

oxygen measuring devices for dissolved oxygen in liquids



- Double display for oxygen and temperature
- Meas. units: O₂-concentration, O₂-saturation and O₂-partial pressure (GMH3630 only)
- Automatic air pressure compensation by means of integrated pressure sensor
- Salinity correction
- Extremely small measuring probe (dimensions as for pH-probe)
- 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
- Simple calibration in atmospheric air

GMH 3610 incl. oxygen electrode

GMH 3630 incl. oxygen electrode

Specification :

Measuring ranges:

- O₂-concentration:** GMH3610: 0,0 ... 25,0 mg/l
GMH3630: 0,0 ... 70,0 mg/l or 0,00 ... 25,00 mg/l
- O₂-saturation:** GMH3610: 0 ... 300 %
GMH3630: 0 ... 600 % or 0,0 ... 250,0 %
- O₂-partial pres.:** GMH3630: 0,0 ... 570,0 hPa or 0 ... 1200 hPa (0,0 ... 427,5 mmHg or 0 ... 900 mmHg)
- Temperature:** 0,0 ... 50,0 °C
- Pressure:** GMH3630 500 ... 1100 hPa abs.
- Accuracy:** (at nominal temperature = 25°C)
- Oxygen:** GMH3610: ±1,5% of m.v. ±0.2 mg/l
GMH3630: ±1,5% of m.v. ±0.2 mg/l (0...25mg/l) or ±2,5% of m.v. ±0.3 mg/l (25...70mg/l)
- Temperature:** ±0,1°C ±1digit
- Pressure:** ±0,5% FS ±1digit

Sensor connection: 6-pin screened Mini-DIN-socket.

Electrode: active membrane type. Electrode-Ø front: approx. 12mm, overall length: approx. 220 mm, anti buckling glanding, neck collar: Ø approx. 20 mm, 4m connection cable with Mini-DIN-plug.

Response time: 95% in 10sec., depending on temperature.

Operation life: approx. 3 years or more, depending on maintenance

Working temperature: 0 to +40°C

Working pressure: max. 3 bar

Flow rate: min. 30 cm/sec.

Display: 2 four digit LCDs (12.4mm and 7mm high) for oxygen, temperature or pressure, as well as additional functional arrows.

Pushbuttons: 6 membrane keys

Working temperature: 0 to +50°C

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

Storage temperature: -20 to +70°C (Electrode: 0 to 60°C)

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

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

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

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 pack: GNG10/3000)

Power consumption: approx. 3 mA

Auto-Off-Function: 1...120min (can also be deactivated).

Low battery warning: Δ and ' bAt '

Difference between GMH3630 and GMH3610:

Additional features of GMH3630:

- Measuring of air pressure by means of integrated pressure sensor
- Extended measuring range for O₂
- O₂-partial pressure measurement
- Correction of salinity

Housing 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 for table top or suspended use.

Weight: approx. 300 g (complete with battery and probe)

Temperature compensation: automatic via temperature sensor integrated in electrode.

Air pressure compensation:

GMH3610: enter current air pressure by means of keys

GMH3630: automatic via integrated pressure sensor. Display of current air pressure.

Correction of salinity (GMH3630): automatic Salinity value can be set via keyboard from 0,0 ... 70,0

Calibration: 1-point calibration: extremely simple quick calibration in atmospheric air.

2-point calibration (GMH3630 only): first point at atmospheric air, second point at upper measuring range (with calibration set GKS3600).

Scope of supply: device incl. electrode, GWOK01 and KOH electrolyte

Upcharges, accessories:

GWO 3600 Spare electrode with 4 m cable

Upcharge for electrode with 10 m cable

Upcharge for electrode with 30 m cable

GSKA 3600 protection cap for depth measuring

Flow apparatus for 12mm electrodes

Provides sufficient flow for the electrode permanently, therefore the minimum flow is ensured (e.g. for measurements in large depths).

GKS 3600 calibration set

(consisting of calibration device, 100 ml calibration solution, 10 ml catalytic solution, measuring pipette and measuring bottle)

GKN 3600 calibration refill set

(consisting of 100ml calibration solution, 10ml catalytic solution, meas. pipette)

GAS 3600 working set

(consisting of 3 spare diaphragm heads and 100ml KOH-electrolyte)

GWOK 01 spare diaphragm head per piece

KOH 100 spare electrolyte KOH 100 ml-bottle

ST-R1 device protection bag with cut out for sensor connection punch: 1 round hole, suitable for: GMH3610, GMH3630, GMH3691... (p.r.t. page 40).

for add. spare parts and accessories p.r.t. pages 39 - 41