



Control panels for gas and fire monitoring

# Gasmaster

**Gasmaster 1**

**Gasmaster 4**

**Gasmaster FP**

# Gasmaster

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

**It provides outstanding performance, from the office to an off shore oil rig, due to the choice of three models to suit your environment.**

**The beauty of Gasmaster is that it's simplicity itself to operate but packs a lot of performance. All functions can be carried out via push buttons on the front panel. All offer outputs for annunciators, shutdowns and datalogging. All have battery backup<sup>1</sup> and come with a variety of power inputs.**

**In short, Gasmaster is the flexible controller that is easy to live with.**

## Simple & convenient

The Gasmaster range has been designed so that **all day-to-day functions can be carried out from the front panel.** Checking and testing Gasmaster is quick and simple because the channel and test mode can be selected via push buttons on the front panel. So checking for a particular hazard can be done in a moment.

Maintenance is an easy task as well. Alarm levels, instrument zeroing and calibration are all altered by adjustable controls clearly located on each channel.

To help in general operation, **Gasmaster has a remote reset facility.** Thus when the hazard has gone the system can be reset, stopping audible alarms at the most convenient point on your site.

## Flexible output options

**Gasmaster can easily be integrated with your current equipment** because it offers industry standard outputs for either 4-20 mA or 1-5 V.

Drives are available for remote audible and visual alarms, remote displays, datalogging and chart recorders, allowing you to monitor the system in the most convenient way.

So that wiring is made as easy as possible Gasmaster has dedicated alarm outputs. With this arrangement and very clear terminal labelling inside the case, it is a simple task to locate the correct terminals for each alarm drive dramatically shortening the time needed to complete installation.

## Safe & reliable

**Alarms can be set for rising and falling gas levels.** Thus both oxygen, flammable and toxic hazards can be monitored. Two levels of alarm permit a warning level of hazard to be set to notify staff before the gas reaches a dangerous concentration whilst allowing for a further alarm to indicate when action must be taken. For oxygen, where high and low levels can present a risk, both an upper and lower level can be programmed.

Most importantly, the alarm drives can be configured so that if the power supply is interrupted then the system will indicate a fault. **This means it fails safe.**

## Customised for your needs

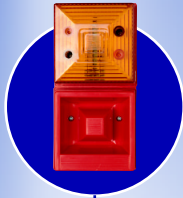
Two levels of common and individual alarm for each relay mean that **Gasmaster can be configured to match the precise requirements of each installation.**

Each channel has the capacity to trigger its own alarm (individual) and the whole system (common). Thus Gasmaster will go into general alarm if one or more of the detectors are triggered. In this way, you can configure Gasmaster to match exactly the pattern of hazard that your staff may meet.

To provide flexibility, **Gasmaster** is available in the following models:

- a) **single channel** - for light industrial units, boiler rooms and catering areas.
- b) **four channel** - for the control of gas and fire detectors, ideal for industrial applications
- c) **flameproof** - for applications where hazardous area mounting is required.

**Dedicated external audio/visual alarm drive**



**Remote reset switch**



**Common relays for fault, low and high**

*eg. Shutdowns, Alarm annunciators, and DCS*

**Individual channel relays for low and high**

**Individual channel analogue outputs, 4-20 mA or 1-5Vdc**

*Datalogger, and signal repeaters*

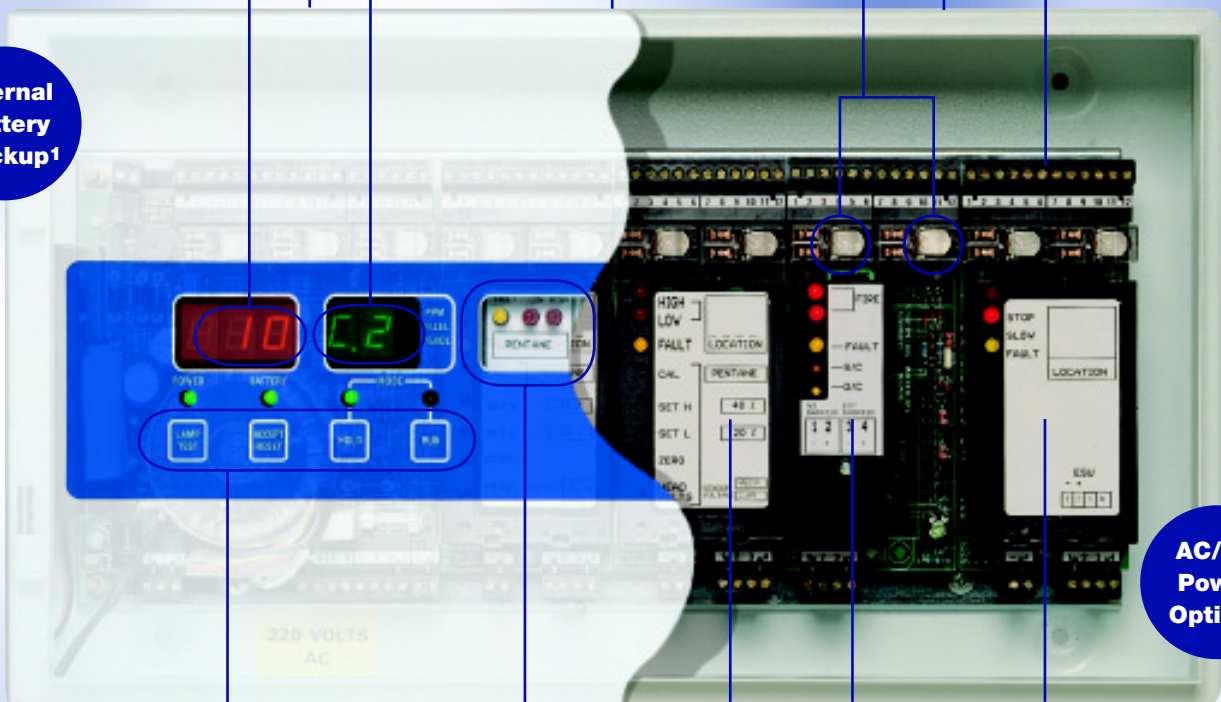
**Display shows gas concentration for selected channel**

