

WATERPROOF HANDHELD METER FOR MEASURING CONDUCTIVITY



WATERPROOF – DEVICE AND PLUG CONNECTIONS

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 $\mu\text{S}/\text{cm}$ * or 0.0..500.0 $\mu\text{S}/\text{cm}$ **
largest measuring range:	0..5000 $\mu\text{S}/\text{cm}$ * or 0..1000 mS/cm **
Spec. Resistance:	0.005..500.0 $\text{k}\Omega\text{cm}$ * (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)

HIGHLIGHTS:

- Conductivity, resistance, salinity, TDS
- Large double backlit display
- Automatic cell correction with reference solutions
- Incl. test protocol

ADDITIONAL FUNCTIONS GMH 5450:



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 \leftrightarrow 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)