



*Splashproof Keypad*

### Key Features

- Measure pH, mV or ISE with temperature
- Electrode diagnostics
- Backlit LCD with battery life on the display
- Docking station for battery recharge
- Waterproof protection
- "Outside Calibration Range" warning
- Settable "Cal Due" warning on display
- Up to 5 calibration points in 7 standard buffers
- Up to 5 custom buffers
- °C or °F unit selection
- Log On Demand up to 150 records (50 each range)
- Auto-end feature
- GLP feature
- RS232 PC connectivity (with HI 92000 software)

### 3 Models to Meet Your Application Requirements

HI 9817x series are state-of-the-art, heavy-duty portable pH meters with temperature probe input—this means changing one probe with another is easy (e.g., pH for ORP). Housed in a waterproof casing, these units are specifically designed to provide laboratory results and accuracy under demanding industrial and field conditions. They come equipped with a series of new diagnostic features to dramatically improve a measurement's reliability. Up to 5 calibration points—choose from 7 memorized buffers and 5 custom buffers. This provides the user with the flexibility necessary to adjust the calibration range and obtain the most accurate and precise readings possible.

For HI 98171 and HI 98172, change the pH sensor for an ORP sensor to obtain mV readings; adjustable between two ranges and accurate to  $\pm 0.2$  mV.

For HI 98172, ISE sensors are calibrated up to 5 points and measurements are obtained in ppm concentrations.

All meters support HANNA's signature Calibration Check™. Calibration Check™ displays an electrode condition graph which informs the user of electrode status during calibration. If readings are taken too far outside the calibration range, the unit will warn the user with a graphic signal. Users may set a reminder to notify when calibration is due.

The HI 9817x Series is equipped with auto-end measuring mode that ensures readings are taken only when they are stable. GLP data is instantly accessible via a dedicated GLP key and Log-on-demand holds up to 150 records. All data can be downloaded to a PC via the RS232 connection. With up to 200 hours of extended battery life, these units will guarantee long operation in the field.

### Screen Highlights



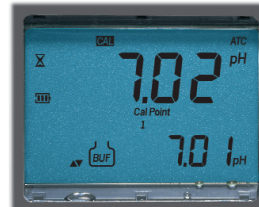
#### Backlit Display

Large backlit display shows current measurement readings along with the electrode condition and battery life.



#### GLP

Comprehensive GLP functions are directly accessible by pressing the GLP key.



#### Calibration Messages

Messages on the LCD make calibration easy and accurate.

## Electrode Condition Graph

Provides a quick and clear indication of electrode status after calibration.



Bargraph Indication	Condition value
All 5 bars	81 - 100%
4 bars	61 - 80%
3 bars	41 - 60%
2 bars	21 - 40%
1 bar	1 - 20%
1 bar blinking	0%
Frame only	Info not available

## HI 710041 Inductive Battery Recharger

When the batteries are low, you don't have to worry about carrying a spare set with you—the batteries can be recharged with HANNA's inductive recharger. Simply leave the meter on the recharger for a few hours and you're ready to go!



*The recharger can be plugged into a standard 115V or 230V socket using the appropriate HANNA adapter.*

SPECIFICATIONS		HI 98170	HI 98171	HI 98172
Range	pH	-2.0 to 16.0; -2.00 to 16.00 pH		-2.00 to 16.00 pH
	mV	— ±699.9 mV; ±2000 mV		
	ISE	—		0.001 to 19990 ppm
	Temperature	-20.0 to 120.0 °C (-4.0 to 248.0°F)		
Resolution	pH	0.1; 0.01 pH		0.01 pH
	mV	—		0.1; 1 mV
	ISE	—		0.001 ppm (0.001 to 1.999)
		—		0.01 ppm (2.00 to 19.99)
Accuracy	pH	±0.1; ±0.01 pH		±0.01 pH
	mV	— ±0.2 mV (±699.9 mV); ±1 mV (±2000 mV)		±0.5% f.s.
	ISE	—		±0.5% f.s.
	Temperature	±0.4°C (±0.8°F) excluding probe error		
pH Calibration	Up to 5 calibration points; 7 standard buffers available (pH buffers 1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 12.45) and 5 custom buffers			
ISE Calibration	—		Up to 5 point calibration, 6 standards available (0.1, 1, 10, 100, 1000, 10000 ppm)	
Slope/Offset Calibration	±1 pH/From 80 to 110%			
Relative mV Offset Range	—		±2000 mV	
Temperature Compensation	Automatic or manual from -20.0 to 120.0°C (-4.0 to 248.0°F)			
Electrodes	HI 1230B pH electrode; HI 7662 temperature probe (included)			
Logging	On demand, 50 samples on each range			
Computer Interface	RS232 (HI 92000 software required)			
Input Impedance	10 <sup>12</sup> Ohm			
Battery Type/Life	(4) 1.2V AA rechargeable batteries, approx. 200 hrs continuous use without backlight. Battery charger included. User-selectable auto off: 1-30 min. or disabled.			
Environment	0 to 50°C (32 to 122°F); RH 100%			
Dimensions/Weight	196 x 80 x 60 mm (7.7 x 3.1 x 2.4")/ 425 g (15 oz)			

### ORDERING INFORMATION

HI 98170-01 (115V) and HI 98170-02 (230V), HI 98171-01 (115V) and HI 98171-02 (230V) and HI 98172-01 (115V) and HI 98172-02 (230V) are supplied with HI 1230B double-junction, pH electrode, HI 7662 stainless steel temperature probe, pH 4.01 and pH 7.01 buffer solutions (20 mL ea.), 100 mL plastic beaker, rechargeable batteries (4), HI 710041 inductive recharger with power adapter, rugged carrying case and instructions.

### SOLUTIONS

- HI 7004L pH 4.01 buffer solution, 500 mL
- HI 7007L pH 7.01 buffer solution, 500 mL
- HI 7010L pH 10.01 buffer solution, 500 mL
- HI 70004P pH 4.01 buffer solution, 20 mL sachets (25)
- HI 70007P pH 7.01 buffer solution, 20 mL sachets (25)
- HI 70010P pH 10.01 buffer solution, 20 mL sachets (25)
- HI 77400P pH 4 and pH 7 buffer solution, (10) 20 mL sachets, (5 ea.)
- HI 70300L Electrode storage solution, 500 mL
- HI 7061L Electrode cleaning solution, 500 mL
- HI 7091L ORP reducing pretreatment solution, 500 mL
- HI 7092L ORP oxidizing pretreatment solution, 500 mL
- HI 7021L ORP test solution @240 mV, 500 mL
- HI 7022L ORP test solution @470 mV, 500 mL
- HI 70300L Electrode storage solution, 500 mL
- HI 7061L Electrode cleaning solution, 500 mL

### ACCESSORIES

- HI 710041 Inductive battery recharger
- HI 920010 RS232 cable for PC connection
- HI 92000 Windows® compatible software