

Fixed Gas Monitor for Wall Mounting



The compact gas monitor

The GMA81, GMA83, GMA84 and GMA88 are compact gas monitoring controllers for wall mounting. Together with GfG's powerful and robust transmitters the GMAs form complete systems for the monitoring of gas hazards at many applications. The GMA81 is a single channel controller for one detection point. Low cost of ownership for several detection points is provided by the GMA83 for up to 3 transmitters, the GMA84 for max. 4 transmitters, or the GMA88, which allows to monitor up to 8 channels simultaneously.

Easy wall mounting

The robust GMA casings can be easily mounted to the wall. You do not need cabinets or additional enclosures. The small size allows space saving installation. The terminal bars for electrical connections are easily accessible behind a cover at the front. The casing is robust and splash water proof (IP 54).

Monitoring more than 500 gas hazards

GfG's gas monitoring systems allow to detect more than 500 gases. You can adapt the GMA settings to any monitoring task for individual and cost effective solution of your specific requirements.

Combustible gases

Where combustible gases may build up explosive concentrations, GfG offers a variety of sensors and transmitters.

Toxic gases

Specially selected GfG transmitters provide reliable monitoring of areas, where toxic gases and vapors may be present.

Oxygen

GfG transmitters ensure reliable protection from hazards caused by oxygen deficiency or surplus.

Detecting - Recognizing - Warning

Once the gas concentration at the transmitter exceeds a certain threshold, the GMA recognizes the danger and triggers an alarm. The controller provides 3 threshold alarms, which can be programmed individually. The adjustable alarm delay eliminates false alarms. Every threshold is variably adjustable within the detection range and can be latching / non-latching and resettable / non-resettable. This allows the best possible adaptation of the controller to your specific detection task. All settings can be changed, even at a later stage.

Quick reaction means increased safety

Every GMA provides 4 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 vapors. 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 of specific gas detection problems.

Alarm models GMA81 A / GMA83 A / GMA84 A / GMA88 A

These models provide integrated audible and visual alarm devices. A bright flashlight on top of the GMA indicates a gas alarm. A buzzer is built-in additionally, thus saving space and wiring efforts. Of course these models include the 4 voltage-free relays, which are standard for the GMA controllers.



allocation of values. Additional LEDs inform about operational status, alarm or failure.

Touch key check

Touch keys allow comprehensive checks of the GMA functions. A separate relay check prevents incidental alarm activation during testing. Just push a button to read the sensor signals of the connected transmitters from the display, i.e. you do not need an external meter for calibration and function test.

Completely configurable

The GMAs are supplied with a configuration for the connected transmitters according to the detection task. Modifications, however, can be easily done: The keypad allows to change alarm thresholds and functions even at a later stage. Just connect a PC or a laptop to re-configure the GMA completely.

Memory

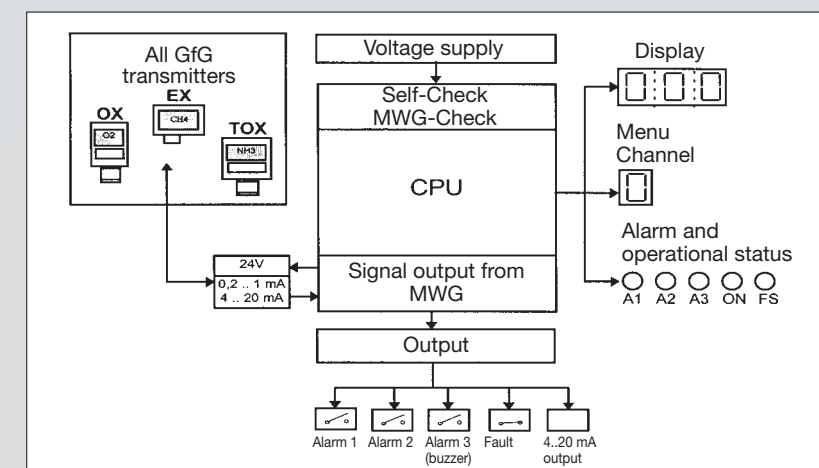
The peak or minimum memory of the GMA81 allows the exact determination of a gas hazard once the alarm was triggered. The GMA stores the peak or the minimum measurement value. Just touch a key to read the value from the LED display.

