

WATERPROOF pH-METER CP-401

Designed for highly accurate pH, redox potential and temperature measurement.

Characteristic features:

- Low weight and small size make working in the field easier.
- Waterproof housing (IP-66) facilitates working in difficult conditions.
- The meter is equipped with easy to read backlight LCD display with brightness control.
- The actually offered meter was modified, what resulted in offering new functions which make working much easier and fulfil more requirements of the customers.
- "HOLD" function to freeze the result on the display.
- Signalisation of the result stabilisation with the "READY" symbol and a sound.
- Possibility of sending the calibration report to a PC - up to 10 last calibrations.
- Possibility of making measurements in clean water, sewage, soil, meat, cheese, paints etc., depending on the kind of applied pH electrode.
- Calibration of the pH electrode : 1 ÷ 5 points.
- Automatic detection of buffer solutions, their values may be changed by the user in the given range.
- Automatic correction of the pH standard solution value changes, along with the temperature changes for NIST standards, what eliminates the necessity of the temperature adjustment.
- Automatic evaluation of the of electrode's condition.
- Storage of 3 electrodes characteristics enables to replace them quickly – feature very useful during field work.



- Readout of the pH electrode condition and data - the zero offset and slope percentage may be checked.
- Precise redox potential measurement (accuracy 0.1 mV).
- Possibility of automatic calculation of the redox reading in relation to the chloride/silver electrode to the hydrogen electrode.

Other features:

- Clock with date.
- Reminding about the calibration date exceeding.
- Auto switch off function, with time set by user, to protect the batteries against discharging.
- Internal data-logger for up to 4000 sets of results collected in series or singly with temperature time and date.
- The results and calibration data are stored in non-volatile memory.
- Possibility of connecting with a PC by a micro USB output and micro USB – USB cable delivered in set.
- Powered by rechargeable batteries, or power adapter with USB - micro USB cable.
- Change of the date protected by a password
- The data transmission software enables printout of the data in a form protected against any changes.
- The meter meets the GLP requirements
- 24 months of warranty for the meter.
- **CP-401** pH-meter received a Golden Medal on EUROLAB international fair.

The standard set includes **CT2B-121** temperature sesor with **Pt-1000B** resistor and **EPS-1** pH electrode for measurements in clean 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 (diaphragma) 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	mV	°C
Range	-6.000 ÷ 20.000 pH	±1999.9 mV	-50.0 ÷ 199.9 °C
Resolution	0.001 pH or 0.01 pH	0.1mV	0.1 °C
Accuracy* (± 1 digit)	±0.002 pH*	±0.1 mV*	±0.1 °C**
Temp. compensation	-5 ÷ 110.0 °C		
Input impedance	10 ¹² Ω		
Power supply	rechargeable batteries: 2 x AA 1.2V, 5V/1000 mA micro USB power adapter		
Weight	220 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-1000B resistor: ±0,8 °C, with Pt-1000A resistor: ±0,35 °C.

tel. +48 32 2738106
www.elmetron.pl e-mail: info@elmetron.com.pl