Fixed Gas Detection Systems

smart
GasDetection
Technologies

5000 Series Control Panel

High performance control panels

GfGsafety.com/us-en

5000 Series Control Panel

High performance control panels

GfG Instrumentation

GfG Instrumentation is a global leader in the design and manufacture of gas detection products used to protect people, facilities and the environment. For over 60 years we have provided gas detection solutions for life critical health and safety applications. Our innovative and reliable gas warning and measurement systems provide the industry benchmark for accuracy, dependability, and cost-effective ownership.

The 5000 Series Control Panel

The 5000 Series can control up to six individual gas transmitters (sensors) and it is possible to extend the GMA200 controller with up to four relay modules resulting in up to 64 additional freely configurable relays.

The clearly structured layout with a graphical display enables the quick detection of hazardous situations. Currently measured values are displayed on the LCD display.

GMA200-MT Controller

The GMA200-MT is at the heart of the 5000 Series and is our most flexible and advanced gas detection system controller. The design of the GMA200-MT ensures simple and clearly structured operation in industrial and commercial applications. The system can be configured for control of any combination of GfG gas transmitters for the measurement of an extremely wide range of toxic and combustible gases and vapors.

Integrated relays

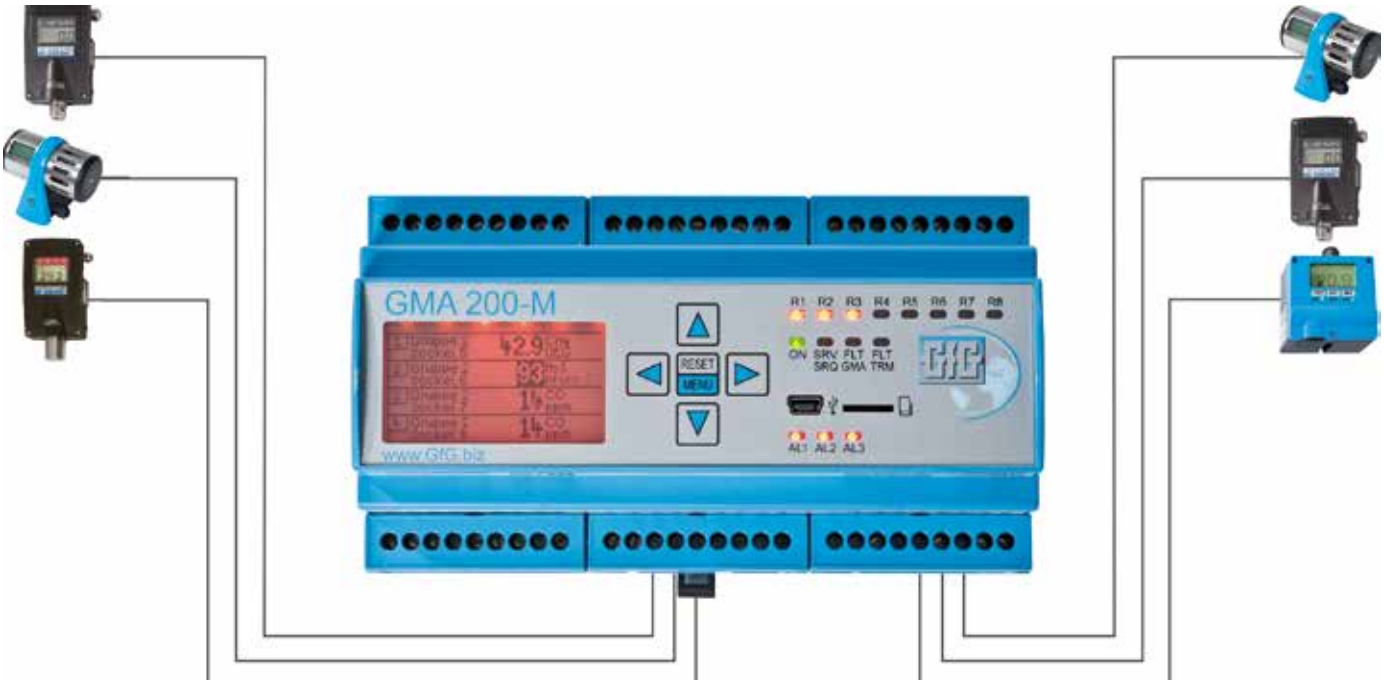
The GMA200-MT systems include comprehensive and fully programmable relays. Each controller is equipped with six internal relays. Menu-driven software allows easy assignment of measuring points to relays, single or multiple alarms per point, alarm thresholds, configuration of collective or group alarms, zoning, fault messages and voting functions.

Flexible modular design

Each GMA200-MT module can control up to 16 individual gas transmitters (sensors). The compact DIN rail mounted design facilitates cost-effective and space-saving installation in existing or custom control cabinets. GMA200-MT systems are scalable, and easy to expand by adding additional controller and relay modules. Optional gateway modules allow control using a remote or touch-screen computer interface.

Easy to configure

Easy-to-use, menu driven software allows configuration of sensor type, gas type, measuring point designations, units of measurement, calibration curves, and function of the comprehensive and fully programmable relays. Up to three individual or specified alarm thresholds can be programmed for each measuring point. The GMA200-MT continuously evaluates the analog input signals of the connected detectors.



