

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 PAGE 77

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

GMH 3692

Art. no. 605919

Air oxygen measuring device w/o sensor

GMH 3695

Art. no. 605921

Air oxygen measuring device w/o sensor with data logger

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

Oxygen 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)

Oxygen 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 77
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

Case (275 x 229 x 83 mm) with punched lining suitable for GMH3xxx

USB 3100 N

Art. no. 601092

Interface converter, electrical isolated

GRS 3105

Art. no. 601099

Interface converter with 5 connection points, electrical isolated, for the connection of 5 devices to one PC (RS232).

GSOFT 3050

Art. no. 601336

Windows software for GMH 3000 and GMH 5000 handheld measuring devices with logger function

ST-R1

Art. no. 601066

Device protection bag with cut-out for probe connection