

HI 2550

**pH/ORP/ISE/EC/TDS/NaCl Benchtop Meter**

- Up to seven measurement parameters
- Two input channels: pH/ORP/ISE and EC/TDS/Resistivity/NaCl
- Up to five point pH calibration with seven standard and two custom buffers
- EC/TDS autoranging, manual ranging and range lock
- HOLD button to freeze readings on the display
- Automatic Temperature Compensation (pH & EC)
- PC interface via USB



HI 2550 is a 2 channel instrument that measures up to 7 parameters. With this single laboratory bench meter you can measure pH, ORP, ISE, conductivity (EC), TDS, NaCl percentage and temperature.

Utilizing an external temperature probe, pH readings are automatically temperature compensated. To ensure a higher level of precision, pH calibrations are up to five calibration points, chosen from the seven available memorized buffers.

This instrument can measure using ORP electrodes (pH channel input), due to its capability to measure mV with a resolution up to 0.1 mV and also use ISE electrodes on the mV scale (pH channel input).

EC measurements can be compensated relative to a selected reference temperature. The EC calibration mode allows you to chose

from among six recognized conductivity standards and perform a single-point calibration. The most suitable EC and TDS range for your application is automatically selected. The HI 2550 also includes the ability to set and lock the range manually.

This instrument provides GLP capabilities that allows for the storage and retrieval of all data regarding pH, rel mV, EC and NaCl calibration and sample measurement as well as data regarding the maintenance and status of the electrode.

With a built-in logging function, measurements are stored in non volatile memory, and can be transferred to a PC through the USB port. Users can manually log up to 200 records and interval log up to 500 records.

SPECIFICATIONS		HI 2550
Range	pH	-2.0 to 16.0 pH; -2.00 to 16.00 pH; -2.000 to 16.000 pH
	ISE & ORP	±999.9 mV (ISE & ORP); ±2000 mV (ISE & ORP)
	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
	TDS	0.00 to 14.99 ppm; 15.0 to 149.9 ppm; 150 to 1499 ppm; 15.0 to 14.99 g/L; 15.0 to 100.0 g/L; up to 400.0 g/L actual* TDS (with 0.80 factor)
	NaCl	0.0 to 400.0% NaCl
	Temperature	-20.0 to 120.0 °C (pH, EC range)
	Resolution	pH
ISE & ORP		0.1 mV (±999.9 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/68°F		pH
	ISE & ORP	± 0.2 mV (±999.9 mV); ± 1 mV (±2000 mV)
	EC	± 1 % reading (±0.05 µS/cm or 1 digit, whichever greater)
	TDS	±1% of reading (±0.03 ppm or 1 digit, whichever greater)
	NaCl	±1% of reading
Temperature	± 0.4 °C (excluding probe error)	
Relative mV Offset		±2000 mV
pH Calibration		up to five point calibration, seven standard buffers available (1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 12.45), and two custom buffers
EC Calibration		two point calibration; one point slope calibration; six buffers available: 84.0, 1413 µS/cm; 5.00, 12.88, 80.0, 111.8 mS/cm; one point offset: 0.00 µS/cm
NaCl Calibration		one point with HI 7037L standard (optional)
Temperature Compensation		manual or automatic from: -20.0 to 120.0 °C (pH range) -20.0 to 120.0 °C (EC range) (can be disabled on conductivity range to measure actual conductivity)
Cond. Temp. Coefficient		0.00 to 6.00 %/°C (for EC and TDS only) default value is 1.90 %/°C
TDS Factor		0.40 to 0.80 (default value is 0.50)
pH Probe		HI 1131B glass body pH electrode with BNC connector and 1 m (3.3') cable (included)
Conductivity Probe		HI 76310 platinum four ring conductivity/TDS probe with built-in temperature sensor and 1 m (3.3') cable (included)
Temperature Probe		HI 7662 temperature probe with 1 m (3.3') cable (included)
Input Impedance		10 <sup>12</sup> ohms
PC Connectivity		opto-isolated USB
Log On Demand		200 records
Log Interval Feature		500 records; 5, 10, 30 sec and 1, 2, 5, 10, 15, 30, 60, 120, 180 min stability logging ("StAb")
Power Supply		12 VDC
Environment		0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions		235 x 218 x 108 mm (9.2 x 8.5 x 4.2")
Weight		1.3 Kg (2.9 lb); kit with holder 2.1 Kg (4.6 lb.)



**ORDERING INFORMATION**

HI 2550-01 (115V) and HI 2550-02 (230V) are supplied with HI 1131B pH electrode, HI 76310 conductivity/TDS probe, HI 7662 temperature probe, HI 76404N electrode holder, HI 70004 pH 4.01 buffer solution sachet, HI 70007 pH 7.01 buffer solution sachet, HI 7071S electrolyte solution (30 mL), 12 VDC adapter and instruction manual.

**ELECTRODES**

- HI 1131B** Glass body pH electrode with BNC connector and 1 m (3.3') cable
- HI 76310** Platinum, 4-ring conductivity/TDS probe with built-in temperature sensor and 1 m (3.3') cable
- HI 7662** Stainless steel temperature probe with 1 m (3.3') cable

**SOLUTIONS**

- HI 5004L** pH 4.01 buffer solution, 500 mL
- HI 5007L** pH 7.01 buffer solution, 500 mL
- HI 5010L** pH 10.01 buffer solution, 500 mL
- HI 7061L** Electrode cleaning solution, 500 mL
- HI 70300L** Electrode storage solution, 500 mL
- HI 7030L** 12880 µS/cm calibration solution, 500 mL
- HI 7031L** 1413 µS/cm calibration solution, 500 mL
- HI 7033L** 84 µS/cm calibration solution, 500 mL
- HI 7034L** 80000 µS/cm calibration solution, 500 mL
- HI 7035L** 111800 µS/cm calibration solution, 500 mL
- HI 7037L** Salinity standard solution, 500 mL

**ACCESSORIES**

- HI 76404N** Electrode holder
- HI 92000** Windows® compatible software
- HI 920013** USB cable for PC connection

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

For a complete list of Solutions and Electrodes, see the end of pH Section 3, ISE Section 4 and Conductivity Section 6.