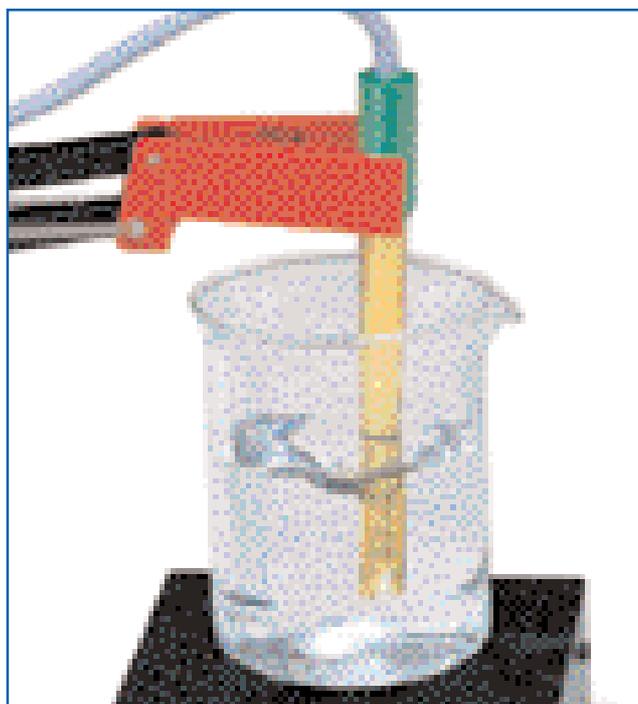




The new **HI 255** is the product of 26 years of instrument testing and design experience. It is the first laboratory bench meter to simultaneously perform precise, repeatable pH and conductivity measurements.

This meter was designed to satisfy the requests of many production and quality control laboratories that need quick multiple parameter measurement results with a single precision instrument.

The pH and conductivity circuits have been electrically separated, so that it is not necessary for the two probes to be simultaneously immersed in the same solution. The conductivity probe will not interfere with your pH measurements and the response of the pH electrode is immediately stable.



## Combined pH/mV and EC/TDS/NaCl Meter for Laboratories

HI 255 is a high performance instrument that measures within a wide range of multiple parameters. With this single laboratory bench meter you can perform pH, ORP, conductivity, TDS, NaCl percentage and temperature measurements.

pH measurements are automatically compensated for temperature, thanks to the external probe included with the instrument.

pH calibration is possible in 1, 2, or 3 points between the 5 available memorized buffers, to ensure a higher level of precision. EC measurements can be compensated according to a reference temperature of 20 or 25°C. The most suitable range of EC and TDS is automatically selected, and EC calibration can be performed at 1 point.

EC calibration can be chosen between 6 memorized buffers.

Thanks to the logging function, measurements are stored in non volatile memory, and can be downloaded to a PC through the RS232 serial port.

In addition to these features, HI 255 is rounded out with GLP features that store the calibration data of any measurement to be displayed upon request.

### Ordering Information

HI 255 is supplied complete with HI 1131B pH electrode, HI 76310 conductivity probe, HI 7662 temperature probe, HI 76404 electrode holder, pH 4 and pH 7 buffer solutions, HI 7071S electrolyte solution, 12 Vdc power adapter and instructions.

