# GMA 200-RT16 / RTD16

Fixed gas Relay Module

- Extends the GMA 200 Controller by 16 additional freely programmable relays
- Ability to connect up to 4 relay modules through the GMA 200 Controller for a total of 64 additional relays
- Intuitive, backlit graphical LCD changes color to indicate alarm
- Available with display or without display
- SIL certification
- NEMA 4X housing

200-RT16 - Relay module, 16 relays, no display
200-RTD16 - Relay module, 16 relays, with graphical display

# GMA 200 relay modules extend the potential of the GMA 200 System

## 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 50 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.

## GMA 200-RT16 Relay Module

Using a GMA 200-RT16 / RTD16 relay module, it is possible to extend the GMA 200 controller by 16 additional freely configurable relays. A total of 4 additional relay modules and thus 64 additional relays can be managed through the GMA 200 controller. Digital connection of the GMA RT16 / RTD16 relay module to the GMA 200 controller enables the local positioning of the relay modules. This local installation of the relay module results in significant cost savings through reduced cabling and installation costs.

## ATEX 94/9/EC Conformity

The GMA 200-MT controller provides full conformity with ATEX Directive 94/9/EC, "Equipment and protective systems intended for use in potentially Explosive Atmospheres - Fourth edition September 2012 - Update December 2013". Conformity with ATEX 94/9/EC is explicitly required if switching or control functions for explosion protection are intended via the gas warning system.

## Flexible modular design

The fundamental configuration and design of the GMA 200-MT / MW gas detection controllers in combination with the GMA 200-RT16 / RTD16 relay modules ensure flexible, simple and clearly structured operation in industrial and commercial applications for measuring combustible and toxic gases / vapors and oxygen concentrations.

*GMA 200-RT16 Relay Module*

*GMA 200-RTD16 Relay Module with graphical display*

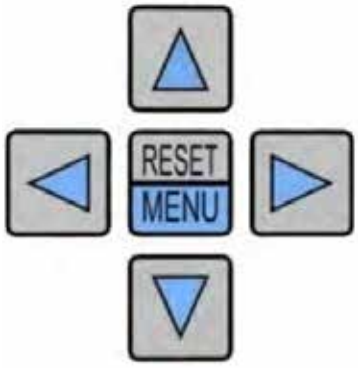
# Simple user display and push button control

## GMA 200-RTD16 graphical display

The optionally available display at the GMA 200-RTD16 relay module enables the local display of measured values, which are transferred by a GMA 200-MT / MW gas detection controller through the digital interface. The clearly structured layout of the GMA 200-RTD16 relay module with graphical display enables the quick detection of hazardous situations. Currently measured values are displayed on the LCD graphical display. In the event of a gas alarm or fault, the display lighting is automatically activated with a red background.

## Operation using keyboard on the GMA 200-RTD16 display

Five buttons enable operation at the GMA 200-RTD16 front panel. The main functions of the keyboard are the acknowledgement of alarms and the menu-driven operation. Information on the status of the relays can be retrieved in the operating menu.




*Full control with only five buttons: GMA 200-RTD16 keypad*

*GMA 200-RTD16 with display for remote measured value display*

# Technical data

## GMA 200-RT16

**GMA 200-RT16 display and control elements:**
19 LED indicators for operating and relay statuses

**GMA 200-RTD16 display and control elements:**
2.2 inch backlit LCD graphical display
5 buttons (left, right, up, down, OK)
19 LED indicators for operating and relay statuses

**Connection cables:**
Terminal blocks: 18-14 AWG cross section
Cable: 2-4 wire 20-16 AWG (for GMA 200 supply)
2-wire 1 x 2 x 16 AWG BUS-LD (for GMA Bus with a length > 33 ft / 10 m)

**Relay outputs:**
Contact: 16 relays each with a changeover contact
Contact rating: 3 A / 250 V AC or 3 A / 30 V DC
Insulation distances: Basic insulation between the relays: 1&2, 2&3, 4&5, 5&6, 7&8, 8&9, 10&11, 11&12, 13&14, 14&15
Double insulation between the relays: 3&4, 6&7, 9&10, 12&13, 15&16

**Alarm acknowledgement inputs:**
Reset: 0-3 V DC (alarm acknowledgement occurs at contact with GND, $U_{MAX}$=30 V DC)

**Ambient temperature:**
Operation:
-4 °F to +122 °F / -20 °C to +50 °C
0 to 99% rh non-condensing
Storage:
-13 °F to +140 °F / -25 °C to +60 °C
0 to 9% rh (recommended 0 to 86 °F / +30 °C non-condensing)
Site of installation: up to a height of 1.2 miles / 2,000 m above sea level

**USB connection:**
Mini USB port for device configuration through PC

**Power supply:**
2 x 24 V DC (20-30 V DC permissible)
Fuses: F1 = show-blow T 500 mA
(1 x redundant voltage supply)

**Power consumption:**
Maximum 6 W

**Housing:**
Attachment on mounting rail TS35 according to DIN 60715
Protection class: IP 20
Material: plastic
Weight: approx. 410 g
Dimensions: approx. 8 x 10 x 4.5 in (W x H x D)

**RS485 connection:**
GMA BUS: RS485, half-duplex, galvanically isolated, max. 230400 baud (for GMA 200-M control center, PC, PLC or Gateway)

**Approvals:**

**Housing:**
NEMA 4X

**Electrical safety:**
EN 61010:2010
Degree of soiling 2
Overvoltage category III for relay contacts

**Electromagnetic compatibility:**
EN 50270:2006
Emitted interference type class I
Interference resistance type class II

Specifications subject to change without notification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