

HI 255

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



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.



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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 ¹² 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.