

# Model MC600

Multi-Channel Controller



General Monitors



## Applications

- Compressor Stations
- Food & Beverage
- Petrochemical Plants
- Pulp & Paper Mills
- Refineries
- Steel Industry
- Utilities
- Wastewater

## Features & Benefits

- One to six channels of continuous monitoring makes unit highly configurable
- Dual Redundant Modbus Communications provide complete status and control capability
- Removable terminal blocks for ease of installation and wiring
- Six user configurable 8A relays drive a combination of horns, beacons
- Modularity (plug-in signal input cards) allows for system expandability, simplified maintenance
- Up to 3 zones with independent voting and relay configuration for application flexibility
- Preconfigured from factory per customer requirements saves installation time with minimum setup required

## Description

The General Monitors MC600 is a microprocessor-based multichannel controller that provides six channels of continuous gas detection. It is compatible with General Monitors' hydrocarbon sensors, H<sub>2</sub>S sensors, all versions of our combustible & H<sub>2</sub>S intelligent/smart sensors, IR400, IR5500, IR700, TS4000H, Observer-i, and Surveyor gas detectors. It provides a front panel user interface including six independent LCD channel displays and keypad for setup, calibration and gas reading functions as well as ready, alarm & fault indicators. The MC600 also provides dual-RS485 serial communication utilizing Modbus protocol.

The MC600's modular design allows for a variety of configuration options. It provides local alarm indication as well as common/discrete relay contacts. The design incorporates the use of a custom display to provide channel status and a user setup interface.

The MC600 provides six user configurable auxiliary relays. The relays can be configured to activate on any of the six channel's alarm high, alarm low or warn set points for use with external devices such as a horn and/or beacon. These relays have the following independent user configurable options: common warn or alarm activation set point, discrete channel alarm activation set point, energized/de-energized, latching/ non-latching and an adjustable timer from 1-120 minutes. The units' front panel has six individual backlit LCD channel displays and warn and alarm daylight readable LED indicators. The MC600 provides one common fault relay, which activates upon any system or individual channel malfunction. This relay has two user selectable options, activated/de-activated during setup or cal mode operation.

The MC600 provides a user selectable zoning and voting feature as well. The system is capable of providing up to three zones of which single or dual voting may be selected.



The Safety Company

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System Specifications	
<b>COMPATIBLE PRODUCTS:</b>	General Monitors S4000CH, S4100C, catalytic bead sensors, S4000TH, S4100T, H <sub>2</sub> S MOS sensors, TS4000H, IR400, IR700, IR5500, IR4000M, Observer-i, & Surveyor
<b>CHANNEL INDICATORS</b>	6 2-lines x 8-character backlit LCD modules
<b>SYSTEM INDICATORS</b>	Ready (green), Fault (yellow), Warn (red), Alarm (red) (adjustable intensity)
<b>FRONT PANEL SWITCHES</b>	Accept, Mode, Reset, Enter, ↑, ↓, Display Setup
<b>ALARMS</b>	High, Low, Warn per channel
<b>TESTS</b>	Display and Card
<b>CHANNEL INHIBIT</b>	Yes
<b>ZONES</b>	Zones 0-3
<b>VOTING</b>	Single or dual per zone
<b>OPTIONS</b>	115/230 VAC power supply, 95 db Horn, remote front panel keyboard
<b>ELECTRICAL CLASSIFICATION</b>	General Purpose Class I, Div. 2
<b>WARRANTY</b>	Two Years
<b>APPROVALS</b>	CSA, CE Marking
Environmental Specifications	
<b>TEMPERATURE RANGE</b> <i>with power supply</i>	-4°F to 140°F (-20°C to 60°C) 14°F to 140°F (-10°C to 60°C)
<b>STORAGE TEMPERATURE RANGE</b> <i>with power supply</i>	-40°F to 158°F (-40°C to 70°C) -4°F to 158°F (-20°C to 70°C)
<b>HUMIDITY</b> <i>with power supply</i>	0 to 95% RH, non-condensing 20 to 90% RH, non-condensing

Electrical Specifications	
<b>INPUT POWER</b> <i>with power supply</i>	24 VDC (20-36 VDC) - Std. 115/230 VAC, 50-60 Hz
<b>CHANNEL INPUT RESISTANCE</b>	4-20mA card, 25 ohms
<b>OUTPUT POWER</b>	4-20mA card, .5 Amp 24 VDC instrument power
<b>RELAYS</b>	6 SPDT - 8A @ 120/230 VAC, 30 VDC per relay, programmable via zoning, 1 SPDT Fault relay
<b>RELAY OPTIONS</b>	State (Energized/De-energized), Mode (Latching/Non-Latching), Timed (1-120 minutes)
<b>RS-485 OUTPUT</b>	Dual redundant Modbus RTU
Mechanical Specifications	
<b>HOUSING</b>	Corrosion resistant, Type 4X, UV stable fiberglass, stainless steel hinges, lockable latches, and four conduit entry holes
<b>DIMENSION</b>	15.5" x 13.3" x 6.7" (395mm x 339mm x 171mm)
<b>WEIGHT</b>	12.75 lbs. (standard) 14.7 lbs. (with power supply)
<b>MOUNTING HOLES</b>	Four 0.32" corner mounting holes suitable for ¼ -20 bolts
<b>STANDARD CONFIGURATION</b>	<b>MC600-00-00-00-00-00-00-1-00</b>

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products. Specifications subject to change without notice.



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