

# GG-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
- 3 alarm setpoints per channel, in addition to TWA & STEL alarms
- Alarm Log records and stores every event
- Industry standard linear 4-20 mA input
- Simple menu-driven programming through the LCD operator interface
- 6.5A power supply can be used to power many external horn/strobes
- Watertight enclosure designed for washdown areas and outdoors
- Horn relay silenceable from front-panel Silence key
- TWA and STEL time-weighted averaging with alarm setpoints

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

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 programmable horn relay, the other five relays are user programmable to trigger upon any event for any sensor or group of sensors.

The GG-XM expansion module accommodates an additional eight sensors for each module, and 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, and can be connected to your plant PLC or other 4-20 mA control panel.

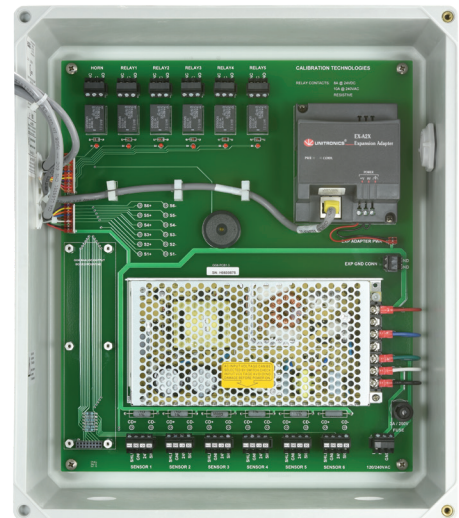
The watertight fiberglass reinforced enclosure will stand up to corrosive washdown, temperature swings, and any other harsh environment encountered in the food industry. The GG-XM's connect to the GG-6 and/or each other via a 24" wire harness. Since the alarm log holds 10,000 events, yesterday's events 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



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 with default setpoints loaded in the software. Easily enter the zone location names and adjust alarm setpoints as necessary.

The backlit LCD displays real-time status of gas sensor concentrations and allows for custom programming via 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. Each expansion module connects to the **GG-6** in a daisy-chain configuration. Wiring is simply 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 **GG-6** is delivered ready to install. Use either the default setpoints or choose your own. Use the model numbers 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, 6.5A)
- GG-6 Startup** (Contact us for details)
- GG-6-GE-M** (Ethernet, Modbus gateway module)
- GG-6-GE-E** (Ethernet, EtherNet/IP gateway module)
- GG-6-GE-B** (Ethernet, BACnet, gateway module)
- GG-6-GR-B** (RS-485, BACnet gateway module)
- GG-6-GR-M** (RS-485, Modbus gateway module)



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

### Input Power Requirements:

120/240 VAC, 3 A, 50/60 Hz (GG-6)  
 120/240 VAC, 3 A, 50/60 Hz (each add-on GG-XM)

### Output DC Power:

24 VDC, 4 A (GG-6/GG-XM)

### Dimensions:

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

### Weight:

14 lbs (GG-6/GG-XM)

### Enclosure:

Fiberglass Reinforced Polyester NEMA 4X, IP 65, with neoprene gasket. Continuous stainless steel hinge. Captive screws in lid. For non-classified areas

### Temperature Range:

0°F to +122°F (-18°C to +50°C)

### Humidity Range:

0-95% RH condensing (100% intermittent), with proper conduit seals

### Relay Outputs:

SPDT, Form C dry contacts  
 8A @ 24 VDC or 10 A @ 120 VAC  
 Adjustable 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)

### Terminal Block Plugs: (Field Wiring)

12-26 AWG, torque 4 lbs-in

### 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. TWA / STEL trending selectable

**Adjustable Warning, Alarm 1, Alarm 2, TWA and STEL Setpoints**

**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

**Downscale Alarm Setting for Oxygen Monitoring**

**Horn Silence Button Clears Horn Relay**

### Certification:

ETL listed to UL standard 61010-1, and CSA standard C22.2 No. 61010-1-12

### Warranty:

2 years

