

CMD510 Bench Conductivity Meter



The CMD510 is a Bench top conductivity meter which can measure up to 200mS over five ranges that are selected automatically. A separate TDS mode can also be selected to cover the range 0-200ppt.

This instrument is supplied with a rugged epoxy bodied conductivity cell with integral temperature sensor.

For conductivities above 200mS the unit can be fitted with a cell of constant $k=10$ which extends the range automatically to 2000mS.

Alternatively for applications such as the measurement of pure water, a cell of $k=0.1$ can be chosen to improve sensitivity at very low levels.

Key Features & Benefit

Multi-Parameter	toggle between Conductivity/temperature and, TDS/temperature at touch of buttons
Multi-Point Push-button Calibration (Up to 5 points for Conductivity/TDS)	Allows easy, quick calibration
Automatic or Manual Calibration	quick, easy calibration; use automatic mode with preset calibration points at most popular values or manually set values in the manual mode for more flexibility
Auto-Ranging for Conductivity/TDS measurements	Gives fast response and best resolution over wide measurement range
Adjustable TDS Factor	for more accurate measurement
User-Customization	for enhanced flexibility like selectable normalization temperature, temperature coefficient and cell constant, etc.
Expanded Memory	stores and recalls up to 50 data sets
Automatic Temperature Compensation (ATC)	Gives best accuracy under fluctuating temperatures
Hold Function	momentarily freezes reading for easy viewing and recording
Stability Indicator	prompts whenever reading stabilizes
Self-Diagnostic	with message codes for easy troubleshooting

APPLICATIONS

Routine Testing: For quick, accurate conductivity or TDS checks in laboratories, field and schools. Useful in hydroponics and agricultural industries.

Industrial: For checking metal finishing, cooling tower water, printing fountain solutions, boiler water, brines, drilling mud, rise tanks, ponds, pollution control, recirculating systems, waste water and industrial process systems.

Water Quality Testing: For analyzing water hard water, untreated water, drinking water, effluent water, pool water and incoming process water. Ideal for all types of quality assurance and water quality testing.

Specification

Conductivity Range	0 to 20.00, 200.0, 2000 μ S/cm; 20.00, 200 mS/cm
TDS Range	0 to 10.00, 100.0, 1000 ppm; 10.00, Max. 100 ppt (depending on factor setting)
Resolution	0.05% of Full Scale
Accuracy	\pm 1% Full Scale + 1 digit
Temperature Range	-10.0 to 110.0 $^{\circ}$ C (14.0 to 230 $^{\circ}$ F)
Resolution & Accuracy	0.1 $^{\circ}$ C & \pm 0.5 $^{\circ}$ C (0.9 $^{\circ}$ F)
Calibration for Conductivity	Automatic (single or multi-point up to 4 points) / Manual (up to 5 points)
Calibration for TDS	Manual (up to 5 points - 1 per range)
Normalization Temperature	15.0 to 30.0 $^{\circ}$ C
Cond. to TDS Conversion Factor	0.40 to 1.00 (selectable)
Cell Constant	0.1, 1.0 or 10.0 (selectable)
Temperature Coefficient	0.0 to 10.0 %/ $^{\circ}$ C (adjustable)
Memory	50 Data Sets
Special Functions	Auto-ranging; Auto-calibration, Auto-hold; Stability Indicator & Self-diagnostic
Power	9VDC, using AC adapters 110VAC or 220VAC, 50/60

Ordering Information

Code	Ref	Description
80-3001-34	CMD510	CMD510 Bench Conductivity Meter including CM7TB dip cell, mains adapter, electrode stand and instructions

For Spares and electrodes – Please refer to our [Electrochemistry Ordering Guide](#).