

## MULTISENSOR WATER ANALYSIS HANDHELD MEASURING DEVICE



NEW!

## HIGHLIGHTS:

- simultaneous measurement of pH/ oxygen or pH/ conductivity and the corresponding temperatures
- integrated galvanic isolation enables simultaneous measurement with affordable standards sensors
- the display enables convenient reading of several values simultaneously and the measurement curve in diagram form
- the data logger can be read directly via USB – with standard smartphone cable or software
- simple and convenient battery charging via USB connection

**G 7500**

Art. no. 414318

MultiSensor water analysis handheld instrument

**G 7500-PH/O2**

Art. no. 414787

MultiSensor water analysis handheld instrument

Device, GE125-L02+accessories, GW0 5610-L02+accessories, GKK 2021

**G 7500-PH/CON**

Art. no. 414788

MultiSensor water analysis handheld instrument

Device, GE125-L02+accessories, LF425-L02+accessories, GKK 2021

**G 7500-PH/CON/O2**

Art. no. 414789

MultiSensor water analysis handheld instrument

Device, GE125-L02+accessories, LF425-L02+accessories, GW05610-L02+accessories, GKK 2021

**General:**

The G 7500 is a comfortable multi-channel water analysis device for simultaneous measurement of two measurement variables and the corresponding temperature. All significant electrochemical measurements can be combined:

- pH/ Redox + conductivity/salinity
- pH/ Redox + dissolved oxygen

The backlit graphic display shows all parameters in plain text in German or English; other languages can be integrated (additional charges indicated on request). Large display or measurement diagram can also be represented. Use of our proven standard plug connectors guarantees that you can use our standard sensors – without additional costs due to complicated technology in the sensors. The device is distinguished by its impressive performance and the affordable system price (refer also to our sets). The state-of-the-art device platform uses the standard USB cable to charge the internal batteries (interchangeable) and read the data logger without the need for additional software or adapters. The logger is read conveniently like a USB 2.0 memory stick.

**Application:**

Therefore, you have applications such as surface water monitoring, neutralisation processes or agricultural measurements ready to hand in a compact format.

- monitoring of bodies of water
- drinking water preparation
- sewage treatment plants
- fish husbandry and aquaculture
- vertical/ urban farming
- conventional agriculture

**Specifications:****Input no.1 pH/ Redox****Connection:** BNC waterproof**Measuring range:** -2.00 ... +16.00 pH ( $\pm 0.25$  % FS @ 25 °C)  
or -1500 ... +1500 mV Redox voltage ( $\pm 0.25$  % FS @ 25 °C)**Temperature:** -10.0 ... +150.0 °C (Pt1000)  
 $\pm 0.25$  % FS connection via 4 mm banana or O<sub>2</sub>/LF sensor**Temperature compensation:** Manual, automatic**Input no. 2****Connection:** 7-pole bayonet jack**Temperature:** -10.0 ... +110.0 °C (NTC or Pt1000) measuring range (Pt 1000)  
-10.0 ... +110.0 °C measuring range (NTC 10k)  
-10.0 ... +110.0 °C (integrated in O<sub>2</sub>/LF sensor)**Conductivity****Measuring range:** 0  $\mu$ S/cm ... 500 mS/cm ( $\pm 0.5$  % FS @ 25 °C)  
Salinity/PSU: 0.0 ... 70.0 g/kg  
Cell constant 0.3 ... 1.6000 1/cm**Temperature compensation** Off, linear (0.300 ... 3.000 %/K), NLF (according to DIN EN 27888), Reference temperature: 20 °C or 25 °C (adjustable)**Dissolved oxygen****Measuring range:** Oxygen saturation: 0.0 ... 500.0 % sat  
Oxygen concentration: 0.0 ... 50.0 mg/l  
Oxygen partial pressure: 0 ... 1013 mbar O<sub>2</sub>  
(accuracy depending on sensor and calibration with flow >20 cm/s, add.  $\pm 1.5$  % FS @ 25 °C, 100 % sat, O<sub>2</sub>)

## MULTISENSOR WATER ANALYSIS HANDHELD MEASURING DEVICE



A multi-channel measuring device was developed based on our proven G 1000/ GMH 3000/ GMH 5000 individual-parameter devices. This combines multi-channel measurement with the proven housing of the GMH 5000 series.

