WATERPROOF pH / CONDUCTIVITY / SALINITY METER CPC-401

- The actually offered meter was modified, it resulted in offering new functions which make the work easier, ensure higher accuracy and fulfil more customer's requirements.
- Used for high accuracy measurements of: pH, redox potential (mV), conductivity, salinity in KCl or NaCl, TDS, resistivity ,and temperature.
- Can be used for field and laboratory measurements.
- Waterproof housing (IP-66) facilitates work in difficult conditions.
- The meter is equipped with an easy-to-read backlit LCD with brightness control.

NEW NEW NEW

- "HOLD" function to freeze the result on the display.
- Signalisation of the result stabilisation "READY" with symbol and sound.
- Possibility of sending to a PC a report of calibration - up to 10 last calibrations.
- The operating procedures in all measuring functions has been unified, what makes working easier.

In the pH measuring function:

- The pH and conductivity measurement circuits are isolated.
- Depending on the chosen electrode, making measurements in clean water, sewage and soil is possible.
- Calibration in 1÷ 5 points.
- Automatic detection of buffer solutions, introduced by the user.
- Automatic correction of the stored pH standard solution value along with the temperature changes for NIST standards.
- Storing of 3 pH electrodes' characteristics enables quickly replacing – very useful feature during field work.
- Automatic evaluation of the electrode's condition.
- Readout of the pH electrode condition and data - the zero shift and slope percentage may be checked

In the redox (mV) measuring function:

- Precise redox potential determination (accuracy 0.1 mV).

In the conductivity measurement function:

- Wide measuring range enables measurements in ultra pure water, natural water as well as in very salty solutions.
- NEW Newly introduced function is the resistivity measurement of the tested liquid.
- Salinity measurement in NaCl or KCl on the basis of the actual real characteristics.
- Defining the TDS (Total Dissolved Solids) based on conductivity measurement.
- 6 sub-ranges switched automatically.
- NEW In case of measurements of natural water with conductivity from 60 µS/cm to 1 mS/cm the meter enables using non-linear temperature compensation. The parameters of this type of water is determined in norm EN27888:1999 and concerns surface waters, deep water and well water. This solution lowers the measurement error.
- NEW The measurement accuracy of the ultra pure water with temperature compensation was increased by automatic adjustment of the **α** coefficient depending on the temperature and kind of trace contaminations.
- NEW Calibration by entering the constant K of the cell or in standard solutions in 1 to 5 points.
- Wide range of α coefficient 0 ÷ 10 % / °C chosen depending on the measured solution.
- Possibility of changing the reference temperature.
- NEW In set with high accuracy conductivity cell ECF-1. Measuring range 0÷500 mS/cm sufficient for measurements in ultra pure water and high salt concentration samples. Metal electrodes are easy to clean and PVC body protects it against mechanical damages.
- Possibility of storing constant K of 3 conductivity cells.
- Automatic conversion of conductivity into salinity in NaCl or KCl on the basis of the actual characteristics and not a constant coefficient, what greatly increases accuracy.
- Possibility to measure electric admittance of tree seedlings - checking the vitality of seedlings with a special sensor.

Other features:

- Automatic or manual temperature compensation.
- Internal clock with date.
- Internal data logger enables storing up to 4000 measurements taken as single or in series with time, temperature and date.
- Non-volatile memory of the stored results and calibration data
- The next calibration date reminder.
- NEW Possibility of connecting with a PC by micro USB connector
- NEW Software for data transmission and collection delivered in set.
- NEW Powered by rechargeable batteries, or power adapter with USB - micro USB cable.
- The meter meets the GLP requirements.
- 24 months of warranty for the meter.

Technical Data

Function	Conductivity	Salinity	Temperature	pH, mV
Range	0 ÷ 1999.9 mS/cm, autorange	NaCl 0 ÷ 250 g/l KCl 0 ÷ 200 g/l	-50.0 ÷199.9 ºC	-2.000 ÷ 16.000 pH, ±1999,9 mV
Accuracy (± 1 digit)	±0.1%; > 20 mS/cm: ±0.25%	±2%;	±0.1 ºC*	±0.002 pH; ±0.1 mV
Temp. compensation	-5 ÷ 70 ºC	-	-	-5 ÷ 110.0 ºC
Input impedance	-	-	-	$10^{12}\Omega$
Power supply	Rechargeable batteries: 2x AA 1,2V or 5V 1000 mA micro USB power adapter			
Temperature probe	Pt-1000 - standard or accurate			
α coefficient range	L = 149; W = 82; H = 22			
Dimensions / Weight	L = 149; W = 82; H = 22 / 220 g			

* Accuracy of the meter. The total error is dependent on the kind of the chosen probe.

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