

Hand-held Conductivity Measuring Units



measuring

monitoring

analysing



- Serial interface,
 Minimum/maximum memory, hold function
- Determination of resistance, salinity, and TDS
- Robust housing, IP65, front



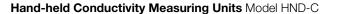
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Description

The KOBOLD hand-held conductivity measuring unit of model HND-C110 is a compact conductivity measuring unit with solidly connected probes that can be used universally. Due to the double display, both, the conductivity and the temperature value can be displayed simultaneously. The HND-C110 model offers functions like minimum/maximum value memory, hold function, auto-off function, and AutoRange (automatic adjustment of the optimum measuring range).

Due to the high temperature dependency in conductivity measurement, the manual measuring unit has automatic temperature compensation.

With the improved unit HND-C110, the determination of resistance, salinity, and TDS are also part of the scope of functions.

Areas of application

- Chemistry, pharmacy, food industry
- Laboratory application

Technical Data

Measuring principle: 2-electrode conductivity measuring

cell with temperature sensor integrated into the shaft electrode material: graphite

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

(manually adjustable or automatically)

• Temperature: -5.0...+100.0°C

Accuracy: (±1 digit, at nominal temperature 25 °C)
• Resolution: ±0.5% of reading ±0.3% of full scale

or ±2 µS/cm

• Temperature: ±0.2 % of reading ±0.3 K

Resolution:

• Conductivity: 0.1 µS/cm, 1 µS/cm, 10 µS/cm

or 0,1 mS/cm

• Temperature: 0.1 °C

• Resistance: 0.001 k Ω , 0.01 k Ω or 0.1 k Ω

Salinity: 0.1TDS: 1 mg/l

Display: two 4-digit LC-displays

Operating temp.: 0...+50 °C (housing),

Measuring cell: -5...+80 °C (continuous)
bis +100 °C (short-term)

Storage temp.: -20...+70°C

Storage humidity: 0...+95% rH (non-condensing)
Electrode: 2-electrode conductivity measuring

cell with temperature sensor integrated into the shaft electrode material: graphite, solidly mounted with 1 m cable

Output: serial interface

(via 3-pin jack, transformer on RS232 or USB optional)

Power supply: 9V-monobloc battery

(included in the scope of delivery), external $10.5 - 12 \ V_{DC}$ via jack housing made of impact-resistant

Material: housing made of impact-resistant

ABS plastic

Protection: IP65, front

Dimensions: housing 142 x 71 x 26 mm (H x W x D),

electrode max. Ø approx. 12 mm,

length approx. 120 mm

Weight: approx. 255 g

(incl. battery and electrode)

Hand-held Conductivity Measuring Units Model HND-C



Scope of functions

- Min.-/Max. value memory
- Hold function: »freezing« of the current value
- Automatic-off function: 1...120 min (can be deactivated)
- AutoRange: Automatic measuring range adjustment (can be deactivated)
- Automatic temperature compensation
- Replace battery display
- Resistance, salinity, and TDS-determination
- Temperature coefficients that can be selected:
 Natural water, linear compensation or no compensation
- Increased temperature measuring range

Order details

Order-no.	Housing design
HND-C110	Conductivity measuring unit with additional functions (see technical data)

Order details accessories for conductivity measuring units HND-C

Order-no.	Description
HND-Z002	Plug power supply (220/240 V_{AC} , 50/60 Hz), 10.5 V_{DC} / 10 mA
HND-Z021*	Case with recess (275 x 229 x 83 mm)
HND-Z022*	Universal case with egg crate foam (275 x 229 x 83 mm)
HND-Z023*	Large case with recess (394 x 294 x 106 mm)
HND-Z031	Interface converter on RS232, galvanically isolated
HND-Z032	Interface converter on USB, galvanically isolated
HND-Z033	Adapter RS232 converter on USB-interface
BUS-S20M	Software for recording measurement data on a computer, for instruments of the HND-series without logger function

^{*} Observe instrument dimensions

Additional accessories upon request

