

## WATERPROOF HANDHELD MEASURING DEVICE FOR MEASURING DISSOLVED OXYGEN IN WATER



## HIGHLIGHTS

- Waterproof and durable (protective silicone case)
- Large double display with background lighting
- New oxygen sensor GWO 5610
- Environmental pressure compensation with integrated barometer

## ADDITIONAL HIGHLIGHTS GMH 5650

- Data logger and alarm function
- Analogue output, pressure connection

## ADDITIONAL FUNCTIONS GMH 5650:

**GMH 5630**

Art. no. 606880

Handheld instrument for dissolved oxygen without accessories

**GMH 5650**

Art. no. 606882

Handheld instrument for dissolved oxygen with data logger without accessories

**Application:**

Oxygen monitoring in aquaculture and aquaria. Testing of well water, sewer systems and in wastewater treatment plants, also suitable for harsh environments. Delivery can take place ready for use (filled) or dry. Electrodes delivered try are long lasting and ready for use within about 1 h after filling.

**Specifications:**

	GMH 5630	GMH 5650
<b>Measuring channels:</b>	O <sub>2</sub> , T, air pressure (integrated)	O <sub>2</sub> , T, air pressure (integrated) / measuring depth <sup>*)</sup>

**Measuring ranges**

<b>O<sub>2</sub>-concentration:</b>	0.00 ... 70.00 mg/l (ppm) (Variable resolution)
<b>O<sub>2</sub>-saturation:</b>	0.0 ... 600.0 % O <sub>2</sub> (Variable resolution)
<b>O<sub>2</sub>-partial pressure:</b>	0 ... 1200 hPa O <sub>2</sub> (0.0 ... 427.5 mmHg)
<b>Temperature:</b>	0.0 ... 50.0 °C
<b>Air pressure:</b>	10 ... 1200 hPa abs    300 ... 5000 hPa abs
<b>Measuring depth:</b>	-    0 ... 40.0 m water column <sup>*)</sup>

**Accuracy**

<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>	0.0 ... 50.0 °C
<b>Air pressure:</b>	10 ... 1200 hPa abs    300 ... 5000 hPa abs

**Sensor:** GWO 5610, active diaphragm type with platinum cathode, Ø 12 mm, standard cable length 2 m, 7 pin bayonet connection

<b>Response time:</b>	90 % in 10 s
<b>Service life:</b>	approx. 3 years, depending on usage and care

<b>Display:</b>	4 ½ digit, 7-segment, illuminated (white)
<b>Working temperature:</b>	Device: -25 ... +50 °C Sensor: 0 ... 40 °C
<b>Sensor operating pressure:</b>	max. 3 bar corresponds to max. 30 m water depth
<b>Inward flow:</b>	min. 20 cm/s
<b>Power supply:</b>	2 x AAA-battery, power consumption: 0.9 mA
<b>Battery life:</b>	approx. 1000 h (without lighting)
<b>Protection rating:</b>	IP65 / IP67
<b>Housing:</b>	Impact-resistant ABS, with stand/hanging bracket
<b>Dimensions:</b>	160 x 86 x 37 mm (H x W x D) including protective silicone case
<b>Weight:</b>	approx. 250 g, including battery and protective case
<b>Scope of supply:</b>	Device incl. batteries (2 x AAA), protective silicone case, calibration protocol, manual, quick guide

**Additional Functions:****Salinity correction:** 0.0 ... 70.0**Pabs / height correction:** Automatic with integrated sensor**Measuring depth (GMH 5650 only):** Hydrostatic depth measurement <sup>\*)</sup>**Output / external supply:** OUT jack: 38400 baud interface, 5 V external supply**Additional with GMH 5650:** Analogue output 0 ... 1 V, adjustable**Calibration:** 1 point air, easy calibration to air at the push of a button**Additional with GMH 5650:** 1 point water, 2 point or 3 point (air and zero point and 100 % O<sub>2</sub>)**GLP:** Calibration interval**Additional with GMH 5650:** Calibration history**Data logger (only GMH 5650):** Cyclical: 10,000, Single: 1000, single value logger with measuring point input**Alarm (only GMH 5650):** 2 alarm channels (O<sub>2</sub> and temperature) with separate alarm thresholds alarm notification horn / visual / interface

<sup>\*)</sup> A simple hydrostatic depth measurement can be made with special accessories. For instance, oxygen profiles in waste water can be recorded very conveniently together with the logger function.

**GMH 5630-L02**

Art. no. 607470

Handheld instrument for dissolved oxygen including sensor GWO 5610, 2 m cable

**GMH 5650-L02**

Art. no. 607474

Handheld instrument for dissolved oxygen with data logger including sensor GWO 5610, 2 m cable

**Varianten:****GMH 5630-L04**

Art. no. 606881

Handheld instrument for dissolved oxygen with sensor with 4 m cable length

**GMH 5630-L10**

Art. no. 607471

Handheld instrument for dissolved oxygen with sensor with 10 m cable length

**GMH 5630-L30**

Art. no. 607472

Handheld instrument for dissolved oxygen with sensor with 30 m cable length

**GMH 5650-L04**

Art. no. 606883

Handheld instrument for dissolved oxygen with data logger with sensor with 4 m cable length

**GMH 5650-L10**

Art. no. 607478

Handheld instrument for dissolved oxygen with data logger with sensor with 10 m cable length

**GMH 5650-L30**

Art. no. 607479

Handheld instrument for dissolved oxygen with data logger with sensor with 30 m cable length

**Accessories and spare parts:****GKK 5001**

Art. no. 611606

with cut-outs for 1 device of the GMH 5xxx-/7500 series and accessories for water analysis (395 x 295 x 106 mm), p.r.t page 112