

## COMPACT CO-MEASURING DEVICE



## 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
- incl. calibration protocol

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

## GCO 100

Art. no. 600062

CO-measuring device with alarm

## 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:

|                             |   |
|-----------------------------|---|
| <b>Measuring principle:</b> | electrochemical CO measuring cell   |
| <b>Measuring range:</b>     | 0 ... 1000 ppm CO concentration   |
| <b>Display ranges:</b>      | 0 ... 1000 ppm CO concentration<br>0 ... 1250 mg/m <sup>3</sup> CO concentration<br>0 ... 60.0 % CO Hb<br>(estimation via exhaled breath gas) |
| <b>Resolution:</b>          | 1 ppm, 1 mg/m <sup>3</sup> or 0.1 % CO Hb   |
| <b>Sensor element:</b>      | integrated in device, measuring inlet at front plate, with inner thread for accessories screw in  |
| <b>Life time:</b>           | >5 years at proper usage at air<br>suggested test interval: every 6 months<br>(depending on precision requirements)                           |

## Accuracy: (at range 0 ... 500 ppm)

|                       |                                   |
|-----------------------|-----------------------------------|
| <b>Linearity:</b>     | < ±5 % of measured value ±1 digit |
| <b>Repeatability:</b> | < ±5 % of measured value ±1 digit |

## Interference (extract)

|                         | Concentration (ppm) | Residence time (min.) | Display (ppm) |
|-------------------------|---------------------|-----------------------|---------------|
| <b>Sulphur dioxide</b>  | 50                  | 600                   | <1            |
| <b>Nitrogen dioxide</b> | 50                  | 900                   | -1            |
| <b>Nitric oxide</b>     | 50                  | 5                     | 8             |
| <b>Hydrogen</b>         | 100                 | 5                     | 20            |
| <b>Carbon dioxide</b>   | 5000                | 5                     | 0             |

|                              |   |
|------------------------------|---|
| <b>Display:</b>              | approx. 11 mm high, 4½-digit LCD-display  |
| <b>Pushbuttons:</b>          | 3 membrane keys   |
| <b>Nominal temperature:</b>  | 25 °C   |
| <b>Operating conditions:</b> | -10 ... +50 °C, 15 ... 90 % RH (non condensing)   |
| <b>Storage temperature:</b>  | -10 ... +50 °C  |
| <b>Interface:</b>            | Serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface adapter                       |
| <b>Power supply:</b>         | 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) |
| <b>Battery life:</b>         | >1000 h   |

## Housing:

Impact-resistant ABS plastic housing, membrane keyboard, transparent panel, integrated pop-up clip

## Dimensions:

142 x 71 x 26 mm (H x W x D)

## Weight:

approx. 155 g

## Scope of supply:

Device, battery, calibration protocol, manual

## Accessories and spare parts:

## ESA 100

Art. no. 603013

Tube-adaptor/flow diverter to screw in front plates.

## ZOT 369

Art. no. 603094

T-piece

## GRV 100

Art. no. 603093

Non return valve

## MSK 100

Art. no. 603012

Mouth piece of plastic

## GAS 100

Art. no. 603587

Extension set for exhaled air control (consisting of ESA 100, ZOT 369, GRV 100 and 5 x MSK 100)

## GZ-10

Art. no. 603133

Test gas cap GCO (for controlled flow with test gas)

## GZ-02

Art. no. 606710

Gas bottle with 12l test gas: 30 ppm CO

## GZ-03

Art. no. 606711

Gas bottle with 12l test gas: 300 ppm CO

## GZ-04

Art. no. 603570

Gas valve unit MiniFlo for gas bottles with 12l

## GB 9 V

Art. no. 601115

spare battery 9 V / approx. 30 0mA/h

## GKK 3000

Art. no. 601048

Case (275 x 229 x 83 mm) with punched lining

## USB 3100 N

Art. no. 601092

Interface converter to USB, electrical isolated

## GAM 3000

Art. no. 601132

switching module for 230 V AC / 10 A

