pH / CONDUCTIVITY METER CPC–461

• The **CPC-461** pH / conductivity meter belongs to the newest generation of meters.
• It is distinguished by a large 3,2" colour graphic touch screen.
• The meter is designed for accurate measurements of : pH, redox potential (mV), conductivity, salinity, TDS temperature.
• It enables simultaneous observation of the pH, conductivity and temperature measurement results.
• 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.

In the pH and mV measurement function:

• The pH and conductivity measurement circuits are isolated one from another.
• Depending on the kind of applied electrode it may be used for clean water, sewage, soil, pastes measurements etc.
• Calibration of the pH electrode in 1 ÷ 5 points.
• Automatic detection of buffer solutions, their values may be set by the user.
• Automatic correction of the pH sample solution value changes along with the temperature changes for NIST standards.
• Automatic temperature compensation.
• Possibility of storing characteristics of 3 pH electrodes enables their quick replacing – very useful feature during field work.
• Automatic control of the electrode's condition.
• Precise Redox potential measurement (accuracy 0.1mV).

In the conductivity measurement function:
• Full measuring range enables measurements in ultra pure water as well as in very salty solutions.
• 6 sub-ranges switched automatically.
• Works with conductivity cells equipped with platinum electrodes.
• Calibration by entering the constant K in range 0.01÷19.999 cm^{-1} or in buffer solution.
• Possibility to store constants K of 3 cells which cover whole measuring range.
• Wide range of α coefficient 0÷10 % / °C chosen depending on the measured solution.
• Possibility of changing the reference temperature.
• Automatic calculation of conductivity into salinity in NaCl or KCl on the basis of the actual characteristics instead of a constant coefficient, what greatly increases accuracy.
• Possibility of defining the TDS with entering the TDS coefficient in range 0.2 ÷ 1.0.

In the temperature measurement function
• Memory of parameters 3 different temperature sensors. It is possible to enter the group of selected temperature sensor what increases the measurement accuracy.

Other features:
• Internal clock with date.
• Collecting up to 2000 data sets in the internal datalogger with temperature, time and date, single collecting and also taking series of measurements possible with time and date – all measured functions are stored.
• Non-volatile memory of the stored results and calibration data
• Storing the date of next calibration and remembering it in the right moment to the user.
• Possibility of choosing the language of the displayed information : Polish , English or German.
• Powered by rechargeable batteries 2 x AA (1.5V), or by power adapter with internal charging of batteries.
• Continuous work time without charging up to 18 hours depending on the chosen function and set brightness of the screen.
• Connecting with a PC by RS-232 or USB output using an adapter (optional).
• The meter is sold with the EPS-1 standard glass pH electrode, EC-60 conductivity cell and temperature sensor.
• The meter meets the GLP requirements.
• 24 months of warranty for the meter.

TECHNICAL DATA

Function	pH	mV	Conductivity, salinity	Temperature
Range	-2.000 ÷ 16.000 pH	±1999.9 mV	0 ÷ 1999.9 mS/cm 0 ÷ 200 g KCl 0 ÷ 250 g NaCl	-50.0 ÷ 199.9ºC
Accuracy (± 1 digit)	±0.002 pH	±0.1 mV	±0.1% > 20 mS/cm: ±0,25%	±0.1 ºC*
Temperature compensation	-5 ÷ 110 ºC	-	-5 ÷ 70 ºC	-
Input impedance	$10^{12}\Omega$	$10^{12}\Omega$	-	-
Dimmensions (mm)	L=149 W=82 H=22			
Weight with batteries	255 g			

* Accuracy of the meter. The total error is a sum of meters error and the applied probe error.