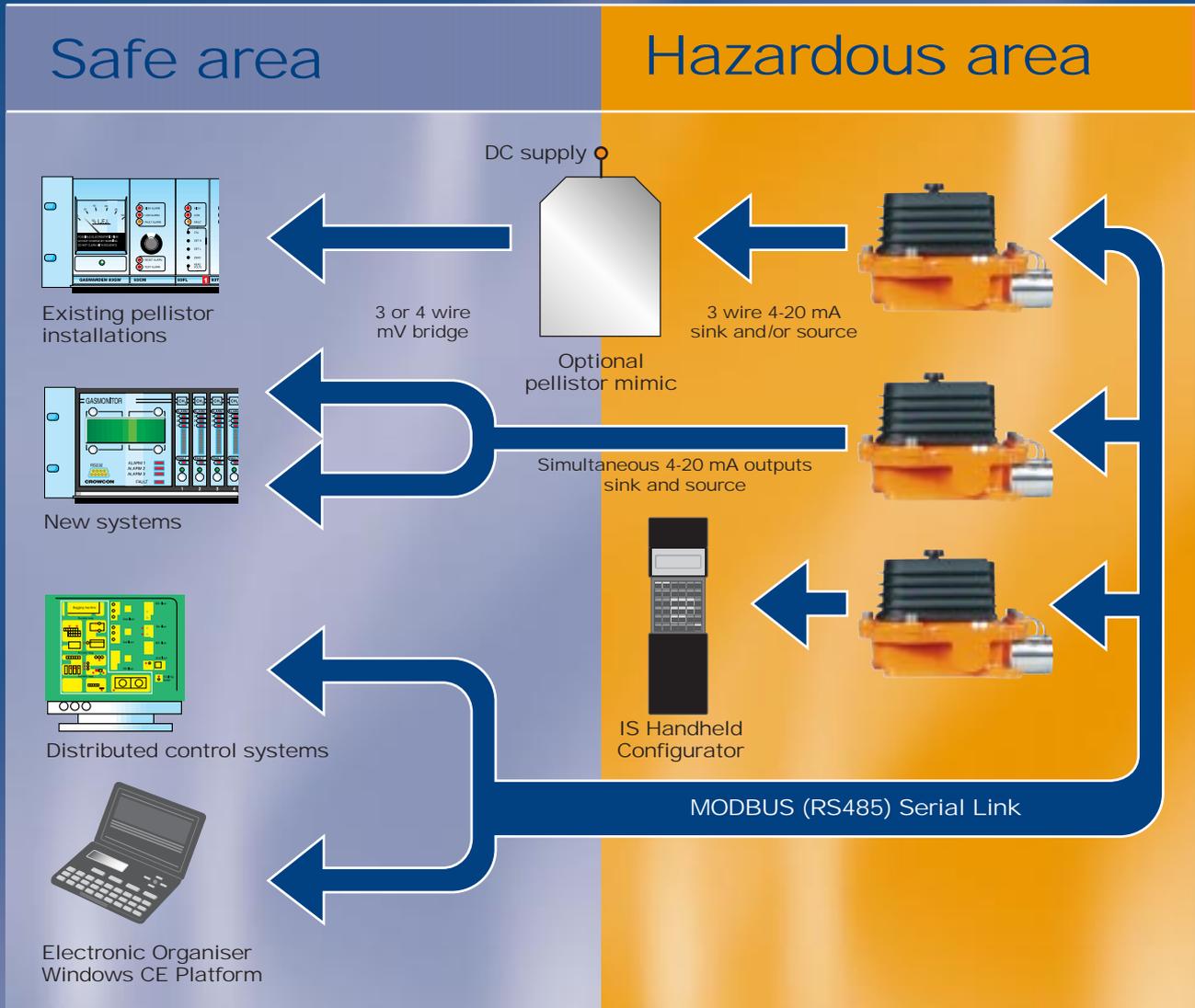
### Toxic gas detector

For toxic gas and oxygen detection TXgard offers four versions tailored to meet your needs. Both intrinsically safe and flameproof options are available and for inaccessible areas TXgard Plus offers local display and one-man calibration.

