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HI 991001, HI 991002 and HI 991003

pH/pH-MV/ORP PORTABLE METERS

HANNA® instruments

With Great Products, Come Great Results™



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

Sensor Check™ WP WATERPROOF B.E.P.S. Battery Error Prevention System 2 YEAR WARRANTY 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.

HANNA 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.



Shown with HI 710020 protective boot (optional)

Titanium Body pH Electrode & Starter Solutions Included!







- **Protective Rubber Boot**
  The optional protective rubber boot helps protect your meter



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 a built-in temperature sensor as well as a titanium outer body

SPECIFICATIONS		HI 991001	HI 991002	HI 991003
Range	pH		-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		±0.5°C up to 60°C; ±1°C outside; ±1°F up to 140°F; ±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)			HI 1296D pre-amplified pH/temperature electrode with DIN connector 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



Recommended Operating Temperature 20 to 40°C (86 to 104°F)

SPECIFICATIONS	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)	pH: 0 to 13; ORP; 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	
Body Material	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

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