

MARTINI Mi160 pH / ORP / ISE / Temperature Laboratory Bench Meter

This new pH/ORP/ISE/Temp bench meter is ideal for very accurate and precise measurements for all laboratory needs. It can perform ion-selective measurements directly in ppm, as well as pH, ORP and temperature measurements.

pH calibration can also be performed in 3 points selectable between 7 memorized buffers, to provide a very accurate calibration curve even when testing different samples, where very wide differences in pH can be found.

Thanks to the memory it can store up to 50 data sets for each range that can be downloaded to a PC via RS232 or USB. These instruments also have GLP features so, at any time, the user can recall the calibration data.

- 7 memorized buffers (pH 1.68, 4.01, 6.86, 7.01, 9.18, 10.01 and 12.45) for pH calibration
- pH calibration up to 3 points
- ISE calibration up to 2 points; six standard solutions available: 0.01, 0.1, 1, 10, 100, 1000 ppm
- Messages on the LCD to make the calibration easy and accurate
- Relative mV feature
- GLP feature, to view last calibration data for pH or ISE



Easy PC Compatibility

RS232 or USB communication interface allows readings to be downloaded to a serial port.



Rear Connector Panel layout

Communication to the PC is done via opto isolated USB and RS232 ports.

SPECIFICATIONS

pH Range	-2.00 to 16.00 pH
mV Range	±699.9 mV / ±1999 mV
ISE Range	0.001 to 19999 ppm
Temp Range	-20.0 to 120.0°C / -4.0 to 248.0°F
pH Resolution	0.01 pH
mV Resolution	0.1 mV / 1 mV
ISE Resolution	0.001 (0.001 to 9.999) ppm; 0.01 (10.00 to 99.99) ppm; 0.1 (100.0 to 999.9) ppm; 1 (1000 to 19999) ppm
Temp Resolution	0.1°C / 0.1 °F
pH Accuracy	±0.01 pH
mV Accuracy	±0.2 mV / ±1 mV
ISE Accuracy	±0.5% Full Scale
Temp Accuracy	±0.4°C / ±0.8°F
pH Calibration	1, 2 or 3 point-calibration, with 7 memorized buffers
ISE Calibration	1 or 2 point calibration, 6 standard solutions available
Temp Calibration	automatic, from -20.0 to 120.0°C / -4.0 to 248.0°F or manual, without temperature probe
pH Electrode	MA917B/1 (included)
Temperature Probe	MA831R (included)
PC Interface	RS232 / USB Opto-isolated
Environment	0 to 50°C / 32 to 122°F; max RH 95%
Input Impedance	1012 Ohm
Power supply	12 VDC power adapter (included)
Dimensions	230 x 160 x 95 mm
Weight	0.9 kg

ACCESSORIES

MA9001	pH 1.68 buffer solution, 230 mL bottle
MA9004	pH 4.01 buffer solution, 230 mL bottle
MA9006	pH 6.86 buffer solution, 230 mL bottle
MA9007	pH 7.01 buffer solution, 230 mL bottle
MA9009	pH 9.18 buffer solution, 230 mL bottle
MA9010	pH 10.01 buffer solution, 230 mL bottle
MA9012	Refilling solution for pH electrode, 230 mL bottle
MA9015	Electrode storage solution, 230 mL bottle
MA9016	Electrode cleaning solution, 230 mL bottle
MA9112	pH 12.45 buffer solution, 230 mL bottle
MA9310	12 VDC Adapter, 220 V
MA9311	12 VDC Adapter, 110 V
MA9315	Electrode Holder
MA917B/1	Glass body, double junction refillable pH electrode
MA921B/1	Double junction, gel filled ORP electrode with platinum sensor
MA831R	Temperature probe
MA9350	RS232 connection cable with 2 m cable
Mi5200	Application Software

ORDERING INFORMATION

Mi160 is supplied complete with:

- MA917B/1 Double junction refillable pH electrode
- MA831R Temperature Probe
- MA9315 Electrode Holder
- M 10004 pH 4.01 Sachet Buffer Solution
- M 10007 pH 7.01 Sachet Buffer Solution
- M 10010 pH 10.01 Sachet Buffer Solution
- M 10016 Sachet Electrode Cleaning Solution
- Mi5200 Application Software
- MA9350 RS232 connection cable with 2 meters cable
- Graduate Pipet, 12 VDC Adapter & Instruction manual