

## ATMOSPHERIC OXYGEN METER



WIDE RANGE OF APPLICATIONS

**HIGHLIGHTS:**

- Alarm monitoring with integrated sounder
- Ambient pressure compensation with integrated barometer

**ADDITIONAL FUNCTIONS OF GMH 3695:**

- Pressure connection



THE DEVICE IS FOR CHECKING ONLY. IT DOES NOT REPLACE A MONITORING DEVICE THAT REQUIRES APPROVAL!

**GMH 3692**

Item No. 605919

Portable instrument for gaseous oxygen, device only, without sensor

**GMH 3695**

Item No. 605921

Portable instrument for gaseous oxygen with data logger, device only without sensor

**APPLICATION:**

**Biochemistry:**

Oxygen monitoring in incubators for growing cell cultures. Monitoring the fermentation of fruits in fermentation plants, etc.

**Medical technology:**

Monitoring the oxygen concentration in ventilators; breathing air control; oxygen concentration monitoring e.g. in oxygen tents, etc.

**Food technology:**

Checking the residual oxygen in packaging (e.g. coffee, tea, MAP, etc.). Monitoring of the oxygen content in critical production processes and storage.

**Air conditioning and ventilation technology:**

Oxygen measurement; air quality monitoring; oxygen concentration measurement in closed ventilation systems, etc.

**Sports:**

Diving gas test: checking the oxygen concentration in nitrox, trimix or similar gas mixtures  
*Note: Not suitable for use in "underwater applications" (rebreather etc.)*

**TECHNICAL SPECIFICATIONS:**

**Measuring ranges**

<b>O<sub>2</sub>-concentration:</b>	0.0..100.0 % O <sub>2</sub> (gaseous) 0..1100 hPa O <sub>2</sub>
<b>Temperature:</b>	-5.0 .. + 50.0 °C
<b>Air pressure:</b>	<b>GMH 3692:</b> 10..1200 hPa; <b>GMH 3695:</b> 300..5000 hPa
<b>Accuracy: (device) (at nominal temperature = 25 °C)</b>	
<b>O<sub>2</sub>-Konzentration:</b>	± 0.1 % ± 1 digit
<b>Temperature:</b>	± 0.1 °C ± 1 digit
<b>Air pressure:</b>	± 3 hPa or 0.1 % of meas. MW (higher applicable)
<b>Oxygen sensor:</b>	observe max. operating pressure of the oxygen sensor, e.g. GOEL 370/381: 500..2000 hPa abs.
<b>Sensor connection:</b>	6-pole shielded mini-DIN socket. <b>at GMH 3695:</b> additional nozzle for pressure connection
<b>Display:</b>	two 4-digit LCD displays (12.4 mm or 7 mm high) and additional arrows.
<b>Control elements:</b>	6 membrane buttons for on/off switch, selection of the measuring range, min and max value memory, hold function, calibration, etc.
<b>Working temperature:</b>	0 .. + 50 °C
<b>Relative humidity:</b>	0 .. + 95 % RH (not condensing)
<b>Storage temperature:</b>	-20 .. + 70 °C
<b>Interface:</b>	serial interface, via galv. isolated interface converter GRS 3100 or GRS 3105 or USB 3100 N (accessory) can be connected directly to the RS232 or USB interface of a PC.

**Power supply:**

9V battery and additional power supply socket for external 10.5..12 V DC voltage supply (suitable power supply: GNG10/3000)

<b>Battery life:</b>	approx. 300 h
<b>Housing:</b>	Made of impact-resistant ABS, membrane keyboard, transparent panel, integrated pop-up clip
<b>Dimensions:</b>	142 x 71 x 26 mm (H x W x D)
<b>Weight:</b>	approx. 160 g (cpl. with battery)
<b>Scope of delivery:</b>	Device, battery, test report, operating instructions

**ADDITIONAL FUNCTIONS:**

**Temperature compensation:**

automatically via the temperature sensor integrated in the sensor housing.

**Air pressure compensation:**

The O<sub>2</sub> concentration is automatically compensated with the integrated pressure sensor.

**Calibration: 1-point calibration:**

simplest adjustment in atmospheric air. (device is calibrated to 20.9 % by pressing the key).

**2-/3-point calibration:**

first point in air (20.9 %), second and third 0 or 100 %.

**Calibration interval:**

after a selectable period (1..365 days or inactive) a recalibration is requested.

**GMH 3695:** additional calibration history

**Analog output (GMH 3695 only):** 0..1 V, freely scalable

**Pressure connection piece (only GMH 3695):** for pressure compensation

**Data logger (GMH 3695 only):** cyclic: 8000 data records, cycle selectable: 1 s..60 min Single: 1000 data records, with measuring point input

**ACCESSORIES OR SPARE PARTS:**

**GKK 3000**

Item No. 601048

Device with soft cutouts for 1x GMH 3000, 275 x 229 x 83 mm (W x H x D)

**USB 3100 N**

Item No. 601092

Interface converter GMH3xxx <=> PC, USB, galvanic isolation

**GRS 3105**

Item No. 601099

5-way interface converter GMH3xxx <=> PC, RS232

**GSOFT 3050**

Item No. 601336

Windows software for GMH 3000 and GMH 5000 with logger

**ST-R1**

Item No. 601066

GMH 3000 protective bag made of Nappa leather, 1 connection, round