Conductivity Measurement

Portavo 902 Cond

The basic version for mobile conductivity measurement.

Robust, intuitive portable device for routine daily measurements in laboratories and processes. Over 1,000 operating hours with a single set of batteries (4x AA).



Facts

- A sensor quiver protects the sensor from drying out or being damaged in daily use.
- 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)
- Memosens sensors and analog sensors can be used on the same device
- The mineral glass display is perfectly readable even after years

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Specifications

Conductivity input, analog	Multi-contact for 2-/4-electrode sensors with integrated temp detector			
conductivity input, analog	Measuring ranges	SE 202 sensor:	0.01 200 μS/cm	
	J . J	SE 204 sensor:	0.05 to 500 mS/cm	
		2-electrode sensors:	0.1 μS • c 200 mS • c ⁵⁾	
		4-electrode sensors:	0.1 μS • c 1000 mS	
	Permissible cell constant	• c ⁵⁾ 0.005 200.0 cm ⁻¹ (adjustable)		
	Measurement error ^{1,2,3)}	$< 0.5 \%$ meas.val. + $0.4 \mu \text{S} \cdot \text{c}^{5)}$		
Temperature input	2 x 4 mm dia. for integrated or separate temperature detector			
	Measuring ranges	NTC 30 kΩ	-20 +120 °C	
	g .ages	Pt 1000	-40 +250 °C	
	Measuring cycle	Approx. 1 s		
	Measurement error ^{1,2,3)}	< 0.2 K (Tamb = 23 °C); T	C < 25 ppm/K	
Conductivity input, Memosens	M8 socket, 4 pins, for Memos			
	Measuring range	SE 215 MS sensor	10 μS/cm 20 mS/cm	
Conductivity input	Measuring cycle	Approx. 1 s	το μο/ επτ 20 πο/ επτ	
	Temperature compensation			
	remperature compensation			
Display resolution ⁵⁾ (autoranging)			$(c < 0.05 \text{ cm}^{-1})$	
Display resolution (duttorunging)	conductivity	0.01 μS/cm	$(c = 0.05 0.2 cm^{-1})$	
		0.1 μS/cm	$(c > 0.2 \text{ cm}^{-1})$	
	Resistivity	00.00 99.99 MΩ • cm	(6 > 0.2 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)	
	HCI	0.00 9.99 % by wt	(-20 50 °C)	
	NaOH	0.00 9.99 % by wt	(0 100 °C)	
	H2SO4	0.00 9.99 % by wt	(-17 110 °C)	
	HNO3	0.00 9.99 % by wt	(-17 50 °C)	
Sensor standardization	Cell constant	Input of cell constant with simultaneous display of		
	conductivity value and temperati			
	Input of solution			
		with simultaneous display of cell constant and		
		temperature		
	Auto	Automatic determination of the cell constant with		
Commentions	2 v socket 4 mm dia for son	KCI solution or NaCl solu	ution	
Connections	2 x socket, 4 mm dia., for separate temp. detector			
	1 x M8 socket, 4 pins, for Memosens lab cable 1x multi-contact socket for 2- and 4-electrode sensors			
Display				
Display	LCD STN 7-segment display with 3 lines and icons Sensoface provides information on the sensor condition			
	Sensorace Status indicators	provides information on the sensor condition		
	Notices	for battery power level		
<u> </u>		Hourglass		
Keypad	[on/off], [cal], [meas], [set], [\blacktriangle], [\blacktriangledown], [clock]			

Specifications

Diagnostics functions	Sensor data (only Memoser	Sensor data (only Memosens) Manufacturer, sensor type, serial number,		
_	ŕ	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	ibration data > 10 years		
EMC	EN 61326-1 (General Requirements)			
	Emitted interference	Class B (residential area)		
	Immunity to interference	Industry		
	EN 61326-2-3 (Particular Re	EN 61326-2-3 (Particular Requirements for Transmitters)		
RoHS conformity	According to directive 2011/65/EU			
Power supply	4x AA batteries			
	Operating time	Approx. 1000 h (alkaline)		
Nominal operating conditions	Ambient temperature	-10 +55 ℃		
	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