H_2S
Cl_2
NH_3
O_3
CO
O_2
CH_4
SO_2
HCL
LPG

Gasmaster

Gas detection control panel

Gasmaster 1

- 1 channel control system

Gasmaster 4

- 1 to 4 channel control system

CROWCON
Gas Detection You Can Trust

Gasmaster

Gasmaster is the flexible and simple-to-use solution wherever you need a self-contained control panel to monitor gas or fire hazards.

It combines extensive features and outstanding performance to suit all applications. Gasmaster provides the information you need at a glance via the comprehensive display, and all adjustments can be performed using the buttons on the front panel. Gasmaster can operate 'stand-alone' or interface with any alarm devices and control systems using a selection of outputs.

Simple and convenient

- Gasmaster has been designed for easy operation. All gas levels are displayed simultaneously to enable full system status checks at a glance.
- All functions from day-to-day operation to re-calibration can be carried out from the front panel, so routine testing can be performed in a moment.
- Gasmaster PC software enables re-configuration and event log upload in an instant.
- Installation and maintenance is also extremely simple. Ample space is provided for cable glands and termination of wiring. Gasmaster warns when calibration is due, and all inputs and outputs can be quickly tested using a simple button press.

Safe & reliable

- There are two levels of alarm per channel as well as common alarm and fault relays, which can be configured to suit site requirements. An integral 85dB multi-tone sounder is fitted as standard.
- Relays can operate in 'fail-safe' mode, and all coils are actively monitored so Gasmaster can warn if a relay fails.
- Battery back-up is provided as standard to ensure continued protection even if the power fails.
- Alarms and faults are recorded in an 'event log' which can be accessed regularly to assess risks on site.

Flexible input and output options

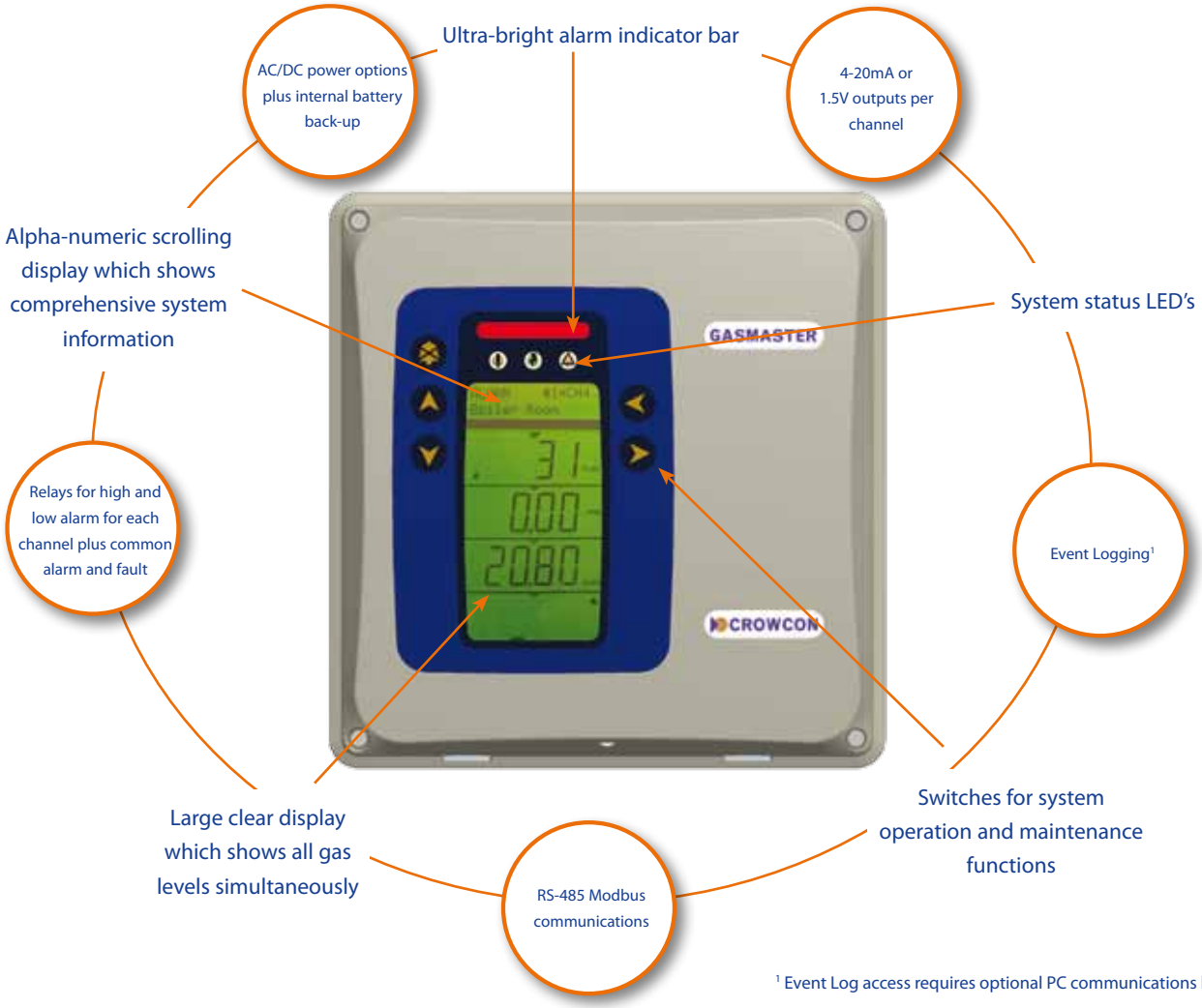
- Gasmaster can monitor and control virtually any combination of gas or fire detectors, and offers an array of outputs as standard to enable simple integration with any control equipment with minimum wiring.
- Gasmaster provides relays, drives for audible/visual alarms, 4-20mA or 1-5V outputs and RS-485 Modbus communications for comprehensive monitoring and control.
- For convenience, Gasmaster has a remote inhibit and remote reset facility to enable control from any point on your site.
- Level 1 alarms can be set to operate 'silently' so that ventilation fans can be controlled without raising alarms

