Gasman

Portable Gas Detection Equipment
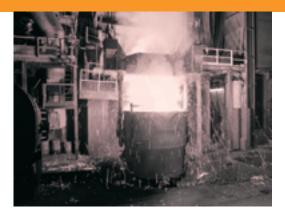
- Robust
- Effective warning
- Flexible
- User friendly

Gasman

Personal single gas monitor

When lives and property are at risk and you need gas detection equipment that is totally reliable, you need Crowcon. For over 40 years Crowcon has been developing and manufacturing high quality products with a reputation for reliability and technical innovation.

Crowcon provide both single gas and multigas monitors for personal monitoring and portable safety applications providing protection against a wide range of industrial gas hazards.

Choosing the portable gas detector for your needs

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

With rugged 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.

Gasman is small, light and easy to use. Weighing just 130g, it is extremely durable, with high impact resistance and dust/water ingress protection to IP65. When potentially hazardous levels of gas are detected, the Gasman alerts the user with a loud 95 dB alarm, a vivid red/blue visual warning and also by vibrating.

Gasman features simple, single-button control and has an easy-to-read, backlit LCD display to ensure clear viewing of gas level readings, alarm conditions and battery life. Data and event logging are available as standard, and there is a built-in 30 day advance warning when calibration is due.

Robust

Tough polycarbonate housing	Protects you in the harshest environments
Water and dust resistant to IP65	
Full overmoulding	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	
Rechargeable versions for all gas types	
Non-rechargeable versions for oxygen and toxic gases	Gas detector tailored to your requirements
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

Gas Test Kit

The Gas Test Kit provides a simple and convenient means of carrying out either bump test or a calibration.

Gases and Ranges

Required ranges and alarms vary by country and application and these can be configured as required. Each gas channel can have two instantaneous alarm levels set. Toxic units also have Time Weighted Average (TWA) alarms.

Flammable gas calibration is available for methane, propane, butane, pentane, hydrogen and ethylene as standard.

Gasman is also available in a safe area CO_2 version offering 0-5% carbon dioxide measurement.

Typical ranges and alarms:

Gas	Range	Standard Alarm (UK)
Carbon monoxide (H_2 filtered)	0-500ppm	30ppm
Ammonia (NH_3)	0-100ppm	25ppm
Carbon monoxide (CO)	0-500ppm	30ppm
Carbon dioxide (CO_2)	0-5%	0-5%
Chlorine (CL_2)	0-20ppm	0.5ppm
Flammable	0-100% LEL	20% LEL
Fluorine (F_2)	0-1ppm	0.1ppm
Hydrogen (H_2)	0-2000ppm	N/A
Hydrogen cyanide (HCN)	0-25ppm	5ppm

Gas	Range	Standard Alarm (UK)
Hydrogen fluoride (HF)	0-10 ppm	1ppm
Hydrogen sulphide (H_2S)	0-100 ppm	5ppm
Nitric oxide (NO)	0-100 ppm	25ppm
Nitrogen dioxide (NO_2)	0-20 ppm	1ppm
Oxygen (O_2)	0-25%	19/23%
Ozone (O_3)	0-1 ppm	0.1ppm
Phosphine (PH_3)	0-5 ppm	0.2ppm
Phosgene (CCL_2)	0-1 ppm	0.1ppm
Sulphur dioxide (SO_2)	0-20 ppm	1ppm

Please see the back page for full technical specifications.

Gasman Specification:

Size		90 x 48 x 24 mm (3.5 x 1.9 x 0.95 ins)
Weight	Flammable	138g (4.9oz)
	Toxic	118g (4.1oz)
	Oxygen	129g (4.6oz)
	Carbon monoxide	139g (4.9oz)
Typical response times (T$_{90}$)	Flammable	20s
	Toxic gas	20s
	Oxygen	10s
Alarms	Audible	95dB Multiple alarm options let you select distinctive tones for different alarm levels
	Visible	Dual colours red/ blue flashing LEDs in a gas hazard
	Vibrating	Internal vibrating alarm
Display		Custom LCD with backlight, with 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	Real time gas concentration levels
	Display recall	Peak readings and TWA
Datalogging		Full timed datalogging 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_2)
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		20-90% RH
Ingress protection		IP65
Approval codes	Europe	Toxic or O$_2$: ATEX II 1G Ex ia IIC T4 Ga (-20OC ≤ Ta ≤ +65°C) BASEEFA04ATEX0384 Flammable: ATEX II 2G Ex ia d IIC T4 Gb (-20OC ≤ Ta ≤ +65°C) BASEEFA04ATEX0383
	International	Toxic or O$_2$: IECEx BAS05.0039 Flammable: IECEx BAS05.0038
	North America	CSA Class 1 Groups A,B,C,D Division 1
Standards safety	Europe	EN60079-0, EN60079-11, EN60079-1, 94/9/EC
	North America	CSA22.2, 152
Operation standards		EN50270, EN50271, IEC61508, EN61779, EN45544
PC interface		RS232 connection from interface module in charger RS232/USB converter available
Calibration		Gasman can be routinely calibrated using Portables PC software or by using Checkbox IMH
Accessories		Gasman is supplied with an integral alligator clip

*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.

CROWCON
Detecting Gas Saving Lives