LABORATORY pH / CONDUCTIVITY / SALINITY METER CPC-511

Easy in use laboratory measuring device, which measures pH, mV (redox potential), conductivity, salinity, TDS and temperature.

Characteristic features:

- Large LCD enables simultaneous readout of the measured function and temperature.
- Very easy in use.

In the pH measuring function:

- Calibration in 1 ÷ 3 points in buffer solutions.
- Automatic detection of the pH buffer solution's value 4.00, 7.00, 9.00 pH (optionally: 4.00, 7.00, 10.00 pH).
- Meter shows information about the pH electrode condition (readout of the buffer and slope values).
- Automatic temperature compensation.
- Depending on the chosen electrode, makes measurement in clean water, sewage, pastes, etc.

In the conductivity measuring function:

- Measures conductivity in distilled water and other liquids up to 1000 mS/cm.
- 5 sub ranges switched automatically (autorange).
- Salinity measurement converted to NaCl up to 250 g/l or KCl up to 200 g/l.
- Converts conductivity into salinity according to real characteristics and not a constant coefficient.
- Determines estimated value of the total dissolved solids (TDS).
- Calibration, by entering the K constant of the cell or by determining it with use of a standard solution.
- Possibility of entering the reference temperature value.
- Automatic temperature compensation.
- Constant α temperature coefficient: 2 % / °C. For precise measurements with temperature compensation it is recommended to use meters with variable coefficient (CPC-502, CPC-505).

Other features:

- Memory of 50 results.
- Wide temperature measuring range.
- IP64 ingress protection.
- Warranty for the meter: 24 months.

The set includes CT2B-121 temperature probe with Pt-1000B resistor, accurate ECF-1 conductivity cell and EPS-1 pH electrode for measurements in clear water, which should not be used in other types of liquid. Measurements in liquid with sediment should be made with use of IJ44A pH electrode. Its unusual construction ("intermediate junction") protects the real junction (diaphragm) of the electrode against clogging, ensures stable measurements in these types of liquids or semi-liquid mass, in which other electrodes stop working quickly. When properly handled, the electrode's lifetime is longer than the standard electrodes



TECHNICAL DATA

Function	рН	mV	Conductivity / Salinity	Temperature
Range	-2.00 ÷ 16.00 pH	± 1999 mV	0 ÷ 1000 mS/cm (autorange) / up to 250 g/l NaCl up to 200 g/l KCl	-50.0 ÷ 199.9 °C
Accuracy (± 1 digit)	±0.01pH*	±1 mV*	±0,25%* / salinity: 2%*	±0.1 °C**
Temp. Compens. range	-5.0 ÷ 110.0 °C	-	-5.0 ÷ 70.0 °C	-
Input impedance	$10^{12}\Omega$	$10^{12}\Omega$	-	-
α coefficient	-	-	Constant: 2% / °C	-
K constant	-	-	0.010 ÷ 19.999 cm ⁻¹	-
Power	12 V / 100 mA power adapter			
Weight	520 g			
Dimensions (mm)	L = 200; W = 180; H = 20/50			

^{*}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-1000B resistor: ±0.8 °C, with Pt-1000A resistor: ±0.35 °C.