

## Multiparameter bench meter mod. EDGE HI 2040-02 kit DO

Edge® is thin and light, measures just 1 cm thick and is equipped with multiple functions capable of satisfying even the most demanding customers. For those who prefer to use edge® with simplified screens and functionalities there is the Basic Mode, ideal for routine measurements. For those who require advanced functionality, the full standard operating mode is available.

**Additional probes to measure pH or conductivity can be connected to the edge® HI2040 DO kit when needed.**

**Digital electrodes** edge® uses special digital electrodes, equipped with an integrated microchip. All sensors are automatically recognized by the instrument as soon as they are connected and send information on the calibration and serial number of the electrode to edge®. With a digital electrode it is possible to change the electrode, without having to perform a new calibration, since the calibration data is stored in the electrode and not in the instrument. This guarantees maximum flexibility for users who measure pH with more than one electrode.



### CAL Check

Hanna's unique CAL Check system analyzes the response of the pH electrode in the buffers during the calibration procedure, alerting the user to potential problems, such as contaminated buffers and the need to clean the electrode. After calibration, the display shows the response time and probe condition indicators. The "probe condition" indicator is based on the electrode offset and slope characteristics.

### 3.5 mm mini-jack connector

The connection of the electrodes has never been so practical, fast and safe. All edge® probes are equipped with a 3.5mm mini-jack digital connector, which makes sensor replacement really easy.

**Edge® is extraordinarily versatile. It can be used in different ways and environments, without taking up the space of a traditional bench instrument.**

### Wall support

edge® can be installed on the wall, using the special support supplied, thus freeing up valuable space on your workbench.

### Multifunctional bench stand

The supplied bench stand also functions as a recharging station and is equipped with an electrode holder with swivel arm.

**edge® is incredibly thin, measures just 1cm thick, has a battery life of 8 hours and features two USB ports.**

### Double USB port

edge® is equipped with a standard USB port for exporting data directly to a USB key and a second micro USB port for connection to a PC and for battery charging.

### Data storage

Storage of up to 1000 data. All readings include date, time and GLP information which can be transferred directly to USB memory or to PC (Windows or Mac).

### Two operating modes

edge can be used in "Extended" or "Basic" mode. With the extended mode all functions are available, while the basic mode reduces the number of functions, increasing ease of use. For example, in extended mode the calibration can be done at 5 points with 2 customizable values, while in basic mode it can be done at 3 points with 5 stored values.

**edge® HI2040-02 DO kit** is supplied complete with:  
bench stand with electrode stand,

wall bracket,  
 HI764080 DO probe,  
 HI7041S filling solution,  
 2 membranes with cap and o-ring,  
 USB cable,  
 power adapter,  
 quality certificate,  
 USB stick with manual in Italian.

## Technical data

<b>PH scale</b>	-2,000 to 16,000 pH, -2.00 to 16.00 pH, $\pm$ 1000 mV
<b>PH resolution</b>	0.001 pH, 0.01 pH, 0.1 mV
<b>PH accuracy</b>	$\pm$ 0.002 pH, $\pm$ 0.01 pH, $\pm$ 0.2 mV
<b>PH calibration</b>	5 points (Standard mode) 1.68, 4.01 (3.00 †), 6.86, 7.01, 9.18, 10.01, 12.45, and two customizable values; 3 points (Basic mode) 4.01; 6.86; 7.01; 9.18; 10.01
<b>PH Temperature Compensation</b>	ATC: from -5.0 to 100.0°C; 23.0 to 212.0 ° F *
<b>CAL Check pH</b>	Probe condition, response time, glass bulb and reference junction diagnostics (HI 11311 and HI 12301 only)
<b>EC scale</b>	from 0.00 to 29.99 $\mu$ S / cm; from 30.0 to 299.9 $\mu$ S / cm; from 300 to 2999 $\mu$ S / cm; from 3.00 to 29.99 mS / cm; from 30.0 to 200.0 mS / cm; up to 500.0 mS (absolute EC) **
<b>EC resolution</b>	0.01 $\mu$ S / cm, 0.1 $\mu$ S / cm, 1 $\mu$ S / cm, 0.01 mS / cm, 0.1 mS / cm
<b>EC accuracy</b>	$\pm$ 1% of reading ( $\pm$ 0.5 $\mu$ S / cm or 1 digit, whichever is greater)
<b>EC calibration</b>	1 offset point (probe calibration in air, 0.00 $\mu$ S / cm); 1 slope point with EC standard (84 $\mu$ S / cm, 1413 $\mu$ S / cm, 5.00 mS / cm, 12.88 mS / cm, 80.0 mS / cm and 118.8 mS / cm)
<b>TDS scale</b>	from 0.00 to 14.99 mg / l (ppm); from 15.0 to 149.9 mg / l (ppm); from 150 to 1499 mg / l (ppm); from 1.50 to 14.99 g / l; from 15.0 to 100.0 g / l; up to 400.0 g / l (TDS absolute **) with TDS conversion factor 0.8
<b>TDS Resolution</b>	0.01 ppm, 0.1 ppm, 1 ppm, 0.01 g / l, 0.1 g / l
<b>TDS accuracy</b>	$\pm$ 1% of reading ( $\pm$ 0.03 ppm or 1 digit, whichever is greater)
<b>TDS calibration</b>	Through EC calibration
<b>EC / TDS Temperature Compensation</b>	Automatic from 0.0 to 100° C or NoTC
<b>Temperature Correction Coefficient</b>	0.00 to 6.00% / °C (only for EC and TDS). The default value is 1.90% / °C
<b>EC / TDS Conversion Factor</b>	from 0.40 to 0.80
<b>Salinity scale (% NaCl)</b>	from 0.0 to 400.0% NaCl ***

