

500T Series Benchtop Meters



Large color touch screen
Easy operation and comfortable experience



Autosampler available
Make measurement more efficient



User management system



Multiple external devices available
PC, autosampler, printer, scanning gun, USB flash disk, etc

GENERAL FEATURES

- Color High contrast LCD touchscreen, 7.0 inches.
- Intelligent operation system provides features including user management, calibration management, method management, data management and etc.
- Multi-reading feature allows auto-read, timed-read and continuous-read.
- Automatic/Manual temperature compensation ensures accurate results.
- Data storage 1000 sets for each parameter (GLP-compliant).
- Data analysis feature helps user review, compare and recalculate results.
- Support for USB or RS-232 communication.
- Reset feature automatically resumes all settings back to factory default options.
- IP54 waterproof.
- Automation measurement.

pH

- 1-6 points calibration with standard recognition.
- Selectable pH buffer groups, including DIN, NIST, USA, MERK, JIS, GB.
- Support for pH standard group customization.
- Automatic electrode diagnosis with pH slope and offset display.

Conductivity

- 1-5 points calibration with standard recognition.
- Settable parameters, including cell constant, reference temperature (5/10/15/18/20/ 25°C), temperature compensation coefficient and TDS factor.
- Temperature compensation type (none, linear, pure water).

Ion

- 1-6 points calibration
- Selectable measurement unit, including µg/L, mg/L, g/L, mmol/L, pX, ppm, etc.
- Multi-measurement modes are supported, including Direct Reading mode, Standard Addition mode, Sample Addition mode and GRAN mode.
- Over 10 methods are built-in, including F⁻, Cl⁻, Br⁻, I⁻, NO₃⁻, BF₄⁻, NH₄⁺, K⁺, Na⁺, Ca²⁺, Cu²⁺, Pb²⁺, Ag⁺ and etc.; user-defined method is supported.

DO

- Support for air-saturated water or zero oxygen calibration.
- Auto barometric pressure compensation.
- Manual Salinity Factor Correction.
- Selectable pressure unit, including kPa, mbar, Torr, Atm.

