

## GASGUARDIAN-6 MULTI-CHANNEL CONTROLLER



### Key Features

- Simultaneously monitor 6 sensors – up to 30 with expansion modules
- Six onboard relays standard – eight more relays per expansion module
- Alarm Log records and stores every event
- Industry standard linear 4/20 mA input can accommodate any gas sensor
- Simple menu-driven programming through the LCD operator interface
- Power supply can also drive external horn/strobes
- Watertight enclosure designed for washdown areas and outdoors
- Configurable for GasGuard sensor line and any other 4/20 mA gas sensor
- Horn relay silenceable from front-panel Silence key

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The perfect full-feature controller for medium to large gas detection systems provides a Stand-Alone Safety System for up to 30 sensors.

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The GG-6 can interface to, but operate independently of, plant control systems for a reliable stand-alone safety system. The GG-6 comes standard with six onboard relays, as well as an onboard buzzer. One relay is a dedicated fault relay, the other five relays are user programmable to trigger upon any event for any sensor or group of sensors.

The GG-XM expansion modules allow you to add on eight sensors for each module, up to three modules for a total of 30 sensors. Each GG-XM comes equipped with eight 4/20 mA inputs, eight programmable relays and its own power supply. Analog output boards can be added on to the controller and expansion modules, which can be connected to your plant PLC or other 4/20 mA control panel.

The watertight fiberglass enclosure will stand up to corrosive washdown, temperature swings and any other harsh environment often encountered in the food industry. The GG-XM's connect to the GG-6 and /or each other via a 24" wire harness. Since the alarm log holds 10,000 events, yesterday's events will not go unnoticed.

### Applications

- Engine Rooms
- Tank Rooms
- Mechanical Rooms
- Sea Vessels
- Refrigeration Systems
- Perimeter Monitoring
- Heat Treatment
- Refineries
- Chemical Plants

### Benefits

- Full-featured
- Expandable
- Easy configuration

# GASGUARDIAN-6

The GG-6 controller utilizes a user-friendly LCD operator interface for all readout information and alarm function control. Out of the box, the controller and expansion modules are configured and ready to go with default setpoints loaded in the software. Just enter the zone location names and adjust the low the high alarm setpoints if needed.

The backlit LCD displays real-time status of gas sensor concentrations and allows for custom programming thru a user-friendly menu system. The GG-6 and expansion modules are compatible with all gas sensors with industry standard 4/20 mA inputs. The power supplies are powerful enough to power all connected sensors and external 24Vdc horn/strobes.

All wiring is safely enclosed inside and easily accessed from the hinged lids. All expansion modules connect to the GG-6 in a daisy-chain configuration. Wiring is as easy as plugging in a wiring harness. All human interfacing is performed via the waterproof membrane keys on the outside of the GG-6, for non-intrusive operation.

## Ordering Information

The **GasGuardian-6** is delivered to you ready to go. Use either the default setpoints or choose your own. Use the model number below to order.

Order #: **GG-6** (does not include sensors) Six channel controller includes LCD operator interface, power supply and 6 relay outputs.  
**GG-XM** (does not include sensors) Eight channel expansion module includes power supply and 8 relay outputs. (the GG-6 can accommodate up to three GG-XM's)

### Options:

**GG-6-AOB** Six channel analog output board  
**GG-XM-AOB** Eight channel analog output board  
**GG-6-APS** Auxiliary 24VDC power supply, 4.5A  
**GG-6 Startup** Contact us for details

*6 channels, 14 channels, 22 channels or 30 channels.*

*Get what you need now...expand later.*



## SPECIFICATIONS

*DUE TO ONGOING RESEARCH AND PRODUCT IMPROVEMENT, SPECIFICATIONS ARE SUBJECT TO CHANGE*

### AC POWER REQUIREMENTS:

110 VAC @ 2 A

### DC POWER AVAILABLE FOR SENSORS

+24 VDC @ 3.7 A (GG-6/GG-XM)

### DIMENSIONS:

15.8" high x 14" wide x 7" deep (GG-6/GG-XM)

### WEIGHT:

12 lbs (GG-6/GG-XM)

### ENCLOSURE:

Fiberglass Reinforced Polyester NEMA 4X, with neoprene gasket. Continuous stainless steel hinge. Captive screws in lid. For non-classified areas.

### TEMPERATURE RANGE:

0°F to +122°F

### HUMIDITY RANGE:

0-100% RH, condensing, with proper conduit seals

### RELAY OUTPUTS:

SPDT relays, 10A @ 24 VDC or 120 VAC  
10 Second On/Off delays  
Selectable to Latch/Non-Latch  
Status LEDs show relay state

#### GG-6 (Six Relays)

##### (6) Programmable Relays

Programmable to trigger upon any event for any sensor or group of sensors.

#### GG-XM (Eight Relays)

##### (8) Programmable Relays

Programmable to trigger upon any event for any sensor or group of sensors.

### ANALOG OUTPUTS: (optional)

(6) Individual 4/20 mA outputs (GG-6)  
(8) Individual 4/20 mA outputs (GG-XM)

### HORN:

PCB mount Piezo buzzer (GG-6 only)

### CONTROLLER FUNCTIONS:

LCD, backlit, graphics display (GG-6 only)  
8 lines x 22 characters  
Waterproof membrane switches, alpha-numeric keys  
Non-volatile memory

**Real-Time Status Display:** Displays gas concentrations and any current alarm conditions.

**Alarm Log:** Records and stores 10,000 events for easy recall

**Calibration Mode:** Locks relay outputs for sensor calibration or maintenance.

**Relay Test Function:** Allows for easy testing of relay output functions

**Adjustable Warning and Alarm Setpoints**

**Adjustable Relay Latch/Non-Latch**

**Downscale Alarm Setting for Oxygen Monitoring**

**Horn Silence Button Clears Horn Relay**