

WATERPROOF pH-METER CP-461

CP-461 pH-meter belongs to the newest generation of meters. It is distinguished by a large 3,2" colour graphic touch screen.

Characteristic features:

- The meter is designed for highly accurate measurements of: pH, redox potential and temperature.
- It 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.
- "HOLD" function to freeze the result on the display.
- Signalisation of the result stabilisation with the "READY" symbol and a sound.
- Possibility of sending a calibration report to a PC - up to 10 last calibrations.
- Depending on the kind of applied electrode it may be used for clean water, sewage, soil, pastes, paints, cheese, milk, meat, 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, what eliminates the necessity to adjust the temperature.
- Automatic or manual 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.
- Easy readout of the electrode's parameters (buffer and slope).

- Precise redox potential measurement (accuracy 0.1mV).
- Possibility of mV measurement in relation to the set or measured reference potential (Vref).
- Memory of 3 different temperature sensors parameters.
- It is possible to enter the group of selective 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.
- Non-volatile memory of the stored results and calibration data.
- Storing the next calibration date.
- Possibility of choosing the language: Polish , English or German.
- Possibility of connecting with a PC by a micro USB output.
- Powered by rechargeable batteries or power adapter with USB - micro USB cable.
- The rechargeable batteries are charged internally.
- Continuous work time without charging up to 18 hours depending on the chosen brightness of the screen.
- The meter meets the GLP requirements.
- 24 months of warranty for the meter.

The standard set includes **CT2S-121** temperature sensor with **Pt-1000S** resistor with **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, which enables measurements in various samples of both pure and contaminated liquids and semi-solids. 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:	pH	Redox / mV	Temperature
Range:	-6.000 ÷ 20.000 pH	± 2000 mV	-50.0 ÷ 200.0°C
Resolution	0.001 pH or 0.01 pH	0.1 mV	0.1 °C
Accuracy (± 1 digit)	± 0.002 pH*	± 0.1 mV*	± 0.1 °C**
Temperature compensation	-5 ÷ 110 °C	-	-
Input impedance	10 ¹² Ω	10 ¹² Ω	-
Power supply	2 x 1.2 V AA rechargeable batteries, 5 V / 1000 mA micro USB power adapter		
Weight	250 g		
Dimensions (mm)	L=149 W=82 H=22		

*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.

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