Benchtop pH/Ion Meter - Touch Screen ISE and pH Meter - -2.000 to 20.000 pH - ±0.002 pH Accuracy

Model **MSBEP-M500BSWISS** | Brand **Master Science**





The Master Science Benchtop pH/Ion Meter combines a high-accuracy pH channel with ion-selective electrode measurement, mV/ORP and temperature. pH is read from -2.000 to 20.000 with ±0.002 pH accuracy, and ion concentration from 1E-9 to 9.999E9 in the unit of choice.

KEY HIGHLIGHTS

- pH and ions on one meter
- Low detection limits
- Electrode health at a glance
- Flexible ion methods
- Organised results

AT A GLANCE

-2.000 to 20.000 pH PH RANGE	**-2000.00 to 2000.00 mV** MV/ORP 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

More than ten ion methods are built in, among them fluoride, chloride, bromide, iodide, nitrate, ammonium, potassium, sodium, calcium, copper, lead and silver, and users can define their own. A 7-inch colour touch screen manages users, calibrations, methods and data.

Overview

- 1 to 6 point calibration with standard recognition
- Selectable and customisable buffer groups
- Slope and offset display

Overview

- 1 to 6 point calibration
- Units from µg/L to mol/L, pX and ppm
- More than 10 built-in methods plus user-defined methods

Key Benefits

pH and ions on one meter
the Master Science Benchtop pH/Ion Meter covers both without a second instrument.

Low detection limits
ion-selective electrode method.

Electrode health at a glance
automatic diagnosis with slope and offset.

Flexible ion methods
direct, addition and GRAN modes.

Organised results
1000-set memory with user management.

For pH and ORP only, see the Master Science benchtop pH meter.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSBEP-M500BSWISS
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Parameters	pH, ISE, mV/ORP, 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 6 points; NIST, GB, DIN, USA, JIS and other buffer groups; custom standards; reminder; slope limit
mV/ORP Range	**-2000.00 to 2000.00 mV**
mV Resolution / Accuracy	**0.1, 0.01 mV / ±0.1 mV or ±0.03% of reading, whichever is greater**
ORP	EH mode; 1 custom calibration point (relative mV)
pX	-2.000 to 20.000 pX; accuracy ±0.002 pX; up to 6 points
ISE Range	**1E-9 to 9.999E9**
ISE Units	mol/L, mmol/L, g/L, mg/L, µg/L, ppm
ISE Accuracy	**±0.3%; up to 4 significant digits; up to 6 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
IP Rating	IP54
Power	AC adapter, 100-240 V AC input, DC 24 V output

DISPLAY & DATA	
Data Storage	1000 groups per parameter, with GLP and log functions
Outputs	USB 2.0 (flash drive, PC); RS232 (printer, scanner, auto-sampler)
Display	7.0-inch colour LCD touch screen with backlight

DIMENSIONS & WEIGHT	
Dimensions	220 × 195 × 68 mm
Weight	950 g

HOW THE MASTER SCIENCE BENCHTOP PH/ION METER SUPPORTS ION ANALYSIS	
Separate pH and ion instruments	one meter for both.
Matrix effects in direct reading	standard addition and GRAN modes.
Worn electrodes going unnoticed	slope and offset diagnosis.
Unit conversions by hand	selectable concentration units.

The Master Science Benchtop pH/Ion Meter is used in

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

General

- High-contrast colour touch screen
- Auto, timed and continuous reading
- Automatic or manual temperature compensation
- Data review, comparison and recalculation
- Factory reset

Optional Accessories

- Ion-selective electrodes (required option, chosen by ion): fluoride, chloride, bromide, iodide, nitrate, potassium, sodium, calcium, copper, lead, ammonium, ammonia, perchlorate, fluoroborate, cyanide, silver/sulfide, residual chlorine
- Reference electrodes for single ISEs