Numerous applications demand simultaneous measurement of multiple measured variables. For example, simultaneous measurement of pH and oxygen is desired when monitoring bodies of water – the G 7500 determines both measurements in one device. A very interesting application area for the combination of pH and conductivity is the current trend market of vertical farming/ urban farming.

A daylight-compatible backlit graphic display is used for optimal visualization. At the same time, simple measurement and easy calibration are guaranteed with the plain text display with various language settings. There are no longer any limitations on the measurement recording, because the buffer size of the data logger is very large. Our proven sensor connections are installed in the devices. As a result, system costs are kept in check and the flexibility of the free sensor selection adapted to your emphases is guaranteed.

|                                  |  |
|----------------------------------|--|
| <b>Temperature compensation:</b> | Automatically via connected sensor   |
| <b>Pressure compensation</b>     | Manual, automatic via int. sensor: 500 ... 1100 hPa $\pm$ 4 hPa  |
| <b>Salinity compensation:</b>    | Manual PSU 0 ... 70 g/kg   |
| <b>Additional functions:</b>     | Text-base user guidance (DE/EN), Charging via USB jack (3 x AAA batteries integrated, interchangeable)             |
| <b>Display:</b>                  | LCD (180 x 128 pixel), monochromatic, adjustable backlighting  |
| <b>Interface:</b>                | USB 2.0, Micro USB jack  |
| <b>Calibration:</b>              | pH 1...5 point calibration (PHL buffer, DIN buffer)<br>LF cell constant<br>O <sub>2</sub> : Water-saturated air    |
| <b>Data logger:</b>              | Yes (8 GB with FAT file system)  |
| <b>Alarm:</b>                    | Yes, acoustic alerting (horn)<br>Visual (red LCD background)   |
| <b>Power supply:</b>             | 3 x NiMH AAA (max. 750 mAh)  |
| <b>Current requirement:</b>      | On: approx. 75 mA in operation;<br>Off: approx. <0.1 mA  |
| <b>Housing:</b>                  | Impact-resistant ABS, with stand/hanging bracket   |
| <b>Protection rating:</b>        | IP67   |
| <b>Dimensions:</b>               | 160 x 86 x 37 mm (H x W x D) incl. protection cover  |
| <b>Weight:</b>                   | 300 g incl. battery and protection cover   |
| <b>Scope of supply:</b>          | Device with 3 AAA batteries, quick reference guide, operating manual and test report as pdf on mass storage device |

**Accessories and spare parts:****GW05610-L04**

Art. no. 607764

replacement sensor for dissolved oxygen, GMH 56 &amp; GMH 75, Sensor with 4 m cable

**GWOK 02**

Art. no. 608012

Spare membrane head for GWO 5610

**KOH 100**

Art. no. 603356

spare electrolyte KOH, 100 ml

**GCAL 3610**

Art. no. 611371

Calibration vessel for dissolved oxygen sensors with  $\varnothing$  12 mm**LF452-L02**

Art. no. 608773

Conductivity cell for GMH 5400 / G 7500-Series, 4-pole graphite measuring cell,  $\varnothing$  16 mm**LF400-L02**

Art. no. 602968

Conductivity cell for GMH 5400 / G 7500-Series, 4-pole graphite measuring cell

**GKL-100**

Art. no. 601396

Conductivity control solution, Control solution 1413  $\mu$ S/cm, 100 ml bottle**GKL-102**

Art. no. 601400

Conductivity control solution, Control solution 50 mS/cm, 100 ml bottle

**GE117-BNC-L02**

Art. no. 600729

pH-electrode incl. Pt1000, pressure resistant, BNC plug

**GE125-BNC-L02**

Art. no. 600731

Waterproof pH electrode with Pt1000 to 4 mm banana

**PHL 4**

Art. no. 601369

pH buffer solution, ready to use, Buffer solution pH 4 in 250 ml dosing bottle

**PHL 7**

Art. no. 601371

pH buffer solution, ready to use, Buffer solution pH 7 in 250 ml dosing bottle

**PHL 10**

Art. no. 601373

pH buffer solution, ready to use, Buffer solution pH10 in 250 ml dosing bottle

**GRL100**

Art. no. 601422

HCL/Pepsin cleaning solution, 100 ml

**GKK 5001**

Art. no. 611606

kompakter Koffer für Feldeinsatz 395 x 295 x 106 mm (W x H x D)