



GENERAL MONITORS
Protection for life.

MODEL MC600

Multi-Channel Controller



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 multi-channel 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, IR5000, IR7000, TS4000, TS400, TS420 and Gassonic's Observer, Surveyor, and Surveyor Extended. 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.

Applications

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



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System Specifications

Compatible Products:	General Monitors Models S4000CH, S4100C, catalytic bead sensors, S4000TH, S4100T, H ₂ S MOS sensors, TS400, TS420, TS4000, IR400, IR7000, IR5000
	Gassonic Models Observer, Surveyor, Surveyor Extended
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 approved.

Environmental Specifications

Temperature Range:	-4°F to 140°F (-20°C to 60°C) <i>with power supply</i> 14°F to 140°F (-10°C to 60°C)
Storage Temperature Range:	-40°F to 158°F (-40°C to 70°C) <i>with power supply</i> -4°F to 158°F (-20°C to 70°C)
Humidity:	0 to 95% RH, non-condensing <i>with power supply</i> 20 to 90% RH, non-condensing

Electrical Specifications

Input Power:	24 VDC (20-36 VDC) - Std. <i>with power supply</i> 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
Dimensions:	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 1/4"-20 bolts

Specifications subject to change without notice.

Represented by:

General Monitors Worldwide



www.generalmonitors.com
www.mc600.com

Lake Forest, CA

26776 Simpatica Circle
Lake Forest, California 92630
Tel: +1-949-581-4464
Fax: +1-949-581-1151
Email: info@generalmonitors.com

Houston, TX

9776 Whithorn Drive
Houston, Texas 77095
Tel: +1-281-855-6000
Fax: +1-281-855-3290
Email: gmhou@generalmonitors.com

Ireland

Ballybrit Business Park
Galway
Republic of Ireland
Tel: +353-91-751175
Fax: +353-91-751317
Email: info@gmil.ie

Singapore

No. 2 Kallang Pudding Road
#09-16 Mactech Building
Singapore 349307
Tel: +65-6748-3488
Fax: +65-6748-1911
Email: genmon@gmpacifica.com.sg

United Arab Emirates

P.O. Box 61209
Jebel Ali
Dubai
United Arab Emirates
Tel: +971-4-8815751
Fax: +971-8-4480051
Email: gmme@emirates.net.ae

United Kingdom

Heather Close
Lyme Green Business Park
Macclesfield, Cheshire
United Kingdom, SK11 0LR
Tel: +44-1625-619583
Fax: +44-1625-619098
Email: info@generalmonitors.co.uk