

## WATERPROOF CONDUCTIVITY / SALINITY METER CC-404

The meter cooperates with four-electrode conductivity cell – its construction enables long-lasting work in liquid with sediment, oil and grease, saltwater or municipal waste. **Frequent cleaning of the cell's electrodes is not required.** It is not recommended for measurements in ultra pure water.

**CC-404** is applied for highly accurate conductivity, resistivity, salinity and temperature measurements. It may be used in the field as well as in laboratory.



### Characteristic features

- The measuring range enables measurements in natural water, drinking water, beer, juice, saline and municipal waste.
- Equipped with an easy-to-read backlight display with brightness control.
- Signalisation of the result stabilisation with a “READY” symbol and a sound.
- “HOLD” function to freeze the result on the display.
- Salinity measurement in NaCl or KCl.
- Defining the TDS (Total Dissolved Solids) based on conductivity measurement.
- 5 sub-ranges switched automatically.
- Wide range of  $\alpha$  coefficient chosen depending on the measured solution.
- In case of measurements of natural water with conductivity from 60  $\mu\text{S}/\text{cm}$  to 1  $\text{mS}/\text{cm}$  the meter enables using non-linear temperature compensation. The parameters of this type of water are determined in the EN27888:1999 norm and concern surface water, deep water and well water. This solution lowers the measurement error.
- Calibration by entering the constant K of the cell or in standard solutions in 1 to 5 points.
- Possibility of sending a calibration report to a PC - up to 10 last calibrations.
- Possibility of changing the reference temperature value.
- Ability to store constants K of three cells, which cover the whole conductivity range.
- Automatic calculation of conductivity into salinity in NaCl or KCl on the basis of the real characteristics instead of a constant coefficient, what greatly increases accuracy.
- The meter enables resistivity measurement of the tested liquid.

- Internal clock with date.
- Internal datalogger - storing up to 4000 measurements taken singly or in series with time, temperature and date.
- Storing the next calibration date.
- Possibility of connecting with a PC by a micro USB connector.
- Change of the date protected by a password
- The data transmission software enables printout of the data in a form protected against any changes.
- Powered with rechargeable batteries or power adapter with USB cable.
- Waterproof housing (IP-66) facilitates work in difficult conditions.
- Small size and low weight make work in the field easier.
- 24 months of warranty for the meter.



The set includes **ECF-4t** four-electrode conductivity cell with built-in temperature sensor, case for the meter and accessories and pendrive with manual and software for collecting the data on the PC.

The range of **ECF-4t**: 10  $\mu$ S/cm ÷ 300 mS/cm is sufficient for conductivity measurements in majority of liquids apart from the ultra pure water. Metal electrodes are easy to clean. Plastic housing protects from mechanical damage.



## Technical Data

Function	Conductivity	Salinity	Resistivity	Temperature
Range	10 $\mu$ S ÷ 300.0 mS/cm, autorange - 5 subranges	NaCl 0 ÷ 296 g/l KCl 0 ÷ 223 g/l	0.500 $\Omega$ cm ÷ 100M $\Omega$ cm	-50.0 ÷ 80.0 °C
Accuracy ( $\pm 1$ digit)	up to 19.999 mS/cm $\pm 0.1\%^*$ ; above 20.00 mS/cm: $\pm 0.25\%^*$	$\pm 2.00\%^*$	$\pm 2\%^*$ of measured value	$\pm 0.1$ °C**
Temp. compensation	-5 ÷ 70 °C			-
K constant	0.010 ÷ 19.999 cm <sup>-1</sup>			-
$\alpha$ coefficient range	0 ÷ 10.00 %/ °C			-
Power	Rechargeable batteries: 2x AA 1,2 V , 5 V/1000 mA USB power adapter			
Dimensions (mm)	L = 149, W = 82, H = 22			
Weight	220 g			

\*The accuracy of the meter only.

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In the range 0 ÷ 100 °C the acceptable error of the probe with Pt-1000B resistor:  $\pm 0,8$  °C, with Pt-1000A resistor:  $\pm 0,35$  °C.

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