

Portavo 907 Multi Oxy

The all-in-one solution for optical oxygen measurement. Multiparameter device for digital pH, conductivity and oxygen sensors with Memosens technology

The only portable device for all Memosens parameters. The powerful Li-ion battery can be charged in the device via USB. The clear network diagram provides an at-a-glance view of the sensor condition.

The data logger for up to 10,000 entries records measuring point, annotation, sensor ID, sensor serial number (Memosens), primary value, temperature, time stamp and device status.

User-friendly software

Portavo 907 proves that a high level of functionality and easy use are not mutually exclusive. It proceeds step by step through the calibration procedure. Technical terms are clearly explained in the context-sensitive help.

Facts

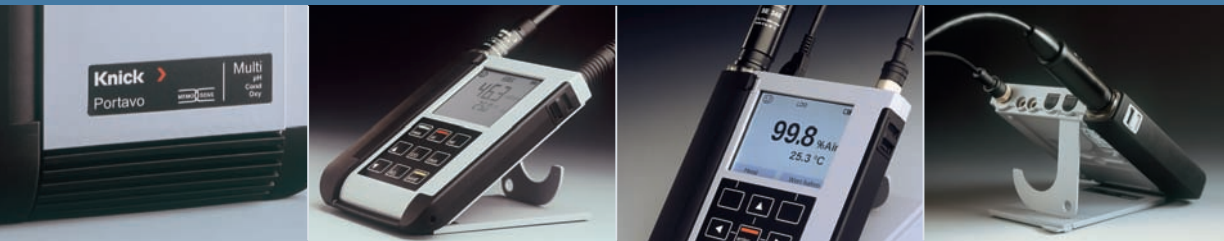
- High-resolution color graphic display
- Transflective and sunlight readable
- Li-ion battery
- Optical oxygen sensor
- Integrated pressure measurement for compensating air pressure fluctuations
- Micro USB port and Paraly SW 112 software
- A sensor quiver protects the sensor from damage and drying out
- The high-performance polymer housing ensures low water absorption and high impact resistance
- Intelligent data logger with 10,000 entries and graphical representation
- IP 66/67 protection
- The mineral glass display is perfectly readable even after years

Comprehensive data logger

The following logging types can be selected:

- Manual logging
- Time-controlled logging at a fixed interval
- Signal-controlled logging of measured value and temperature
- Combined time- and signal-controlled logging
- Threshold-controlled logging with pre-trigger





pO₂ 0 to 400 mbar
Tamb 0 to 50 °C



LITHIUM
TECHNOLOGY

MEMO SENS

3 years
warranty!

