Benchtop Ion Meter - Laboratory pH and ISE Meter with LCD - -2.000 to 20.000 pH - 7-Point ISE

Model **MSBEP-M400BSWISS** | Brand **Master Science**





The Master Science Benchtop Ion Meter is a button-operated pH and ion meter with a 7-inch high-resolution LCD. It measures pH from -2.000 to 20.000 with ±0.002 pH accuracy, ion concentration by ion-selective electrode, mV and temperature.

KEY HIGHLIGHTS

- pH and ions together
- Readable from a distance
- Locked results
- Electrode condition shown
- Splash resistant

AT A GLANCE

-2.000 to 20.000 pH PH RANGE	**-2000.00 to 2000.00 mV** MV RANGE
1E-9 to 9.999E9 ISE RANGE	**±0.002 pH** PH ACCURACY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

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Overview

pH takes up to five calibration points and ions up to seven. More than ten ion methods are stored, including fluoride, chloride, nitrate, ammonium, potassium, sodium, calcium and ammonia nitrogen, and four measuring modes are available for difficult samples.

Overview

- 1 to 5 point calibration with standard recognition
- Selectable buffer groups
- Automatic electrode diagnosis

Overview

- 1 to 7 point calibration
- Units from µg/L to mol/L and pX
- More than 10 built-in methods plus user-defined methods

Key Benefits

pH and ions together
the Master Science Benchtop Ion Meter handles both channels.

Readable from a distance
7-inch display.

Locked results
auto-hold at the end point.

Electrode condition shown
slope and offset after calibration.

Splash resistant
IP54 housing.

For touch-screen operation, see the Master Science benchtop pH/ion meter.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSBEP-M400BSWISS
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Parameters	pH, ISE, mV, pX, temperature
pH Range	**-2.000 to 20.000 pH**
pH Resolution	0.1, 0.01, 0.001 pH
pH Accuracy	**±0.002 pH**
pH Calibration	Up to 5 points; NIST, GB, DIN, USA, GOST and other buffer groups; custom standards
mV Range	**-2000.00 to 2000.00 mV**
mV Resolution / Accuracy	**1, 0.1, 0.01 mV / ±0.1 mV or ±0.03% of reading, whichever is greater**
pX	-2.000 to 20.000 pX; accuracy ±0.002 pX; up to 7 points
ISE Range	**1E-9 to 9.999E9**
ISE Units	mol/L, mmol/L, g/L, mg/L, µg/L, ppm, ppb
ISE Accuracy	**±0.3%; up to 4 significant digits; up to 7 calibration points**
ISE Modes	Direct reading, standard addition, sample addition, GRAN
Temperature	-10 to 135 °C (14 to 275 °F); resolution 0.1; accuracy ±0.1
Reading Modes	Auto read (fast, medium, slow), timed, continuous
Temperature Compensation	ATC and MTC
Inputs	pH electrode BNC (Q9); temperature probe 4-pin aviation connector
Auto Shutdown	1 to 60 min, or off
IP Rating	IP54
Power	AC adapter, 100-240 V AC input, DC 9 V output

DISPLAY & DATA

Data Storage	500 results per parameter, with GLP functions
Outputs	USB (PC); RS232 (printer)
Display	7.0-inch LCD with backlight

DIMENSIONS & WEIGHT

Dimensions	242 × 195 × 68 mm
Weight	900 g

COMMON PROBLEMS AND HOW THIS METER HELPS

Common Problems and How This Meter Helps	How the Master Science Benchtop Ion Meter supports routine ion analysis:
Two instruments for pH and ions	one meter measures both.
Interfering sample matrix	standard addition, sample addition and GRAN modes.
Readings taken before stabilising	auto-hold and locked prompt.
Hand-written logs	500-result memory with PC and printer output.

The Master Science Benchtop Ion Meter is used in

- **Health and disease control**
- **Environmental protection**
- **Agriculture and forestry**
- **Water quality analysis**
- **Scientific research and higher education**

General

- Auto, timed and continuous reading
- Automatic or manual temperature compensation
- USB and RS-232 communication
- Factory reset

Optional Accessories

- Ion-selective electrodes (required option, chosen by ion)