

Model MC600

Multi-Channel Controller



General Monitors

Applications

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

Features

- One to six channels of continuous monitoring
- Dual Redundant Modbus Communications
- Removable terminal blocks
- Six user configurable 8A relays
- Modularity (plug-in signal input cards)
- Up to 3 zones with independent voting and relay configuration
- Preconfigured from factory per customer requirements

Benefits

- Highly configurable
- Provides complete status and control capability
- Ease of installation and wiring
- Drive a combination of horns, beacons
- System expandability, simplified maintenance
- Application flexibility
- Saves installation time with minimum setup required

Description

The Model MC600 is a microprocessor-based multichannel controller that provides six channels of continuous gas detection. It is compatible with General Monitors' hydrocarbon sensors, H₂S sensors, all versions of our combustible & H₂S intelligent/smart sensors, IR400, IR5500, IR700, TS4000H and Gassonic's Observer-H and Surveyor. 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.



*Because every life has a **purpose...***

System Specifications	
COMPATIBLE PRODUCTS:	General Monitors Models S4000CH, S4100C, catalytic bead sensors, S4000TH, S4100T, H ₂ S MOS sensors, TS4000H IR400, IR700, IR5500, IR4000M Gassonic Models Observer-H & Surveyor
CHANNEL INDICATORS	6 2-lines x 8-character backlit LCD modules
SYSTEM INDICATORS	Ready (green), Fault (yellow), Warn (red), Alarm (red) (adjustable intensity)
FRONT PANEL SWITCHES	Accept, Mode, Reset, Enter, ↑, ↓, Display Setup
ALARMS	High, Low, Warn per channel
TESTS	Display and Card
CHANNEL INHIBIT	Yes
ZONES	Zones 0-3
VOTING	Single or dual per zone
OPTIONS	115/230 VAC power supply, 95 db Horn, remote front panel keyboard
ELECTRICAL CLASSIFICATION	General Purpose Class 1, Div. 2
WARRANTY	Two Years
APPROVALS	CSA, CE Marking
Environmental Specifications	
TEMPERATURE RANGE <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)
STORAGE TEMPERATURE RANGE <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)
HUMIDITY <i>with power supply</i>	0 to 95% RH, non-condensing 20 to 90% RH, non-condensing

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