

# pH Benchtop Meters with Three Point Calibration

- Up to three point pH calibration with five standard buffers or two custom
- ORP measurement (HI 2213 only)
- Relative mV readings (HI 2213 only)
- GLP features
- Calibration expiration reminder
- Automatic Temperature Compensation

The HI 2212 and HI 2213 are pH and temperature benchtop meters. HI 2213 can measure oxidation reduction potential (ORP) in the mV range. A relative mV feature is also provided.

Calibration can be performed at up to three-points using five standard and two custom buffers.

These instruments feature manual or automatic temperature compensation with the HI 7662 temperature probe.

GLP (Good Laboratory Practice) feature provides data consistency. A calibration reminder can be set to alert the user, that too much time has elapsed since the last pH calibration and a new one should be performed.



## ORDERING INFORMATION

HI 2212-01 (115V), HI 2212-02 (230V) and HI 2213-01 (115V) and HI 2213-02 (230V) are supplied with HI 1131B pH electrode, HI 7662 temperature probe, HI 76404N electrode holder, HI 70004 pH 4.01 buffer solution sachet, HI 70007 pH 7.01 buffer solution sachet, HI 70715 electrolyte solution (30 mL), HI 700661 cleaning solution sachet, 12 VDC adapter and instructions.

## ELECTRODES

Combination pH electrodes with BNC connectors, and 1 m (3.3') cable:

- HI 1043B** Use: strong acids and bases. glass body, double junction, refillable
- HI 1053B** Use: emulsions. glass-body, triple ceramic junction, refillable
- HI 1083B** Use: biotechnology. glass-body, open junction, refillable
- HI 1131B** Use: general purpose. glass-body, ceramic junction, refillable
- HI 1332B** Use: general purpose. PEI body, double junction, refillable
- HI 7662** Stainless steel temperature probe and 1 m (3.3') cable

## SOLUTIONS

- HI 5004L** pH 4.01 buffer solution, 500 mL
- HI 5007L** pH 7.01 buffer solution, 500 mL
- HI 5010L** pH 10.01 buffer solution, 500 mL
- HI 7061L** Electrode cleaning solution, 500 mL
- HI 70300L** Electrode storage solution, 500 mL

SPECIFICATIONS		HI 2212	HI 2213
Range	pH	-2.00 to 16.00 pH	
	mV	—	±699.9 mV; ±2000 mV
	Temperature	-20.0 to 120.0 °C (-4.0 to 248.0 °F)	
Resolution	pH	0.01 pH	
	mV	—	0.1 mV; 1 mV
	Temperature	0.1 °C	
Accuracy	pH	±0.01 pH	
	mV	—	±0.2 mV; ±1 mV
	Temperature	±0.2 °C (excluding probe error)	
Relative mV Offset Range		—	±2000 mV
pH Calibration		automatic, up to three points with five standard buffers available (4.01, 6.86, 7.01, 9.18, 10.01), and two custom buffers	
Temperature Compensation		manual or automatic from -20.0 to 120.0 °C (-4.0 to 248.0 °F)	
pH Probe		HI 1131B glass body pH electrode with BNC connector and 1 m (3.3') cable (included)	
Temperature Probe		HI 7662 stainless steel temperature probe with 1 m (3.3') cable (included)	
Input Impedance		10 <sup>12</sup> ohm	
Power Supply		12 VDC adapter (included)	
Environment		0 to 50 °C (32 to 122 °F); RH max 95%	
Dimensions		235 x 222 x 109 mm (9.2 x 8.7 x 4.3")	
Weight		1.3 kg (2.9 lbs.)	

For a complete list of Solutions and Electrodes, see the end of this section.