#### WATERPROOF METER FOR MEASURING PH/REDOX















#### 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

Interface/supply:

working conditions

Display:

Measuring ranges	
pH:	-2,00016,000 pH (resolution selectable)
Redox/mV:	-2000.02000.0 mV (resolution can be selected) (based on hydrogen system DIN38404: -1792 + 2207 mV <sub>H</sub> )
Temperature:	-5.0 + 150.0 °C; 23.0302.0 °F
rH:	0.070.0 rH
accuracy	
pH:	± 0.005 pH
Redox/mV:	$\pm$ 0.05 % FS (mV or mV $_{\rm H})$
Temperature:	$\pm$ 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 <sup>12</sup> ohms
Temperature:	2 banana sockets (4 mm) for temperature sensors (Pt1000 or NTC 10K)

4-pole bayonet connection for

two 4 1/2 digit 7-segment displays

serial interface and supply

(with USB 5100 accessory)

-25 .. + 50 °C; 0..95 % RH

(not condensing)

(15 mm and 12 mm)

#### DUCALIBRATION

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

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

Weight:

### 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:

Standard redox or mV measurement "mV Conversion to hydrogen system according to "mV" DIN38404 part 6

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:**

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**

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

Waterproof pH/ORP/temperature meter, device complete with pH electrode GE 125 (PT1000)

## GMH 5550-G125

Waterproof pH/ORP/temperature meter with logger, device complete with pH electrode GE 125 (PT1000)