

## COMPACT CO - MEASURING DEVICE



### FUNCTIONS:



### HIGHLIGHTS:

- 3 display units selectable (ppm, mg/m<sup>3</sup> and % CO Hb)
- Alert at exceeding the maximum concentration at work (MAK/AGW)
- incl. interface

THE DEVICE IS ONLY INTENDED FOR CONTROL PURPOSES FOR THESE APPLICATIONS. IT IS NOT A REPLACEMENT FOR A MONITORING DEVICE SUBJECT TO AUTHORISATION!

## GCO 100

Product-ID: 600062  
CO-measuring device

### 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 and scentless.

**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:

- 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, flue gas tract, ...)
- Detection of CO in the breath of smoker (% CO Hb)
- Cognition of CO poisoning i.e. at burnt offering (fire fighters, ...)

### Specifications:

**Measuring principle:** electrochemical CO measuring cell

**Measuring range:** 0 ... 1000 ppm CO concentration

**Display ranges:** 0 ... 1000 ppm CO concentration  
0 ... 1250 mg/m<sup>3</sup> CO concentration  
0 ... 60.0 % CO Hb (estimation via exhaled breath gas)

**Resolution:** 1 ppm, 1 mg/m<sup>3</sup> 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 ±1 digit

**repeatability:** < ±5 % of measured value ±1 digit

### 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 LCD-display

**Pushbuttons:** 3 membrane keys

**Nominal temperature:** 25 °C

**Ambient condition:** -10 ... +50 °C, 15 ... 90 % RH (non condensing)

**Storage temperature:** -10 ... +50 °C

**Serial interface:** Serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface adapter

**Power supply:** 9 V-battery as well as additional d.c. connector for external 10.5 - 12 V 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

**Scope of supply:** Device, battery, manual

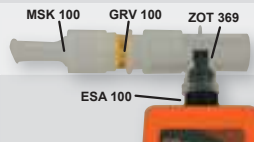
### Accessories and spare parts:

#### ESA 100

Product-ID: 603013  
tube-adapter/flow diverter to screw in front plates.

#### ZOT 369

Product-ID: 603094  
T-piece



#### GRV 100

Product-ID: 603093  
non return valve

#### MSK 100

Product-ID: 603012  
mouth peace of plastic

#### GAS 100

Product-ID: 603587  
extension set for exhaled air control (consisting of ESA100, ZOT369, GRV 100 and 5x MSK100)

#### GZ-10

Product-ID: 603133  
test gas cap GCO (for controlled flow with test gas)

#### GZ-02

Product-ID: 603569  
gas bottle with 12l test gas: 30 ppm CO

#### GZ-03

Product-ID: 603123  
gas bottle with 12l test gas: 300 ppm CO

#### GZ-04

Product-ID: 603570  
gas valve unit MiniFlo for gas bottles with 12l

#### GB 9 V

Product-ID: 601115  
spare battery 9 V / approx. 300mA/h

#### GLI 9 V

Product-ID: 601117  
Lithium battery 9 V / approx. 1200 mA/h

#### GKK 3000

Product-ID: 601048  
case (275 x 229 x 83 mm) with punched lining

#### USB 3100 N

Product-ID: 601092  
interface converter to USB, electrical isolated

#### GAM 3000

Product-ID: 601132  
switching module for 230 VAC/10 A

## COMPACT AIR OXYGEN MEASURING DEVICE



### FUNCTIONS:



FOR DIVING APPLICATIONS

## GOX 100

Product-ID: 600142  
for universal applications

### General:

- 1-button calibration
  - Automatic power-off
  - Min-/max- value memory
  - Incl. sensor GOEL 370
- Note: not for under water use (Rebreathers)

## GOX 100T

Product-ID: 600157  
for diving applications

### General:

- 1-button calibration
  - MOD-Display (Maximum Operating Depth)
  - HOLD function
  - Incl. sensor GOEL 370
- Note: not for under water use (Rebreathers)

### Specifications:

**Measuring range:** 0.0 ... 100.0 % O<sub>2</sub>

**Accuracy typ.:** ±0.1 % O<sub>2</sub> ±1 digit, calibrated device (range from 15 ... 40 % O<sub>2</sub>)

**MOD (GOX 100T):** 0 ... 100 m / 0 ... 199 ft

**Sensor Connection:** 0.7 m jack-connector cable

**Sensor:** Oxygen-partial pressure probe, mounted in external sensor housing

**Warranty:** 12 months

**Working pressure:** 0.5 ... 2.0 bar abs.

**Over-/under-pressure:** max. 0.25 bar (pressure difference)

**Working temperature:** 0 ... 45 °C (sensor), -20 ... +50 °C (device)

**Relative humidity:** 0 ... 95 % RH

**Power supply:** 9 V battery

**Power consumption:** approx. 120 µA (over 2500 h)

**Display:** 3½-digit, 13 mm high LCD-display

**Housing:** ABS-enclosure, front side IP65

**Dimensions:** approx. 106 x 67 x 30 mm (H x W x D)

**Weight:** approx. 185 g

**Scope of supply:** Device incl. sensor, tube-adaper, t-piece, battery

### Variants:

#### GOX 100-LACK

Product-ID: 602047  
with encapsulated PC board (for applications where condensation is possible)

#### GOX 100-T-LACK

Product-ID: 604660  
with encapsulated PC board (for applications where condensation is possible)