

CONDUCTIVITY METER CC-461

CC-461 conductivity meter belongs to the newest generation of electronic devices. It is designed for accurate measurements of: conductivity, salinity, resistivity and temperature.

Characteristic features:

- It is distinguished by large colour graphic touch screen.
- The meter may be used for the field measurements as well as during accurate laboratory work.
- Low weight and small size make working in the field easier.
- Waterproof housing (IP-66) enables working in difficult conditions.
- Full measuring range enables measurements in ultra pure water as well as in very salty solutions.
- 6 sub-ranges switched automatically.
- The most recent model has been modified, what results in offering new functions which make working easier, ensure higher accuracy and fulfil more requirements.
- "HOLD" function to freeze the result on the display.
- Signalisation of the result stabilisation with a "READY" symbol and a sound.
- Possibility of sending a calibration report to a PC - up to 10 last calibrations.



- In case of measurements of natural water with conductivity from 60 $\mu\text{S}/\text{cm}$ to 1 mS/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 function lowers the measurement error.
- The measurement accuracy of ultra pure water with temperature compensation is increased by automatic adjustment of the α coefficient depending on the kind of trace contaminations and temperature.
- Calibration by entering the constant K in range $0.010 \div 20.000\text{cm}^{-1}$ or in standard solutions in 1 to 5 points.
- Possibility of changing the reference temperature.
- Possibility to store constants K of 3 conductivity cells .
- Wide range of α coefficient ($0 \div 10 \text{ \% / } ^\circ\text{C}$) chosen depending on the measured solution.
- Automatic calculation of conductivity to salinity in NaCl or KCl on the basis of the current characteristics instead of a constant coefficient, what greatly increases accuracy.
- Possibility of defining the TDS with entering the TDS coefficient in range $0.2 \div 1.0$.
- Memory of 3 different temperature sensors parameters. It is possible to enter the group of selected temperature sensor what increases the measurement accuracy.
- The resistivity measurement option added.

Other features:

- Internal clock with date.
- Collecting up to 2000 data sets collected in banks.
- Non-volatile memory of the stored results and calibration data.
- Storing the next calibration date and signalling it to the user.
- Possibility of choosing language: Polish, English or German.
- Possibility of connecting with a PC by micro USB connector
- Powered with rechargeable batteries or power adapter with USB cable.
- The batteries are charged without taking them out of the meter.
- Continuous work time without charging - up to 18 hours.
- The meter meets the GLP requirements.
- 24 months of warranty for the meter.

The set includes **CT2S-121** temperature probe with **Pt-1000S** resistor and accurate **ECF-1** conductivity cell. Measuring range: $0 \div 400 \text{ mS}/\text{cm}$ is sufficient for conductivity measurements in majority of liquids of maximal concentration, e.g. aqueous soil extracts and water with grease or oil. Metal electrodes are easy to clean. Plastic housing protects from mechanical damage.

TECHNICAL DATA

Function	Conductivity	Salinity	Resistivity	Temperature
Range	0 ÷ 2000 mS/cm, autorange – 6 subranges	KCl 0 ÷ 239 g/l, NaCl 0 ÷ 296 g/l	0.500 Ωcm ÷ 200 MΩcm	-50.0 ÷ 200.0 °C
Accuracy (± 1 digit)	up to 19.999 mS/cm ±0.1%*, above 20.00 mS/cm ±0.25%*	±2.00 %*	±2 % of the measured value*	±0.1 °C**
Temp. compensation	-5 ÷ 70 °C	-5 ÷ 70 °C	-5 ÷ 70 °C	-
α coefficient	0.00 ÷ 10.00 %/°C	0.00 ÷ 10.00 %/°C	0.00 ÷ 10.00 %/°C	-
K constant	0.010 ÷ 20.000 cm ⁻¹	-	-	-
Power supply	2 x AA 1.2 V rechargeable battery, 5 V / 1000 mA USB power adapter			
Dimensions (mm)	L = 149 W = 82 H = 22			
Weight	250 g			

*The accuracy of the meter only.

**The accuracy of the meter only. The total error includes the meters and probe's accuracy.
In the range 0 ÷ 100 °C the acceptable error of the probe with Pt-1000S resistor: ±0,27°C.

ELMEIRON[®] Sp. j.

41-814 Zabrze . Witosa 10 POLAND

tel. +48 32 2738106

www.elmetron.pl e-mail: info@elmetron.com.pl