

# GMA103

## Gas warning system for 19" Rack-mounting



### Safe recognition and warning of gas hazards

The GMA103 provides 3 alarm levels, which can be used for taking appropriate counter measures in case of gas hazards. The pre-alarm, for example, may give a warning for low gas concentrations, thus indicating leakages before dangerous situations occur. The following first and second main alarm thresholds notify direct danger requiring immediate action.

The alarm levels can be variably set within the detection range and adapted to changing requirements. Every threshold can be selected to be latching/non-latching and resettable/non-resettable. The adjustable alarm delay prevents false alarms. The GMA103 for up to 3 detection points provides one individual alarm per transmitter.

### Quick reaction means increased safety

Every GMA controller provides optional voltage-free relays for the 3 alarms and for fault warning. The relays may be used for controlling external alarm devices like beacons and buzzers or, e.g. by closing solenoid valves or turning a fan on, they can introduce specific counter measures to prevent dangers from gases or vapours.

Every relay can be either a normally closed (NC) or normally open (NO) contact and works in either closed or open circuit operation. This flexibility allows the GMA to meet individual requirements and to offer a safe solution for specific gas detection problems.

### The GMA103 consists of the components mentioned below

- GMA 103 controller (optionally available with relays and for 230V)
- GMA Multiplexer
- GMA SPG Supply Module according to type of transmitter

## Technical Data

### Gas:

Depending on transmitter:  
Combustible and toxic gases and vapors, oxygen

### Detection range:

Depending on requirements:  
% LEL, % Vol., ppm, mg/m<sup>3</sup>

### Ambient temperature:

0 .. +55°C

### Humidity:

0 .. 99 % r.h.

### Power supply:

230/115 V, 50/60 Hz, 24 V DC  
Battery back-up (option)

### Power consumption:

Max. 4 W, normal 2 W

### Input signal:

0.2 .. 1 mA / 4 .. 20 mA

### Alarm functions:

Exceeding / falling short,  
Latching / non-latching,  
Resettable / non-resettable,  
Adjustable hysteresis,  
Alarm delay 0 .. 2 min.

### Relay outputs:

4 voltage-free relay outputs for alarm and fault, NC contacts, NO contacts  
Load: max 250 V, 1000 VA

### Display:

3-digit LED display for linearized measurement values, service  
1 LED green - Operation,  
1 LED yellow - Fault,  
3 LED red - Alarm,  
peak and minimum reading

### Function keys:

4 keys for all functions, e.g. alarm thresholds, calibration, function and relay test

### Calibration:

Automatic zeroing, calibration by means of measurement value memory

### Dimensions:

35 x 128 x 172 mm (WxHxD)



#### GfG Headquarters

Klönnestrasse 99  
44143 Dortmund • Germany  
Phone: +49 / (0)231 - 564 000  
info@gfg-mbh.com • www.gasmessung.de

#### GfG Europe

Great Dunmow  
Essex CM6 1XG • United Kingdom  
Phone: +44 / (0)1371 - 874 447 • Fax: +44 / (0)1371 - 879 904  
info@gfgeurope.com • www.gfgeurope.com