WATER-PROOF HANDHELD DEVICE FOR CONDUCTIVITY MEASUREMENT

ISO

STANDARD-FUNKTIONS:

AUTO-HOLD · AUTO OFF · BAT · MIN MAX





WATER-PROOF DEVICE AND PLUG CONNECTIONS

HIGHLIGHTS:

- *Measurement of conductivity, resistance, salinity, TDS*
- *Large double display with background illumination*
- *Automatic cell correction with reference solutions*

ADDITIONAL FUNCTIONS GMH 5450:

ALARM · LOGG

GMH 5430

Product-ID: 600035

Water-proof handheld device without electrode

GMH 5450

Product-ID: 600037

Water-proof handheld device with analog output and data logger, without electrode

Application:

Mobile use for:
- industry and craft
- measurements of waters and aquaristics, fish farming
- drinking water monitoring, process control, soil measurements
- food production and control
- quality management

Additional applications at laboratory:
- medicine, pharmacy, chemistry

Specifications:

Measuring range:	
Number of meas. ranges:	5
Smallest range:	0.000 ... 5.000 µS/cm * or 0.0 ... 500.0 µS/cm **
Biggest range:	0 ... 5000 µS/cm * or 0 ... 1000 mS/cm **
Resistivity:	0.005 ... 500.0 kOhm * cm (depends on cell constant)
TDS:	0 ... 5000 mg/l (depends on cell constant)
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 m.v. ±0.1 % FS (depends on electrode)
Temperature:	±0.2 K
Connection:	
Conductivity, temperature:	1 x 7-pole bayonet connector for connection of different measuring cells, supported temperature sensors: Pt1000 or NTC (10 k)
Interface / ext. supply:	4-pole bayonet connector for serial interface and supply (with accessory: USB adapter USB 5100)
Analog output: (only GMH 5450)	0 - 1 V, freely adjustable, connection with 4-pole bayonet connector, resolution 13 bit, accuracy 0.05 % at nominal temperature
Datenlogger: (nur GMH 5450)	Zyklisch: 10.000 Datensätze, Zyklus wählbar: 1 s … 60 min Einzel: 1000 Datensätze (mit Messstelleneingabe, 40 einstellbare Messstellentexte oder Messstellennummern)
Display:	4 ½ digit 7-segment, illuminated (white)
Operating conditions:	-25 ... +50 °C, 0 ... 95 % RH (non-condensing)
Storage temperature:	-25 ... +70 °C
Background illumination:	duration adjustable (off, 5 s ... 2 min.)
Power supply:	2 x AAA battery (included), power consumption 6.25 mA
Battery life time:	approx. 160 h (without background illumination)
Protection class:	IP65 / IP67
Housing:	Impact-resistant ABS plastic housing, integrated pop-up clip
Dimensions:	160 x 86 x 37 mm (H x W x D) incl. silicone protection cover
Weight:	approx. 250 g incl. battery and protection cover
Scope of supply:	Device, K 50 BL, battery, manual

depends on cell constant of used electrode
** cell constant 0.01 / cm* *** cell constant 0.1 ... 1.2 / cm (standard)*

additional Functions:

Cell correction
Manually or automatically with reference solution

Automatic temperature compensation:
As conductivity depends strongly on temperature, each conductivity value is only valid at the corresponding temperature. Therefore the device supports temperature compensation, i.e. referring the conductivity to a reference temperature (selectable: 20 °C or 25 °C).

Supported types of compensation:
- nLF: Non-linear function of natural waters acc. to DIN EN 27888 (ISO 7888) (Reference temperature 25 °C)
- Lin: adjustable linear compensation
- off: no compensation

Salinity measurement:
Salinity means the sum of the concentrations of all dissolved salts in water. The unit is g/kg. (equals PSU = Practical Salinity Unit).

TDS measurement (total dissolved solids)
TDS means the mass concentration of dissolved media in a liquid. The unit is mg/l.

GLP (Good Laboratory Practice)
adjustable calibration intervals
GMH 5450: Calibration memory: latest 16 calibrations

Accessories and spare parts:

EBS 20M
Product-ID: 601158
Software for long-term monitoring (p.r.t. page 76)

GSOFT 3050
Product-ID: 601336
Software for operation of logger devices (p.r.t. page 77)

USB 5100
Product-ID: 601095
Electrically isolated interface converter, supplied via USB

GNG 5 / 5000
Product-ID: 602287
Plug-in power supply 5 V DC, suitable for devices of the series GMH 5000 (p.r.t. page 74)

GKK 3500
Product-ID: 601052
Device case (394 x 294 x 106 mm) with eggcrate foam and cut-outs for 1 device (p.r.t. page 72)