

Compact CO - measuring device

GCO 100



- 3 display units selectable (ppm, mg/m³ and % CO Hb)
- Freely adjustable alarm boundaries - integrated acoustic alarm
- Alert at exceeding the maximum concentration at work (MAK/AGW)
- Automatic zero point adjustment
- Max. value memory, hold function
- Interface for RS232- or USB-adapter
- Low power consumption (>1000 hours with normal 9V-battery)
- Battery or power adapter operation, Power-Off-function
- External switching module for 230V/10A (= GAM3000) directly pluggable
- Calibration protocol within scope of supply
- Integrated measuring element - 3 years warranty for the sensor

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Specification:

Measuring principle:	electrochemical CO measuring cell		
Measuring range:	0 ... 1000 ppm CO-Concentration		
Display ranges:	0 ... 1000 ppm CO-Concentration 0 ... 1250 mg/m ³ CO-Concentration 0 ... 60.0 % CO Hb (estimation via exhaled breath gas)		
Resolution:	1 ppm, 1 mg/m ³ or 0.1 % CO Hb		
Measuring element:	integrated in device, measuring inlet at front plate, with inner thread for accessories screw in		
Life time:	>5 years at proper usage at air suggested test interval: every 6 months (depending on precision requirements)		
Accuracy:	(at range 0 ... 500 ppm),		
linearity:	< ±5 % of measured value		
repeatability:	< ±5 % of measured value		
Interference:	(extract)		
	Concentration (ppm)	residence time (min.)	display (ppm)
sulphur dioxide	50	600	<1
nitrogen dioxide	50	900	-1
nitric oxide	50	5	8
hydrogen	100	5	20
Carbon dioxide	5000	5	0
Display:	approx. 11 mm high, 4½-digit LC-display		
Pushbuttons:	3 membrane keys		
Nominal temperature:	25 °C		
Ambient condition:	-10 ... +50 °C, 15 ... 90 %RH (non-condensing)		
Storage temperature:	-10 ... +50 °C		
Power supply:	9V-battery, type IEC 6F22 (in scope of supply) as well as additional d.c. connector for external 10.5 - 12V direct voltage supply. (suitable power supply: GNG 10 / 3000)		
Power consumption:	<0.25 mA (>1000 operating hours)		
Housing:	impact-resistant ABS plastic housing, membrane keyboard, transparent panel. Front side IP65, integrated pop-up clip for table top or suspended use.		
Dimensions:	142 x 71 x 26 mm (H x W x D)		
Weight:	approx. 155 g		
Device functions:			
Hold function	by keypress the current measuring will be "frozen"		
Max value memory	the max. measured value will be stored		
Alerting	adjustable alarm rail, value depending alarm sound		
Power-Off-function	device will turn of after the set period off time (1-120		

General:

Carbon monoxide (CO) is created by the combustion of carbon. Depending on the effectiveness of the combustion (oxygen supply) and the temperature of the combustion more or less CO gas is created. The gas is inflammable and highly toxic. It is invisible, tasteless, scentless and lighter than air.

Even smallest concentrations are dangerous for humans!

Therefore a directive exists in Germany, which limits the maximum concentration of CO gas at work (MAK / AGW) to 30 ppm

Application areas:

- Control of the air quality (e.g. at work place)
- Checking of heating systems, gas central-heating, fireplace
- Control of the air at maintenance work (tunnel, gas central-heating, ...)
- Detection of CO in the breath of smoker (% CO Hb)
- Cognition of CO poisoning i.e. at burnings (fire fighters, ...)

Price, accessories:

ESA 100 tube-adapter/flow diverter to screw in front plates.

ZOT 369 T-piece

GRV 100 non return valve

MSK 100 mouth peace of plastic

GAS 100 extension set for inhaled air control (consisting of ESA100, ZOT369, GRV 100 and 5x MSK100)

GZ-10 test gas cap GCO (for controlled flow with test gas)

GZ-02 gas bottle with 12l test gas: 30 ppm CO

GZ-03 gas bottle with 12l test gas: 300 ppm CO

GZ-04 gas valve unit MiniFlo for gas bottles with 12l

GB 9 V spare battery 9V / approx. 300mA/h, type IEC 6F22

GLI 9 V lithium battery 9V / approx. 1200mA/h

GKK 3000 case (275 x 229 x 83 mm) with punched lining

USB 3100 interface converter to USB, elec. isolated

GAM 3000 switching module for 230VAC/10A (refer to page. 38)

for additional accessories please refer to page 39 - 41

