

Portavo 902 pH

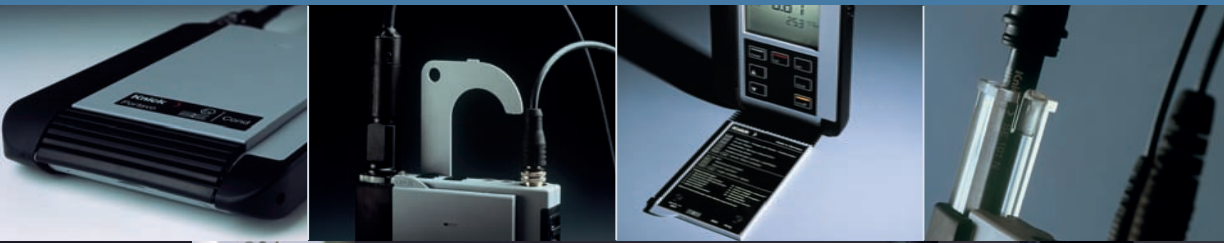
The basic version for mobile pH measurement.

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 pH sensors can be used on one device (e.g special flat-membrane sensors)
- The mineral glass display is perfectly readable even after years





MEMO SENS

3 years warranty!

Original size

Portavo 902 pH

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)
	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 Pt 1000 -40 ... +250 °C
	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	
	Display ranges ⁴⁾	pH -2.000 ... +16.000 mV -2000 ... +2000 mV Temperature -50 ... +250 °C
Memosens ORP input	M8 socket, 4 pins, for Memosens lab cable	
	Display ranges ⁴⁾	mV -2000 ... +2000 mV Temperature -50 ... +250 °C
	Sensor standardization ^{*)}	ORP calibration (zero adjustment)
	Permissible calibration range ΔmV (offset)	-700 ... +700 mV
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
Calimatic buffer sets ^{*)}	Knick CaliMat	Ciba (94) User defined
	NIST technical	HACH Mettler-Toledo
	NIST standard	Hamilton WTW techn. buffers
	DIN 19267	Reagecon
Permissible calibration range	Zero point	6 ... 8 pH
	With ISFET:	-750 ... +750 mV Operating point (asymmetry)
	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	
Connections	2x socket, 4 mm dia., for separate temp. detector 1x M8 socket, 4 pins, for Memosens lab cable 1x 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]	

Specifications

Diagnostics functions	Sensor data (only Memosens) 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 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 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

4) Ranges depending on Memosens sensor