### Specifications

|                          |             | HI 255  |
|--------------------------|-------------|---|
| Range                    | pH/ORP      | -2.00 to 16.00 pH; -2.000 to 16.000 pH / ±699.9 mV; ±2000 mV  |
|                          | EC          | 0.00 to 29.99 µS/cm; 30.0 to 299.9 µS/cm; 300 to 2999 µS/cm   |
|                          | TDS         | 3.00 to 29.99 mS/cm; 30.0 to 200.0 mS/cm; up to 500.0 mS/cm actual EC*  |
|                          | NaCl        | 0.00 to 14.99 ppm; 15.0 to 149.9 ppm; 150 to 1499 ppm   |
|                          | Temperature | 1.50 to 14.99 g/L; 15.0 to 100.0 g/L; up to 400.0 g/L actual TDS*   |
| Resolution               | pH/ORP      | 0.01 pH; 0.001 pH/ 0.1 mV (±699.9 mV); 1 mV (±2000 mV)  |
|                          | EC          | 0.01 µS/cm; 0.1 µS/cm; 1 µS/cm; 0.01 mS/cm; 0.1 mS/cm   |
|                          | TDS         | 0.01 ppm; 0.1 ppm; 1 ppm; 0.01 g/L; 0.1 g/L   |
|                          | NaCl        | 0.1% NaCl   |
|                          | Temperature | 0.1°C   |
| Accuracy (@20°C)         | pH / ORP    | ±0.01 pH; ±0.002 pH/ ±0.2 mV (±699.9 mV); ±1 mV (±2000 mV)  |
|                          | EC          | ±1% of reading ±(0.05 µS/cm or 1 digit)   |
|                          | TDS         | ±1% of reading ±(0.03 ppm or 1 digit)   |
|                          | NaCl        | ±1% of reading  |
|                          | Temperature | ±0.4°C (excluding probe error)  |
| Relative mV Offset       |             | ±2000 mV  |
| Calibration (pH)         |             | automatic, at 1, 2 or 3 points, with 5 memorized buffers (pH 4.01, 6.86, 7.01, 9.18, 10.01)   |
| Calibration (EC)         |             | automatic, 1 point, with 6 memorized values (84.0 and 1413 µS/cm; 5.00, 12.88, 80.0 and 111.8 mS/cm)  |
| Calibration (NaCl)       |             | automatic, 1 point, with HI 7037L calibration solution  |
| Temperature Compensation |             | manual or automatic, -10.0 to 120.0°C (14 to 248°F) for pH; 0.0 to 60.0°C (32 to 140°F) for EC (can be disabled for measuring actual EC and TDS values) |
| Temperature Coefficient  |             | 0.00 to 6.00%/°C (EC and TDS only); default value: 1.90%/°C   |
| TDS Conversion Factor    |             | 0.40 to 0.80; default value: 0.50   |
| pH Electrode             |             | HI 1131B (included)   |
| EC Probe                 |             | HI 76310 (included)   |
| Temperature Probe        |             | HI 7662 (included)  |
| PC Connection            |             | RS232 opto-isolated serial port   |
| Data Logging             |             | 200 samples   |
| Input Impedance          |             | 10 <sup>12</sup> Ohm  |
| Power Supply             |             | 12 Vdc adapter (included)   |
| Environment              |             | 0 to 50°C (32 to 122°F); RH max 95%   |
| Dimensions / Weight      |             | 240 x 182 x 74 mm (9.4 x 7.2 x 2.9") / 1.1 kg (2.4 lb.)   |

\* with temperature compensation function disabled

### Accessories

|           |  |           |  |
|-----------|--|-----------|--|
| HI 1131B  | Refillable pH electrode with BNC connector       | HI 7030L  | 12880 µS/cm calibration solution, 500 mL bottle  |
| HI 76310  | 4-ring platinum sensor conductivity probe        | HI 7031L  | 1413 µS/cm calibration solution, 500 mL bottle   |
| HI 7662   | Temperature probe                                | HI 7033L  | 84 µS/cm calibration solution, 500 mL bottle     |
| HI 76404  | Electrode holder                                 | HI 7034L  | 80000 µS/cm calibration solution, 500 mL bottle  |
| HI 6004   | pH 4.010 buffer solution, 500 mL bottle          | HI 7035L  | 111800 µS/cm calibration solution, 500 mL bottle |
| HI 6007   | pH 7.010 buffer solution, 500 mL bottle          | HI 7037L  | Salinity (NaCl) standard solution, 500 mL bottle |
| HI 6010   | pH 10.010 buffer solution, 500 mL bottle         | HI 710005 | 115 Vac/12 Vdc power adapter                     |
| HI 77400P | pH 4 and pH 7 buffer sachets, 20 mL, 5 pcs. each | HI 710006 | 230 Vac/12 Vdc power adapter                     |
| HI 7071   | Electrolyte solution, 30 mL bottle, 4 pcs.       | HI 92000  | Windows® compatible software                     |
| HI 70300L | Electrode storage solution, 500 mL bottle        | HI 920010 | Serial cable for PC connection                   |

For a complete range of calibration, cleaning and maintenance solutions, see section F. For pH and ORP electrodes, see section E. For accessories, see section U.