Benchtop Multi-Parameter Analyzer - pH EC ISE DO Water Quality Meter - 7-inch Touch Screen - IP54

Model **MSBEP-M500TSWISS** | Brand **Master Science**





The Master Science Benchtop Multi-Parameter Analyzer brings four measuring channels to one bench instrument: pH, conductivity, ion-selective electrode and dissolved oxygen. Derived values include mV/ORP, pX, resistivity, TDS, salinity and DO saturation, with temperature on every probe.

KEY HIGHLIGHTS

- One instrument, four channels
- Less bench space
- Consistent data handling
- Fewer calibration errors
- Ready for automation

AT A GLANCE

-2.000 to 20.000 pH / ±0.002 pH PH RANGE / ACCURACY	**0.000 µS/cm to 2000 mS/cm** CONDUCTIVITY RANGE
±0.5% FS; resolution from 0.001 µS/cm CONDUCTIVITY ACCURACY	**-10 to 135 °C (14 to 275 °F); resolution 0.1; accuracy ±0.1** TEMPERATURE

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

support@themsci.com
www.themsci.com

Scan to view online

Overview

A 7-inch colour touch screen shows the channels side by side and gives access to user, calibration, method and data management. Each parameter has its own memory of 1000 result sets, and data go out through USB or RS-232.

Overview

- 1 to 6 point calibration
- Customisable buffer groups
- Slope and offset diagnosis

Key Benefits

One instrument, four channels
the Master Science Benchtop Multi-Parameter Analyzer replaces separate pH, conductivity, ion and DO meters.

Less bench space
220 × 195 mm footprint.

Consistent data handling
one system for users, methods and records.

Fewer calibration errors
automatic recognition of pH buffers and conductivity standards.

Ready for automation
RS-232 link to printer, scanner or auto-sampler.

A hand-held alternative is the Master Science portable multi-parameter meter.

Technical Specifications

GENERAL

General	Specifications of the Master Science Benchtop Multi-Parameter Analyzer:
Brand	Master Science
Model Number	MSBEP-M500TSWISS
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Parameters	pH, conductivity, ISE, DO, temperature; mV/ORP, pX, resistivity, TDS, salinity, DO saturation
pH Range / Accuracy	**-2.000 to 20.000 pH / ±0.002 pH**
pH Resolution	0.1, 0.01, 0.001 pH
pH Calibration	Up to 6 points; NIST, GB, DIN, USA, JIS and other buffer groups; custom standards; reminder
mV/ORP	-2000.00 to 2000.00 mV; ±0.1 mV or ±0.03% of reading; EH mode
pX	-2.000 to 20.000 pX; ±0.002 pX; up to 6 points
ISE	1E-9 to 9.999E9; ±0.3%; up to 6 calibration points
ISE Units	mol/L, mmol/L, g/L, mg/L, µg/L, ppm
Conductivity Range	**0.000 µS/cm to 2000 mS/cm**
Conductivity Accuracy	**±0.5% FS; resolution from 0.001 µS/cm**
Conductivity Calibration	Up to 5 points; standards 10, 84, 500, 1413 µS/cm and 12.88 mS/cm recognised
Resistivity	5.00 Ω·cm to 100.00 MΩ·cm; ±0.5% FS
TDS	0.000 to 1000 ppt; ±0.5% FS
Salinity (NaCl)	0.0 to 80.0 ppt; resolution 0.1 ppt; ±1 ppt
Dissolved Oxygen (polarographic)	0.00 to 99.99 ppm; resolution 0.01 ppm; ±0.10 ppm to 50 ppm, ±0.50 ppm above
DO Saturation	0.0 to 600%; resolution 0.1%; ±2.0%
DO Compensation	Automatic barometric pressure; manual salinity factor
Temperature	-10 to 135 °C (14 to 275 °F); resolution 0.1; accuracy ±0.1
Reading Modes	Auto read (fast, medium, slow), timed, continuous
Inputs	pH BNC (Q9); DO probe 4-pin; conductivity probe 5-pin aviation connectors

GENERAL	
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

COMMON PROBLEMS AND HOW THIS ANALYZER HELPS	
Common Problems and How This Analyzer Helps	How the Master Science Benchtop Multi-Parameter Analyzer streamlines water analysis:
A row of single-purpose meters	four channels in one housing.
Results stored in different places	shared database with 1000 sets per parameter.
DO errors from pressure changes	automatic barometric compensation.
Manual transcription	USB and RS-232 output.

The Master Science Benchtop Multi-Parameter Analyzer is used in

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

Ion

- 1 to 6 point calibration
- Direct reading, standard addition, sample addition and GRAN modes
- More than 10 built-in methods plus user-defined methods

Conductivity

- 1 to 5 point calibration
- Settable cell constant, reference temperature, compensation coefficient and TDS factor
- None, linear or pure water compensation

Dissolved Oxygen

- Air-saturated water or zero oxygen calibration
- Automatic barometric compensation
- Pressure units kPa, mbar, Torr, atm

Optional Accessories

- Ion-selective electrodes (chosen by ion)