

OXYGEN METER CO-502, pH / OXYGEN METER CPO-502 CONDUCTIVITY / SALINITY / OXYGEN METER CCO-502

- All the models measure: concentration of oxygen dissolved in water and sewage in % or mg/l, temperature and atmospheric pressure.
- The meters are equipped with built-in 60 mm thermal printer.
- **CCO-502** model additionally measures conductivity and salinity.
- **CPO-502** model additionally measures pH and redox potential.

Characteristic features:

Oxygen measurement function:

- Possibility to measure oxygen dissolved in water in % or mg/l.
- Galvanic dissolved oxygen sensor, accurate and easy to operate.
- When properly maintained, the sensor may be efficient for several years.
- Each model equipped with a function of automatic atmospheric pressure measurement with calculation of its influence on the oxygen measurement readout in mg/l.
- Calibration of the oxygen sensor in 1 or 2 points.
- Automatic or manual temperature compensation.
- In **CO-502** and **CPO-502** models possibility of introducing the salinity value with automatic calculation of its influence on the result of oxygen measurement.
- **CCO-502** model automatically counts the influence of salinity measured in the conductivity mode on the oxygen measurement result.



All the models have the same housing, they differ in number of buttons and colours.

Conductivity measurement in CCO-502:

- Full conductivity measuring range enables measurements in ultra pure water as well as saline.
- 6 sub-ranges switched automatically.
- Calibration by entering the constant K in range $0.01 \div 19.999 \text{ cm}^{-1}$ or in standard solutions.
- Possibility of changing the reference temperature.
- Wide range of α coefficient ($0 \div 10 \text{ \% /}^\circ\text{C}$) chosen depending on a kind of measured liquid.
- Possibility of changing the reference temperature.
- Converting the conductivity to salinity in NaCl and KCl proceeds according to the real dependence, what greatly increases accuracy.
- Possibility of determining the TDS by entering the TDS coefficient (0.2 to 1.0).
- In set with high accuracy conductivity cell **ECF-1**. Measuring range $0 \div 500 \text{ mS/cm}$ sufficient for measurements in pure water and high salt concentration samples. Metal electrodes are easy to clean.

pH measuring function in CPO-502:

- The pH and conductivity measurement circuits are isolated what eliminates influence of one measurement to other one.
- pH calibration in $1 \div 5$ points.
- Automatic detection of the buffer solutions' values entered by the user.
- Automatic correction of the standard solution's pH value changes along with the temperature changes for NIST standards, what eliminates the necessity of the solutions' temperature adjustment.
- Storing of 3 pH electrodes characteristics enables their quick replacement.
- Depending on the kind of applied pH electrode it may be used for clear water, sewage, soil measurements etc.

mV, redox potential measurement function in CPO-505:

- Precise redox potential measurement (accuracy 0.1 mV).
- Relative measurement function.

Other features

- Automatic or manual temperature compensation.
- Stores the next calibration date.
- Internal clock with date.
- Internal datalogger enables storing up to 950 measurements taken individually or in series with time, temperature and date.
- The results and calibration data are stored in non-volatile memory.
- RS-232 output (or optionally USB with use of a special converter), Centronix for external printer.

In comparison with **CO-505** the meter has smaller display without backlight. There is no possibility to “hold” the reading on the display and no information about the reading stabilisation. The meter does not create the calibration reports. In **CPO-502** there is no possibility to view the electrode's buffer and slope. **CCO-502** has no function of automatic calculations of the α coefficient for natural and ultra pure water.

The standard set includes **CT2B-121** temperature probe with **Pt-1000B** resistor **COG-1** oxygen sensor. The other accessories are included depending on the chosen model.

TECHNICAL DATA

Function	O2 (%)	O2 (mg/l)	Temp.	pH (CPO-502)	mV / Redox (CPO-502)	Conductivity / Salinity (CCO-502)
Range	0 ÷ 600%	0 ÷ 60 mg/l	-50.0 ÷ 199.9°C	- 2.000 ÷ 16.000pH	1999.9mV	0 ÷ 1999.9 mS/cm, 0 ÷ 200 g/l KCl, 0 ÷ 250 g/l NaCl
Accuracy (1 digit)	±1%**	±0.1 mg/l*	±0.1 °C***	±0.002 pH*	±0.1 mV*	<19.99 mS/cm ±0.1%* > 20 mS: ±0,25%* salinity: 2%
Temp. compens.	0 ÷ 40 °C	0 ÷ 40 °C	-	-5 ÷ 110 °C		-5 70 °C
Input imped.				10 ¹² W	10 ¹² W	
α coefficient						0.00 ÷ 10.00 %/ °C
Atmosph. press.	800 ÷ 1100 hPa					
Power supply	6,5 V / 3,2 A power adapter					
Weight	650 g					
Dimensions (mm)	L = 200; W = 180; H = 20/50					

* The accuracy of the meter only.

** The accuracy of the meter only. With COG-1 or COG-2 oxygen sensor the accuracy at calibration temperature: ±1%. By the difference ±5 °C accuracy: ± 3%, by the difference ±10°C accuracy: ±5%.

*** 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.

ELMETRON® Sp. j.

41-814 Zabrze . Witosa 10 POLAND

tel. +48 32 / 2738106 fax +48 32 / 2738114

www.elmetron.pl e-mail: info@elmetron.com.pl