







## HI 991001, HI 991002 and HI 991003

## pH/pH-MV/ORP PORTABLE METERS

The HI 991001, HI 991002 and HI 991003 are well suited for plating baths, wastewater, swimming pool and spa water quality and environmental applications.

HI 991003 is a portable pH/pH-mV/ORP/temperature meter with our unique Sensor Check™ feature that allows the user to determine the electrode status at any time. HI 991002 measures pH/ORP/temperature while the HI 991001 measures pH/temperature.

The HI 1296D and HI 1297D pH probes feature a recessed flat tip that is easy to clean and prevents solids in solutions from collecting on the sensor. The titanium body of these probes function as a potential matching pin for increased stability of readings and extended sensor life.

These instruments easily fit in the palm of your hand and the bottom probe connection ensures the electrode cable doesn't get in your way. The large, multi-level LCD displays the primary reading, temperature and calibration instructions simultaneously.

## **FEATURES**

- Sensor Check™ (HI 991003)
  - Allows users to check electrode status at any time
- Waterproof
- Multi-level LCD Display

Display the current measurement simultaneously with the current temperature. A quick-guide is also displayed to aid users

HOLD

The Hold button freezes readings on the display for manual recording.

- Automatic Temperature Compensation
- Automatic 1 or 2 Point Calibration
- BEPS

(Battery Error Prevention System) alerts the user in the event that low battery power could adversely affect readings

- Battery % displayed on startup.
- Heavy-duty

Tough ABS plastic enclosures and titanium body electrodes







ISO 9001:2000 CERTIFIED COMPANY

# WE DESIGN, MANUFACTURE, SUPPLY AND SUPPORT ALL OF OUR PRODUCTS.

## **THAT'S 360° VALUE**

Over the past 30 years, **HANNA** has never failed to design fresh and innovative products and the new HI 991001, HI 991002 and HI 991003 are no exception. We are excited to introduce such high accuracy and ease of use in a compact, modern design that fits right in your hand.

**HNNN** is the largest family-owned manufacturer of analytical instrumentation in the world. These instruments are manufactured in our European state-of-the-art ISO 9001:2000 production facility and is CE compliant to EN 61326-1 and EN 61010-1 standards.

When you buy a **HANNA** product, you're not only buying the best value for your money, but you're also adding the benefit of **HANNA**'s unsurpassed customer service and post-sale technical support.

## Titanium Body pH Electrode & Starter Solutions Included!









Shown with HI 710020

protective boot (optional)



## HI 1297D AND HI 1296D PRE-AMPLIFIED pH ELECTRODES

The HI 1297D (HI 991003) and HI 1296D (HI 991001 and HI 991002) pH electrodes have a built-in temperature sensor and also contain a mini pre-amplifier to render measurements impervious to noise and electrical interferences.

## Titanium Probe Body

 $The \,HI\,1297D \,and \,HI\,1296D \,pH \,electrodes \,feature \,abuilt-in \,temperature \,sensor \,as \,well \,as \,at it an ium \,outer \,body \,abuse \,abuse$ 

SPECIFICATIONS		HI 991001	HI 991002	HI 991003
Range	рН	-2.00 to 16.00 pH		
	pH-mV	-	-	±825 mV (pH-mV)
	ORP	-	±1999 mV	±1999 mV
	Temperature*	-5.0 to 105.0°C; 23.0 to 221.0°F		
Resolution	pH		0.01 pH	
	mV	-	1 mV	1 mV
	Temperature		0.1°C/0.1°F	
Accuracy (@20°C)	pH		±0.02 pH	
	mV	-	±2 mV	±2 mV
	Temperature	$\pm 0.5$ °C up to 60°C; $\pm 1$ °C outside; $\pm 1$ °F up to 140°F; $\pm 2$ °F outside		
Temperature Compensation	pH	Automatic		
pH Calibration		Automatic 1 or 2 point calibration with 2 sets of memorized buffers (4.01, 7.01, 10.01 or 4.01, 6.86, 9.18)		
Electrode (included)			H/temperature electrode and 1 m (3.3' cable)	HI 1297D pre-amplified pH/ temperature electrode with DIN connector and 1 m (3.3' cable)
Battery Type		(3) 1.2V AAA		
Battery Life		Approximately 200 hours of continuous use		
Auto-off		After 8 minutes of non-use		
Environment		0 to 50°C (32 to 122°F); RH max. 100%		
Dimensions		150 x 58 x 29 mm (5.9 x 2.8 x 1.1")		
Weight		205g (7.2 oz.)		

#### ORDERING INFORMATION

**HI 991001**, **HI 991002** and **HI 991003** are supplied with HI 1296D pH/temperature or HI 1297D pH/ORP/temperature electrode with DIN connector and 1 m (3.3') cable, starter set of calibration solution sachets, (3) 1.2V AAA batteries, and instructions.

#### **ELECTRODES**

**HI 1296D** Pre-amplified pH/temperature electrode with built-in temperature sensor, DIN connector and

1 m (3.3') cable

HI 1297D Pre-amplified pH/ORP electrode with built-in temperature sensor, DIN connector 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 7020L ORP 200/275 mV test solution, 500 mL
HI 7061L Electrode cleaning solution, 500 mL
HI 70300L Electrode storage solution, 500 mL

### ACCESSORIES

**HI 710020** Orange protective rubber boot **HI 710021** Blue protective rubber boot



<b>SPECIFICATIONS</b>	HI 1296D	HI 1297D	
Description	pH electrode	pH/ORP electrode	
Reference	Single, Ag/AgCl		
Junction	Cloth		
Electrolyte	Gel		
Max Pressure	3 bar		
Range	pH: 0 to 13 T: 0 to 80°C (32 to 176°F)		
Tip /Shape	Spheric (dia: 5 mm)	pH: Conic (3 mm) ORP: Platinum sensor	
Temperature Sensor	Yes		
Amplifier	Yes		
<b>Body Material</b>	Titanium		
Connection/Cable	DIN/5-pole; 1 m (3.3')	DIN/7-pole; 1 m (3.3')	
Recommended Use	Wastewater	Wastewater, municipal water, water treatment, swimming pools	

