

AIR OXYGEN MEASURING DEVICE



WIDE RANGE OF APPLICATION

HIGHLIGHTS:

- Alarm detector with integrated horn
- Automatic compensation of ambient air via integrated barometer

ADDITIONAL FUNCTIONS GMH 3695:

- pressure connection

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

GMH 3692

Art. no. 605919

Handheld instrument for gaseous oxygen w/o sensor

GMH 3695

Art. no. 605921

Handheld instrument for gaseous oxygen with datalogger w/o sensor

Application:

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.**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 bottles (diving, etc.).

Note: not suited for „under water“-applications (rebreather, etc.)

Specifications:

Measuring ranges

O₂ concentration: 0.0 ... 100.0 % O₂ (gaseous)
0 ... 1100 hPa O₂**Temperature:** -5.0 ... +50.0 °C**Air pressure:** **GMH 3692:** 10 ... 1200 hPa; **GMH 3695:** 300 ... 5000 hPa

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

O₂ concentration: ±0.1 % ±1 digit**Temperature:** ±0.1 °C ±1 digit**Air pressure:** ±3 hPa or 0.1 % v. m.w. (whichever is higher)

Oxygen sensor:

for suitable sensors p.r.t. page 76
Observe permissible operating pressure of oxygen sensor
e.g. GOEL 370/381: 500 ... 2000 hPa abs.

Sensor connection:

6-pin screened Mini-DIN-socket.

GMH 3695: additional pressure ports

Display:

two 4 digit LCDs (12.4 mm or 7 mm 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 ... +50 °C

Relative humidity:

0 ... +95 % RH (non-condensing)

Storage temperature:

-20 ... +70 °C

Interface:

serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface converter GRS 3100 or GRS 3105 resp. USB 3100 N (p.r.t. accessories).

Power supply:

9 V battery as well as additional d.c. connector for external 10.5 ... 12 V direct voltage supply. (suitable power supply: GNG10/3000)

Battery life:

approx. 300 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. 160 g (incl. battery)

Scope of supply:

Device, battery, calibration protocol, manual

Additional functions:

Temperature compensation:

automatic via temperature sensor, integrated in probe housing

Air pressure compensation:The O₂ concentration will be compensated according to the absolute atmospheric pressure set.**Calibration:****1-point calibration:**

extremely simple quick calibration in atmospheric air (press button to compensate unit to 20.9 %).

2-/3-point calibration:

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

Calibration interval:

The device asks for a recalibration after a selectable time period (1 ... 365 days or inactive).

GMH 3695: additional calibration history**Analog output (GMH 3695 only):**

0 ... 1 V, freely scalable

Pressure nozzles (GMH 3695 only):

for pressure compensation

Data logger (GMH 3695 only):

cyclic: 8000 data sets, adjustable cycle time: 1 s ... 60 min

manual: 1000 data sets, with measuring point input

Accessories and spare parts:

Suitable sensors

p.r.t. next page

GKK 3000

Art. no. 601048

Device case soft lining for 1x GMH 3000 (275 x 229 x 83 mm)

USB 3100 N

Art. no. 601092

Interface Converter GMH3xxx <=>PC, USB, electrical isolated

GRS 3105

Art. no. 601099

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

GSOFT 3050

Art. no. 601336

Windows software for GMH 3000 and GMH 5000 with logger

ST-R1

Art. no. 601066

Protection bag, leather