

Portavo 904 Cond

Robust, intuitive portable device for conductivity measurement.

Up to 5,000 values can be recorded using the integrated data logger. These data can be easily transferred to a computer for analysis using the USB interface and the included software.

Facts

- A sensor quiver protects the sensor from damage and drying out
- The high-performance polymer housing ensures low water consumption and high impact resistance
- Over 1,000 hours of measurement with a single set of batteries (4x AA)
- Li-ion battery
- Data logger with 5,000 values
- Micro USB port and Paraly SW 112 software
- Memosens sensors and analog sensors can be used on one device.
- The mineral glass display is perfectly readable even after years





LITHIUM
TECHNOLOGY

MEMO SENS

3 years
warranty!

Specifications

Conductivity input, analog	Multi-contact for 2-/4-electrode sensors with integrated temp detector	
	Measuring ranges	SE 202 sensor: 0.01 ... 200 $\mu\text{S}/\text{cm}$ SE 204 sensor: 0.05 to 500 mS/cm 2-electrode sensors: 0.1 $\mu\text{S} \cdot \text{cm} \dots 200 \text{mS} \cdot \text{cm}^5$ 4-electrode sensors: 0.1 $\mu\text{S} \cdot \text{cm} \dots 1000 \text{mS} \cdot \text{cm}^5$
	Permissible cell constant	0.005 ... 200.0 cm^{-1} (adjustable)
	Measurement error ^{1,2,3)}	< 0.5 % meas.val. + 0.4 $\mu\text{S} \cdot \text{cm}^5$
Temperature input	2 x 4 mm dia. for integrated or separate temperature detector	
	Measuring ranges	NTC 30 k Ω -20 ... +120 $^{\circ}\text{C}$ Pt 1000 -40 ... +250 $^{\circ}\text{C}$
	Measuring cycle	Approx. 1 s
	Measurement error ^{1,2,3)}	< 0.2 K (Tamb = 23 $^{\circ}\text{C}$); TC < 25 ppm/K
Conductivity input, Memosens	M8 socket, 4 pins, for Memosens lab cable	
	Measuring range	SE 215 MS sensor 10 $\mu\text{S}/\text{cm} \dots 20 \text{mS}/\text{cm}$
Conductivity input	Measuring cycle	Approx. 1 s
	Temperature compensation	Linear 0 ... 20 %/K, reference temp. adjustable nLF: 0 ... 120 $^{\circ}\text{C}$ NaCl HCl (ultrapure water with traces) NH3 (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 $^{\circ}\text{C}$)
	TDS	0 ... 1999 mg/l (10 ... 40 $^{\circ}\text{C}$)
	Concentration	0.00 ... 9.99 % by wt
Concentration determination	NaCl	0.00 ... 9.99 % by wt (0 ... 60 $^{\circ}\text{C}$)
	HCl	0.00 ... 9.99 % by wt (-20 ... 50 $^{\circ}\text{C}$)
	NaOH	0.00 ... 9.99 % by wt (0 ... 100 $^{\circ}\text{C}$)
	H2SO4	0.00 ... 9.99 % by wt (-17 ... 110 $^{\circ}\text{C}$)
	HNO3	0.00 ... 9.99 % by wt (-17 ... 50 $^{\circ}\text{C}$)
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
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 1x multi-contact socket for 2- and 4-electrode sensors	
Display	LCD STN 7-segment display with 3 lines and icons	
	Status indicators	for battery power level, logger
	Notices	Hourglass

Specifications

Keypad	[on/off], [cal], [meas], [set], [▲], [▼], [STO], [RCL], [clock]
Data logger	5,000 memory locations
	Recording Manual, interval- or event-controlled
MemoLog calibration data logger (Memosens only)	Up to 100 Memosens calibration records can be saved – 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, operating time Calibration data Calibration date; cell constant 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 Operating time Approx. 1000 h (alkaline)
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

5) c = cell constant