

# MP METERS



## Applications

- Drinking Water
- Field Use
- Industrial Water
- Power
- Salt Water
- Wastewater

## Multi-parameter, probeless meters allow rapid spot checks of clean water applications and tap sampling.

Hach's MP Meters offer single-handed operation for clean water applications, thanks to their probe-free design.

### Go Probeless!

Hach's MP Meters work without probes, allowing rapid testing of pH, ORP (Oxidation Reduction Potential)/Redox, conductivity, resistivity, Total Dissolved Solids (TDS) and temperature. The instruments use integrated sample cups for efficient, high-throughput testing.

### Simple, One-Handed Operation

MP Meters operate easily with just one hand. Whether in the lab, plant, or in a remote field location, measurement takes only two steps: 1. Fill the cell cup and 2. Push a parameter key to take the reading.

### Infrequent Calibration

Achieve reliable readings without repetitious calibration. Typical calibration frequency ranges from every two weeks to monthly, depending on parameter and individual testing needs.

### Superior Accuracy

MP Meters use an advanced four-electrode conductivity cell technology, a unique, replaceable pH/ORP sensor, and powerful microprocessor-based circuitry to deliver high performance with a superior accuracy of  $\pm 1\%$ . Pre-programmed common salt profiles in every instrument provide unsurpassed accuracy for conductivity, resistivity, and TDS measurements across a wide variety of sample matrices.

### Field Reliable

An auto-shutoff maximizes battery life. In addition to longer operation time, MP Meters maintain data integrity thanks to a non-volatile microprocessor that backs up measurement data and retains calibration and memory data, even during a battery change. MP Meters are also waterproof, buoyant, and fully operational after immersion up to 1 meter (3 feet).

### Flexible Communication

The optional USB-powered MP-Dock Accessory Package and MP DataLink Software reduce data logging time and errors, and allow fast, easy download with the flexibility to export as a .CSV file.



Be Right™

## Specifications\*

<b>Power</b>	9V alkaline battery
<b>Battery Life</b>	>100 hours (5000 readings)
<b>Display</b>	4-digit Liquid Crystal Display (LCD)
<b>Ratings</b>	IP67/NEMA 6; Waterproof to 1 meter/3 feet
<b>Operating/Storage Temperature</b>	0 to 55°C (32 to 132°F)
<b>Cell Capacity</b>	pH/ORP: 1.2 mL (0.04 oz.) Conductivity/TDS/Resistivity: 5 mL (0.2 oz)
<b>Case/Conductivity Cell Material</b>	VALOX®†
<b>Dimensions</b>	196 x 68 x 64 mm (7.7 x 2.7 x 2.5 in)
<b>Weight</b>	352 g (12.4 oz)

### Conductivity

<b>Range</b>	0–9999 µS/cm, 10–200 mS/cm in 5 autoranges
<b>Resolution</b>	0.01(<100 µS), 0.1(<1000 µS), 1.0(<10 mS), 0.01(<100 mS), 0.1(<200 mS)
<b>Accuracy</b>	±1% of reading
<b>Auto Temperature Compensation</b>	0 to 71°C (32 to 160°F)
<b>Adjustable Temperature Compensation to 25°C</b>	0–9.99%/°C
<b>Conductivity/TDS Ratios Preprogrammed</b>	KCl, 442‡, NaCl
<b>Adjustable Conductivity/TDS Ratio Factor</b>	0.20–7.99

### TDS

<b>Range</b>	0–9999 ppm, 10–200 ppt in 5 autoranges
<b>Resolution</b>	0.01(<100 ppm), 0.1(<1000 ppm), 1.0(<10 ppt), 0.01(<100 ppt), 0.1(<200 ppt)
<b>Accuracy</b>	±1% of reading
<b>Auto Temperature Compensation</b>	0 to 71°C (32 to 160°F)
<b>Adjustable Temperature Compensation to 25°C</b>	0–9.99%/°C
<b>Conductivity/TDS Ratios Preprogrammed</b>	KCl, 442‡, NaCl
<b>Adjustable Conductivity/TDS Ratio Factor</b>	0.20–7.99

