

# Multiparameter Meter

pH/ORP/ISE and EC/TDS/Salinity



- **Five-point Calibration**
  - Up to five point pH calibration
- **Hold feature**
  - Hold button to freeze readings on the display
- **ATC**
  - Automatic temperature compensation for pH and EC
- **Connectivity**
  - PC interface via USB
- **Multiple input channels**
  - Two input channels: pH/ORP/ISE and EC/TDS/Resistivity/Salinity

## Dual-Channel, with Up to Seven Parameters

HI2550 is a dual-channel instrument that measures up to seven parameters. With this single laboratory bench meter you can measure pH, ORP or ISE, conductivity (EC), TDS or salinity, and temperature.

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

This instrument can take measurements using ORP electrodes (pH channel input), due to its capability to measure mV with a resolution up to 0.1 mV, as well as 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 choose 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 HI2550 also includes the ability to set and lock the range manually.

## Good Laboratory Practice

This instrument provides GLP capabilities that allow for the storage and retrieval of all data regarding pH, ORP, EC and salinity calibration and sample measurement as well as data regarding the maintenance and status of the electrode.

## Data Logging

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	HI2550	
pH**	Range	-2.0 to 16.0 pH; -2.00 to 16.00 pH; -2.000 to 16.000 pH
	Resolution	0.1 pH; 0.01 pH; 0.001 pH
	Accuracy	± 0.01 pH; ± 0.002 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
	Temperature Compensation	automatic or manual from: -20.0 to 120.0 °C
	Input Impedance	10 <sup>12</sup> ohms
ISE and ORP	Range	±999.9 mV; ±2000 mV
	Resolution	0.1 mV (±1000.0 mV); 1 mV (± 2000 mV)
	Accuracy	± 0.2 mV (±999.9 mV); ± 1 mV (±2000 mV)
Temperature**	Range	-20.0 to 120.0 °C (4.0 to 248.0°F)
	Resolution	0.1 °C (0.1°F)
	Accuracy	± 0.4 °C (excluding probe error)
EC	Range	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
	Resolution	0.01 µS/cm; 0.1 µS/cm; 1 µS/cm; 0.01 mS/cm; 0.1 mS/cm
	Accuracy	± 1 % reading (±0.05 µS/cm or 1 digit, whichever is greater)
	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
	Temperature Compensation	automatic or manual from -20.0 to 120.0 °C, or disabled
	Temperature Coefficient	0.00 to 6.00 %/°C (for EC and TDS only; default value is 1.90 %/°C)
TDS	Range	0.00 to 14.99 ppm; 15.0 to 149.9 ppm; 150 to 1499 ppm; 1.50 to 14.99 g/L; 15.0 to 100.0 g/L; up to 400.0 g/L actual* TDS (with 0.80 factor)
	Resolution	0.01 ppm; 0.1 ppm; 1 ppm; 0.01 g/L; 0.1 g/L
	Accuracy	±1% of reading (±0.03 ppm or 1 digit, whichever is greater)
	TDS Factor	0.40 to 0.80 (default value is 0.50)
Salinity	Range	0.0 to 400.0% NaCl
	Resolution	0.1% NaCl
	Accuracy	±1% of reading (excluding probe error)
	Calibration	one point with HI7037 standard (optional)
Additional Specifications	pH Electrode	HI1131B glass body pH electrode with BNC connector and 1 m (3.3') cable (included)
	EC Probe	HI76310 platinum four-ring EC/TDS probe and 1 m (3.3') cable (included)
	Temperature Probe	HI7662 temperature probe with 1 m (3.3') cable (included)
	Relative mV Offset Range	±2000 mV
	PC Connectivity	opto-isolated USB
	Log-on-demand	200 samples
	Interval Logging	500 records; 5, 10, 30 sec and 1, 2, 5, 10, 15, 30, 60, 120, 180 min stability logging
	Power Supply	12 VDC (included)
	Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
	Dimensions	235 x 222 x 109 mm (9.2 x 8.7 x 4.3")
Weight	1.3 Kg (2.9 lb); kit with holder 2.1 Kg (4.6 lb.)	
Ordering Information	<b>HI2550-01</b> (115V) and <b>HI2550-02</b> (230V) are supplied with HI1131B pH electrode, HI76310 EC/TDS probe, HI7662 temperature probe, HI76404N electrode holder, HI70004 pH 4.01 buffer solution sachet, HI70007 pH 7.01 buffer solution sachet, HI7082 3.5M KCL electrolyte solution (30 mL), 12 VDC adapter and instruction manual.	

(\*) Uncompensated conductivity (or TDS) is the conductivity (or TDS) value without temperature compensation.  
 (\*\*) Reduced to actual sensor limits

pH and ORP electrodes begin on page 2.87; pH and ORP solutions begin on page 2.110;  
 ISE electrodes and solutions begin on page 3.30; EC, TDS and salinity solutions begin on page 5.31