

Milwaukee conductivity meter mod. MW170

EC/TDS/NaCl/Temp Logging Bench Meter

The Milwaukee MW170 4-in-1 MAX EC/TDS/NaCl/Temp Bench Logging Meter is preferred by people testing samples in various applications. The easy-to-use logging feature allows data collection without messy notes and errors. From aquaculture, environmental, research to educators, the MW170 MAX is your meter for fast, accurate readings.

The MW170 MAX EC/TDS/NaCl/Temp. Bench meter offers:

ACCURACY

People choose the MW170 4-in-1 MAX EC/TDS/NaCl/Temp Bench Logging Meter to improve the accuracy of their testing program. With easy 1 point EC calibration, 6 standard buffer choices and 2 point temperature calibration, the meter can be quickly calibrated to a higher temperature accuracy compared to other meters and it provides more accurate temperature compensation readings than a one point calibration. The MW170 MAX Bench Meter is accurate to $\pm 1\%$ of reading for EC/TDS and NaCl.

The meter comes with MA814DB/1 (4 ring) conductivity probe with a built in temperature sensor allowing the meter to automatically adjust the EC/TDS/NaCl reading for the effect of temperature (ATC).

The meter can also be used as a very accurate thermometer with accuracy $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$)

TOUGHNESS

The rugged meter is built to take knocks and has a sleek design that includes a small benchtop footprint .

LOW MAINTENANCE

The Milwaukee MW170 MAX EC/TDS/NaCl/Temp Bench Logging Meter comes with the MA814DB/1 combination EC/Temp sensor. This EC probe was designed to be both low maintenance and able to withstand more challenging samples. The MA814DB/1 is ideal for use in horticulture, aquaculture, environmental labs, water treatment/conditioning and many other applications.

DESIGN FEATURES

- Fast easy to read results with large dual level digital LCD readout.
- Extreme accuracy to 1% of reading for EC/TDS/NaCl $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$).
- Extended auto-ranging feature for EC/TDS/NaCl.
- Lightweight, sleek design featuring a small benchtop footprint.
- Simple easy-to-use logging; manual log-on-demand or manual log-on-stability up to 1,000 records.
- Micro USB Port download functions.
- GLP data, date and time.
- Easy measurement: just place the probe in the sample, gently stir and wait for the reading to stabilize.
- Single cell factor calibration for EC/TDS/NaCl, automatic simple one point calibration and two point for temperature allowing increased accuracy.
- Rugged low maintenance, high performance, easy-to-clean EC/TDS/NaCl/Temp probe.
- Built in temperature sensor.
- Internal clock date to keep track of different time-dependent functions (calibration, timestamp, calibration time out).
- 3 feet probe cables for extra flexibility when testing.
- Includes MA9315 electrode holder, cables, adapter and probe.



CARE, USE AND CLEANING

EC meters usually start performing poorly because of problems with the sediment on the conductivity probe's rings. The dirty rings on the probe can change impedance. Cleaning the rings is simple. Slide the plastic shield off and clean with DI water and soft cloth to keep your readings accurate.

STORAGE

When not in use, store the meter and probe in a safe area to avoid damage. The EC probe is stored dry.

CALIBRATION

The MW170 MAX is easy 1 point EC/TDS/NaCl calibration for ease-of-use and two point temperature calibration for best accuracy in (ATC). Calibrating regularly is best to keep your PRO MW170 4-in-1 MAX Bench meter accurate for all your readings.

Technical data

EC Range:	0.00 to 29.99 $\mu\text{S}/\text{cm}$ / 30.0 to 299.9 $\mu\text{S}/\text{cm}$
EC Range:	300 to 2999 $\mu\text{S}/\text{cm}$
EC Range:	3.00 to 29.99 mS/cm / 30.0 to 200.0 mS/cm
EC Range:	up to 500 mS/cm absolute conductivity**
TDS Range:	0.00 to 14.99 ppm (mg/L)
TDS Range:	15,0 to 149,9 ppm (mg/L) / 150 to 1499 ppm (mg/L)
TDS Range:	1,50 a 14,99 g/l / to 15,0 a 100,0 g/l
TDS Range:	upt to 250.0 g/L absolute TDS**
TDS Range:	up to 400 g/L absolute TDS** (with 0.80 factor)
Salinity Range:	0.0 to 400.0% NaCl / 2.00 to 42.00 PSU
Salinity Range:	0.00 to 80.00 g/L
Temp. Range:	-20.0 to 120.00°C
EC Resolution:	0,01 $\mu\text{S}/\text{cm}$ / 0,1 $\mu\text{S}/\text{cm}$ / 1 $\mu\text{S}/\text{cm}$
EC Resolution:	0,01 mS/cm / 0,1 mS/cm
TDS Resolution:	0,01 ppm / 0,1 ppm / 1 ppm
TDS Resolution:	0,01 g/L / 0,1 g/L
Salinity Resolution:	0,1% NaCl / 0,01 PSU / 0,01 g/L
Temperature Resolution:	0,1°C
Accuracy at 25°C	
EC:	$\pm 1\%$ of reading / $\pm 0.05 \mu\text{S}/\text{cm}$ or 1 digit, whichever is greater
TDS:	$\pm 1\%$ of reading / $\pm 0.03 \text{ ppm}$ or 1 digit, whichever is greater
Salinity:	$\pm 1\%$ of reading
Temperature:	$\pm 0,5^\circ\text{C}$
Calibration	
EC/TDS:	single cell factor calibration, 6 standards: 84 $\mu\text{S}/\text{cm}$, 1413 $\mu\text{S}/\text{cm}$, 5.00 mS/cm , 12.88 mS/cm , 80.0 mS/cm , 111.8 mS/cm / one point offset: 0.00 $\mu\text{S}/\text{cm}$
Salinity:	one point with MA9066 salinity calibration solution

Temperature Compensation:	Temperature Compensation: Automatic or manual from -20 to 120°C (-4.0 to 248.0°F) or NO TC without temperature compensation
Conductivity temperature coefficient:	0.00 to 6.00 % / °C (EC and TDS only) Default value: 1.90 % / °C
TDS factor:	0.40 to 0.80 / Default value: 0.50
EC Probe:	MA814DB/1 4 ring
Temperature probe:	Built-in temperature sensor
Logging:	Maximum 1,000 log records (stored in up to 100 lots) / on demand, 200 logs on stability, 200 logs, interval logging 1000
PC Connectivity:	1 micro USB port
Power Supply:	12 VDC adapter (included)
Battery Type:	Internal
Battery life:	Approx. 8 hours of use
Environment:	0 to 50°C / 32 to 122°F; max RH 95%
Dimensions (HxWxD)	230 x 160 x 95 mm
Weight:	0,9 Kg
Warranty:	3 years meter

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

Code	Description
M6100170	Milwaukee conductivity meter mod. MW170 EC/TDS/NaCl/Temp Logging Bench Meter