### Mineral/Salt

<b>Range</b>	0–9999 ppm, 10–200 ppt in 5 autoranges
<b>Resolution</b>	0.01 (<100 ppm), 0.1 (<1000 ppm), 1.0 (<10 ppt), 0.01 (<100 ppt), 0.1 (<200 ppt)
<b>Accuracy</b>	±1% of reading
<b>Auto Temperature Compensation</b>	0 to 71°C (32 to 160°F)
<b>Adjustable Temperature Compensation to 25°C</b>	0–9.99%/°C
<b>Conductivity/TDS Ratios Preprogrammed</b>	KCl, 442‡, NaCl
<b>Adjustable Conductivity/TDS Ratio Factor</b>	0.20–7.99

### Resistivity

<b>Range</b>	10 KΩ–30 MΩ
<b>Resolution</b>	0.01(<100 KΩ), 0.1(<1000 KΩ), 0.1(>1 MΩ)
<b>Accuracy</b>	±1% of reading
<b>Auto Temperature Compensation</b>	0 to 71°C (32 to 160°F)
<b>Adjustable Temperature Compensation to 25°C</b>	0–9.99%/°C

### pH

<b>Range</b>	0–14 pH
<b>Resolution</b>	0.01 pH
<b>Accuracy</b>	±0.01 pH
<b>Auto Temperature Compensation</b>	0 to 71°C (32 to 160°F)

### ORP

<b>Range</b>	±999 mV
<b>Resolution</b>	1 mV
<b>Accuracy</b>	±1 mV

### Temperature

<b>Range</b>	0 to 71°C (32 to 160°F)
<b>Resolution</b>	0.1°C/F
<b>Accuracy</b>	±0.1°

\*Subject to change without notice.

† VALOX is a trademark of SABIC Innovative Plastics IP BV

‡ 442 Natural Water Standard is a trademark of Myron L Company

## MP Meters Model Selection Guide

Parameters	MP-4	MP-6p	MP-6
pH		■	■
ORP		■	■
Conductivity	■	■	■
Resistivity	■		■
TDS	■	■	■
Mineral/Salt		■	
Temperature	■	■	■
<b>Features</b>			
Autoranging	■	■	■
Adjustable Temperature Compensation	■	■	■
Memory	100 readings	100 readings	100 readings
Date & Time Stamp	■	■	■
pH Calibration Prompts		■	■
Low battery indicator	■	■	■
Auto-off	■	■	■

## Ordering Information

### Essentials Packages

- HMP4EP** MP-4 Portable Meter, hard-sided case, and 50 mL NaCl, KCl, and 442™ standard solutions for calibration
- HMP4EPD** MP-4 Portable Meter, MP-Dock, hard-sided case, and 50 mL NaCl, KCl, and 442™ standard solutions for calibration
- HMP6PEP** MP-6p Portable Meter with pH storage solution, hard-sided case, 50 mL NaCl, KCl, and 442™ standard solutions, and 50 mL pH buffer set for calibration.
- HMP6PEPD** MP-6p Portable Meter with pH storage solution, MP-Dock, hard-sided case, 50 mL NaCl, KCl, and 442™ standard solutions, and 50 mL pH buffer set for calibration.
- HMP6EP** MP-6 Portable Meter with pH storage solution, hard-sided case, 50 mL NaCl, KCl, and 442™ standard solutions, and 50 mL pH buffer set for calibration.
- HMP6EPD** MP-6 Portable Meter with pH storage solution, MP-Dock, hard-sided case, 50 mL NaCl, KCl, and 442™ standard solutions, and 50 mL pH buffer set for calibration.

