

Autoranging EC/TDS/NaCl/Temperature Laboratory Bench Meter

- Years warranty 3
- LOG
- RS232
- USB
- ATC
- MTC
- Software CD
- Dual Display
- Self diagnostics
- GLP
- CE



Mi170 measures 4 different parameters - EC, TDS (Total Dissolved Solids), percentage of NaCl and temperature in a variety of ranges.

The auto-ranging feature for EC and TDS measurements automatically sets the resolution suitable to the tested sample. All measurements can be temperature compensated at 20 or 25°C and the compensation coefficient is selectable by the user.

The automatic temperature compensation can also be disabled for measuring the actual conductivity value. The stability indicator on the LCD ensures accuracy.

Conductivity readings are performed with the 4-ring probe supplied with the meter. The GLP feature allows users to store and recall data on system status.

PC compatible through an RS232 or USB port.

Specifications	Mi170	
Range	EC	0.00 to 29.99 µS/cm; 30.0 to 299.9 µS/cm; 300 to 2999 µS/cm; 3.00 to 29.99 mS/cm; 30.0 to 200.0 mS/cm; up to 500.0 mS/cm actual conductivity (uncompensated EC)*
	TDS	0.00 to 14.99 mg/L (ppm); 15.0 to 149.9 mg/L (ppm); 1.5 to 14.99 g/L (ppt); 15.0 to 100.0 g/L (ppt); up to 400.0 g/L actual TDS* (with 0.80 factor)
	NaCl	0.0 to 400.0%
	Temp	-20.0 to 120.0°C / -4.0 to 248.0°F
Resolution	EC	0.01 µS/cm; 0.1 µS/cm; 1.0 µS/cm; 0.01 mS/cm; 0.1 mS/cm
	TDS	0.01 mg/L; 0.1 mg/L; 1.0 mg/L; 0.01 g/L; 0.1 g/L
	NaCl	0.1%
	Temp	0.1°C / 0.1°F
Accuracy	EC	±1% of reading ±(0.05 µS/cm or 1 digit)
	TDS	±1% of reading ±(0.03 mg/L or 1 digit)
	NaCl	±1% of reading
	Temp	±0.4°C / ±0.8°F
Calibration	EC	1 point slope calibration with 6 memorized solutions (84.0 µS/cm, 1413 µS/cm, 5.00 mS/cm, 12.88 mS/cm, 80.0 mS/cm, 111.8 mS/cm)
	NaCl	1 point, with MA9066 calibration solution
Temp	2 points, 0 to 50°C / 32 to 122°F	
Temp. Compensation	automatic or manual, from -20.0 to 120.0°C / -4.0 to 248.0°F	
Temp. Coefficient	selectable from 0.00 to 6.00%/°C (EC and TDS only)	
Probe	MA814DB/1 4-ring probe with built-in temperature sensor (included)	
TDS Factor	0.40 to 0.80 (default value is 0.50)	
Logging	up to 50 records, LOG on demand or auto-logging	
GLP	last EC, NaCl calibration data	
PC Interface	RS232 / USB Opto-isolated	
Environment	0 to 50°C / 32 to 122°F; max RH 95%	
Power supply	12 VDC power adapter (included)	
Dimensions	230 x 160 x 95 mm	
Weight	0.9 kg	

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

Accessories

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|--|---|
| <b>MA814DB/1</b> EC/Temperature probe with DIN connector and 1 m cable | <b>MA9065</b> 111.8 mS/cm calibration solution, 230 mL bottle |
| <b>MA9060</b> 12880 µS/cm calibration solution, 230 mL bottle          | <b>MA9066</b> 100% NaCl calibration solution, 230 mL bottle   |
| <b>MA9061</b> 1413 µS/cm calibration solution, 230 mL bottle           | <b>MA9069</b> 5000 µS/cm solution, 230 mL bottle              |
| <b>MA9063</b> 84 µS/cm calibration solution, 230 mL bottle             | <b>MA9310</b> 12 VDC Adapter, 220 V                           |
| <b>MA9064</b> 80000 µS/cm conductivity solution, 230 mL bottle         | <b>MA9311</b> 12 VDC Adapter, 110 V                           |
|  | <b>MA9315</b> Electrode holder                                |
|  | <b>MA9350</b> RS232 connection cable with 2 meters cable      |
|  | <b>Mi5200</b> Application Software                            |

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 opto-isolated USB and RS232 ports.



Ordering Information

- Mi170 is supplied complete with
- MA814DB/1 EC/TDS/NaCl/Temperature Probe
  - MA9315 Electrode Holder
  - M10030 12880 µS/cm calibration solution
  - M10031 1413 µS/cm calibration solution
  - Mi5200 Application Software
  - MA9350 RS232 connection cable with 2 meters cable
  - MA9310 12 VDC Adapter
  - Instruction manual



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