

HI 22091

pH/mV Meter with Manual Temperature Compensation (MTC) and Analog Output

The HI 22091 pH/mV Meter with Manual Temperature Compensation (MTC) and Analog Output provides a simple to use, cost effective method of measuring pH. The HI 22091 replaces PH 209R and features a large, easy to read LCD, built-in solution holders and an attractive redesigned case.

In order to achieve maximum accuracy, the HI 22091 features a manual pH calibration at one or two points. Manual calibration enables the user to select the instrument's calibration points closer to the desired range of measurement, making them ideal for applications that require custom calibration points. (i.e.- In many applications, a standard calibration curve such as pH 7 or pH 4 is too far from the value of the sample to achieve the highest accuracy.)

The HI 22091 pH/mV Meter can also measure ORP (oxidation reduction potential) or ion concentration (ISE) in the extended mV range with optional electrodes.

FEATURES/BENEFITS:

- * Manual calibration for offset and slope
- * Manual Temperature Compensation (MTC)
- * ± 0.01 pH accuracy
- * ± 1 mV accuracy
- * Analog Output
- * Large, easy to read LCD
- * Built-in Solution Holders
- * Includes HI 1332B PEI body refillable probe

FEATURES IN DEPTH:

Manual pH calibration - This simple to use feature provides the ability to demonstrate the concept of offset and slope. It can be calibrated to any value within the measurement ranges and is less expensive than models with auto-calibration.

Manual Temperature Compensation (MTC) - MTC provides the ability to demonstrate the effect of temperature on pH measurement. It is simple to use and allows for different temperature corrections based on the sample being tested.

Analog Output- Allows a recording device to be connected to the meter.

mV Range - Allows an ORP electrode to be used to measure REDOX reactions. The mV function can also be used with ISE electrodes for specific ion concentrations.

Large LCD - The new, larger LCD is bright and easy to read.

Built-in Solution Holders - The HI 22091 has solution holders built into the casing. This convenient feature saves space and prevents solutions from tipping over.

PRIMARY APPLICATIONS:

- * Water Quality- Testing water quality

* Education - Teach students about pH

Electrodes

HI 1332B Use: general purpose. PEI body, double junction, refillable

HI 3131B Glass body ORP electrode with platinum sensor, BNC connector and 1m (3.3') cable

Solutions

HI 5100-12 10.01 pH Buffer Solution (120 ml)

HI 5300-12 Electrode Storage Solution (120 ml)

HI 5400-12 4.01 pH Buffer Solution (120 ml)

HI 5700-12 7.01 pH Buffer Solution (120 ml)

HI7061M Electrode Cleaning Solution

HI 7082 Electrolyte Solution, 3.5M KCl, 4 x 30 mL bottle

Accessories

HI 76404 Electrode Holder

HI 710005 Power Adapter, 115 Vac to 12 VDC, US Plug

HI 710006 Power Adapter, 230 Vac to 12 VDC, European Plug

HI 740036P 100 mL Plastic Beaker

Order Information:

HI 22091-01 (115V) and HI 22091-02 (230V) are supplied with HI 1332B pH electrode, 12 VDC adapter and instruction manual.

• Specifications

pH Range	0.00 to 14.00 pH	mV Range ± 1999 mV	pH
pH Resolution	0.01 pH	mV Resolution	1 mV
pH mV Resolution	1 mV	pH	
pH Accuracy (@20°C/68°F)	± 0.01 pH		
mV Accuracy (@20°C/68°F)	± 1 mV		
Calibration	Manual, two point		
Temperature Compensation	Manual, 0 to 100°C (32 to 212°F)		
Analog Output	0 to 5 V according with: 0 to 14 pH or -1999 to +1999 mV, temp.: always 0		
Probe	HI 1332B PEI body refillable double junction pH electrode with BNC connector and 1 m (3.3') cable (included).		
Power Supply	12 VDC adapter (included)		
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing		
Weight	1.3 kg (2.9 lbs)		