edge® EC

edge®EC–Innovation in a Single Parameter

edge EC's groundbreaking design is the culmination of Hanna's vision, design capabilities, integrated production and world class R&D. edge EC is a single meter that can measure EC, TDS, and salinity..

Additional feature information

- Digital four-ring conductivity probe
  - Covers all ranges from 0.00 µS/cm to 500 mS/cm (absolute EC)

- Accuracy
  - ± 1% of the reading (±0.05 µS/cm or 1 digit, whichever is greater)

- Calibration
  - Offset (0 µS/cm) and cell factor calibration
  - Choice of 5 standards (auto-recognition)

- Data logging
  - Manual log-on-demand
  - Manual log-on-stability
  - Interval logging

- GLP data
  - Records date, time, offset and cell factor
  - Data of the last performed calibration is stored in the probe: date, time, cell constant, temperature coefficient, reference temperature and battery status. When the probe is connected to edge®EC, GLP data is automatically transferred

- Auto-ranging or manual range selection

- EC, TDS and salinity reading modes

- Temperature compensation
  - Automatic
  - NoTC (absolute)

- Adjustable EC to TDS conversion factor

- Adjustable temperature correction coefficient

- Seawater salinity units
  - % NaCl
  - PSU
  - g/L

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edge®EC technical features

Rechargeable Battery

edge EC has a built in rechargeable battery that is charged when the meter is in the plugged in benchtop or wall mount cradle. The battery can also be recharged through the micro USB port with either a USB port from a computer or directly to the power supply.

Two USB ports

edge EC includes one standard USB for exporting data to a flash drive. edge EC also includes one micro USB port for exporting files to your computer as well as for charging when the cradle is not available.

Clear, full text readout

edge features clear, full text guides displayed on the bottom of the screen. There is no need to decipher scrambled abbreviations or symbols; these helpful messages guide you through every process quickly and easily.

Data logging

edge EC allows you to store up to 1000 log records of data. Logging data sets include readings, GLP data, date and time.

GLP

Data of the last calibration you perform is stored in the sensor including the date, time, and buffers used. When the sensor is connected to edge EC, GLP data is automatically transferred.

Two Operating Modes

edge EC can be used in Extended or Basic Operating Modes. Extended Mode enables all edge features while Basic Mode reduces features–ideal for routine measurements by displaying a simplified screen and features.

edge EC design features

Capacitive touch keypad

edge EC features sensitive capacitive touch buttons for accurate keystrokes when navigating edge's menus and screens. Since they are part of the screen, the buttons can never get clogged with sample residue.

Easy to read LCD

edge EC features a 5.5" (14 cm) LCD display that you can clearly view from over 5 m (16.4'). The large display, with its wide 150° viewing angle, provides one of the easiest to read LCDs in the industry.

Zero footprint

Using the wall mount cradle (included), edge EC can be placed on a wall, leaving zero footprint on the benchtop space. The cradle has a built-in connector to power and charge the batteries.

3.5 mm probe input

Plugging an electrode in has never been simpler; no alignments or broken pins, simply connect the 3.5 mm plug and begin. Digital electrodes are automatically recognized.

Sleek design

Incredibly thin and lightweight, edge measures just 1/2" (12 mm) thick and weighs just 8.8 ounces (250 g).

Accepts edge EC compatible conductivity probe

A hybrid meter that can be used in portable, wall-mount and benchtop configurations

The versatile design of edge®EC enables it to be used as a portable, wall-mount or benchtop meter. edge EC simplifies measurement, configuration, calibration, diagnostics, logging and transferring data directly to a computer or USB drive.

Portable field unit

edge EC is ideal for field use due to its light weight, large screen, and thin design. It can easily be slipped into a backpack or messenger bag. The battery life lasts up to 8 hours when used as a portable device.

Wall–mount cradle

The included wall–mount cradle makes it easy to conserve space on the benchtop while also charging edge EC with the AC adapter. The cradle is ideal for continuous monitoring applications.

Electrode holder with built-in cradle

The electrode holder features a swivel, adjustable arm with a built-in cradle to hold edge EC securely in place at the optimum viewing angle.

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Digital electrodes

edge®EC performs measurements through its unique digital electrodes. These digital electrodes are auto-recognized, providing sensor type, calibration data and a serial number when connected to edge EC by an easy to plug-in 3.5 mm connector.

Conductivity probe

HI763100 (included)
Conductivity probe with temperature sensor
Recommended for general purpose

Specifications		HI2003 edge EC
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 absolute EC**
	Resolution	0.01 µS/cm; 0.1 µS/cm; 1 µS/cm; 0.01 mS/cm; 0.1 mS/cm
	Accuracy (@25°C/77°F)	±1% of reading (±0.05 µS/cm or 1 digit, whichever is greater)
	Calibration	single cell factor calibration; six standards available: 84 µS/cm, 1413 µS/cm, 5.00 mS/cm, 12.88 mS/cm, 80.0 mS/cm, 111.8 mS/cm, one point offset: 0.00 µS/cm
	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 mg/L (ppm); 15.0 to 149.9 mg/L (ppm); 150 to 1499 mg/L (ppm); 1.50 to 14.99 g/L; 15.0 to 100.0 g/L; up to 400.0 g/L absolute TDS using 0.80 conversion factor**
	Resolution	0.01 mg/L (ppm); 0.1 mg/L (ppm); 1 (ppm); 0.01 g/L; 0.1 g/L
	Accuracy (@25°C/77°F)	±1% of reading (±0.03 ppm or 1 digit, whichever is greater)
	Calibration	through EC calibration
	TDS Factor	0.40 to 0.80 (default value is 0.50)
Salinity†	Range	0.0 to 400.0 % NaCl; 2.00 to 42.00 PSU; 0.0 to 80.0 g/L
	Resolution	0.1 % NaCl; 0.01 PSU; 0.01 g/L
	Accuracy (@25°C/77°F)	±1% of reading
	Calibration	PSU and g/L through EC calibration; % NaCl – one-point with HI7037 sea water standard
Temperature	Range*	-20.0 to 120.0°C; -4.0 to 248.0°F
	Resolution	0.1°C; 0.1°F
	Accuracy	±0.5°C; ±0.9°F
Additional Specifications	Probe	HI763100 digital four-ring conductivity probe with 3.5 mm (1/8") connector and 1 m (3.3') cable
	Logging	up to 1000† (400 for basic mode) records organized in: manual log-on-demand (max. 200 logs), manual log-on-stability (max. 200 logs), interval logging† (max. 600 samples; 100 lots)
	Connectivity	1 USB port for storage; 1 micro USB port for charging and PC connectivity
	Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
	Power Supply	5 VDC adapter (included)
	Dimensions	202 x 140 x 12 mm (7.9" x 5.5" x 0.5")
	Weight	250 g (8.82 oz.)
Ordering Information		**HI2003-01** (115V) and **HI2003-02** (230V) edge EC includes: HI763100 Conductivity probe, 1413 µS/cm conductivity standard sachets (4), 12880 µS/cm conductivity standard sachets (2), 5000 µS/cm conductivity standard sachets (2), electrode rinse solution sachets (2), benchtop docking station with electrode holder, wall-mount cradle, USB cable, 5 VDC power adapter, quality certificates and instruction manual.
		HI2003-03 includes the above without probe.

* temperature limits will be reduced to actual probe limits
** with temperature compensation function disabled
† standard mode only

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