„Watch Dog“ as per CENELEC standards

The independent surveillance unit (watch dog) of the GMA checks permanently the functions of the microprocessor, parameter memory, circuitry and transmitters. The GMAs offer an essential safety lead and comply to EN 50271.

Linearized display

A 3-digit LED display indicates the linearized measurement values. The multi-channel models GMA83, GMA84 and GMA88 provide an extra channel display for exact



GMA81 / GMA83 / GMA84 / GMA88

Technical Data

Gas

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

Detection range

Depending on requirement:
ppm, % LEL, Vol.-%

Ambient temperature

-10 .. +55°C

Power supply

230 V AC / 24 V DC

Power consumption

Max. 4 W, normal 2 W

Alarm functions

Exceeding / falling below
Latching / non-latching
Resettable / non-resettable
Adjustable hysteresis
Alarm delay 0 .. 2 min.
De-activation variably adjustable
Alarm allocation for GMA84
and GMA 88

Relay outputs

4 voltage-free relay outputs for
alarm and fault,
NC contacts, NO contacts,
change-over contacts
Load: 1000 VA, 5 A

Display

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

Input signal

0,2 .. 1 mA / 4 .. 20 mA

Output signal

Linearized signal 4 .. 20 mA (GMA81)

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

Enclosure

130 x 185 x 95 mm (WxHxD)
IP 54, splash water proof

Installation

Easy wall mounting

Dimensions

106 x 90 x 58 mm (WxHxD)

Function tested (GMA81)

PFG-No. 41300600 P

CE -certificate

electromagnetic resistance
89/336/EWG

EC type approval (GMA81)

BVS03 ATEX G 006 X

Ordering Information

Single channel models

GMA81 2081001
GMA81 A 2081002
with integrated alarm

3-channel models

GMA83 2083001

4-channel models

GMA84 2084001
GMA84 A 2084002
with integrated alarm

8-channel models

GMA88 2088001
GMA88 A 2088002
with integrated alarm

Accessories

Buzzer 2000246
Siren 2000252
Flashlight 2000226
Beacon 2000230

Edition 2 / June 2005 / SCH - GfG equipment is in all stages produced according to the latest standard of environmental protection. Both GfG and our suppliers strictly adhere to the regulations for the disposal of critical material. This catalog, for example, is printed on recycled paper, consisting of 100% wastepaper - without being treated with bleaching agent (chlorine). The surface finish is done on the basis of kaolin (chalk), an organic material, which is of no ecological damage.

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Compact Gas Monitor for all Transmitters

GMA81 / GMA83 / GMA84 / GMA88



Compact gas monitor
Easy wall mounting
Flexible for all detection tasks
Re-configurable even at a later stage

	GMA 81	GMA 83	GMA 84	GMA 88
Number of transmitters	1	up to 3 transmitters of same type	up to 4 transmitters of same type	up to 8 or two groups of 4 identical transmitters
Alarms	3 threshold alarms, adjustable within detection range, GMA81 A with integrated lamp and buzzer	Individual alarms for every transmitter	3 threshold alarms, adjustable within detection range, alarm allocation in display, GMA84 A with integrated lamp and buzzer	3 threshold alarms, adjustable within detection range, alarm allocation in display, GMA88 A with integrated lamp and buzzer
Dimensions WxHxD (mm)	130x209x95 GMA81 A 135x247x95	256x216x123	256x216x123 GMA84 A 256x254x123	256x216x123 GMA88 A 256x254x123

We reserve the right of modification.



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Worldwide Supplier of Gas Detection Solutions