Adaptable to your needs

- The LCD display can be set to read in many languages, and provides detailed descriptions of alarms and detector locations as well as system status.
- Gasmaster is available in two versions to address the needs of virtually any application:
- **Gasmaster 1:** for one gas detector or fire zone
- **Gasmaster 4:** for one to four gas detectors, fire zones or Environmental Sampling Units (contact Crowcon for details)

Gasmaster 4

Gasmaster is a compact but powerful control system that combines simple operation with an extensive array of input and output functions.



[1] Event Log access requires optional PC communications kit

Gasmaster Accessories

Accessory Enclosure allows connection of mV Bridge type flammable gas detectors.

Auxillary Power Unit provides extended back-up in the event of mains power failure.

Gasmaster Specifications:

Model	Gasmaster 1	Gasmaster 4
Size	288h x 278w x 110d (mm) (11.3 x 10.9 x 4.3 inches)	288h x278w x 110d (mm) (11.3 x 10.9 x 4.3 inches)
Weight	4.5kg (10 lbs)	4.5kg (10 lbs)
Enclosure material	Back-box: cast aluminium Front cover: fire retardent ABS plastic	Back box: cast aluminium Front cover: fire retardent ABS plastic
Ingress protection	IP54, IP66 optional	IP54, IP66 optional
Power	100-240Vac 50-60Hz or 20-30Vdc, 60W max	100-240Vac 50-60Hz or 20-30Vdc, 60W max
Battery back-up	1.2Ah batteries fitted internally	1.2Ah batteries fitted internally
Operating temperature	-10°C to +50°C (14°F to 122°F)	-10°C to +50°C (14°F to 122°F)
Humidity	0 to 95% RH non-condensing	0 to 95% RH non-condensing
Inputs: Gas	One 2 or 3 wire 4-20mA gas detector (sink or source). Adaptor for mV bridge type detectors available	One to four 2 or 3 wire 4-20mA gas detectors (sink or source). Adaptor for mV bridge type detectors available
Inputs: Fire	One loop of up to 20 conventional smoke/ heat detectors or manual call points, or one flame detector (4-20mA or digital contact signal)	One to four loops of up to 20 conventional smoke/heat detectors or manual call points, or one to four flame detectors
Inputs: Environmental Sampling Unit	For use with one Crowcon ESU fan	For use with one to four Crowcon ESU fans
Inputs: Remote inhibit	Via normally open contact	Via normally open contact
Inputs: Remote reset	Via normally open contact	Via normally open contact
Outputs: Relays DPCO contacts rated 250Vac 8A . Relays can be set as energised or de-energised, latching or non-latching, latching acceptable	Low alarm. High alarm. Fault. Alarm relays can be set for rising or falling alarms. Hysteresis can be adjusted on low alarms	Low alarm and High alarm per channel plus Common Low, High and Fault. Alarm relays can be set for rising or falling alarms. Hysteresis can be adjusted on low alarms
Outputs: A/V alarm drive	24Vdc 650mA max. drive	24Vdc 650mA max. drive
Outputs: Analogue	4-20mA (current source, max. loop resistance 700Ω) or 1-5Vdc (min. load 50 KΩ)	4-20mA for each channel (current source, max. loop resistance 700Ω) or 1-5Vdc (min. load 50 KΩ)
Outputs: Serial link	RS-485 Modbus RTU for monitoring and control via DCS/SCADA/PLC systems	RS-485 Modbus RTU for monitoring and control via DCS/SCADA/PLC systems
Communications port[1]	For PC configuration and event log upload	For PC configuration and event log upload
Event logging[1]	Time-stamped log of up to 300 alarms, fault or system intervention activities	Time-stamped log of up to 300 alarms, fault or system intervention activities
Panel indication	LCD back-lit display shows gas level (in ppb, ppm, % volume or % lel units), and scrolling alpha-numeric status indication. LED's for Alarm, Fault, Power and Warning. Integral 85dB sounder (at 10cm)	LCD back-lit display shows gas level (in ppb, ppm, % volume or % lel units), for all channels and scrolling alpha-numeric status indication. LED's for Alarm, Fault, Power and Warning. Integral 85dB sounder (at 10cm)
Approvals	EMC: EN50270, EN60945, FCC Part 15, ICES002 Marine: MED (Marine Equipment Directive) Amendments 3 and 5	
Functional safety	Validated to IEC61508	

[1] Event log access requires optional PC communications kit and communications port

Compatible Devices

Industry-standard gas detectors

Sounders and Beacons Safe area, intrinsically safe or flameproof options

Up to 20 fire/heat detectors per zone

Fan control for Crowcon's Environmental Sampling Unit

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