

M510T Multi-parameter Analyzer



Large color touch screen
Easy operation and comfortable experience



Method management
Various methods are built-in, available for methods customization



Support for Bluetooth



Assortment of accessories

GENERAL FEATURES

- Color High contrast LCD touchscreen, 4.3 inches.
- Intelligent operation system provides features including user management, calibration management, electrode management, method management, data management, Log Management and etc.
- Multi-reading feature allows auto-read, timed-read and continuous-read.
- Automatic/Manual temperature compensation ensures accurate results.
- Auto-hold feature senses and locks the measurement endpoint.
- Data Storage 1000 sets for each parameter (GLP-compliant).
- Data analysis feature helps user review, compare and recalculate results.
- Support for USB communication.
- Auto-power off feature effectively extends the battery service life.
- Reset feature automatically resumes all settings back to factory default options.
- IP65 waterproof. The portable meter is suitable for fields measurements and out door measurements.

pH

- 1-8 points calibration with Standard Recognition.
- Selectable pH buffer groups, including USA, NIST, DIN, GB, MERK, JIS.
- User-defined pH buffer or buffer group is supported.
- Automatic electrode diagnosis with pH slope and offset display.

Ion

- 1-6 points calibration.
- Selectable measurement unit, including µg/L, mg/L, g/L, mmol/L, pX, ppm, ppb, 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.

Conductivity

- 1-5 points calibration automatically recognizes the standard solutions.
- 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).

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	M510T
Parameters	pH/EC/ISE/DO/Temp. (mV/ORP/pX/Resistivity/TDS/Sal./DO Saturation)
pH	Range
	-2.000 to 20.000 pH
	Resolution
	0.1, 0.01, 0.001pH
	Accuracy
	±0.002 pH
	Calibration Points
mV/ORP	Up to 8
	Standard Customization
	Yes
	Calibration Reminder
	Yes
	Standard Recognition
	USA, NIST, MERK, JIS, GB and DIN buffers
pX	Slope Limit
	Yes
	Range
	-2000.00 to 2000.00 mV
	Resolution
	0.1, 0.01 mV
	Accuracy
ISE	±0.1 mV or ±0.03%
	EH ORP Mode
	Yes
	ORP Calibration Points
	1 custom point (relative mV)
	Range
	-2.000 to 20.000 pX
Conductivity	Resolution
	0.1, 0.01, 0.001 pX
	Accuracy
	±0.002 pX
	Calibration Points
	Up to 6
	Range
Resistivity	1.000e-9 to 9.999e+9
	Units
	mol/L, mmol/L, g/L, mg/L, µg/L, ppm, ppb
	Resolution
	Up to 4 significant digits
	Accuracy
	±0.3%
TDS	Calibration Points
	Up to 8
	Range
	0.000 µS/cm to 3000 mS/cm
	Resolution
	0.001 µS/cm minimum, various with range selection
	Accuracy
Salinity	±0.5% FS
	Reference Temperature
	5, 10, 15, 18, 20, 25 °C
	Calibration Points
	Up to 5
	Calibration Reminder
	Yes
Dissolved Oxygen Concentration	Standard Recognition
	10µS/cm, 84µS/cm, 500µS/cm, 1413µS/cm, 12.88mS/cm; 146.5µS/cm, 1408µS/cm, 12.85mS/cm, 111.3mS/cm
	Range
	5.00 Ω·cm~100.0 MΩ·cm
	Resolution
	0.01 Ω·cm minimum
	Accuracy
Saturation	±0.5% FS
	Range
	0.000 ppm~1000 ppt
	Resolution
	0.001ppm minimum, changed with range
	Accuracy
	±0.5% FS
Temperature	Range
	0.0 ~ 80.0 ppt
	Resolution
	0.1ppt
	Accuracy
	±1ppt
	Sensor Type
Measurement	Polarographic
	Range
	0.00 to 99.99 ppm
	Resolution
	0.01 ppm
	Accuracy
	±0.10ppm, 0.00~50.00ppm
Data management	±0.50ppm, 50.0~99.99ppm
	Calibration Reminder
	Yes
	Calibration Points
	Air-saturated water or zero point
	Barometric Compensation
	Yes
Inputs	Manual Salinity Factor Correction
	Yes
	Range
	(0.0 to 600.0)%
	Resolution
	0.10%
	Accuracy
Outputs	±2.0%
	Range
	-10 to 135 °C, 14 to 275 °F
	Unit
	°C, °F
	Resolution
	0.1
Display options	Relative Accuracy
	±0.1
	Reading Mode
	Auto Read (Fast, Medium, Slow), Timed, Continuous
	Reading Prompts
	Reading, Stable, Locked
	Temp. Compensation
General	ATC, MTC
	Data Storage
	1000 Groups
	GLP Features
	Yes
	pH Electrode
	BNC(Q9)
General	DO with Temp. Probe
	4-pin aviation connector
	Conductivity with Temp. Probe
	5-pin aviation connector
	USB
	USB 2.0 flash memory device, PC, scanner
	Backlight
General	Yes
	Auto Shutdown
	300, 600, 1200, 1800, 3600 sec., off
	IP Rating
	IP65
	Date and Time
	Yes
General	Power
	Rechargeable Lithium battery, AC Adapter, 100-240V AC input, DC5V output
	Dimensions
General	90×255×40 mm
	Weight
General	500g (1.1 lb)