

## MULTISENSOR WATER ANALYSIS PORTABLE INSTRUMENT

**G 7500**

Item No. 414318

MultiSensor water analysis portable instrument

**G 7500-PH/O<sub>2</sub>**

Item No. 414787

MultiSensor water analysis portable instrument set for pH and oxygen device including Micro USB/USB-A 1.8 m communication and charging cable in case GKK 2021

pH electrode GE 125-L02, PHL 4, PHL 7, PHL 10, KCL3M, GRL 100  
O<sub>2</sub> sensor GWO 5610-L02, replacement GWOK02, GSKA 3610, KOH, 2 pipettes, vinyl gloves

**G 7500-PH/CON**

Item No. 414788

MultiSensor water analysis portable instrument set for pH and conductivity device including Micro USB/USB-A 1.8 m communication and charging cable in case GKK 2021

pH sensor GE 125-L02, PHL 4, PHL 7, PHL 10, KCL3M, GRL 100  
Conductivity measuring cell LF 425-L02

**G 7500-PH/CON/O<sub>2</sub>**

Item No. 414789

MultiSensor water analysis portable instrument set for pH, conductivity and oxygen device including Micro USB/USB-A 1.8 m communication and charging cable in case GKK 2021

pH electrode GE 125-L02, PHL 4, PHL 7, PHL 10, KCL3M, GRL 100  
Conductivity sensor LF 425-L02 O<sub>2</sub> sensor GWO 5610-L02, replacement GWOK02, GSKA 3610, KOH, 2 pipettes, vinyl gloves

**GENERAL:**

The G 7500 is a convenient multi-channel water analyzer for the simultaneous measurement of two measured variables and the associated one temperature.

All the essentials can be combined electrochemical measurements:

- pH/ORP + conductivity/salinity
- pH/Redox + dissolved Oxygen

The illuminated graphic display shows all parameters in plain text German or English, other languages can be integrated (Charges on request). Large display or measured value diagrams can also be displayed. The use of our proven standard connectors ensures that you can use our standard sensors – consciously without surcharge through complex technology in the sensors. Thus, the device is impressive due to the performance and the affordable system price (see also our sets). The modern device platform uses the usual USB cable for charging the internal batteries (interchangeable) and to access the data logger without any additional software or adapters are necessary. The logger is comfortably accessed like a USB 2.0 data stick.

**HIGHLIGHTS:**

- simultaneous measurement of pH/oxygen or pH/conductivity and the associated temperatures
- built-in galvanic isolation allows simultaneous measuring – with inexpensive standard sensors
- the display enables convenient reading of several values at the same time, as well as the course of the measured values in diagram form
- The data logger can be accessed directly via USB – with standard smart-phone cable or software
- simple and convenient battery charging via USB port

**APPLICATIONS:**

You have applications such as water monitoring, neutralization processes or agricultural surveys neatly under control.

- Water monitoring
- Fresh water treatment
- Sewage treatment plants
- Fish farming and aquaculture
- Vertical/urban farming
- Conventional agriculture

**TECHNICAL SPECIFICATIONS:****Input no. 1 pH/redox**

**Connection:** BNC waterproof

**Measuring range:** -2.00..+16.00 pH (± 0.25 % FS @ 25 °C)  
othe -1500 .. + 1500 mV redox voltage (± 0.25 % FS @ 25 °C)

**Temperature:** -10.0.. +150.0 °C (Pt1000)  
± 0.25 % FS connection via 4 mm banana, alternatively via O<sub>2</sub>/LF sensor

**Temperature compensation:** Automatically via connected sensor

**Input no. 2**

**Connection:** 7-pole bayonet socket

**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 μS/cm..500 mS/cm (± 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 partialpressure: 0 ..1013 mbar O<sub>2</sub>  
(Accuracy depending on the sensor and Calibration, with flow> 20 cm/s, plus ± 1.5 % FS @ 25 °C, 100 % sat. O<sub>2</sub>)

**Temperature compensation:** Automatically via connected sensor

**Pressure compensation:** Manual, automatic via int. sensor: 500..1100 hPa ± 4 hPa

**Salinity compensation:** Manual PSU 0..70 g/kg

**Additional functions:** Text-based user interface (DE/EN), charging via USB socket  
(3 x AAA rechargeable batteries integrated, interchangeable)

## MULTISENSOR WATER ANALYSIS PORTABLE INSTRUMENT



Based on our proven single parameter instruments G 1000/GMH 3000/GMH 5000 a multi-channel measuring instrument has been developed. This combines the multi-channel measurement in the proven housing of the GMH 5000 series.

