

sensION™+ MM340
 Benchtop Multi-Parameter Meter



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™+ MM340** is an outstanding multi-parameter pH and ion-meter, perfect for research laboratories.
- It provides two measuring channels for pH / ORP/redox / I.S.E. and option for two magnetic stirrers.
- Up to four ion selective calibration curves per channel. Calibration with 2-5 standards.
- Several calibration modes: with automatic recognition of 3 buffer groups, at a determined pH value, etc.
- Automatic buffer recognition: technical DIN 19267, DIN 19266 and up to 3 buffers chosen by the user.
- Data logger-Storage of up to 330 measurements per channel.
- Includes RS 232 C connectivity for printer or PC and connection for external PC, keyboard or barcode reader.

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, polymer body and a ceramic junction. pH 0 to 12, 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)



Be Right™

Specifications

	Measured Ranges	Resolution	Input Accuracy (± 1 digit)
pH	-2.00 to 19.99	0.1/0.01/0.001	≤ 0.002
mV	± 2000	0.1/1	≤ 0.2
ISE	10^{-6} M to 10^{-1} M	programmable	-
Temp.	-2.0 to 150.0°C (-4.0 to 302.0°F)	0.1°C (0.1°F)	$\leq 0.2^\circ\text{C}$ (0.4°F)

Temperature Compensation Automatic with Pt 1000 temp. probe (A.T.C.) or NTC 10 KOhm. Programmable isopotential pH, standard value at pH 7.00.

pH Calibration Technical buffers DIN 19267: pH 2.00, 4.01, 7.00, 9.21 and 10.01 (values at 25°C) (77°F). DIN 19266 buffers: 1.679, 4.006, 6.865, 7.000, 9.180, 10.012 and 12.454 at 25°C (77°F).

Specific user's buffers.

With 1, 2 or 3 buffers selectable inside the range.

Calibration at any pH value (indirect calibration).

Manual introduction of the calibration parameters.

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).

Calibration at any mV value.

ISE Calibration 2-5 programmable standards.

Selectable calibration units: mol/L, M, mmol/L, mM, $\mu\text{mol/L}$, g/L, mg/L, ppm and %

Up to 4 calibration curves per channel.

Temperature Readjustment Correction of the temp. probe deviation (A.T.C.) at 25°C (77°F) and 85°C (185°F).

Data Logger Storage capacity up to 330 readings per channel.

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

Display Graphic, backlit liquid crystal, 128 x 64 dots.

Connectable Sensors 2 combined or indicator electrodes, BNC connector (Imp. $>10^{12}\Omega$). 2 Reference electrodes, banana connector.

A.T.C. type Pt 1000, NTC 10KOhm, banana or telephone connector.

Connectable Peripherals

2 magnetic stirrers.

Printer or PC, external PC keyboard or barcode reader.

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 adapter

Materials Enclosure, ABS and PC. Keypad, PET with protective treatment.

Physical Parameters Weight 1100 g. Size 350 x 200 x 110 mm.

How To Order

LPV2200.97.0002 pH-meter SensION+ MM340 with accessories

LPV2210T.97.002 Kit: pH-meter SensION+ MM340, accessories and electrode + temp. sensor **5010T**

LPV2211T.97.002 Kit: pH-meter SensION+ MM340, accessories and electrode + temp. sensor **5011T**

LPV2214T.97.002 Kit: pH-meter SensION+ MM340, accessories and electrode + temp. sensor **5014T**

LPV2221T.97.002 Kit: pH-meter SensION+ MM340, accessories and electrode + temp. sensor **5021T**

Included Accessories

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

Other Accessories:

LZW8201 Thermal printer of 40 columns, interface RS.

LZW8200 Impact printer of 40 columns, interface RS.

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