

GA100

Gas Transmitter for **oxygen** and **toxic** Gases

Input:
Oxygen &
toxic Gases



Output:
(1) 4...20 mA
(2) 2x relays
(3) RS485

Description

The analog gas transmitter GA100 is designed for continuous monitoring of ambient air for oxygen or toxic gases / vapors. One electrochemical sensor detects one gas per unit. GA100 is capable of about 20 different gases to be measured. We are constantly expanding the number of gases to be measured.

Features

- 4 ... 20 mA output (standard)
- 3x Relays output (optional)
- 1x RS485 output (optinal)
- eaysy handling and programming with 3 keys
- optimized for detection of smalles leak of gas
- one man auto software gas calibration
- highly resistant to aggressive environments
- programmable by using remote control from 10m distance
- capable of detecting down to PPB, PPM, %LEL; %V/V, mg/m³
- autoranging of gas concentration from PPB to PPM, ppm to %LEL & %V/V

GA100 weatherproof version**GA100 flameproof version****potential Applications**

Continuous monitoring and detection of pollutants in the ambient air in a variety of applications.

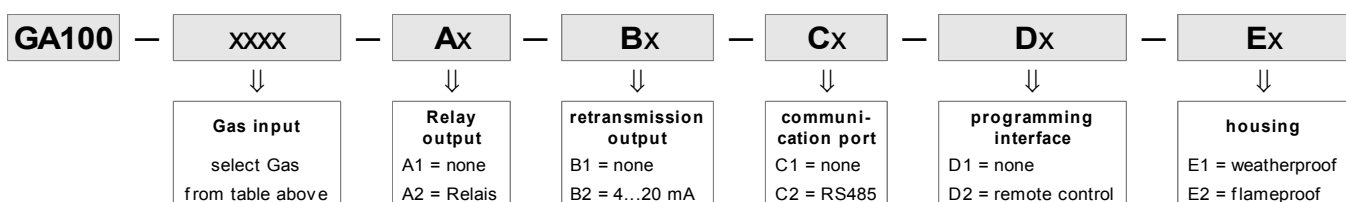
- living room
- car garage
- heating
- office rooms
- operating room
- laboratory
- storage
- repair shop
- production
- chemical plants
- parking garage
- swimming pool
- sports grounds
- pumping station
- dispensing technology
- refrigeration
- biogasanalgen
- water treatment
- waste water treatment ...

General	
sensor element	electrochemical diffusion
gases detected	oxygen and toxic gases (please select from table below)
accuracy	± 1% of full scale
response time	$t_{90} < 40 \text{ s}$
start-up time	< 30 s
output (standard)	4 ... 20 mA with configurable range selection
control actions	(1) user selctable hystersis and logic option
	(2) 2x independent alarm set points with latch & non-latch facility
	(3) configurable STEL and TWA set points for toxic Gasese (optional)
auto ranging	from a) PPB to PPM; b) PPM to %LEL; c) PPM to %V/V
setting	(1) by 3 keys on front panel
	(2) by using remote control (optional)
output-option 1	3x SPDT relays (1x for failsafe & 2x for alarm condition) of rating 120VAC/2A; 24VDC/2A
output-option 2	RS485 communication port with MODBUS RTU protocol
sensor life expectancy (normal operating enviroment)	≥ 2 a
max. storage time	6 months
error monitoring	(1) during sensor break / open → the display shows „SENSOR OPEN“ and 4...20A output goes down to 3,7 mA
	(2) during over range → the display shows „OVER RANGE“ and 4...20A output goes up to 21 mA
Guidline	CE-sign; EMC-directive 2004 / 108 / EEC
Environmental	
working temperature	0 ... +50°C ± 5%
storage temperature	0 ... +40°C ± 5%
humidity	15 ... 90% non-condensing
Electrical	
power supply	24 VDC; range 18 ... 36 VDC
power consumption	< 3,2 W
connection	3 wires (1,5 mm ²), flexible or armoured shielded cable
housing	
protection class	IP65
housing material	polycarbonate, grey colour
cable entry	thermoplastic cable gland (IP68)
dimension	190 x 80 x 55 mm (H x W x D)
weight	~ 500 g
mounting	a) wall mounting; b) stand mounting

gas number	oxygen	Range	Unit	Resolution
E001	Oxygen O ₂	0 ... 25	% Vol.	0,1
E002	Oxygen O ₂	0 ... 100	% Vol.	0,1
	toxic gases	Range	Unit	Resolution
E003	Amonia NH ₃	0 ... 50	PPM	1
E004	Amonia NH ₃	0 ... 100	PPM	1
E005	Chlorine Cl ₂	0 ... 20	PPM	1
E006	Chlorine Cl ₂	0 ... 200	PPM	1
E007	Carbon Monoxide CO	0 ... 2.000	PPM	1
E008	Carbon Dioxide CO ₂	0 ... 10	PPM	0,1
E009	Ethylene Oxide C ₂ H ₄ O	0 ... 20	PPM	1
E010	Hydrogen Sulphide H ₂ S	0 ... 100	PPM	1
E011	Hydrogen Sulphide H ₂ S	0 ... 200	PPM	1
E012	Hydrogen Cyanide HCN	0 ... 100	PPM	1
E013	Hydrogen Chloride HCL	0 ... 50	PPM	1
E014	Nitric Oxide NO	0 ... 250	PPM	1
E015	Nitrogen Dioxide NO ₂	0 ... 20	PPM	1
E016	Ozone O ₃	0 ... 2	PPM	1
E017	Phosphine PH ₃	0 ... 9.999	PPM	1
E018	Phosgene COCL ₂	0 ... 1.000	PPM	1
E019	Sulphur Dioxide SO ₂	0 ... 50	PPM	1
E020	Sulphur Dioxide SO ₂	0 ... 2.000	PPM	1

If you can not find a gas, please contact us (available on request).

ordering information



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status: February 2012