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**Conductivity/TDS** 

edge®EC is thin and lightweight, measuring just 1/2" (12 mm) thick and weighing less than 9 ounces (250 g). edge<sup>®</sup>EC has an incredibly wide viewing angle, 5.5" (14 cm) LCD and a sensitive capacitive touch keypad.

edge®EC measures conductivity through its unique digital conductivity probe. The digital conductivity probe is auto-recognized, providing type, calibration data and a serial number when connected to edge®EC by an easy to plug-in 3.5mm connector. The versatile design of edge®EC enables it to be used as a handheld, benchtop or wall-mounted meter. edge®EC simplifies measurement, configuration, calibration, diagnostics, logging and transferring data directly to a computer or USB drive.

- 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
  - $\cdot~$  Offset (O  $\mu\text{S/cm})$  and cell factor calibration
  - Choice of 5 standards
- Auto-ranging or manual range selection
- EC, TDS and salinity reading modes
- Temperature compensation
  - Automatic
  - NoTC (absolute)
- GLP data
  - Records date, time, offset and cell constant value (K)
  - 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.
- Adjustable EC to TDS conversion factor
- Adjustable temperature correction coefficient



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





## edge<sup>®</sup> EC Technical Features

#### • 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 charging edge®EC when the cradle is not available.

Clear, full text readout

edge®EC 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. Data sets include readings, GLP data, date and time.

 Basic mode
 You can use edge®EC in Basic Mode–ideal for routine measurements for a simplified screen and features.

# Accepts edge®EC compatible conductivity probes

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## edge® EC Design Features

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#### Capacitive touch keypad

edge®EC features a capacitive touch keypad that gives a distinctive, modern look. Since the keypad is part of the screen, your buttons can never get clogged with sample residue. For faster scrolling, simply hold down the arrow keys.

#### Easy to read LCD

Specifications

edge®ECfeatures 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 provide one of the easiest to read LCD's 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 edge®EC and charge its batteries.

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

Specifications		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)	$\pm 1\%$ of reading $\pm (0.5\mu S$ 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, 118.8 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)**, with 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 (0.8 TDS Factor)
	Accuracy (@25°C/77°F)	$\pm 1\%$ of reading $\pm (0.03 \text{ ppm or } 1 \text{ digit}, \text{ whichever is greater})$
	Calibration	through EC calibration
	TDS Factor	0.40 to 0.80 (default value is 0.50)
Salinity <sup>†</sup>	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	one-point with HI7037 100% NaCl 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	Temperature Compensation	automatic -5.0 to 100.0°C (23.0 to 212.0°F); NoTC – none, absolute conductivity.
	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	one USB port for storage; one micro USB port for charging and PC connectivity
	Probe	HI763100 digital four-ring conductivity probe with 1/8"(3.5mm) connector and 1 m (3.3') cable
	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	<b>HI2003-01</b> (115V) and <b>HI2003-02</b> (230V) edge®EC includes: HI763100 Conductivity probe, 1413 μS/cm conductivity standard sachets (3), 12880 μS/cm conductivity standard sachets (3), benchtop docking station with electrode holder, wall-mount cradle, USB cable 5 VDC power adapter, quality certificate and instruction manual.	

## 3.5 mm probe input

are automatically recognized.



#### Portable field unit

edge®EC is ideal for field use due to its light weight, large screen and thin design. It can be slipped into a back pack or messenger bag. Up to 8 hours of battery life when used as a portable device.



#### • Wall mount cradle

The included wall mount cradle makes it easy to conserve space on the benchtop and can charge edge®EC with the AC adapter. 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.

instruments

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

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EC , TDS and salinity solutions begin on page 6.42