

# GMA304

## Gas warning system for 19" Rack-mounting



**GMA304 for 4 transmitters for control of up to four measuring points. 3 common alarms and fault output.**

### Data communication over CAN BUS

All GfG transmitters can be connected to the GMA301. More than 500 different gases can be monitored. All settings are made via touch keys on the front, with a display menu. A coded service key protects the system from unauthorized access. Gas concentration is continuously shown on a 3-digit LED display. Gas concentration, gas type and detection range can all be displayed via a simple button push.

Zero and span adjustment can also be performed simply via the simple operation from push buttons. The controller has a min/max memory that enables the user to check the exact concentrations encountered after a gas alarm has occurred. In addition, the highest or lowest measured value is stored and displayed in the LED display. A 4-20mA output is available to transmit gas measurement readings to external devices.

### Alarm functions

3 alarm thresholds can be set. Additional relay and alarm functions are adjustable: exceeding/falling below, latching/not latching, quiescent current/full load current, open/normally closed contact, signal delay and hysteresis. 4 LED lights display operation status, alarm and fault signals.

### Delta alarm

The delta alarm function can be used to ensure the fastest response to a gas leak. Not only the measured gas concentration is considered, but also the rate of rise of the measured value. An unusually fast rate of rise can be used to trigger the alarms, even before the normal threshold value has been reached.

### The GMA304 consists of the components mentioned below

- GMA 304 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 vapours, oxygen

### Detection range:

Depending on requirements:  
% LEL, % Vol., ppm

### Ambient temperature:

-10°C .. +55°C

### Humidity:

0 .. 99 % r. h.

### Power supply:

230/115 V AC, 50/60 Hz or 24 V DC  
or 24 V DC back-up power supply (option)

### Power consumption:

max. 13 W

### Input signal:

0.2 .. 1 mA / 4 .. 20 mA

### Output signal:

CAN or CAN open open

### Relay output:

4 voltage free contacts for alarm and fault, NO, NC, load: 250 V / 4 A

### Alarms:

3 threshold alarms  
3 delta alarms  
alarms adjustable

### Alarm functions:

Exceeding / falling below,  
Latching / self resetting,  
Resettable / non-resettable,  
Adjustable hysteresis,  
Alarm relay

### Display:

3 digit LED display for concentration readings and programming  
1 LED green for operation  
1 LED yellow for failure  
3 LED red for alarm 1, 2 and 3

### Function keys:

Service code keys for service menu, maintenance resp. for changing of parameters.  
4 push buttons for changing of parameters and for access to menu points

### Test sockets (front):

Transmitter signal,  
standardized output signal: 0 .. 10 V

### Dimensions:

35.2 x 129 x 16 mm (W x H x D)



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