

Portavo 902 pH

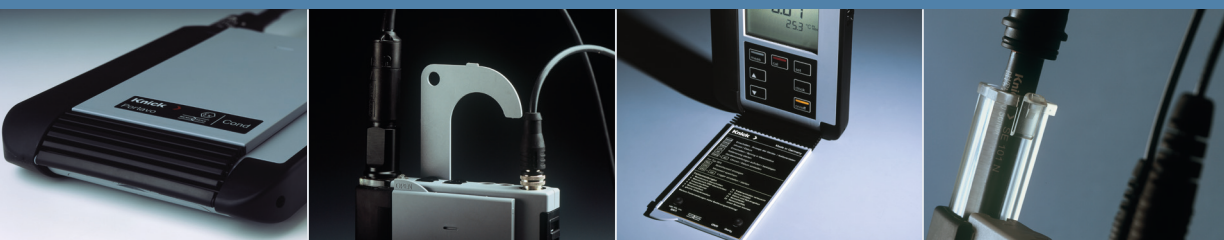
The portable analyzer for Memosens and analog pH and ORP sensors.

Robust, intuitive portable analyzer for routine daily measurements in laboratories and processes.

Facts and Features

- Memosens sensors and analog pH/ORP sensors can be used on one device
- A sensor quiver protects the sensor from drying out or being damaged in daily use.
- Robust housing with IP66/67, also for outdoor use
- The mineral glass display is perfectly readable even after years
- Temperature probe adjustment in the Memosens sensor (offset correction)





MEMO SENS

3-year
warranty!

Original size

Specifications

pH/mV input (analog)	pH socket, DIN 19 262 (13/4 mm)	
	pH range	–2 ... 16
	Decimal places ^{*)}	2 or 3
	Input resistance	1 x 10 ¹² Ω (0 ... 35 °C / 32 ... 86 °F)
	Input current	1 x 10 ^{–12} A (at RT, doubles every 10 K)
	Measuring cycle	Approx. 1 s
	Measurement error ^{1,2,3)}	< 0.01 pH, TC < 0.001 pH/K
	mV range	–1300 ... 1300 mV
	Measuring cycle	Approx. 1 s
	Measurement error ^{1,2,3)}	< 0.1 % meas. val. + 0.3 mV, TC < 0.03 mV/K
Temperature input	2 x 4 mm dia. for integrated or separate temperature detector	
	Measuring ranges	NTC 30 kΩ –20 ... 120 °C / –4 ... 248 °F Pt1000 –40 ... 250 °C / –40 ... 482 °F
	Measuring cycle	Approx. 1 s
	Measurement error ^{1,2,3)}	< 0.2 K (Tamb = 23 °C / 73.4 °F); TC < 25 ppm/K
Memosens pH input (also ISFET)	M8 socket, 4 pins, for Memosens lab cable	
	Display ranges ⁴⁾	pH –2.000 ... 16.000 mV –2000 ... 2000 mV Temperature –50 ... 250 °C / –58 ... 482 °F
Sensor standardization ^{*)}	pH calibration	
Operating modes ^{*)}	Calimatic	Calibration with automatic buffer recognition
	Manual	Manual calibration with entry of individual buffer values
	Data entry	Data entry of zero and slope
	Temperature calibration (TAN option)	Software option SW-P002 for temperature probe adjustment in the Memosens sensor (offset correction)
Calimatic buffer sets ^{*)}	–01– Mettler-Toledo	2.00/4.01/7.00/9.21
	–02– Knick CaliMat	2.00/4.00/7.00/9.00/12.00
	–03– Ciba (94)	2.06/4.00/7.00/10.00
	–04– NIST technical	1.68/4.00/7.00/10.01/12.46
	–05– NIST standard	1.679/4.006/6.865/9.180
	–06– HACH	4.01/7.00/10.01/12.00
	–07– WTW techn. buffers	2.00/4.01/7.00/10.00
	–08– Hamilton	2.00/4.01/7.00/10.01/12.00
	–09– Reagecon	2.00/4.00/7.00/9.00/12.00
	–10– DIN 19267	1.09/4.65/6.79/9.23/12.75
	Permissible calibration range	Zero point 6 ... 8 pH
	With ISFET:	–750 ... 750 mV Operating point (asymmetry)
	Slope	Approx. 74 ... 104 %

Specifications

Memosens ORP input	M8 socket, 4 pins, for Memosens lab cable		
Sensor standardization*)	Display ranges ⁴⁾	mV Temperature	–2000 ... 2000 mV –50 ... 250 °C / –58 ... 482 °F
	ORP calibration (zero adjustment)		
	Permissible calibration range	ΔmV (offset)	–700 ... 700 mV
Calibration timer*)	Temperature calibration (TAN option)	Software option SW-P002 for temperature probe adjustment in the Memosens sensor (offset correction)	
	Interval	1 ... 99 days, can be switched off	
Sensoface	Provides information on the sensor condition Evaluation of zero/slope, response, calibration interval		
Connections	2 x socket, 4 mm dia., for separate temperature probe 1 x M8 socket, 4 pins, for Memosens lab cable 1 x pH socket, to DIN 19262		
Display	LCD STN 7-segment display with 3 lines and icons		
	Sensoface	Status indication (friendly, neutral, sad)	
	Status indicators	for battery power level	
	Notices	Hourglass	
Keypad	[on/off], [cal], [meas], [set], [▲], [▼], [clock]		
Diagnostic functions	Sensor data (Memosens only)	Manufacturer, sensor type, serial number, operating time	
	Calibration data	Calibration date, zero and 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 environment)	
	Immunity to interference	Industrial applications	
	EN 61326-2-3		
RoHS conformity	According to directive 2011/65/EU		
Power supply	4 x AA alkaline or lithium batteries		
	Operating time	Approx. 1000 h (alkaline)	
Nominal operating conditions	Ambient temperature	–10 ... 55 °C / 14 ... 131 °F	
	Transport/Storage temp.	–25 ... 70 °C / –13 ... 158 °F	
	Relative humidity	0 ... 95 %, short-term condensing allowed	
Housing	Material	PA12 GF30 (silver gray RAL 7001) + TPE (black)	
	Protection	IP 66/67 with pressure compensation	
	Dimensions	Approx. 132 x 156 x 30 mm / 5.2 x 6.14 x 1.18 inches	
	Weight	Approx. 500 g / 1.10 lbs	

* user-defined

1) at nominal operating conditions

2) ± 1 count

3) plus sensor error

4) ranges depending on Memosens sensor