# WATERPROOF HANDHELD METER FOR MEASURING CONDUCTIVITY



WATERPROOF – DEVICE AND PLUG CONNECTIONS

HIGHLIGHTS:

○ Conductivity, resistance, salinity, TDS

○ Large double backlit display

○ Automatic cell correction with reference solutions

○ Incl. test protocol

ADDITIONAL FUNCTIONS GMH 5450:

ALARM    LOGG



## GMH 5430
*Item No. 600035*
Waterproof handheld conductivity meter,
device only (without sensor)

## GMH 5450
*Item No. 600037*
Waterproof handheld conductivity meter with logger,
device only (without sensor)

### APPLICATION:

Mobile use for
• Industry and craft
• Measurements in waters and aquaristics, fish farming
• Drinking water, process monitoring, soil measurement
• Food production and monitoring
• Quality assurance
Additional applications in laboratories:
• Medicine, pharmacy, chemistry

### TECHNICAL SPECIFICATIONS:

Measuring ranges

| | |
|---|---|
| Number of measuring ranges: | 5 |
| smallest measuring range: | 0.000..5.000 µS / cm * or 0.0..500.0 µS / cm ** |
| largest measuring range: | 0..5000 µS / cm * or 0..1000 mS / cm ** |
| Spec. Resistance: | 0.005..500.0 kOhm * cm (depending on cell constants) |
| TDS: | 0..5000 mg / l (depending on cell constants) |
| Salinity: | 0.0..70.0 (g salt / kg water) |
| Temperature: | -5.0 .. + 100.0 °C, Pt1000 or NTC 10 k |
| Supported cell constants: | 4,000..15,000 / cm - 0,4000..1,5000 / cm - 0,04000..0,15000 / cm - 0,004000..0,015000 / cm |

Accuracy (at nominal temperature 25 °C)

| | |
|---|---|
| Conductivity: | ± 0.5 % of reading ± 0.1 % FS (depending on the electrode) |
| Temperature: | ± 0.2 K |

connections

| | |
|---|---|
| Conductivity, temperature: | 1 x 7-pole bayonet connection for connecting different measuring cells, supported temperature sensors Pt1000 or NTC 10 k |
| Interface / ext. care: | 4-pole bayonet connection for serial interface and supply (with accessories: USB adapter USB 5100) |
| Analog output: (only GMH 5450) | 0..1 V, freely scalable, connection via 4-pole bayonet socket, resolution 13 bit, accuracy 0.05 % at nominal temperature |
| Data logger: (only GMH 5450) | Cyclic: 10,000 data records, cycle selectable: 1 s..60 min Single: 1000 data records (with measuring point input, 40 adjustable measuring point texts or measuring point numbers) |
| Display: | 4 ½ digits 7-segment, illuminated (white) |
| Working conditions: | Device: -25 .. + 50 °C, 0..95 % r. F. (not condensing) |
| Storage temperature: | -25 .. + 70 °C |
| Backlit: | Light duration adjustable (off, 5 s..2 min) |

| | |
|---|---|
| Power supply: | 2 x AAA batteries, power consumption: 6.25 mA |
| Battery life: | approx. 160 h (without lighting) |
| Protection class: | IP65 / IP67 |
| Housing: | impact-resistant ABS, with stand-up / hanging bracket |
| Dimensions: | 160 x 86 x 37 mm (H x W x D) including silicone protective cover |
| Weight: | approx. 250 g including battery and protective cover |
| Scope of delivery: | Device, K 50 BL, battery, test report, operating instructions |

*Depending on the cell constant of the LF electrode used*
*\* Cell constant 0.01 / cm \*\* cell constant 0.1..1.2 / cm (standard)*

### ADDITIONAL FUNCTIONS:

**Cell correction** Cell constant manually or automatically using reference solutions.
**Automatic temperature compensation** The conductivity depends strongly on temperature, so that it only applies to the corresponding temperature. The device therefore offers the option of compensating the conductivity to a reference temperature (adjustable to 20 °C or 25 °C). Supported Compensation Types:

| | |
|---|---|
| nLF: | non-linear function of natural water according to DIN EN27888 (ISO 7888) (reference temperature 25 °C) |
| Lin: | adjustable linear compensation |
| off: | no compensation |

**Salinity determination**
Salinity is the sum of the concentration of all dissolved salts in sea water.
The information is given in g / kg (corresponds to PSU = Practical Salinity Unit).
**TDS determination (total dissolved solids)**
The total dissolved solids describes the mass concentration of the dissolved substances in a liquid. The information is given in mg / l.
**GLP (Good Laboratory Practice)**
adjustable calibration intervals GMH 5450: Calibration memory for the last 16 calibrations

### ACCESSORIES AND SPARE PARTS:

GKL 10 ... Conductivity control solutions

**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)