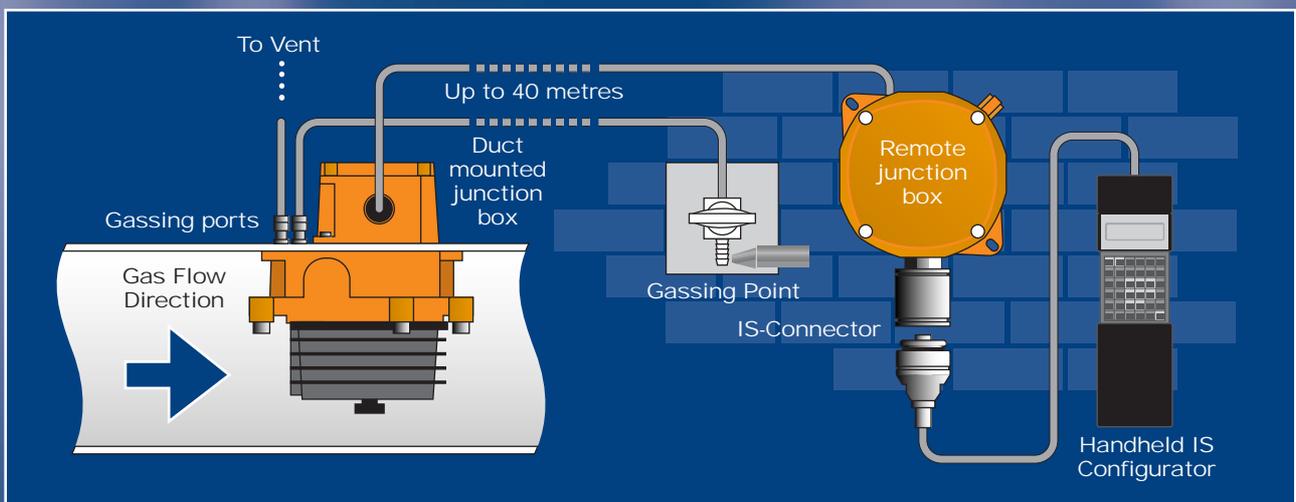
An extremely wide range of toxic sensors is available including our unique sulphistor which can operate even at very high background levels of hydrogen sulphide.

# Nimbus, the total system solution

It can interface with any standard control system, or combination of systems, new or old.



## Duct Mounted





Model	Nimbus
Function	The detection of hydrocarbon gases C <sub>1</sub> to C <sub>5</sub> and ethylene in the 0-100% LEL range by means of infrared absorption.
Dimensions	125 x 170 x 210 mm (5 x 6.8 x 8.3 ins)
Weight	2.5 Kg, (5.5 lbs)
Construction	LM25 marine grade alloy, polyester powder coated
Optical system	Dual wavelength, dual detector
Optical performance	Correct operation with up to 90% obscuration. Dirty optics warning above 75% (configurable). Heated optics to avoid condensation.
Power consumption	Operating voltage: 10 to 32 V dc (nominal 24 V), 180 mA (maximum), 4.3 W @ 24 V, 1.8 W @ 10 V.
Typical output signals	All levels configurable - simultaneous sink and source output 0 mA: fault 2 mA: dirty optics 4-20 mA: 0-100% LEL 24 mA: over range
Status light	Green - normal function Yellow - fault Red - detecting gas 22 other conditions indicated by flash rate
Communications	Modbus RS485 serial link
Functional testing	Gas chamber or flow adaptor for gassing
Accuracy	Zero stability <1% LEL ±5% of gas reading
Repeatability	±2% of gas reading
Response time	<7 seconds - T <sub>90</sub> <3 seconds - instantaneous high levels of gas
Temperature range	-40°C to 65°C (-40°F to 149°F)
Humidity range	0 to 99% RH non-condensing
Approvals	 EEx d IIB+Hydrogen T6 Class 1, Div 1, Groups B, C & D Tamb = -40°C to 65°C (-40°F to 149°F)
Standards	 EN50014, EN50018 UL1203
Ingress protection	IP66 (jets of water) IP67 (submersion), NEMA 4X
Light immunity	Totally immune to all external light, both constant and modulated (including sunlight, white light, flashing beacons etc.)
General immunity	Totally immune to all catalyst poisons.
Electromagnetic compatibility	Gas detection standard pr EN50270 RF emissions EN50081-2 RF immunity EN50082-2

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 **CROWCON**  
Gas Detection You Can Trust