Laboratory pH-meter

CA 10101E

Laboratory pH-meter

- ✓ Compatible with **Regressi**, **Graph2D** and **DLT** via **USB port**
- ✓ Compatible with **CAEx interfaces**
- ✓ Storage of **100,000** measurements
- ✓ Ideal for **fixed and mobile measurements**
- ✓ **Rugged** and **modern**

TARGET MARKETS

Education: priority market

Secondary education: mainly high schools. For the general and technological/scientific sections (e.g. STL, STI2D, ST2S). may also be proposed in middle schools.

Higher education: Universities (Bachelor's, Master), IUT (BUT) technological colleges, high schools (CPGE and BTS), Engineering schools. In general terms, any establishments proposing a scientific syllabus such as Chemistry, Physics, Life Sciences, Biology, Biotechnologies, Engineering, Health, Pharmacy, Environment, Agri-food, etc.

pH-meters are used during **Practical Exercises**. In these Practicals, the students perform scientific experiments.

Analogue outputs: enable connection to CA Ex (Computer Assisted Experimentation) interfaces. A CAEx interface is a unit connected to a PC and to sensors (pH-meter, conductivity meter, thermometer, oxygen analyser, etc.). These allow users to acquire and process the experimental data. They are sometimes accompanied by specific software which create a virtual laboratory for the student.

Regressi and Graph2D: educational software. In particular, they can be used to acquire and process experimental data. The pH-meter can be hooked up to these software products (1 at a time!) which record the values measured. Students can then process these values (as a curve, for example).

Data Logger Transfer (DLT): can be used to recover the saved measurements, configure the instrument and program the recordings.

Any activities not requiring the industrial range's IP 67 protection: secondary market

Academic research laboratories
Public and industrial R&D laboratories
Regulatory test laboratories

Sectors: agri-food, environment, agriculture, drinking water, chemicals industry, cosmetics, biotechnology, etc.

TARGET USERS

Teachers, students, researchers, engineers, technicians, chemists, etc.

COMPETITIVE ADVANTAGES

- ✓ Compatible with **Regressi** and **Graph2D** via **USB** port.
- ✓ Compatible with **CAEx** interfaces via the **analogue outputs**.
- ✓ Compatible with **Data Logger Transfer** (programmable recordings).
- ✓ Automatic or manual storage of **100,000 time/date-stamped measurements**.
- ✓ Micro USB port for **transfer onto computer**.
- ✓ Extra-wide multi-display **LCD screen**: clear display for easy reading of values.

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- ✓ **Guided** calibration (up to 3 points for pH) with a **customizable** list of buffer solutions.
- ✓ **Shockproof** sheath, **backlighting**.
- ✓ Made in **France**, **eco-design**.

SPECIFICATIONS

Measurement range	pH	-2.00 to 16.00 pH
	Redox	±199.9 mV / -1999 to -200 and 200 to 1999 mV
	Temp	-10.0 to +120.0°C / 14.0 to 248.0°F
Resolution (R)	pH	0.01 pH
	Redox	0.1mV / 1mV
	Temp	0.1 °C / 0.1 °F
Intrinsic uncertainty (instrument without probe)	pH	±0.02 pH
	Redox	±0.2mV / ±2mV
	Temp	±0.4 °C / ±0.7 °F
Calibration	pH	Automatic, up to 3 points, 3 predefined, modifiable reference groups
	Redox	Automatic, 1 point, 2 predefined, modifiable reference values
Electrode	pH	**NOT SUPPLIED**
	Redox	**NOT SUPPLIED**
T°C compensation	Automatic (ATC) or manual (MTC), -10 to 120°C / 14 to 248 °F	
Data storage	100,000 measurements	
Batteries / battery life	4 x 1.5 V AA or LR6 alkaline batteries / ~200h use	
Sensor input	BNC (pH and redox electrode) 2 mm banana (reference electrode) Jack (Pt1000 temperature probe)	
Communication interface	Type-B micro-USB (also used for power supply) Analogue output for pH or Redox (2 x 4 mm banana)	
Dimensions (with sheath)	211x127x54 mm	
Weight	600 g (with batteries)	
Environmental conditions	Storage: -20 to +70°C Operation: -10 to +55 °C	
Warranty	3 years	

STATE AT DELIVERY

The **CA 10101E pH-meter** is delivered in a cardboard box with:

1) 1 protective sheath mounted on the instrument
2) 4 x AA or LR6 alkaline batteries
3) 1 USB-mains adapter
4) 1 USB – micro USB cable
5) Bilingual Quick Start Guide
6) Verification certificate

The electrodes and probes are not supplied with the instrument.

TO ORDER

CA 10101E laboratory pH-meter……P01710011

Accessories

Comb. pH electrode (PVC)……..XRV1H-BNC
Comb. Redox electrode (PVC)…….XRPT1-BNC
Comb. Argentometry electrode (glass)…….BRAG1-BNC
pH electrode (PVC)……....XV41-BNC
Redox electrode (PVC)……XPT1-BNC
Ag/AgCl ref. electrode (glass)……..…BR41-BA2
Hg2Cl2/Hg ref. electrode (glass)....……BR42-BA2
Temperature sensor (Pt1000)……....P01710070
pH4.01 buffer solution (NIST)** P01700106
pH7.00 buffer solution (NIST)** P01700107
pH10.01 buffer solution (NIST)** P01700109
pH4.005 buffer solution (Cofrac)***.....P01700101
pH6.865 buffer solution (Cofrac)***.....P01700102
pH9.180 buffer solution (Cofrac)***.....P01700103
220 mV ORP buffer solution ..…….....P01700114
468mV ORP buffer solution.....P01700115
Set of 3 plastic beakers.....……..P01710056

Replacement parts

Shockproof sheath.....P01710050
USB-µUSB cable & mains adapter..…P01654023

Note: the NIST solutions are conditioned in 125 ml vials. The Cofrac solutions are conditioned in single-does 25 ml vials (sold in packs of 10).

*** Delivered with a quality certificate guaranteeing compliance with the NIST and DIN 19266 standards*
**** Delivered with a Cofrac certificate*

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