

WATERPROOF METER FOR MEASURING PH/REDOX



WATER-PROOF DEVICE AND
PLUG CONNECTIONS



HIGHLIGHTS:

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

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

connections

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

PH CALIBRATION

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

GNG 5/5000

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)

PH MEASURING SET

**GMH 5530-SET**

Item No. 611614

Waterproof pH/ORP/temperature meter

Device, GE125-L02, PHL 4, PHL 7, PHL 10, KCL3M, GRL100, GKK 2021

GMH 5550-SET

Item No. 611254

Waterproof pH/ORP/temperature meter with logger:

Device, GE125-L02, PHL 4, PHL 7, PHL 10, KCL3M, GRL100, software, USB 5100, GKK 2021

GENERAL:

With our ready-to-use pHmeasuring set "SET" you not only have everything you need for your work in a practical case – with the set you save 23 % compared to the individual components

APPLICATIONS:

No matter what industry you are in, our comprehensive SET-GMH 5550 never lets you down and is always tidy thanks to the practical case

TECHNICAL SPECIFICATIONS:**Measuring ranges**

pH:	-2,000..16,000 pH (resolution selectable)
Redox / mV:	-2000.0..2000.0 mV (resolution can be selected) (based on hydrogen system DIN38404: -1792 .. + 2207 mV _H)
Temperature:	-5.0 .. + 150.0 °C; 23.0..302.0 °F
rH:	0.0..70.0 rH

Dimensions: 450 x 360 x 140 mm (case)**Weight:** approx. 5700 g

Scope of delivery: Device with silicone protective cover, pH electrode, 3 x buffer solution, KCl electrolyte, pepsin cleaning solution, case, battery, test report, operating instructions
SET-GMH 5550 only: software, interface converter

ACCESSORIES OR SPARE PARTS:**GMH 5550**

Item No. 600043

Waterproof pH/ORP/temperature meter with logger, without electrode

GSOFT 3050

Item No. 601336

Windows software for portable instruments with logger function

USB 5100

Item No. 601095

Interface converter GMH 5xxx <=> PC, Galvanic isolation

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)

PH / ORP ACCESSORIES

Supplementary set GMH 55 ES

**ACCESSORIES OR SPARE PARTS:****GMH 55 ES**

Item No. 603066

pH add-on set for GMH 35xx and GMH 55xx
 out pH electrode GE 100 BNC, temperature probe
 GF1T-T3-B-BS, case GKK3500,
 calibration set GAK1400

GE 125-BNC

Item No. 600731

waterproof pH electrode with Pt 1000, temperature probe with waterproof BNC plug and banana plug

**GF 1T-T3-B-BS**

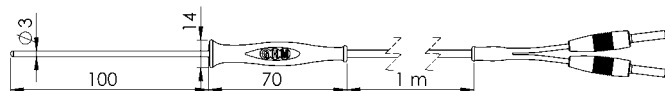
Item No. 611088

compact Pt1000 hand probe with silicone handle

-70 .. + 250 °C, Pt1000 class B

Immersion tip Ø 3 mm made of V4A tube, black silicone handle up to +250 °C, 1 m, silicone cable up to +230 °C continuously / +250 °C 2 h, 2 x Ø 4 mm banana plugs

Response time T₉₀: Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s

**GE 100-BNC**

Item No. 600704

Universal pH electrode, BNC connector

**GR 105-BNC**

Item No. 607798

Redox electrode, BNC connector

**PHL 4**

Item No. 601369

Ready-to-use pH buffer solution (pH 4.01 / 25 °C), 250 ml

PHL 7

Item No. 601371

Ready-to-use pH buffer solution (pH 7.00 / 25 °C), 250 ml

PHL 10

Item No. 601373

Ready-to-use pH buffer solution (pH 10.01 / 25 °C), 250 ml

KCL 3 M

Item No. 602477

3 mol KCL electrolyte for refilling or storing (fill into the protective cap) electrodes
 with 3 mol KCl electrolyte, 100 ml spray bottle

CaCl

Item No. 603254

Electrolyte for soil pH measurement, 1000 ml

GRL 100

Item No. 601422

HCL/Pepsin cleaning solution, 100 ml

GRP 100

Item No. 601424

Redox test solution 220 mV, 100 ml

GAK 1400

Item No. 603523

pH work and calibration set

Scope of delivery:

5 buffer capsules each GPH 4.0, GPH 7.0 and
 GPH 10.0, 3xGPF100, 1x KCL3M, 1x GRL 100
 If no buffer solutions are available, the GAK 1400
 is a recommended standard equipment.

