

## Oxygen measuring devices for dissolved oxygen in liquids

**HIGHLIGHTS:**

- Automatic air pressure compensation
- Salinity correction
- Simple calibration in atmospheric air

**ADDITIONAL FUNCTIONS GMH 3651:**MEAS. UNITS: O<sub>2</sub>-CONCENTRATIONO<sub>2</sub>-SATURATIONAND O<sub>2</sub>-PARTIAL PRESSURE (GMH3651 ONLY)**GMH 3611**

Art. no. 605922

Oxygen measuring device incl. oxygen electrode, with 4 m cable

**GMH 3651**

Art. no. 605924

Oxygen measuring device incl. oxygen electrode with data logger, with 4 m cable

**Specifications:****Measuring ranges: (device)**

<b>O<sub>2</sub>-concentration:</b>	0.00 ... 70.00 mg/l (ppm) (resolution selectable)
<b>O<sub>2</sub>-saturation:</b>	0.0 ... 600.0 % O <sub>2</sub> (resolution selectable)
<b>O<sub>2</sub>-partial pressure:</b>	3651: 0 ... 1200 hPa O <sub>2</sub> (0.0 ... 427.5 mmHg)
<b>Temperature:</b>	0.0 ... 50.0 °C
<b>Pressure:</b>	3611: 10 ... 1200 hPa abs. 3651: 10 ... 11000 hPa abs. or 0 ... 100.0 m water column* (with pressure port)

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

<b>Oxygen:</b>	±1.5 % of m.v. ±0.2 mg/l (0 ... 25 mg/l) or ±2.5 % of m.v. ±0.3 mg/l (25 ... 70 mg/l)
<b>Temperature:</b>	± 0.1 °C ± 1 digit
<b>Pressure:</b>	±0.5 % FS ± 1 digit ±3 hPa or 0.1 % of m.v. ±2 hPa (750 ... 1100 hPa)

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

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

**Response time:** 95 % in 10 s, depends on temperature

**Operation life:** approx. 3 years, depends on maintenance

**Working temperature:** 0 ... +40 °C

**Working pressure:** max. 3 bar  
Operating pressure sensor GWO 3600 max. 3000 hPa rel. or 4000 hPa pay attention to abs.!

**Flow rate:** min. 30 cm/s

**Display:** 2 x 4 digit LCDs  
(12.4 / 7 mm high)

<b>Interface:</b>	serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface converter.
<b>Power supply:</b>	9 V-battery as well as additional d.c. connector for external 10.5-12 V direct voltage supply. (suitable power pack: GNG10/3000)
<b>Battery life:</b>	approx. 500 h
<b>Housing:</b>	impact-resistant ABS, integrated pop-up clip for table top or suspended use.
<b>Dimensions:</b>	142 x 71 x 26 mm (H x W x D)
<b>Weight:</b>	approx. 300 g (incl. battery and probe)
<b>Scope of supply:</b>	Device incl. electrode, GWOK01 and KOH electrolyte, battery, manual

**Additional functions:**

**Temperature compensation:** automatic via temperature sensor integrated in electrode.

**Air pressure compensation:** automatic via integrated pressure sensor. Display of current air pressure.

**Correction of salinity:** autom. salinity value can be set via keyboard from 0.0 ... 70.0

**Calibration:** 1-point calibration: extremely simple quick calibration in atmospheric air. additional at GMH 3651: 2- and 3-point-calibration

**Calibration interval:** The device asks for a recalibration after a selectable time period (1 - 365 days or inactive). GMH 3651: additional calibration history

**Analog output (GMH 3651 only):** 0 ... 1 V, freely adjustable

**Alarm (GMH 3651 only):** 2 Alarm (O<sub>2</sub> and temperature) with separate alarm limits, Alarm horn / visual / interface

**Data logger (GMH 3651 only):** cyclic: 10.000 data sets, manual: 1.000 data sets (with measuring point input, 40 adjustable measuring point texts or measuring point numbers)

\* There is the possibility for hydrostatic depth measurements with special accessories (upon request / pressure connection). This allows in combination with the logger function e.g. comfortable recordings of oxygen profiles in waters.

**Variants:****GMH 3611-L10**

Art. no. 606233

Device GMH 3611 with sensor with 10 m cable length

**GMH 3611-L30**

Art. no. 607086

Device GMH 3611 with sensor with 30 m cable length

**GMH 3651-L10**

Art. no. 606105

Device GMH 3651 with sensor with 10 m cable length

**GMH 3651-L30**

Art. no. 606106

Device GMH 3651 with sensor with 30 m cable length

**Accessories and spare parts:****GMH 3611-GL**

Art. no. 606310

Oxygen measuring device without accessories

**GMH 3651-GL**

Art. no. 606312

Oxygen measuring device without accessories

**GWO 3600-L04**

Art. no. 603895

Spare sensor with 4 m cable

**GWO 3600-L10**

Art. no. 603258

Spare sensor with 10 m cable

**GWO 3600-L30**

Art. no. 603259

Spare sensor with 30 m cable

**GWOK 01**

Art. no. 601411

Spare diaphragm head

**GAS 3600**

Art. no. 603497

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

**GSKA 3600**

Art. no. 601414

Protective PVC cap, submerged, for use in still bodies of water

**GSKA 3610**

Art. no. 607267

Protective cap made of gunmetal, salt water resistant, submerged, also suitable for use with greater depths or with a flow

**KOH 100**

Art. no. 603356

Spare electrolyte 100 ml

