

# The world's most innovative pH, EC and DO meter

edge's groundbreaking design is the culmination of Hanna's vision, design capabilities, integrated production and world class R&D. The edge is rich in features to accommodate the needs of a vast amount of customers. For those that prefer very simplistic operation there is a basic mode operation with simplified menu and options while for those who require advanced features there is the full featured standard operating mode. edge is available as a pH, conductivity or dissolved oxygen kit and any edge kit can be upgraded with additional probes to measure pH, conductivity and dissolved oxygen.



# edge® technical features

#### Rechargeable Battery

edge 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 includes one standard USB for exporting data to a flash drive. edge 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 allows you to store up to 1000 log records of data. 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, GLP data is automatically transferred.

#### Two Operating Modes

edge 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 pH Features\*



## CAL Check™ (pH only)

Hanna's exclusive CAL Check feature analyzes the pH electrode response in the pH buffers during the calibration process to alert the user of potential problems such as a contaminated buffer or dirty electrode. After calibration, indicators for probe condition are displayed on the measurement screen. The probe condition is based on offset and slope characteristics of the pH electrode.

### Sensor Check™ (pH only)

When used with Hanna's electrodes equipped with a matching pin, edge constantly checks the impedance of the pH measuring electrode to notify you in real time in the event of glass breakage. During calibration, Sensor Check checks the state of the junction. The reference junction is also evaluated and reported on the display.

#### **ORP** Measurement

edge measures ORP with edge compatible ORP probes.

# edge design features



#### Capacitive touch keypad

edge 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 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 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.





# Hybrid meters that can be used in portable, wall-mount and benchtop configurations

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



#### Portable field unit

edge 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 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 securely in place at the optimum viewing angle.





# Digital electrodes

edge® measures pH, conductivity and dissolved oxygen through its unique digital electrodes. These digital electrodes are autorecognized, providing sensor type, calibration data and a serial number when connected to edge by an easy to plug-in 3.5mm connector.

• Simply connect each probe via the 3.5 mm jack, Digital Smart Electrodes are automatically recognized

- Digital four-ring conductivity probe
  - Covers all ranges from 0.00 µS/ cm to 500 mS/cm (absolute EC)
- Accuracy
  - $\pm$  1% of the reading ( $\pm$ 0.05  $\mu$ S/cm or 1 digit, whichever is greater)
- Calibration
  - · Offset (0 µS/cm) and cell factor calibration
  - Choice of five standards (auto-recognition)
- Data logging
  - · Manual log-on-demand
  - · Manual log-on-stability
  - Interval logging
- 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 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
- Adjustable EC to TDS conversion factor
- Adjustable temperature correction coefficient
- Seawater salinity units
  - % NaCl
  - · PSU
  - g/L

#### Sleek design

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

# All edge compatible pH, EC and dissolved oxygen digital probes are interchangeable with edge.

Specifications		HI2030 edge
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; μp 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	$0.00to14.99mg/L(ppm); 15.0to149.9mg/L(ppm); 150to1499mg/L(ppm); 1.50to14.99g/L; 15.0to100.0g/L; upto400.0g/LabsoluteTDSusing0.80conversionfactor^{**}$
	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 <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	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 (included in EC kit)	HI763100 digital four-ring conductivity probe with 3.5 mm (1/8") connector and 1 m (3.3') cable
	Logging	up to $1000^{\dagger}$ ( $400$ for basic mode) records organized in: manual log-on-demand (max. $200$ logs), manual log-on-stability (max. $200$ logs), interval logging $^{\dagger}$ (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 / Weight	202 x 140 x 12 mm (7.9" x 5.5" x 0.5") / 250 g (8.82 oz.)
Ordering Information	12880 µS/cm conductivity s	<b>D30-02</b> (230V) EC kit also includes: HI763100 Conductivity probe, 1413 μS/cm conductivity standard sachets (4), tandard sachets (2), 5000 μS/cm conductivity standard sachets (2), and electrode rinse solution sachets (2). and D0 digital probes are interchangeable with HI2030 and can be ordered separately.

