

WATERPROOF METER FOR MEASURING PH/REDOX



WATER-PROOF DEVICE AND PLUG CONNECTIONS



HIGHLIGHTS:

- o GLP functions (good laboratory practice)
- o large backlit double display
- o high resolution (0.001 pH/0.1 mV)
- o including test report

ADDITIONAL FUNCTIONS OF GMH 5550:



**GMH 5530**

Item No. 600041  
Waterproof pH/ORP/temperature meter, device only (without electrode)

**GMH 5550**

Item No. 600043  
Waterproof pH/ORP/temperature meter with logger, device only (without electrode)

**APPLICATION:**

- Measurements in water and aquaristics, fish farming
- Drinking water, process monitoring, soil measurements
- Food production and monitoring
- Laboratory: medicine, pharmacy, chemistry
- Quality assurance

**TECHNICAL SPECIFICATIONS:**

**Measuring ranges**

<b>pH:</b>	-2,000..16,000 pH (resolution selectable)
<b>Redox / mV:</b>	-2000.0..2000.0 mV (resolution can be selected) (based on hydrogen system DIN38404: -1792 .. + 2207 mV <sub>H</sub> )
<b>Temperature:</b>	-5.0 .. + 150.0 °C; 23.0..302.0 °F
<b>rH:</b>	0.0..70.0 rH
<b>accuracy</b>	
<b>pH:</b>	± 0.005 pH
<b>Redox / mV:</b>	± 0.05 % FS (mV or mV <sub>H</sub> )
<b>Temperature:</b>	± 0.2 °C (in the range from -5.0 to 100.0 °C)
<b>rH:</b>	± 0.1 rH

**connections**

<b>pH, redox:</b>	BNC socket, suitable for standard BNC plugs and waterproof BNC plugs, plus banana socket (4 mm) for separate reference electrode, input resistance: 10 <sup>12</sup> ohms
<b>Temperature:</b>	2 banana sockets (4 mm) for temperature sensors (Pt1000 or NTC 10K)
<b>Interface / supply:</b>	4-pole bayonet connection for serial interface and supply (with USB 5100 accessory)
<b>working conditions</b>	-25 .. + 50 °C; 0.95 % RH (not condensing)
<b>Display:</b>	two 4 ½ digit 7-segment displays (15 mm and 12 mm)

**PH CALIBRATION**

<b>Automatically:</b>	1-, 2- or 3-point calibration, GREISINGER standard buffer or buffer according to DIN19266 (A, C, D, F, G)
<b>Manually:</b>	1-, 2- or 3-point calibration
<b>Power supply:</b>	2 x AAA batteries, power consumption: <1.0 mA
<b>Battery life:</b>	1000 hours
<b>Housing:</b>	impact-resistant ABS, with stand-up/hanging bracket
<b>Protection class:</b>	IP65/IP67
<b>Dimensions:</b>	160 x 86 x 37 mm (H x W x D) including protective cover
<b>Weight:</b>	250 g including battery and protective cover
<b>Scope of delivery:</b>	Device, battery, test report, operating instructions

**ADDITIONAL FUNCTIONS:**

- Status display for pH electrode and battery:** Bar graph
- Background lighting:** duration adjustable (off, 5 s..2 min.)
- Automatic temperature compensation:** If the temperature sensor is plugged in and the "pH" operating mode is active, there is automatic temperature compensation (ATC) in the range 0..150 °C. Manual entry is possible without a temperature sensor.
- pH calibration:** either 1-, 2- or 3-point calibration with characteristic curves for GREISINGER standard buffers (GPH or PHL) and buffers according to DIN19266 or with manual buffer entry. With automatic buffer recognition, the temperature dependency of the buffers is automatically compensated.
- Permissible electrode data:** Asymmetry: ± 55 mV / slope: 45..62 mV / pH Determination of the condition of the pH electrode during calibration.
- Redox measurement (ORP):** 2 options:  
"mV" Standard redox or mV measurement  
"mV<sub>H</sub>" Conversion to hydrogen system according to DIN38404 part 6

- rH measurement:** The rH value is calculated using an ORP measurement and manual entry of the pH value.
- Calibration interval:** after a selectable period (1..365 days or inactive) a recalibration is requested.
- Calibration memory (only GMH 5550):** last 16 calibrations
- Analog output (GMH 5550 only):** 0..1 V, freely scalable, connection via 4-pole bayonet socket, resolution 13 bit, accuracy 0.05 % at nominal temperature
- Data logger (GMH 5550 only):** with measuring point input, recording interval: 1 s..1 h, recording duration: 416 days at an interval of 1 h, measured value storage: cyclical: 10,000 data records, individual: 1,000 data records

**ACCESSORIES OR SPARE PARTS:**

- EBS 20M**  
Item No. 601158  
Measurement data acquisition software for EASYBus & GMH
- GSOFT 3050**  
Item No. 601336  
Windows software for GMH 3000 and GMH 5000 with logger
- USB 5100**  
Item No. 601095  
Interface converter GMH 5xxx <=> PC, Galvanic isolation
- GN5/5000**  
Item No. 602287  
Plug in power supply for GMH 5XXX series
- 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)

DEVICE INCLUDING ELECTRODE



**GMH 5530-G125**

Item No. 475746  
Waterproof pH/ORP/temperature meter, device complete with pH electrode GE 125 (PT1000)

**GMH 5550-G125**

Item No. 475747  
Waterproof pH/ORP/temperature meter with logger, device complete with pH electrode GE 125 (PT1000)