**Display shows selected channel**

**Low and high level alarm relays**

**Channel relay terminals**

**Internal Battery Backup<sup>1</sup>**



**AC/DC Power Options**

**Membrane switches allow user to make all day-to-day tests from the front panel**

**Gas control module**

**Fire control module**

**Visual alarm indicators for each channel:**

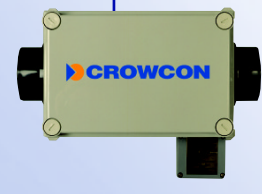
- Fault*
- Low alarm*
- High alarm*
- Internal audible alarm*



**Industry-standard gas detectors**



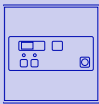
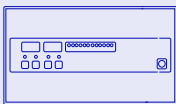
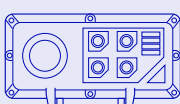
**Up to 20 fire/heat detectors<sup>2</sup>**



**Fan control module: for use with Crowcon Environmental Sampling Unit**

<sup>1</sup> Not Gasmaster FP

<sup>2</sup> Not Gasmaster 1

			
<b>Gasmaster Model</b>	<b>1</b>	<b>4</b>	<b>FP</b>
<b>Size</b>	240 x 240 x 90 mm (9.5 x 9.5 x 3.5 inches)	420 x 240 x 90 mm (16.5 x 9.5 x 3.5 inches)	440 x 230 x 207 mm (17.3 x 9 x 8.1 inches)
<b>Weight</b>	4 kg (9 lbs)	9 kg (20 lbs)	15 kg (33 lbs) - Aluminium 50 kg (110 lbs) - Cast iron
<b>Enclosure material</b>	Mild steel	Mild steel	Aluminium or cast iron
<b>Ingress protection</b>	IP54, IP66 <sup>1</sup>	IP54, IP66 <sup>1</sup>	IP54, IP65 <sup>2</sup>
<b>Inputs:</b>			
4-20 mA (sink or source), or mV bridge	•	•	•
Gas: <i>Pellistor, electrochemical, semiconductor or thermal conductivity</i>	•	•	•
Fire: <i>Smoke detectors, heat detectors and manual call points, up to 20 per channel</i>		•	•
Fan control: <i>For use with Crowcon Environmental Sampling Units (ESU) only</i>		•	•
<b>Outputs:</b>			
Analogue: <i>4-20 mA, max. load 150 Ohm or 1-5 V, min load 50 kOhms</i>	•	•	•
Common relay: <i>DPCO, contacts rated @ 250 V ac, 5 A non-inductive load; Low, High, Fault</i>	•	•	•
Individual relay: <i>DPCO, contacts rated @ 250 V ac, 5 A non-inductive load; Low, High</i>	•	•	•
Relay configuration: <i>Rising, falling alarms Energised/de-energised</i>	•	•	•
External audio/visual alarm drive: <i>650 mA max current drive (max. 2 x YL4 Yodalights)</i>	•	•	•
<b>Panel indication:</b>			
Channel reading (7 segment red LED)	•	•	•
Channel number (7 segment green LED)		•	•
Measurement units (ppm, % LEL, % vol.)	•	•	•
Mains power	•	•	•
Battery OK	•	•	•
Run mode (cycling display)		•	•
Hold mode		•	•
<b>Alarm indication:</b>			
Audible <i>Internal</i>	•	•	•
Visual <i>Individual low and high (red LED)</i>	•	•	•
<i>Individual fault (Yellow LED)</i>	•	•	•
<b>Power:</b>			
110/120 V ac, 220/240 V ac 50-60 Hz, 12 V dc, 24 V dc, 50 W max.	•	•	•
Battery back-up	•	•	•
<b>Remote reset</b>	•	•	•
<b>Lamp test</b>	•	•	•
<b>Approvals:</b>			
RF immunity EN 50082-1	•	•	•
RF interference EN 50081-1	•	•	•
Classification EEX d IIB T6			•
<b>Operating temperature</b>	-10 to +40°C (14 to 104°F)	-10 to +40°C (14 to 104°F)	0 to 50°C (32 to 122°F)
<b>Humidity</b> <i>0-95% non-condensing</i>	•	•	•

<sup>1</sup> IP54 protection is standard, IP66 available as an option

<sup>2</sup> IP54 protection is standard, IP65 available as an option