Up to 6 transmitters for combustible, O_2 and toxic gas measurement can be connected to the GMA200-MT

« Decisive Safety Advantage. »

Relay modules
Each GMA200-RT relay module provides an additional 16 freely configurable relays. A total of four additional relay modules (for 64 additional relays) can be managed by the same GMA200-MT system. The digital connection with the GMA200-MT controller allows remote positioning of the relay module wherever it makes the most sense, substantially reducing cabling and installation costs. Relay modules are available with or without an integral display for readings and system information, making it easy to add a remote terminal wherever needed.

Optional Fieldbus-Gateways
Optional gateway modules allow integration of the GMA200-MT system into existing company networks based on TCP/IP, Process Field Bus or Process Field Network protocols. Monitoring and system performance data are easily exported for viewing or analysis.

LED indicator lights
The status of the GMA200-MT system (including operation, fault, service, alarm and relay status) is shown through LEDs. Individual LED indicators identify the type and severity of the alarm condition, (FLT, AL1, AL2, AL3), and any relays activated by the condition, (R1 through R8).

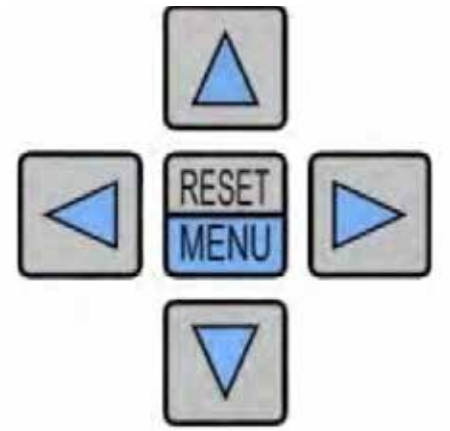
Graphical display
Currently measured values are displayed on a backlit, graphical LCD. In the event of an alarm, the display changes color from green to red, and highlights the affected channels.

Keypad operation
Operation of the GMA200-MT is through easy-to-use menus, and a simple five button interface for alarm acknowledgement, and viewing information on the status of the gas warning system, detectors and relays. The intuitive push-button controls make it easy to navigate through additional screens of information. The integrated display enables the reading of alarm levels through the controller LCD for easy hazard assessment.

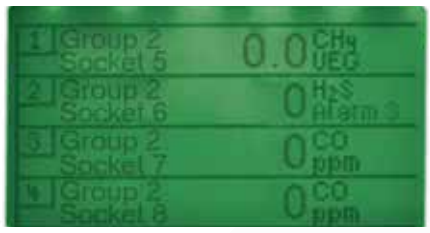
Datalogging standard
Measured values, mean values, alarm events and faults are stored on a microSD memory card.

Configuration
A built-in USB port in the GMA200-MT is used for connection to the configuration software.

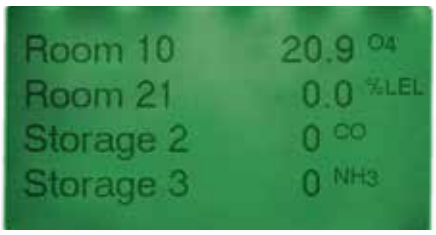
Easy and convenient service
GfG offers full after-the-sale commissioning and field service support.



Full control with only five buttons: GMA200-MT keypad



GMA200-RTD with display for remote measured value display



Display for quick and safe evaluation

5000 Series Control Panel

Feature summary

- Complete controller package available in 1-6 and 1-16 channel configurations
- Up to 6 analog inputs or 6 digital inputs
- Scalable system with fully programmable menu driven relays
- Rugged metal housing, steel enclosure with key lock
- Local display, with horn and strobe
- 2 amp power supply

Technical Data: 5000 Series

Type designation:	5000 Series
Gases:	Combustible, oxygen and toxic gases and vapors in combination with GfG transmitters.
Displays and controls: Status LEDs: Display: Pushbuttons:	Illuminated 2 inch LC full graphic display 8 status LEDs for alarms and operating states Backlit LCD graphical display 5 function keys
Connection options:	Gas warning system GMA200-MT6: Up to 6 analog or digital detectors
Alarms:	3 independent threshold alarms per measuring point (AL1, AL2, AL3) Ascending, descending, exceeding, not achieved acknowledgeable (additional horn only), non-acknowledgeable non-self-locking / self-locking
Inputs:	6 analog inputs (4-20 mA or 0.2-1 mA); max. 50 Ohm input resistance 2 digital inputs: Acknowledgement of alarms can be freely configured 2x RS-485 BUS (for connection of external relay modules or digital transmitters in BUS wiring) 1x RS-485 BUS (for digital transfer of measured and output data to a higher-level control center)
Outputs:	6 relays (normally open contact), freely configurable for single alarms per measuring point and alarm threshold, configuration of collective or group alarms, fault messages, and voting functions 1 relay for maintenance ad 1 for fault messages 2 analog outputs: 4-20 mA / 600 Ohm max. resistance, freely configurable
External relay module:	16 relays per module; up to 4 relay modules per GMA200-MT system (for up to 64 additional relays); freely configurable for single alarms per measuring point and alarm threshold, configuration of collective or group alarms, fault messages and voting functions
Data storage:	Measured values stored on microSD card for permanent data recording of measured values, alarms and faults. Storage intervals adjustable (5 s - 60 min) Records instantaneous and mean values, minimum/maximum concentration
Environmental conditions: Temperature for operating: Temperature for storage: Pressure:	 -4 to +122 °F / -20 to +50 °C -22 to +140 °F / -30 to +60 °C 70 kPa to 130 kPa
Approvals / Certifications: Protection class: Electromagnetic compatibility:	 IP20 EN 50270:2006 Emitted intereference type class I Interference resistance type class II

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