

# Portable pH Meter

for Skin and Scalp

- Simultaneous pH and temperature measurements on a large dual-line LCD display
- User-friendly two button design
- Application specific probe
- Durable IP67 waterproof casing
- Watertight probe connection
- Probe condition indicator
- Automatic pH calibration at one or two points within two memorized buffer sets (standard or NIST)
- On-screen calibration tags
- mV measurement for electrode check
- Selectable temperature unit (°C or °F)
- Auto-off function
- Battery life indication and low battery detection



HI99181 is a light weight, portable, pH, and temperature meter supplied with a specially designed pH electrode intended for the direct determination of pH on skin and scalp.

Researchers monitoring the compatibility between skin and cosmetics or pharmaceuticals use pH as essential marker of compatibility. The skin mantle has an acidic pH, ranging from pH 4 to 6. The acidic pH is a deterrent toward harmful microbes, pollution, and toxins. Age, genetics, sweat, and moisture can alter the pH of skin. Products are constantly created to restore the pH balance of skin and a reliable pH measurement of skin provides the scientific metrics.

The HI99181 portable pH meter together with a HI14143/50 combination pH electrode (when immersed in a drop of water on the skin surface), can determine the pH of the skin with high accuracy and repeatability.

The HI14143/50 probe offers numerous features that improve pH testing for skin measurements. The flat tip of the HI14143/50 provides optimal contact between the sample and the sensor.



- **Optional shockproof silicon rubber boot**
  - Specially designed to protect your instrument from damage or impact

HI710028 Orange  
HI710029 Blue  
HI710030 Green

## Specifications

## HI99181

pH	Range*	-2.00 to 16.00 pH / -2.0 to 16.0 pH
	Resolution	0.01 pH / 0.1 pH
	Accuracy (@25°C/77°F)	±0.02 pH / ±0.1 pH
pH-mV	Calibration	Automatic, one or two-point selectable bufferset standard: 4.01; 7.01; 10.01 or NIST: 4.01; 6.86; 9.18
	Range*	±825 mV
	Resolution	1 mV
Temperature	Accuracy (@25°C/77°F)	±1 mV
	Range*	-5.0 to 105.0°C; 23.0 to 221.0°F
	Resolution	0.1°C; 0.1°F
Additional Specifications	Accuracy (@25°C/77°F)	±0.5°C (up to 60°C), ±1.0°C (outside); ±1.0°F (up to 140°F), ±2.0°F (outside)
	Temperature Compensation	automatic, from -5.0 to 105.0°C (23.0 to 221.0°F)
	Probe (included)	HI14143/50 preamplified pH and temperature probe with flat tip, 50 mm-long body, DIN connector, and 1 m (3.3') cable
Ordering Information	Battery Type / Life	1.5V AAA (3) approx. 1400 hours of continuous use
	Auto-off	user selectable: after 8 min, 60 min, or disabled
	Environment	0 to 50°C (32 to 122°F); RH max. 100%
	Meter Dimensions	154 x 63 x 30 mm (6.1 x 2.5 x 1.2")
	Meter Mass (with batteries)	196 g (6.91 oz.)
	Case Ingress Protection Rating	IP67
<b>Ordering Information</b>		<b>HI99181</b> is supplied with HI14143/50 pH/temperature probe with flat tip, 50 mm-long body, Quick Connect DIN connector and 1m (3.3') cable, pH 4.01 and 7.01 buffer sachets, HI700620 cleaning and disinfection solution sachet for skin residuals, HI700621 cleaning solution sachet for skin grease and sebum, 100 mL beaker, 1.5V AAA batteries (3), calibration certificate of meter, calibration certificate of probe, instruction manual, and HI710142 rugged carrying case.

\* the HI14143/50 is limited to be used from 0 to 12 pH and from 0 to 50 °C temperature (32 to 122 °F).