

## Compact air oxygen meas. device



### GOX 100

device incl. sensor, tube-adaptor and T-piece

- Min-/max- value memory
- Sensor element is exchangeable without tools
- Easy calibration at ambient air
- Cost-effective sensor elements with long life-time

#### Specification:

**Meas. range:** 0,0 ... 100,0 % O<sub>2</sub> (O<sub>2</sub>-concentration)

**Accuracy:** (±1 digit) (at nominal temperature = 25°C) ± 0.1 %O<sub>2</sub> ± 1 digit (calibrated device)

**Probe connection:** via 0.7m jack-connector-cable attached to the device.

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

**Response Time:** t<sub>90</sub> < 10 sec., depending on temperature

**Life-time:** 12 months (appropriate application and ambient pressure)

**Working pressure:** 0.5 to 2.0 bar absolute

**Measuring freq.:** approx. 1 meas. per sec.

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

**Working temperature:** -5 to 50°C (sensor), -20 to 50°C (device)

**Relative humidity:** 0 to +95%RH (non-condensing)

**Storage temperature:** -15 to 60°C (sensor), -20 to 70°C (device)

**Power supply:** 9V battery type IEC 6F22

**Power consumption:** approx. 120µA (battery life-time with standard zinc-carbon-battery over 2500 h)

**Low battery display:** "BAT"

**Auto-off-function:** 1 ... 120 min. (can be switched off)

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

**Dimensions:** approx. 106 x 67 x 30 mm, without sensor and sensor-cable

**Weight:** approx. 185g incl. battery and sensor

#### Spare peaces, accessories:

**GOEL 369** spare sensor element

**ESA 369** spare tube-adaptor

**ZOT 369** spare T-adaptor

**GB 9 V** spare battery 9V

**GKK 252** case (235 x 185 x 48 mm) with foam lining

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## Air oxygen measuring device



### GMH 3691 Sensor not included - please order separately!

#### Specification:

**Measuring ranges:**

**Oxygen concentration:** 0,0 ... 100,0 % O<sub>2</sub> (gaseous)

**Partial oxygen pressure:** 0 ... 1100 hPa O<sub>2</sub>

**Temperature:** -5,0 ... 50,0 °C

**Accuracy:** (device) (at nominal temperature = 25°C)

**Oxygen concentration:** ±0.1% ±1digit

**Partial oxygen pressure:** ±1 hPa ±1digit

**Temperature:** ±0.1°C ±1digit

**Oxygen electrode:** for suitable sensores  
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**Sensor connection:** 6-pin screened Mini-DIN-socket.

**Display:** two 4 digit LCDs (12.4mm or 7mm high), as well as additional arrows.

**Pushbuttons:** 6 membrane keys for ON/OFF-switch, selection of meas. range, min- and max-value memory, hold-function, calibration etc.

**Working temperature:** 0 to +50°C

**Relative humidity:** 0 to +95%RH (non-condensing)

**Storage temperature:** -20 to +70°C

**Interface:** serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface adapter GRS3100 or GRS3105 resp. USB3100 (p.r.t. accessories).

**Power supply:** 9V-battery, type IEC 6F22 (included), as well as additional d.c. connector for external 10.5-12V direct voltage supply. (suitable power supply: GNG10/3000)

**Power-Off-function:** 1...120min (can also be deactivated).

**Power consumption:** approx. 1.5 mA

**Low battery warning:**  $\Delta$  and ' bAt '

**Dimensions:** 142 x 71 x 26 mm (H x W x D)  
Impact-resistant ABS plastic housing, membrane keyboard, transparent panel. Front side IP65, integrated pop-up clip.

**Weight:** approx. 160 g (cpl. with battery)

#### Functions:

**Min-/Max-value memory:** max. and min. values will be memorized.

**Hold function:** by pressing a button the current meas. value will be memorized.

**Alarm:** integrated limit detector for min. or max. alarm.

**Temperature compensation:** automatic via temperature sensor, integrated in probe housing.

**Air pressure compensation:** The O<sub>2</sub> concentration will be compensated according to the abs. atmospheric pressure set (500...2000hPa).

- Double display for oxygen and temperature
- Measured units: O<sub>2</sub>-concentration and O<sub>2</sub>-partial pressure
- Alarm detector with integrated horn
- Automatic temperature compensation
- Min./Max. value memory, Hold function
- Serial interface, device can be connected to bus system (up to 5 devices can be connected to one PC interface)
- Battery and d.c. operation
- Wide range of application
- Most simple calibration in atmospheric air

**Calibration:** 1-point calibration: extremely simple quick calibration in atmospheric air. (press button to compensate unit to 20.9%).

2-point calibration: first point at atmospheric air (20.9%), second point freely selectable

**Application:** Wide range of application for your home, job and hobby! For example:

- **Bio chemistry:** Oxygen monitoring in breeding chambers for cell cultures. Monitoring of fermenting process of fruits in fermentation plants etc.

- **Medicine:** Monitoring of oxygen concentration in respirators; checking of breathing, monitoring of oxygen concentration in incubators, oxygen tents etc.

- **Food technology:** Monitoring of residual oxygen in packages (e.g. coffee, tea, etc.). Monitoring of oxygen content during production processes.

- **Safety technology, safety at work:** Oxygen monitoring in mines/pits, underground parking lots, wine cellars, cooling chambers, greenhouses or stores. Oxygen monitoring or alarm in case of danger of suffocation when working in tanks, wells etc.

- **Air conditioning and ventilation technology:** Oxygen measurements, air quality monitoring, measuring of oxygen concentration in enclosed air conditioning systems, etc.

- **Sport:** Checking of oxygen content in compressed air breathing apparatuses (diving, etc.), oxygen monitoring for gliding.

**The device can only be used to check during these applications. -> no substitute for approved monitoring device!**

#### Accessories:

**Suitable sensores** p.r.t. page 33

**GKK 3000** case (275 x 229 x 83 mm) with punched lining suitable for GMH3xxx

**GRS 3100** interface converter, electrical isolated, for RS232

**GRS 3105** interface converter with 5 connection points, electr. isolated, for the connection of 5 GMH3xxx to one PC (RS232).

**ST-R1** device protection bag with cut-out for probe connection

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