### Meters Only

- HMP4** MP-4 Portable Meter
- HMP6P** MP-6p Portable Meter with pH storage solution
- HMP6** MP-6 Portable Meter with pH storage solution

### Accessories

- HMPDOCK** MP-Dock Accessory Package (includes MP DataLink software)
- HMPCASE** Hard-sided case for MP Portable Meter, MP-Dock, and up to six 50 mL standard solutions
- 2975126** Acid electrode cleaning solution, 50 mL pour-top

*Continued on next page.*

## Ordering Information *continued*

### Standard Solutions

#### Sodium Chloride

<b>2971826</b>	49 mg/L NaCl (100 $\mu$ S/cm), 50 mL pour-top
<b>2971849</b>	49 mg/L NaCl (100 $\mu$ S/cm), 500 mL
<b>1440026</b>	491 mg/L NaCl (1,000 $\mu$ S/cm), 50 mL pour-top
<b>1440049</b>	491 mg/L NaCl (1,000 $\mu$ S/cm), 500 mL
<b>2972226</b>	5,370 mg/L NaCl (10,000 $\mu$ S/cm), 50 mL pour-top
<b>2972249</b>	5,370 mg/L NaCl (10,000 $\mu$ S/cm), 500 mL
<b>2307426</b>	10,246 mg/L NaCl (18,000 $\mu$ S/cm), 50 mL pour-top
<b>2307449</b>	10,246 mg/L NaCl (18,000 $\mu$ S/cm), 500 mL

#### Potassium Chloride

<b>2974226</b>	74.55 mg/L (0.001M) KCl (146.9 $\mu$ S/cm), 50 mL pour-top
<b>2974249</b>	74.55 mg/L (0.001M) KCl (146.9 $\mu$ S/cm), 500 mL
<b>2974326</b>	745.5 mg/L (0.01M) KCl (1,412 $\mu$ S/cm), 50 mL pour-top
<b>2974349</b>	745.5 mg/L (0.01M) KCl (1,412 $\mu$ S/cm), 500 mL
<b>2974426</b>	7,455 mg/L (0.1M) KCl (12,890 $\mu$ S/cm), 50 mL pour-top
<b>2974449</b>	7,455 mg/L (0.1M) KCl (12,890 $\mu$ S/cm), 500 mL

#### 442™ Natural Water Standards

<b>2974526</b>	30 ppm TDS (46.7 $\mu$ S/cm), 50 mL pour-top
<b>2974549</b>	30 ppm TDS (46.7 $\mu$ S/cm), 500 mL
<b>2974626</b>	300 ppm TDS (445 $\mu$ S/cm), 50 mL pour-top
<b>2974649</b>	300 ppm TDS (445 $\mu$ S/cm), 500 mL
<b>2974726</b>	1,000 ppm TDS (1417 $\mu$ S/cm), 50 mL pour-top
<b>2974749</b>	1,000 ppm TDS (1417 $\mu$ S/cm), 500 mL
<b>2974826</b>	3,000 ppm TDS (3,960 $\mu$ S/cm), 50 mL pour-top
<b>2974849</b>	3,000 ppm TDS (3,960 $\mu$ S/cm), 500 mL

#### pH Buffer Solutions

<b>2283426</b>	pH 4.01 color-coded red buffer solution, 50 mL pour-top
<b>2283449</b>	pH 4.01 color-coded red buffer solution, 500 mL
<b>2283526</b>	pH 7.00 color-coded yellow buffer solution, 50 mL pour-top
<b>2283549</b>	pH 7.00 color-coded yellow buffer solution, 500 mL
<b>2283626</b>	pH 10.01 color-coded blue buffer solution, 50 mL pour-top
<b>2283649</b>	pH 10.01 color-coded blue buffer solution, 500 mL

### Replacement Parts

**HMPSENS** Replacement pH/ORP sensor for MP-6 and MP-6p meters



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Hach Company reserves the right to alter specifications to equipment at any time.

