

Complete Simplicity
Hach sensION+, an
all-in-one system with
guided menu navigation
makes general
electrochemistry testing
fast and simple. Each
system is designed to be
used in a wide variety of
applications and comes
complete with
everything you need to
start testing.

Features and Benefits

- sension[™] † PH3 provides customers with ease of use and high quality measurements at a competitive price.
- A simple model which meets all the requirements for routine measurements.
- Functional design with essential accessories for proper pH measurement.
- The magnetic stirrer offers precise and repeatable measurements everytime.

- The calibration flasks include stir bars and minimize consumption of buffers.
- More than 10 calibrations can be performed with only 40 ml of buffer.
- Other features: calibration in 1, 2 or 3 points and ORP/Redox calibration.
- User re-calibration warning and two measuring modes: by stability or continuous.

Recommended pH Electrodes

Common Characteristics of Electrodes

- High performance electrodes with encapsulated reference element and Ag+ ion barrier (except 5010T).
- All electrodes are combination type and include built in Pt 1000 temperature sensor.

LZW5010T.97.002: 5010T *Economical*, for general aqueous samples, low maintenance, non-refillable with gel electrolyte, plastic (PC body) and a ceramic junction. pH 0 to 14, Temp. 0°C (32°F) to 80°C (176°F)

LZW5011T.97.002: 5011T *Dirty samples and food applications*, for samples that include high solid content and/or viscous media, etc., low maintenance, non-refillable with polymer electrolyte, thick glass body and an open junction. pH 2 to 14, Temp. 0°C (32°F) to 80°C (176°F)

LZW5014T.97.002: 5014T *Universal and high performance*, for general aqueous samples, sulfurs, reducing sugars or applications that react with silver ions, refillable, thick glass body and 2 ceramic junctions. pH 0 to 14, Temp. -10°C (14°F) to 100°C (212°F)

LZW5021T.97.002: 5021T *For difficult samples*, for low ionic strength, colloidal, emulsions and cream samples, refillable, thick glass body and an open junction with a protective "clog-free" sleeve. pH 0 to 14, Temp. 0°C (32°F) to 60°C (140°F)





Specifications

Measured Parameters	рН	mV	Temperature
Range	-2.00 to19.99	±2000	-20.0 to150.0°C (-4.0 to 302.0°F)
Resolution	0.01	1	0.1°C (0.1°F)
Input accuracy (± 1 digit)	≤0.01	≤1	0.2°C (0.4°F)

Temperature Compensation

Automatic with Pt 1000 probe, NTC 10KOhm (A.T.C.) or manual.

pH Calibration

Automatic recognition of technical buffers, pH 2.00, 4.01, 7.00, 9.21 and 10.01 (values at 25°C)(77°F) With 1, 2 or 3 buffers selectable inside the range.

Programmable calibration validity between 0 h and 7 days.

Automatic rejection of electrodes in poor condition.

ORP/Redox Calibration

Automatic recognition of ORP/redox standard 220 mV at 25°C (77°F).

Languages

English, German, Spanish, French, Italian and Portuguese.

Display

Graphic, backlit liquid crystal, 128x64 dots.

Connectable Sensors

Combined or indicator electrode, BNC connector (Imp. $>10^{12}\Omega$).

Reference electrode, banana connector.

A.T.C. type Pt 1000, banana or telephonic connector.

Connectable Peripherals

Magnetic stirrer.

Directives Low Voltage and EMC

According to 2004/95/EC. According to 2004/108/EC

Power Supply

External power supply 100-240 V, 0.4 A, 47-63 Hz, with plug adapters.

Materials

Enclosure, ABS and PC. Keypad, PET.

Physical Parameters

Weight: 800 g. Size: 350 x 200 x 110 mm.

How To Order

LPV2000.97.0002 pH-meter SensION+ pH31 with accessories.

LPV2010T.97.002 Kit: pH-meter SensION+ pH31, accessories and electrode + temp. sensor 5010T LPV2011T.97.002 Kit: pH-meter SensION+ pH31, accessories and electrode + temp. sensor 5011T. LPV2014T.97.002 Kit: pH-meter SensION+ pH31, accessories and electrode + temp. sensor 5014T LPV2021T.97.002 Kit: pH-meter SensION+ pH31, accessories and electrode + temp. sensor 5021T

Included Accessories

- Magnetic stirrer
- Calibration flasks with magnetic stirring bar
- Sensor holder
- User manual
- Solutions: pH 4, pH 7, pH 9 and KCl

At Hach, it's about learning from our customers and providing the right answers. It's more than ensuring the quality of water— it's about ensuring the quality of life.

When it comes to the things that touch our lives... Keep it pure.

Make it simple.

Be right.

For current price information, technical support, and ordering assistance, contact the Hach office or distributor serving your area.

In the United States, contact:

HACH COMPANY World Headquarters

P.O. Box 389

Loveland, Colorado 80539-0389

U.S.A.

Telephone: 800-227-4224 Fax: 970-669-2932 E-mail: orders@hach.com

www.hach.com

U.S. exporters and customers in Canada, Latin America, sub-Saharan Africa, Asia, and Australia/New Zealand, contact:

HACH COMPANY World Headquarters

P.O. Box 389

Loveland, Colorado 80539-0389

U.S.A.

Telephone: 970-669-3050 Fax: 970-461-3939 E-mail: intl@hach.com

In Europe, the Middle East, and Mediterranean Africa, contact:

HACH LANGE GmbH Willstätterstraße 11 D-40549 Düsseldorf GERMANY

Tel: +49 (0) 211 5288-0 Fax: +49 (0) 211 5288-143 E-mail: info@hach-lange.de www.hach-lange.com