<b>Salinity Resolution (% NaCl)</b>	0.1% NaCl
<b>Salinity Accuracy (% NaCl)</b>	± 1% of reading at 25 ° C
<b>Salinity Calibration (% NaCl)</b>	1 point with Standard HI 7037L
<b>Salinity Scale (PSU)</b>	from 2.00 to 42.00 PSU ***
<b>Salinity Resolution (PSU)</b>	0.01 PSU
<b>Salinity Accuracy (PSU)</b>	± 1% of reading
<b>Salinity Calibration (PSU)</b>	through EC calibration
<b>Salinity scale (ppt)</b>	0.0 to 80.0 g / l ****
<b>Salinity Resolution (ppt)</b>	0.01 g / l
<b>Salinity Accuracy (ppt)</b>	± 1% of reading at 25 ° C
<b>Salinity Calibration (ppt)</b>	through EC calibration
<b>Dissolved Oxygen Scale</b>	from 0.00 to 45.00 ppm (mg / l), from 0.0 to 300.0% saturation
<b>Dissolved Oxygen Resolution</b>	0.01 ppm (mg / l); 0.1% saturation
<b>Dissolved Oxygen Accuracy</b>	± 1.5% of reading or ± 1 digit
<b>Dissolved Oxygen Calibration</b>	1 or 2 points, at 0% (HI7040 zero oxygen solution) and 100% (in air)
<b>Dissolved Oxygen Temperature Compensation</b>	automatic from 0 to 50 °C; 32.0 to 122.0 ° F
<b>Salinity compensation</b>	0 to 40 g / l (resolution 1 g / l)
<b>Altitude compensation</b>	-500 to 4000 m (100 m resolution)
<b>Temperature scale</b>	-20.0 to 120.0 °C, -4.0 to 248.0 ° F
<b>Resolution Temperature</b>	0.1 ° C, 0.1 ° F
<b>Accuracy Temperature</b>	± 0.5 ° C, ± 0.9 ° F
<b>PH electrode</b>	HI11310 pH electrode (included)
<b>Registration Type</b>	Sample storage (max. 200 records); Manual with reading stability (max. 200 records); automatic storage at programmable intervals *** (Max. 600 records; 100 lots)
<b>Registration Memory</b>	Up to 1000 records in total
<b>Connection</b>	USB (for USB Key connection); micro-USB (for connection to PC)
<b>Display</b>	LCD
<b>Battery Type / Duration</b>	built-in rechargeable battery with a duration of up to 8 hours of continuous use
<b>power supply</b>	5 VDC adapter (included)
<b>Terms of Use</b>	from 0 to 50 ° C, RH max 95% without condensation
<b>Dimensions</b>	202 x 140 x 12.7mm (8 "x 5.5" x 0.5 ")
<b>Weight</b>	250 g (8.82 oz)
<b>Notes</b>	* the temperature range is limited to the working temperature of the specific probe / sensor used) ** with temperature compensation function disabled *** standard mode only † The buffer at pH 3.00 is visible only when using the specific electrode (HI10480) and replaces the value at pH 4.01

Code	Description
HI204002	Multiparameter bench meter mod. EDGE HI 2040-02 kit DO