Conductivity measuring devices

- Wide measuring range from 0,0 µS/cm to 200,0 mS/cm manually selectable or automatic range selection
- Double display for conductivity and temperature
- Display of resistance, salinity or TDS (dry residue of filtrate)
- Conform to the regulations of the drinking water ordinance (TrinkwV 2001) and DIN EN 27888
- Automatic temperature compensation, reference temp. (20°C/25°C) selectable
- Setting of different temperature coefficients
- Extremely small measuring probe (dimensions as for pH-probe)
- Min./Max. value memory, Hold function,
- Serial interface, device can be connected to bus system (up to 5 devices can be connected to one PC interface)
- Battery and d.c. operation

GMH 3430

Conductivity measuring device incl. probe

Specification:

Measuring range:

Conductivity:	0,0 ... 200,0 µS/cm
	0 ... 2000 µS/cm
	0,00 ... 20,00 mS/cm
	0,0 ... 200,0 mS/cm
	manual setting or auto range
Temperature:	-5,0 ... +100,0°C
Resistance:	0,005 ... 100,0 kOhm * cm
Salinity:	0,0 ... 70,0
TDS:	0 ... 1999 mg/l
Resolution:	0,1 µS/cm; 1 µS/cm; 10 µS/cm or 0,1mS/cm
	0,1 °C
	0,001 kOhm; 0,01 kOhm or 0,1 kOhm
	0,1 (salinity)
	1 mg/l

Accuracy: (±1digit) (at nominal temperature = 25°C)

Conductivity:	±0,5% of m.v. ±0,3% FS or ±2µS/cm
Temperature:	±0,2% of m.v. ±0,3K

Cell constant: adjustable from 0.800 ... 1.200 cm^{-1}

Temp. compensation: automatic or off

Compensation coefficient:

- nLF: non-linear function of natural water according to EN27888 (DIN38404)
  (reference temperature adjustable 20°C or 25°C)
- Lin: linear compensation from 0,3 ... 3,0 %/K
  (reference temperature adjustable 20°C or 25°C)
- off: no compensation

Display: 2 four digit LCDs (12.4mm and 7mm high) for conductivity (resistance, salinity, TDS) and temperature, min./ max values, hold function, etc. as well as additional functional arrows.

Measuring cell: 2-pol conductivity measuring cell; temperature sensor integrated in shaft. Electrode material: graphite.
The graphite electrodes are the optimum solution for sewage and can be cleaned easily.

Warranty for sensor element: 12 months

Working temperature: 0 to +50°C (device)
meas. cell: 0 to +80°C (permanent) 0 to +100° C (short time)

Relative humidity: 0 to +95%RH (non-condensing)

Min/Max-value memory: max. and min. values as well as the corresponding temperature will be memorized.

Hold function: the current meas. value will be 'frozen'.

Interface: serial interface, direct connection to RS232 or USB interface of a PC via electrically isolated interface converter GRS3100 or GRS3105 resp. USB3100 (p.r.t. accessories).

Pushbuttons: 6 membrane keys for ON/OFF-switch, selection of meas. range, min- and max-value memory, hold-function, etc.

Power supply: 9V-battery, type IEC 6F22 (included) as well as additional d.c. connector (internal pin Ø 1.9mm) for external 10.5-12V direct voltage supply. (suitable power supply: GNG10/3000)

Power-Off-function: Device will be automatically switched off if no key is pressed/no interface communication takes place for the time of the power-off delay. The power-off delay can be set to values between 1 and 120 min.; it can be completely deactivated.

Low battery warning: ⚠ and ' bAt '

Power consumption: approx. 3.5 mA (meas. power not incl.)

Housing dimensions (device): 142 x 71 x 26 mm (H x W x D)
Impact-resistant ABS plastic housing, membrane keyboard, transparent panel. Front side IP65, integrated pop-up clip for table top or suspended use.

Electrode dim.: approx. 120mm long, Ø approx. 12mm, 1m of fixed connection cable between electrode and device.

Weight: approx. 255 g (incl. batteries and measuring cell)

Automatic temperature compensation: The conductivity is highly dependant on the temperature, i.e. it is only valid for one temperature. For better comparison the device offers the possibility to compensate the conductivity to a reference temperature (adjustable 20°C or 25°C).

Temperature measurement: The temperature of the agent can be displayed by means of the temperature probe integrated in the electrode.

AutoRange: Automatic selection of to the optimum meas. range for conductivity measurements. AutoRange mode can be deactivated by pressing a button.

Salinity determination: Salinity is understood to be the sum of concentrations of all salts dissolved in water. Reading in g/kg.

TDS-determination (dry residue of filtrate): The dry residue of filtrate is understood to be the concentration of substances dissolved in a liquid. Reading in mg/l.

Optionen:

- LTG

for organic matter (alcohol, petrol, diesel)

up to max. 1000 µS/cm

with glass shaft, unplatinized,
1,35 m PUR-cable, fix connected with device

Accessories:

GKL 100 100ml conductivity control solution
(100ml bottles with 1413 µS/cm. (pursuant to DIN EN 27888))

miscellaneous accessories (case, power supply, etc.)
suitable for all GMH3xxx devices **p.r.t. p. 41 -43**