



Connectable PC.



Thermal or dot matrix printer. Optional.

Electrode holder.
With groove for cable,
protecting it from breakage.

Holes for a sensor's protector
or a spare electrode.

Large graphic display.
It speaks for itself.

Integrated
magnetic
stirrer.

Calibration flasks with
magnetic stirring bar.

Industrial quality,
easy-to-use keypad.

PC keyboard.
Optional.



GLP 21 is the most complete laboratory pH-meter, with resolution selectable from 0.1, 0.01 to 0.001 pH. Interface RS 232 C for printer or PC. Measuring reports in "reduced" or "complete" (GLP) format.

Several calibration modes: with automatic recognition of 3 buffer groups, at a determined pH value, etc. Automatically recognised buffers: technical DIN 19267, DIN 19266 and up to 3 buffers freely chosen by the user.

Determination of the electrode's isopotential, important for pH measurements at high temperatures. Possibility of temperature re-adjustment... Limits for maximum and minimum pH value... Data Logger for 400 measurements...

ComLabo Software optional. For bidirectional communication with a PC and to interconnect CRISON modules. It allows automating processes such as measuring pH with an automatic sample changer.

Authorised CRISON dealer:

Sample changer
Optional.



pH-Meter GLP 21. Specifications



Measured parameters	pH	mV	Temp.
Range	-2...16	± 2000	-20...150°C (-4...302°F)
Resolution	0.1/0.01/0.001	0.1/1	0.1°C (0.18°F)
Measuring error (± 1 digit)	≤ 0.005	≤ 0.5	≤ 0.2°C (0.36°F)
Reproducibility (± 1 digit)	± 0.001	± 0.1	± 0.1°C (0.18°F)

Automatic temperature compensation

Manual entrance or with Pt 1000 temperature probe (A.T.C.).
Programmable isopotential pH, standard value 7.00.

pH calibration

Technical buffers DIN 19267: 2.00, 4.01, 7.00, 9.21 and 10.90 (25 °C) (77 °F).

DIN 19266 buffers: 1.679, 4.006, 6.865, 9.180 and 12.454 (25 °C) (77 °F).

Specific user's buffers.

With 1, 2 or 3 buffers selectable from 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.

mV calibration

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

Calibration at any mV value.

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 400 readings.

Languages

Spanish, Italian, French, English and Catalan.

Display

Graphic, backlit liquid crystal, 128 x 64 dots.

Connectable sensors

Combined or indicator electrode, BNC connector (Imp. >10¹²Ω).

Reference electrode, banana connector.

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

Connectable peripherals

CRISON magnetic stirrer.

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 plug-in power supply 220VCA/12 VDC, 3.3 W.

Materials

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

Physical parameters

Weight: 1100 g. Size: 350 x 200 x 110 mm.

Specifications subject to change without notice.



Recommended pH electrodes

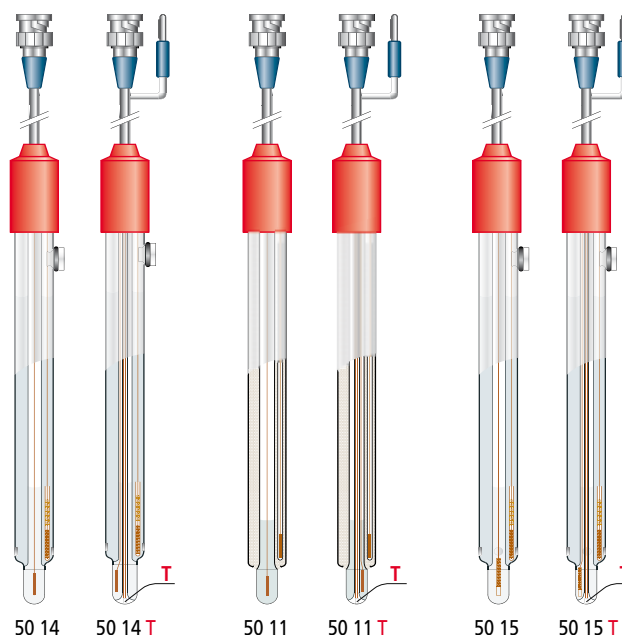
- High tech electrodes: with encapsulated reference element and Ag⁺ ions barrier.
- Very accurate and robust, of industrial quality.
- **T** versions with built-in temperature sensor.

50 14 and **50 14 T**, universal, for aqueous media in general.
pH 0 ... Temp. 14, -10 ... 100 °C, 2 ceramic diaphragms.

50 11 and **50 11 T**, for foodstuff and difficult samples.
Polymer electrolyte, non-refillable: **without maintenance**.
pH 2 ... 14, Temp. 0 ... 80 °C, open annular diaphragm.

50 15 and **50 15 T**, for pharmacy, chemistry and foodstuff.
Very resistant to alkalinity and high temperatures.
Excellent response to sudden changes of temperature.
Special electrolyte for samples containing a lot of proteins.
pH 0 ... 14, Temp. -5 ... 100 °C, 3 ceramic diaphragms.

T= temperature sensor



How to order

Code	Description	Included accessories
21 00	pH-meter GLP 21 with accessories, without electrode .	
21 14	Complete Kit: GLP 21 pH meter, accessories and electrode 50 14 .	<ul style="list-style-type: none"> • Magnetic stirrer. • Sensor holder. • Solutions: pH 4, pH 7, pH 9 and KCl. • Calibration flasks with magnetic stirring bar. • User manual.
21 14 T	Complete Kit: GLP 21 pH meter, accessories and electrode + temperature sensor 50 14 T .	
21 11	Complete Kit: GLP 21 pH meter, accessories and electrode 50 11 .	
21 11 T	Complete Kit: GLP 21 pH meter, accessories and electrode + temperature sensor 50 11 T .	
21 15	Complete Kit: GLP 21 pH meter, accessories and electrode 50 15 .	
21 15 T	Complete Kit: GLP 21 pH meter, accessories and electrode + temperature sensor 50 15 T .	

Instruments developed and manufactured in Spain by CRISON INSTRUMENTS, S.A. www.crisoninstruments.com