

## Bench-top dissolved oxygen meter


**NEW!**

## HIGHLIGHTS:

- Primary water treatment
- Chemicals laboratories general use
- Laboratory instrument

## HD-3409-2

Art. no. 700034

Bench-top dissolved oxygen meter

General:	
The HD-3409-2 is a bench top instrument for electrochemical measures: dissolved oxygen and temperature. The displayed data can be stored (datalogger) and can be transferred to PC or serial printer. The storing and printing parameters can be set from menu. The HD-3409-2 measures the concentration (in mg/l) of dissolved Oxygen in liquids, the saturation index (in %) and the temperature. Thanks to an internal pressure sensor, the instruments automatically compensate for barometric pressure.	
Specifications:	
<b>Display ranges:</b>	mg/l O <sub>2</sub> , %O <sub>2</sub> , mbar, °C/°F measurement
<b>Instrument</b>	
<b>Dimensions:</b>	55 x 120 x 220 mm (H x W x D)
<b>Materials:</b>	ABS, rubber
<b>Display:</b>	2 x 4½ characters plus symbols, visible area: 52 x 42 mm
<b>Operating conditions</b>	
<b>Working temperature:</b>	-5 ... +50 °C
<b>Storage temperature:</b>	-25 ... +65 °C
<b>Working relative humidity:</b>	0 ... 90 % RH without condensation
<b>Protection degree:</b>	IP66
<b>Power</b>	
<b>Batteries:</b>	3 batteries 1.5 V type AA
<b>Autonomy (only batteries):</b>	100 h with 1800 mAh alkaline batteries
<b>Mains (cod. SWD-10):</b>	Output mains adapter 100 ... 240 V AC/ 12 V DC-1 A
<b>Storage of the measured values</b>	
<b>Quantity:</b>	18,000 measures made up of the four parameters mg/l O <sub>2</sub> , % O <sub>2</sub> , mbar, [°C or °F]
<b>Connections</b>	
<b>Serial interface and USB:</b>	8-pole MiniDin connector, 1.1 - 2.0 electrically isolated
<b>Mains adapter (cod. SWD-10)</b>	2-pole connector (positive at centre) 12 V DC/1 A
<b>Measurement connections</b>	
<b>Input for Oxygen probes:</b>	8-pole male DIN45326 connector
<b>Input for temperature probes with SICRAM module or TP47 module:</b>	8-pole male DIN45326 connector
<b>Measurement of the concentration of dissolved oxygen</b>	
<b>Measurement range:</b>	0.00 ... 90.00 mg/l
<b>Resolution:</b>	0.01 mg/l
<b>Accuracy:</b>	±0.03 mg/l ±1 digit (0 ... 90 % RH, 1013 mbar, 20 ... 25 °C)
<b>Measurement of the saturation index of dissolved oxygen</b>	
<b>Measurement range:</b>	0.0 ... 600.0 %
<b>Resolution:</b>	0.1 %
<b>Accuracy:</b>	±0.3 % ±1 digit (in the range 0.0 ... 199.9 %) ±1 % ±1 digit (in the range 200.0 ... 600.0 %)

<b>Automatic/manual temperature compensation:</b>	0 ... 50 °C
<b>Measurement of barometric pressure</b>	
<b>Measurement range:</b>	0.0 ... 1100.0 mbar
<b>Resolution:</b>	0.1 mbar
<b>Accuracy:</b>	±2 mbar ±1 digit between 18 ... 25 °C
<b>Salinity setting</b>	
<b>Setting range:</b>	0.0 ... 70.0 g/l
<b>Resolution:</b>	0.1 g/l
<b>Temperature measurement with the sensor inside the dissolved oxygen probe</b>	
<b>Measurement range:</b>	0.0 ... 45.0 °C
<b>Resolution:</b>	0.1 °C
<b>Accuracy:</b>	±0.1 °C ±1 digit
<b>Scope of supply:</b>	Instrument HD-3409-2, calibrator HD9709/20 (for polarographic probe) or DO9709/21 (for galvanic probe), 3 1.5 V alkaline batteries, operating manual and DeltaLog9. <b>Dissolved oxygen probes, temperature probes, standard reference solutions, connection cables, cables for data download to PC or printer have to be ordered separately.</b>
<b>Accessories:</b>	
<b>DO9709-SS-0-0</b>	Art. no. 700035 Polarographic combined oxygen and temperature probe, incl. 2 membranes, electrolyte and zero point solution, cable length 2 m
<b>DO9709-SS-1</b>	Art. no. 700036 Galvanic oxygen and temperature probe, incl. 2 membranes, electrolyte and zero point solution, cable length 2 m
<b>DO9709-SS-1-5</b>	Art. no. 700037 Galvanic oxygen and temperature probe, incl. 2 membranes, electrolyte and zero point solution, cable length 5 m
<b>HD2101-USB</b>	Art. no. 700038 Connection cable USB 2.0 connector type A - 8-pole Mini Din for connection to PC with USB input.
<b>SWD-10</b>	Art. no. 700039 Stabilized power supply at 100 ... 240 V AC/12 V DC/1 A mains voltage.
<b>HD-22-3</b>	Art. no. 700040 Laboratory electrode holder with metal basis plate. Flexible electrode holder for free positioning. For Ø 12 mm probes. (see picture)
<b>HD-40-1</b>	Art. no. 700056 Portable, serial input, 24 column thermal printer, 57 mm paper width, 4 NiMH 1.2 V rechargeable batteries, SWD-10 power supply, instruction manual, 5 thermal paper rolls. Requires the cable HD-2110-CSNM (optional).
<b>HD-2110-CSNM</b>	Art. no. 700041 RS232C 8-pole MiniDin - 9-pole D Sub female null-modem cable for connecting the printer to instruments with MiniDIN connector.