Model		M500T	M500T-A	PH500T	EC500T	I500T	DO500T
Parameters (up to 12)		pH/EC/ISE/DO/Temp. (mV/ORP/pX/Resistivity/TDS/Sal./DO Saturation)	pH/EC/ISE/Temp. (mV/ORP/pX/Resistivity/TDS/Sal.)	pH/Temp. (mV/ORP)	EC/Temp. (Resistivity/TDS/Sal.)	pH/ISE/Temp. (mV/ORP/pX)	DO/Temp. (DO Saturation)
pH	Range	-2.000 to 20.000 pH	•	•	/	•	/
	Resolution	0.1, 0.01, 0.001pH	•	•	/	•	/
	Accuracy	±0.002 pH	•	•	/	•	/
	Calibration Points	Up to 6	•	•	/	•	/
	Standard Customization	Yes	•	•	/	•	/
	Calibration Reminder	Yes	•	•	/	•	/
	Standard Recognition	NIST,GB,DIN,USA,MERK,JIS buffers	•	•	/	•	/
	Slope Limit	Yes	•	•	/	•	/
mV/ORP	Range	-2000.00 to 2000.00 mV	•	•	/	•	/
	Resolution	0.1, 0.01 mV	•	•	/	•	/
	Accuracy	±0.1 mV or ±0.03 % of reading whichever is greater	•	•	/	•	/
	EH ORP Mode	Yes	•	•	/	•	/
	ORP Calibration Points	1 custom point (relative mV)	•	•	/	•	/
pX	Range	-2.000 to 20.000 pX	•	/	/	•	/
	Resolution	0.1, 0.01, 0.001 pX	•	/	/	•	/
	Accuracy	±0.002 pX	•	/	/	•	/
	Calibration Points	Up to 6	•	/	/	•	/
ISE	Range	1E-9 to 9.999E9	•	/	/	•	/
	Units	mol/L, mmol/L, g/L, mg/L, µg/L, ppm	•	/	/	•	/
	Resolution	Up to 4 significant digits	•	/	/	•	/
	Accuracy	±0.3 %	•	/	/	•	/
	Calibration Points	Up to 6	•	/	/	•	/
Conductivity	Range	0.000 µS/cm to 2000 mS/cm	•	/	•	/	/
	Resolution	0.001 µS/cm minimum; changed with range	•	/	•	/	/
	Accuracy	±0.5 % FS	•	/	•	/	/
	Reference Temperature	5, 10, 15, 18, 20, 25 °C	•	/	•	/	/
	Calibration Points	Up to 5	•	/	•	/	/
	Calibration Reminder	Yes	•	/	•	/	/
	Standard Recognition	10µS/cm, 84µS/cm, 500µS/cm, 1413µS/cm; 12.88mS/cm	•	/	•	/	/
Resistivity	Range	5.00Ω·cm ~ 100.00MΩ·cm	•	/	•	/	/
	Resolution	0.01Ω·cm minimum	•	/	•	/	/
	Accuracy	±0.5 % FS	•	/	•	/	/
TDS	Range	0.000 ~ 1000ppt	•	/	•	/	/
	Resolution	0.001ppm minimum; changed with range	•	/	•	/	/
	Accuracy	±0.5%	•	/	•	/	/
Salinity	Type	NaCl%	•	/	•	/	/
	Range	(0.00 ~ 8.00)%	•	/	•	/	/
	Resolution	0.01%	•	/	•	/	/
	Accuracy	±0.1%	•	/	•	/	/
Dissolved Oxygen Concentration	Sensor Type	Polarographic	/	/	/	/	•
	Range	0.00 to 99.99 mg/L	/	/	/	/	•
	Resolution	0.01mg/L	/	/	/	/	•
	Accuracy	±0.3mg/L (0.00 to 20.00 mg/L) ±10% (20.00 to 99.99 mg/L)	/	/	/	/	•
	Calibration Reminder	Yes	/	/	/	/	•
	Calibration Points	Air-saturated water or zero point	/	/	/	/	•
	Barometric Compensation	Yes	/	/	/	/	•
	Manual Salinity Factor Correction	Yes	/	/	/	/	•
% Saturation	Range	(0.0 to 600) %	/	/	/	/	•
	Resolution	0.10%	/	/	/	/	•
	Accuracy	±10.0%	/	/	/	/	•
Temperature	Range	-10 to 135 °C, 14 to 275 °F	•	•	•	•	•
	Unit	°C, °F	•	•	•	•	•
	Resolution	0.1	•	•	•	•	•
	Accuracy	±0.1	•	•	•	•	•
Measurement	Reading Mode	AutoRead(Fast, Medium, Slow), Timed, Continuous	•	•	•	•	•
	Reading Prompts	Reading, Stable, Locked	•	•	•	•	•
	Temp. Compensation	ATC, MTC	•	•	•	•	•
Data Management	Data Storage	1000 Groups	•	•	•	•	•
	GLP Features	Yes	•	•	•	•	•
	Log Management	Yes	•	•	•	•	•
Inputs	pH Electrode	BNC(Q9)	•	•	/	•	/
	Temp./DO Probe	4-pin aviation connector	•	•	/	•	•
	Temp./EC. Probe	5-pin aviation connector	•	/	•	/	/
Outputs	USB	USB 2.0 flash memory device, PC	•	•	•	•	•
	RS 232	printer, scanner, autosampler	•	•	•	•	•
Display Options	Backlight	Yes	•	•	•	•	•
	Auto Shut-down	1~60 min, off	•	•	•	•	•
	IP Rating	IP54	•	•	•	•	•
	Date and Time	Yes	•	•	•	•	•
General	Power	AC Adapter, 100-240 VAC input, DC24V output	•	•	•	•	•
	Dimensions	220 x 195 x 68 mm	•	•	•	•	•
	Weight	950g (2.09 lb)	•	•	•	•	•

• INCLUDED, / NONE