

## OXYGEN CONTROLLER CO-801

The user may choose between two models of **CO-801** dissolved oxygen controller: measuring the concentration of oxygen dissolved in water in %, range 0 ÷ 600 % or in mg/l, range: 0 ÷ 60 mg/l.

With use of an appropriate head, the device can make continuous measurements of concentration of oxygen dissolved in water in ponds, water treatment stations or industrial plants. High measurement accuracy and stability has been provided. The device has a large, graphic display, showing the oxygen concentration and temperature readout and the status of each relay simultaneously. The graphic display enables to choose among the displayed information. Apart from the basic data – oxygen concentration and temperature – one of the following additional parameters may be chosen to be displayed:

1. Information about the relays' status,
2. Information about the last calibration date.

Thanks to the modern electronic components the controller's memory has become fully independent from the power supply.

The device is easy to operate and has an English menu.

It is equipped with a collective optical signalisation of the correct work and the progress of the controlling process.

The meter cooperates with a galvanic oxygen sensor.

**CO-801** controller has an automatic temperature compensation system, which cooperates with the **Pt-1000** temperature probe.

The device enables calibration of the oxygen sensor in 0% and 100% oxygen concentration with automatic detection of the calibration point value. It is possible to calibrate the sensor without the need of disconnecting the outputs.

The **CO-801** controller is powered with standard 230 V voltage, which is galvanically isolated from the input clamps.

**Outputs:** relays (alarm or PID regulation), isolated digital output: RS-485, MODBUS (ASCII and RTU); isolated current outputs: 0 ÷ 20 or 4 ÷ 20 mA. Wide range of input voltage: 110/230/24V AC, 12-24 V. Low voltage signalisation.

The meter has also real time clock with date.

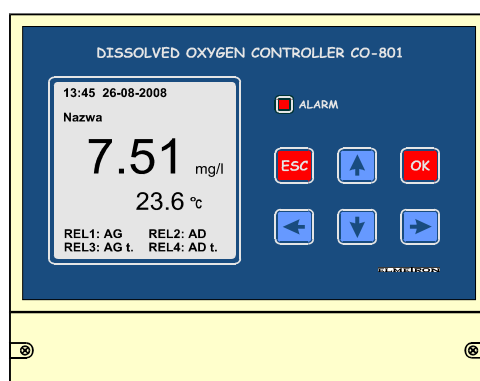
24 months of warranty for the meter.

During measurements in tanks the controller may cooperate with the **COG-2** oxygen sensor hanged on a hook or hanger or with use of the **GXZ-1t** head. The length of the head may be agreed from 0.5 m to 4 m, diameter of the head 50 mm. The head is equipped with a special handle to be hanged on an arm or a hook. The measurement in a pipeline is made with use of flow through head **GXP-1t**. For the steel pipelines we offer a special mounting equipment for the oxygen sensor which is mounted on the thread placed on the pipe and made according to our drawings. In case of high pressure in the pipeline a use of the lateral circulation with free outflow of small volume of the liquid through the **GXP-01** head should be used.

The choice of the suitable head depends on the measured liquid and the conditions.

The signal is amplified in the pre-amplifier, which is placed in the head or next to it.

Optionally there is a possibility of the radio transmission of data from the measuring head to the controller.



## TECHNICAL DATA

Measured value	Oxygen in water in % or mg/l, temperature °C
<b>O<sub>2</sub> concentration range:</b>	0 ÷ 600 % or 0 ÷ 60 mg/l
<b>Resolution</b>	0.1 % or 0.01 mg/l
<b>Accuracy</b>	±0.2 % or ±0.02 mg/l ± 1 digit *
<b>Temperature measurement range</b>	-50 ÷ 200 °C **
<b>Temperature measurement accuracy</b>	±0.2 °C ***
<b>Temperature compensation</b>	automatic
<b>Temperature compensation range</b>	0 ÷ 40 °C (for mg/l measurement)
<b>The relays" parameters</b>	2A/250VAC/30VDC, PID controlling
<b>Calibraton</b>	1 or 2 point
<b>Measurement input</b>	isolated
<b>O<sub>2</sub> datalogger output</b>	isolated, 0 ÷ 20 mA or 4 ÷ 20 mA
<b>Temperature datalogger output</b>	isolated, 0 ÷ 20 mA or 4 ÷ 20 mA
<b>RS485 output</b>	isolated
<b>Maximal RS connection lenght</b>	1000 m
<b>Maximal cable length between preamplifier and controller</b>	200 m
<b>Maximal distance between sensor and preampl.</b>	10 m
<b>Power supply</b>	240 V 50Hz, for a special order 170VAC±250VAC, 24VDC/24 VAC
<b>Isolation class</b>	PN-83/T-06500
<b>Radioelectric interference</b>	N level
<b>Dimensions</b>	215 x 215 x 95 mm
<b>Weight of contoller / preamplifier</b>	1350 g / 150 g
<b>Ambient temperature</b>	-25 ÷ 40 °C
<b>Atmospheric humidity / pressure</b>	max. 80% / 80 ÷ 110 kPa
<b>Atmospheric aggresivity level</b>	N/2/AG-U/C

\* 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 %.

\*\* Temperature measuring range limited to the temperature operating range of the O<sub>2</sub> sensor.

\*\*\*The accuracy of the meter only, accuracy with the sensor built in the oxygen sensor in the range to 40 °C ±0.6 °C.



CO-801 looks similarly to CP-801

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