

MW170 MAX

Autoranging EC/TDS/NaCl/Temperature Laboratory Bench Meter

MW170 MAX is a compact and versatile bench meter that can measure up to four different parameters: EC, TDS, salinity (in PSU, g/L, percentage NaCl) and temperature. The main operating modes are setup, calibration, measurement and logging.

- Easy to read LCD display
- Auto-off feature to prolong battery life
- All measurements can be temperature compensated automatically (ATC), or manually (MTC) with a user-selectable compensation coefficient. Temperature compensation can be disabled (NO TC) if the actual conductivity value is required.
- The auto-ranging feature for both EC and TDS measurements automatically sets the most suitable resolution for the tested sample.
- Available log space for up to 1000 records. Logged data can be exported using a USB cable
- Dedicated GLP key to store and recall data on system status
- Built-in rechargeable battery with 8 hours battery life



Specifications		MW170 MAX
Range	EC	0.00 to 29.99 $\mu\text{S/cm}$; 30.0 to 299.9 $\mu\text{S/cm}$; 300 to 2999 $\mu\text{S/cm}$; 3.00 to 29.99 mS/cm ;
	TDS	30.0 to 200.0 mS/cm ; up to 500.0 mS/cm absolute conductivity*
	Salinity	0.00 to 14.99 mg/L (ppm); 15.0 to 149.9 mg/L (ppm); 150 to 1499 mg/L (ppm);
	Temp	1.5 to 14.99 g/L (ppt); 15.0 to 100.0 g/L (ppt); up to 400.0 g/L absolute TDS* (with 0.80 factor)
Resolution	EC	0.0 to 400.0 % NaCl; 2.00 to 42.00 PSU; 0.00 to 80.00 g/L
	TDS	-20.0 to 120.0 $^{\circ}\text{C}$ / -4.0 to 248.0 $^{\circ}\text{F}$
	Salinity	0.01 $\mu\text{S/cm}$; 0.1 $\mu\text{S/cm}$; 1.0 $\mu\text{S/cm}$; 0.01 mS/cm ; 0.1 mS/cm
	Temp	0.01 mg/L ; 0.1 mg/L ; 1.0 mg/L ; 0.01 g/L ; 0.1 g/L
Accuracy (@ 25 $^{\circ}\text{C}$ / 77 $^{\circ}\text{F}$)	EC	0.1% NaCl; 0.01 PSU; 0.01 g/L
	TDS	0.1 $^{\circ}\text{C}$ / 0.1 $^{\circ}\text{F}$
	Salinity	$\pm 1\%$ of reading ($\pm 0.05 \mu\text{S/cm}$ or 1 digit, whichever is greater)
	Temp	$\pm 1\%$ of reading ($\pm 0.03 \text{ ppm}$ or 1 digit, whichever is greater)
Calibration	EC/TDS	$\pm 1\%$ of reading
	Salinity	$\pm 0.5 \text{ }^{\circ}\text{C}$; $\pm 0.9 \text{ }^{\circ}\text{F}$
	Temp	Single cell factor calibration 6 standards: 84 $\mu\text{S/cm}$, 1413 $\mu\text{S/cm}$, 5.00 mS/cm , 12.88 mS/cm , 80.0 mS/cm , 111.8 mS/cm one-point offset: 0.00 $\mu\text{S/cm}$
	Temp	one-point with MA9066 Salinity calibration solution
Temp. Compensation	EC/TDS	2 points, 0 to 50 $^{\circ}\text{C}$ / 32 to 122 $^{\circ}\text{F}$
	Salinity	ATC – automatic, from -5 to 100 $^{\circ}\text{C}$ (23 to 212 $^{\circ}\text{F}$)
	Temp	MTC – manual, from -5 to 100 $^{\circ}\text{C}$ (23 to 212 $^{\circ}\text{F}$)
	Temp	No TC – without temperature compensation
Temp. Coefficient	EC/TDS	0.00 to 6.00 % / $^{\circ}\text{C}$ (EC & TDS only) Default value: 1.90 % / $^{\circ}\text{C}$
Probe	EC/TDS	MA814DB/1 4-ring probe with built-in temperature sensor (included)
TDS Factor	EC/TDS	0.40 to 0.80 Default value: 0.50
Log	EC/TDS	Maximum 1000 records; On demand, max. 200 samples; On stability, max. 200 samples
PC connectivity	EC/TDS	Interval logging, max. 1000 samples (max. 100 lots)
Environment	EC/TDS	1 micro USB port
Power supply	EC/TDS	0 to 50 $^{\circ}\text{C}$; max RH 95%
Battery life	EC/TDS	12 VDC adapter (included)
Packaging dimensions	EC/TDS	8 hours
Packaging weight	EC/TDS	335 x 120 x 255 mm
	EC/TDS	2.16 kg

(*) Absolute conductivity (or TDS) is the conductivity value without temperature compensation.

More accurate readings with the 4-RING MA814DB/1 EC/TDS/NaCl and Temperature probe!

Conductivity readings are performed by applying an alternate current to the 4-ring probe which creates a variable voltage depending on the conductivity.



Rear Connector Panel layout

Communication to the PC is done via a micro USB port.



Accessories

- MA814DB/1** EC/Temperature probe with DIN connector and 1 m cable
- MA9060** 12880 $\mu\text{S/cm}$ calibration solution, 230 mL bottle
- MA9061** 1413 $\mu\text{S/cm}$ calibration solution, 230 mL bottle
- MA9063** 84 $\mu\text{S/cm}$ calibration solution, 230 mL bottle
- MA9064** 80000 $\mu\text{S/cm}$ conductivity solution, 230 mL bottle

- MA9065** 111.8 mS/cm calibration solution, 230 mL bottle
- MA9066** 100% NaCl calibration solution, 230 mL bottle
- MA9069** 5000 $\mu\text{S/cm}$ solution, 230 mL bottle
- MA9310** 12 VDC Adapter, 220 V
- MA9311** 12 VDC Adapter, 110 V
- MA9315** Electrode holder
- MA9350** RS232 connection cable with 2 meters cable

Ordering Information

MW170 MAX is supplied complete with

- **MA814DB/1** EC/TDS/NaCl/Temperature Probe
- **MA9315** Electrode Holder
- **MA9310** 12 VDC Adapter
- Instruction manual