Numerous applications require the simultaneous measurement of several measurands. For example, the simultaneous measurement of pH and oxygen is desired in water monitoring – the G 7500 determines both measured values in one device.

One of the very interesting areas of application, the combination of pH and conductivity, are the current trend markets of vertical farming / Urban farming.

A backlit graphic display suitable for daylight is used for optimal visualization. At the same time, simple measurement and comparison are guaranteed thanks to the plain text display that can be converted into different languages. There are no longer any limitations in the recording of measured values, as the memory size of the data logger is very large.

Our proven sensor connections are consciously built into the devices. This keeps the system costs manageable and ensures the flexibility of free sensor selection to match your focus.

<b>Display:</b>	LCD (180 x 128 pixels), monochrome, adjustable Backlight
<b>Interface:</b>	USB 2.0, micro USB socket
<b>Calibration:</b>	pH 1.5 point calibration (PHL buffer, DIN buffer) LF cell constant O <sub>2</sub> : air saturated with water
<b>Data logger:</b>	Yes (8 GB with FAT file system)
<b>Alarm:</b>	Yes, Acoustic alarm (sounder) visual (red LDC background)
<b>Power supply:</b>	3 x NiMH AAA (max. 750 mAh)
<b>Power consumption:</b>	On: approx. 75 mA in operation; Off: approx. 0.1 mA
<b>Housing:</b>	impact-resistant ABS, with stand-up/hanging bracket
<b>Protection class:</b>	water protected, IP67
<b>Dimensions:</b>	160 x 86 x 37 mm (H x W x D) including protective cover
<b>Weight:</b>	300 g including battery and protective cover
<b>Scope of delivery:</b>	Device with 3 AAA rechargeable batteries, quick reference guide, operating manual and test report as pdf on mass storage device

**ACCESSORIES AND SPARE PARTS:****GW05610-L02**

Item No. 607386

Spare sensor for dissolved oxygen, GMH 56 &amp; GMH 75, sensor with 2 m cable

**GW05610-L04**

Item No. 607764

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

**GWOK 02**

Item No. 608012

Spare membrane head for GWO 5610

**KOH 100**

Item No. 603356

KOH spare electrolyte, 100 ml

**GCAL 3610**

Item No. 611371

Calibration bottle for gel. Oxygen sensors with Ø 12 mm

**LF425-L02**

Item No. 608773

Conductivity measuring cell, 7-pole, waterproof bayonet connection, for GMH 5400/G 7500 series

**LF400-L02**

Item No. 602968

Conductivity measuring cell, 7-pole, waterproof bayonet connection, for GMH 5400/G 7500 series

**GKL-100**

Item No. 601396

Conductivity control solution, Control solution 1413 µs/cm, 100 ml bottle

**GKL-102**

Item No. 601400

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

**GE117-BNC-L02**

Item No. 600730

pH electrode with Pt1000, pressure-resistant, BNC connector

**GE125-BNC-L02**

Item No. 600731

Waterproof pH electrode with Pt1000, BNC connector

**PHL 4**

Item No. 601369

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

**PHL 7**

Item No. 601371

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

**PHL 10**

Item No. 601373

Ready-to-use pH buffer solution, Buffer solution pH 10 in 250 ml dosing bottle

**GRL100**

Item No. 601422

HCL/Pepsin cleaning solution, 100 ml

**HD-22-3**

Item No. 700040

Freely positionable laboratory sensor holding arm for sensors Ø12mm

**GKK 5001**

Item No. 611606

Case for GMH 5000/G7500 series water analysis / universal, 395 x 295 x 106 mm (W x H x D)

**GKK 2021**

Item No. 414760

Device case 2 levels, for 1x GMH 5500/7500 and 3 PHL solutions, 450 x 360 x 140 mm (W x H x D)