Original size

Specifications

Optical oxygen input	M12 socket for SE 340 sensor or Memosens sensors												
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	Measurement error ^{1,2,3)} Zero signal < 0.1 % full saturation												
	Measuring cycle Approx. 1 s												
	Measurement error ^{1,2,3)} < 0.1 % meas. val.												
	Temperature meas. range ⁵⁾ 0.0 ... 50.0 °C												
	Measurement error ^{1,2,3)} Temperature ± 0.2 K												
Sensor standardization	Automatic calibration in air, humidity adjustable												
	Zero calibration												
	Max. overpressure 2.5 bars												
	Immersion depth min. 60 mm max. 25 m												
Storage	Quiver												
Temperature input	2 x 4 mm dia. for integrated or separate temperature detector												
	<table border="0"> <tr> <td>Measuring ranges</td> <td>NTC 30 kΩ</td> <td>-20 ... +120 °C</td> </tr> <tr> <td></td> <td>Pt 1000</td> <td>-40 ... +250 °C</td> </tr> </table>	Measuring ranges	NTC 30 kΩ	-20 ... +120 °C		Pt 1000	-40 ... +250 °C						
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	Measuring cycle Approx. 1 s												
	Measurement error ^{1,2,3)} < 0.2 K (Tamb = 23 °C) TC < 25 ppm/K												
Memosens pH input (also ISFET)	M8 socket, 4 pins, for Memosens lab cable and M12 socket, 8 pins												
	<table border="0"> <tr> <td>Display ranges⁴⁾</td> <td>pH</td> <td>-2.000 ... +16.000</td> </tr> <tr> <td></td> <td>mV</td> <td>-2000 ... +2000 mV</td> </tr> <tr> <td></td> <td>Temperature</td> <td>-50 ... +250 °C</td> </tr> </table>	Display ranges ⁴⁾	pH	-2.000 ... +16.000		mV	-2000 ... +2000 mV		Temperature	-50 ... +250 °C			
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Memosens ORP input	M8 socket, 4 pins, for Memosens lab cable and M12 socket, 8 pins												
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	Sensor standardization ^{*)} ORP calibration (zero adjustment)												
	Permissible calibration range ΔmV (offset) -700 ... +700 mV												
Sensor standardization ^{*)}	pH calibration												
Operating modes ^{*)}	<table border="0"> <tr> <td>Calimatic</td> <td colspan="2">Calibration with automatic buffer recognition</td> </tr> <tr> <td>Manual</td> <td colspan="2">Manual calibration with entry of individual buffer values</td> </tr> </table>	Calimatic	Calibration with automatic buffer recognition		Manual	Manual calibration with entry of individual buffer values							
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	Data entry Data entry of zero and slope												
Calimatic buffer sets ^{*)}	<table border="0"> <tr> <td>Knick CaliMat</td> <td>Ciba (94)</td> <td>User defined</td> </tr> <tr> <td>NIST technical</td> <td>HACH</td> <td>Mettler-Toledo</td> </tr> <tr> <td>NIST standard</td> <td>Hamilton</td> <td>WTW techn. buffers</td> </tr> <tr> <td>DIN 19267</td> <td>Reagecon</td> <td></td> </tr> </table>	Knick CaliMat	Ciba (94)	User defined	NIST technical	HACH	Mettler-Toledo	NIST standard	Hamilton	WTW techn. buffers	DIN 19267	Reagecon	
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Permissible calibration range	<table border="0"> <tr> <td>Zero point</td> <td>6 ... 8 pH</td> </tr> <tr> <td>With ISFET:</td> <td>-750 ... +750 mV operating point (asymmetry)</td> </tr> <tr> <td>Slope</td> <td>Approx. 74 ... 104 %</td> </tr> </table>	Zero point	6 ... 8 pH	With ISFET:	-750 ... +750 mV operating point (asymmetry)	Slope	Approx. 74 ... 104 %						
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Slope	Approx. 74 ... 104 %												
Calibration timer ^{*)}	Interval 1 ... 99 days, can be switched off												
Sensoface	Provides information on the sensor condition												
	Evaluation of zero/slope, response, calibration interval												

Specifications

Conductivity input, Memosens	M8 socket, 4 pins, for Memosens lab cable or M12 socket for Memosens sensors	
	Measuring range	SE 215 MS sensor 10 $\mu\text{S}/\text{cm}$... 20 mS/cm
	Measuring cycle	Approx. 1 s
	Temperature compensation	Linear 0 ... 20 %/K, reference temp. adjustable nLF: 0 ... 120 °C
		NaCl HCl (ultrapure water with traces) NH ₃ (ultrapure water with traces) NaOH (ultrapure water with traces)
Display resolution ⁵⁾ (autoranging)	Conductivity	0.001 $\mu\text{S}/\text{cm}$ ($c < 0.05 \text{ cm}^{-1}$) 0.01 $\mu\text{S}/\text{cm}$ ($c = 0.05 \dots 0.2 \text{ cm}^{-1}$) 0.1 $\mu\text{S}/\text{cm}$ ($c > 0,2 \text{ cm}^{-1}$)
	Resistivity	00.00 ... 99.99 $\text{M}\Omega \cdot \text{cm}$
	Salinity	0.0 ... 45.0 g/kg (0 ... 30 °C)
	TDS	0 ... 1999 mg/l (10 ... 40 °C)
	Concentration	0.00 ... 9.99 % by wt
Concentration determination	NaCl	0.00 ... 9.99 % by wt (0 ... 60 °C)
	HCl	0.00 ... 9.99 % by wt (-20 ... 50 °C)
	NaOH	0.00 ... 9.99 % by wt (0 ... 100 °C)
	H ₂ SO ₄	0.00 ... 9.99 % by wt (-17 ... 110 °C)
	HNO ₃	0.00 ... 9.99 % by wt (-17 ... 50 °C)
Sensor standardization	Cell constant	Input of cell constant with simultaneous display of conductivity value and temperature
	Input of solution	Input of conductivity of the calibration solution with simultaneous display of cell constant and temperature
	Auto	Automatic determination of the cell constant with KCl solution or NaCl solution

