

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



- Years warranty **3**
- LOG
- ATC
- MTC
- Points **3**
- RS232
- USB
- Software CD
- GLP
- Dual Display
- Self diagnostics
- Memorized buffers **7**
- CE

| Specifications | Mi160 |
|--------------------------|--|
| Range | pH -2.00 to 16.00 pH mV ±699.9 mV / ±2000 mV ISE 0.001 to 19999 ppm Temp -20.0 to 120.0°C / -4.0 to 248.0°F |
| Resolution | pH 0.01 pH mV 0.1 mV / 1 mV ISE 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 0.1°C / 0.1°F |
| Accuracy (@20°C) | pH ±0.01 pH mV ±0.2 mV / ±1 mV ISE ±0.5% Full Scale Temp ±0.4°C / ±0.8°F |
| Rel mV offset | ±2000 mV |
| pH Calibration | 1, 2 or 3 point-calibration, with 7 memorized buffers |
| ISE Calibration | 1 or 2 point calibration, 6 standard solutions available |
| Temperature Compensation | 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) |
| Logging | up to 50 records, LOG on demand or auto-logging |
| Environment | 0 to 50°C / 32 to 122°F; max RH 95% |
| Input Impedance | 10 ¹² Ohm |
| Power Supply | 12 VDC power adapter (included) |
| Dimensions | 230 x 160 x 95 mm |
| Weight | 1.1 kg |

Accessories

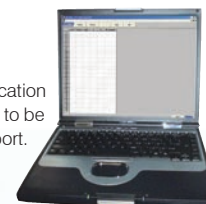
- MA9004** pH 4.01 buffer solution, 230 mL bottle
- MA9007** pH 7.01 buffer solution, 230 mL bottle
- MA9010** pH 10.01 buffer solution, 230 mL bottle
- MA9015** Electrode storage solution, 230 mL
- MA9016** Electrode cleaning solution, 230 mL
- MA9112** pH 12.45 buffer solution, 230 mL bottle
- MA831R** Temperature probe
- MA9310** 12 VDC Adapter, 220 V
- MA9311** 12 VDC Adapter, 110 V
- MA9315** Electrode Holder



- MA917B/1** Glass body, double junction refillable pH electrode
- MA924B/1** ±2000 mV Glass ORP electrode, refillable with BNC connector and 1 meter cable
- SE300** Platinum ORP electrode with 1 m cable
- MA9350** RS232 connection cable with 2 m cable
- Mi5200** Application Software

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.



Ordering Information

Mi160 is supplied complete with:

- **MA917B/1** Double junction refillable pH electrode
- **MA831R** Temperature Probe
- **MA9315** Electrode Holder
- **M10004** pH 4.01 Sachet Buffer Solution
- **M10007** pH 7.01 Sachet Buffer Solution
- **M10010** pH 10.01 Sachet Buffer Solution
- **M10016** Sachet Electrode Cleaning Solution
- **Mi5200** Application Software
- **MA9350** RS232 connection cable with 2 meters cable
- **MA9310** 12 VDC Adapter
- Graduate Pipet & Instruction manual