

### PCE-PH 228

#### pH Meter with GLP Data Management / High Accuracy $\pm 0.002$ pH + 2 Digits

The advanced pH meter stands for precision, user-friendliness, and GLP compliance (Good Laboratory Practice). With a high-resolution LCD display, the pH meter provides a clear and concise presentation of measurement values. GLP compliance is ensured through automatic data recording and traceable documentation. It allows measurement of pH or redox value and temperature with external sensors.

A Permanent Measurement Verification (PMV) indicates to the operator, using a color bar, where the measurement value is located within the calibration range, providing insight into whether the measurement is in the correct range. User and sample management enable easy navigation and adjustment of measurement parameters on the pH meter.

#### ISO cal option

- » fast, precise pH and temperature measurement
- » redox measurement (with optional electrode)
- » GLP data management
- » easy 2, 3, 4, and 5-point calibration
- » calibration reminder
- » permanent Measurement Verification (PMV)
- » graphical display of measurement history
- » data logger



### APPLICATION



### TECHNICAL SPECIFICATIONS

<b>pH</b>			
Measurement Range	-2 pH ... +20 pH		
Resolution	0.001 pH		
<b>Accuracy</b>	$\pm 0.002$ pH + 2 digits		
<b>Electrode</b>			
Designation	PE-03		
Measurement Range	+1 pH ... +13 pH		
Temperature Range	5 ... 60 °C		
Application	Aqueous non-corrosive media		
Reference Electrolyte	Ag/AgCl		
Shaft Material	Epoxy resin		
Shaft Length	160 mm		
Shaft Diameter	12 mm		
Cable Length	1 m		
<b>Redox</b>			
Measurement Range	-2000 mV ... +2000 mV		
Resolution	1 mV		
Accuracy	$\pm 2$ mV		
<b>Temperature Sensor</b>			
Minimum Temperature	-20 °C		
Maximum Temperature	100 °C		
Resolution	0.1 °C		
Accuracy	$\pm 0.5$ °C (@ 20 °C)		
<b>General Technical Data</b>			
Storage Medium	Internal memory		
Storage Interval from	1 s		
Storage Interval to	12 h		
Storage Capacity	32 GB		
Storage Capacity			
Additional Information	100 records with a maximum of 100,000 data points per record		
Interface	USB-C		
Menu Language	German, English, French, Spanish, Italian, Dutch, Portuguese, Turkish, Polish, Russian, Chinese, Danish, Japanese		
Protection Class (Device)	IP52		
Power Supply	5 V DC, 500 mA		
Weight	252 g		
Dimensions (L x W x H)	178 x 85 x 32 mm / 7 x 3,3 x 1,2 in		
Operating Conditions	-20 ... 65 °C, 10 ... 95 % r.H		
Storage Conditions	-20 ... 65 °C, 10 ... 95 % r.H		
Languages of the Manual	German, English		
<b>Batteries and Accumulators</b>			
Type	Lithium polymer battery		
Lithium Info	Lithium in the product (built-in or included)		
Capacity	2500 mAh		
Voltage	3.7 V		
System	Secondary: Rechargeable battery		
Quantity	1		
<b>Optional accessories:</b>			
Calibration Solution pH4 and pH7 and pH10		Order no.: PCE-PH4710	
Electrode Storage Solution 3mol / l		Order no.: PCE-SSO	
pH Electrode IJ-44A		Order no.: IJ-44A	
Diaphragm Cleaner with Thiourea		Order no.: PCE-DCS-250	
Cleaning solution pepsin / hydrochloric acid		Order no.: PCE-GCS-500	
REDOX-Electrode ORP-14		Order no.: ORP-14	
Redox Solution +468 mV		Order no.: PCE-RTS-468	
Redox Solution +240 mV		Order no.: PCE-RTS-220	
Temperature sensor TP-07		Order no.: TP-07	
pH-Electrode PE-03		Order no.: PE-03	
Food pH-electrode		Order no.: CPC-OSH-12-01	



Subject to change without notice