Specifications

Memosens input, oxygen	M8 socket, 4 pins, for Memosens lab cable or M12 socket for Memosens sensors						
Display ranges ⁴⁾	<table border="1"> <tr> <td>Saturation</td> <td>0.000 ... 1000.0 %</td> </tr> <tr> <td>Concentration</td> <td>000 µg/l ... 100.00 mg/l</td> </tr> <tr> <td>Partial pressure</td> <td>0.0 ... 2000 mbars</td> </tr> </table>	Saturation	0.000 ... 1000.0 %	Concentration	000 µg/l ... 100.00 mg/l	Partial pressure	0.0 ... 2000 mbars
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Concentration	000 µg/l ... 100.00 mg/l						
Partial pressure	0.0 ... 2000 mbars						
Temperature meas. range ⁴⁾	-20 ... 150 °C						
Sensor standardization	Automatic calibration in air, humidity adjustable, automatic compensation of ambient pressure Zero calibration						
Storage	in quiver						
Connections	2x socket, 4 mm dia., for separate temp. detector 1x M8 socket, 4 pins, for Memosens lab cable 1x micro USB-B for data transmission to PC M12, 8 pins, for Memosens sensors or SE 340 (optical oxygen)						
Air pressure measurement	700 ... 1100 hPa						

Specifications

User interface	Straightforward menu navigation with graphic icons and detailed operating instructions in plain text	
Languages	German, English, French, Spanish, Italian, Portuguese, Russian	
Sensoface	Status indication (friendly, neutral, sad)	
Status indicators	For battery power level, logger	
Graphic display	QVGA TFT display with white backlighting	
Keypad	[on/off], [meas], [enter], [◀], [▶], [▲], [▼]	
Data logger	2 context-sensitive softkeys	
	10,000 memory locations	
	Recording	Manual, interval- and/or event-controlled with limit value and pre-trigger, management of tag numbers and annotations
MemoLog calibration data logger (Memosens only)	Up to 100 Memosens calibration records can be saved	
	– recording viewable on the display	
	– directly retrievable via MemoSuite (USB)	
	Manufacturer, sensor type, serial no., zero, slope, calibration date	
Communication	USB 2.0	
	Profile	HID, driverless installation
	Usage	Data exchange and configuration via Paraly SW 112 software
Diagnostics functions	Sensor data (only Memosens) Manufacturer, sensor type, serial number, wear, operating time	
	Calibration data	Calibration date, zero, slope
	Device self-test	Automatic memory test (FLASH, EEPROM, RAM)
	Device data	Device type, software version, hardware version
Data retention	Parameters, calibration data > 10 years	
EMC	EN 61326-1 (General Requirements)	
	Emitted interference	Class B (residential area)
	Immunity to interference	Industry
	EN 61326-2-3 (Particular Requirements for Transmitters)	
RoHS conformity	According to directive 2011/65/EU	
Power supply	4x AA batteries	
	4x rechargeable NiMH batteries	
	1x Li-ion battery, USB chargeable	
Nominal operating conditions	Ambient temperature	-10 ... +55 °C
	Transport/Storage temp.	-25 ... +70 °C
	Relative humidity	0 ... 95 %, short-term condensing allowed
Housing	Material	PA12 GF30 + TPE
	Ingress protection	IP66/67 with pressure compensation
	Dimensions	Approx. (132 x 156 x 30) mm
	Weight	Approx. 500 g

*) user-defined

1) According to EN 60746-1, at nominal operating conditions

2) ± 1 count

3) Plus sensor error

4) Ranges depending on sensor

5) c = cell constant