

# Gasman

## Personal Rechargeable Single Gas Monitor

Robust

Effective warning

Flexible

User-friendly



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Gasman is a rugged, compact single gas personal monitor designed for use in the toughest environments.

With impact-resistant construction and compliance to IP65, Gasman offers a wide range of gases, including six flammable calibration options. Gasman gives an unbeatable combination of powerful loud and bright alarms. Its stunningly compact and lightweight design makes it ideal for use in industries such as oil and gas, chemical, steel works and waste and water works.



### Robust

Tough polycarbonate housing	Protects you in the harshest environments
Water and dust resistant to IP65	
Full overmolding	High impact resistance

### Effective warning

2 levels of instantaneous alarm and TWA alarms for toxic versions	Ensures prompt evacuation from hazardous zone
95dB audible alarm	
Vivid twin red/blue visual alarm	If ambient noise is high, Gasman still alerts you by vibrating and with the high impact blue/red LED alarms
Internal vibrating alarm	

### Flexible

Versions available for flammable gas, oxygen and toxic gases	Gas detector tailored to your requirements
Rechargeable versions for all gas types	
Non-rechargeable versions for oxygen and toxic gases	
Real time TWA and peak display options	
Fully interchangeable intelligent sensor modules	

### User-friendly

One button operation	Quick and easy to use
Backlit display for gas diagnostics and operating status	Easy to read
Ultra lightweight- just 85g for toxic versions	Comfortable to wear



## Typical ranges and alarms

Gas	Range	Typical alarms
Ammonia (NH <sub>3</sub> )	0-1000ppm	25ppm
Carbon monoxide (CO)	0-1500ppm	30ppm
Carbon dioxide (CO <sub>2</sub> )	0-5%	0.5%
Carbon monoxide (H <sub>2</sub> filtered)	0-500ppm	30ppm
Chlorine (CL <sub>2</sub> )	0-20ppm	0.3ppm
Chlorine Dioxide (ClO <sub>2</sub> )	0-1ppm	0.1ppm
Ethylene Oxide (ETO)	0-10ppm	3ppm
Flammable	0-100% LEL	20% LEL
Fluorine (F <sub>2</sub> )	0-1ppm	0.5ppm
Hydrogen (H <sub>2</sub> )	0-2000ppm	N/A
Hydrogen cyanide (HCN)	0-25ppm	5ppm

Gas	Range	Typical alarms
Hydrogen fluoride (HF)	0-10 ppm	1ppm
Hydrogen sulphide (H <sub>2</sub> S)	0-250 ppm	5ppm
Nitric oxide (NO)	0-100 ppm	25ppm
Nitrogen dioxide (NO <sub>2</sub> )	0-20 ppm	1ppm
Oxygen (O <sub>2</sub> )	0-25%	19.5%/23.5%
Ozone (O <sub>3</sub> )	0-1 ppm	0.1ppm
Phosphine (PH <sub>3</sub> )	0-5 ppm	0.1ppm
Phosgene (COCl <sub>2</sub> )	0-1 ppm	0.1ppm
Sulphur dioxide (SO <sub>2</sub> )	0-20 ppm	1ppm

More gas types will be available - contact Crowcon with your requests.

## Specification

Size		90 x 48 x 24 mm (3.5 x 1.9 x 0.95 ins)
Weight	Flammable Toxic Oxygen Carbon dioxide	138g (4.9oz) 85g (3oz) 129g (4.6oz) 139g (4.9oz)
Typical response times ( $T_{90}$ )	Flammable Toxic gas Oxygen	20s 20s 10s
Alarms	Audible	95dB Multiple alarm options let you select distinctive tones for different alarm levels
	Visible	Dual colors red/ blue flashing LEDs in a gas hazard
	Vibrating	Internal vibrating alarm
Display		Custom LCD with backlight and display of gas concentration. Graphic symbols for battery (with proportional indication of remaining operation time), and display mode. Start-up indication when calibration is due within 30 days, calibration overdue or service required.
Display modes	Normal display Display recall	Real time gas concentration levels Peak readings and TWA
Datalogging		Full timed data logging with adjustable sample rate, set to 1 min. data rate as default. 900 hours storage at 1 min. interval (54,000 logs), >4800 events
Battery	Rechargeable	Lithium battery for all gas types
	Non-rechargeable	Lithium battery for toxics and oxygen (excluding CO <sub>2</sub> )
Operating time*	Rechargeable	12 hours minimum for flammable unit
	Non-rechargeable	Up to 2 years
Sampling		Optional manual aspirator
Operating temperature range**		-20°C to + 65°C (-4°F to +149°F)
Humidity		5-95% RH***
Ingress protection		IP65
Approval codes	Europe	Toxic or O <sub>2</sub> : ATEX II 1G Ex ia db IIC T4 Ga (-4°F ≤ Ta ≤ +149°F) BASEEFA04ATEX0384 Flammable: ATEX II 2G Ex ia d IIC T4 Gb (-4°F ≤ Ta ≤ +149°F) BASEEFA04ATEX0383
	International	Toxic or O <sub>2</sub> : IECEx Ex ia IIC T4 Ga (-4°F ≤ Ta ≤ +149°F) BAS05.0039 Flammable: Ex db ia IIC T4 Gb (-4°F ≤ Ta ≤ +149°F)
	North America	CSA Class 1, Division 1, Groups A, B, C, D
Standards safety	Europe North America	EN60079-0, EN60079-11, EN60079-1, 2014/34/EU CSA22.2 Atex 2014/34/EU
Operation standards		EN50270, EN50271, IEC61508, EN61779, EN45544
PC interface		RS232 connection from 'Charger/interface' variation RS232/USB converter available
Calibration		Gasman can be routinely calibrated using Portables PC software
Accessories		Gasman is supplied with an integral alligator clip. Optional accessories: gas test kit, Gasman external filter, leather carrying case, single-way charger, charger interface software and communication kit (excluding PSU), 5 way multi-charger

\*Operating time will depend on operating pattern and alarm occurrence. Frequent or long lasting alarms and use of the optional confidence beep will reduce battery life.

\*\*Toxic and oxygen sensors are not rated for continuous operation at high temperatures. Consult Crowcon if operating temperatures are likely to exceed 40°C (104°F) for extended periods.

\*\*\* Sensor humidity range varies by sensor type, consult Crowcon for further details