

MC600 Multi-Channel Controller

The Total Monitoring Solution for Toxic and Combustible Gas



General Monitors



Intelligent Modular Control System

With an advanced microprocessor design, the modular MC600 Multi-Channel Controller from General Monitors sets a new industry standard for flexibility and economy in toxic and combustible gas detection systems. The six-channel MC600 offers continuous gas monitoring with either our basic H₂S and hydrocarbon gas sensors or our intelligent gas detectors—the Models S4000CH/S4100C combustible, IR400/IR5500 infrared, S4000TH/S4100T H₂S, IR700 carbon dioxide, TS4000H toxic gas, IR4000M and Gassonic Ultrasonic detectors.

Low Cost Per Point Safety

Due to its smart design, the MC600 Multi-Channel Controller, when configured with our highly reliable MOS H₂S gas and our catalytic-bead combustible gas sensors, provides a breakthrough in economical safety monitoring systems. The result is a highperformance, low cost per point safety monitoring system that is easy to install with a long life, reducing safety system life cycle costs and offering an attractive return on investment.

The highly scalable MC600 Multi-Channel Controller can be configured as either a local gas detection system, or it can be networked to provide a large plant-wide distributed safety system. Up to 127 MC600 Controllers can be linked to monitor 762 points. Designed with dual RS-485 serial communications, the MC600 is Modbus compatible. It features six user configurable relays and up to three zones with selectable zoning and independent voting.



Flexible Modular Design



Modular design allows for various configurations with plug-in versatility.

- One to six channels of continuous toxic and combustible gas monitoring in a compact, rugged controller designed for general-purpose or Class I, Division 2 hazardous environments.
- Compatible with all of our catalytic bead and H₂S gas sensors and over 20 of our fixed-point gas detectors.
- Modular, plug-in signal cards provide system scalability—from simple local systems to large plant-wide distributed systems.
- Modbus protocol offers complete status and control via RS-485 serial communication.
- Six user configurable 8-Amp relays for applications flexibility, with full zoning and voting capability.
- Easy wiring and installation with removable terminal blocks.
- Fast set up with all detector information preloaded and stored onboard.
- Individual large LCD channel displays, LED indicators and keypad.

Popular MODBUS Communications

Easy Set-Up

All detector and gas table information is preloaded and stored on the MC600 Multi-Channel Controller at the factory to simplify set-up. Pluggable terminal blocks make wiring and interconnections a fast process. Easy to read LCD modules, LED indicators and keypad controls offer an intuitive operator interface, along with the popular Modbus protocol.

Rugged Housing

The MC600 is housed in a fiberglass, Type 4X cabinet that can be wall-mounted in a safe (non-hazardous or Class I, Division 2 hazardous) area with an optional onboard power supply. Signal conditioning boards for H2S/hydrocarbon sensors and a 4-20 mA interface for smart detectors are easily installed or removed from slots.

Display Features

The MC600 features six backlit LCD modules that each have two lines, with eight-characters per line. Large multi-colored LED Ready, Alarm, Warning and Fault indicators (that are daylight readable) supplement the LCD digital displays, and keypad controls are provided for setup, calibration and gas reading functions, and self tests.

Configurable Relays

The MC600's six auxiliary 8-Amp relays are user-configurable to activate external devices such as a horn and/or beacon on any of the six channels' alarm or warning set-points. They feature independent userconfigurable options: zoning, warn, alarm LO or alarm HI activation set-points, energized/de-energized, latching/non-latching and timed delay. There is one common 8A fault relay, which activates upon any system or individual channel malfunction and can be configured to activate/de-activate during setup and calibration.

Agency Approvals

CSA, CE Marking approved.



Applications

With its modular design flexibility, scalability and economy, the MC600 Multi-Channel Controller supports applications within a wide range of industries:

- Chemical Processing
- Compressor Stations
- Electric Utilities
- Oil/Gas Production Facilities
- Oil/Gas Refining Plants
- Petrochemical
- Pulp & Paper Mills
- Steel Mills
- Sulfur Recovery Plants
- Wastewater Treatment

General Monitors—by MSA

Over 100 years of experience and capability in comprehensive safety solutions have made MSA a modern and forward-looking company for the protection of people, facilities, and the environment. MSA is one of the few suppliers of fixed gas and flame detection (FGFD) measurement technology that develops and manufactures a complete range of products and integrates them into safety solutions.

With the acquisition of General Monitors in September 2010, the MSA FGFD product portfolio expanded even further. As two unmatched experts in gas and flame detection joined forces, we are proving that the right mix of durable products and innovative technology can increase safety while driving operational efficiency.

Together MSA and General Monitors have the widest range of sensing technologies for gas and flame detection. We can create solutions that will not only provide worker safety and protect facilities, but will also decrease overall cost of ownership. While our customers still have access to the great products and service that they have come to rely on in the past, they now have access to so much more: superior service, improved support, a wider range of technology, and unique solutions enhanced by the combined strength of MSA and General Monitors.

Our Mission

MSA's mission is to see to it that men and women may work in safety and that they, their families, and their communities may live in health throughout the world.

MSA: Because every life has a purpose.

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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