



GLP 22+ is an outstanding pH-meter + excellent ion-meter, perfect for research laboratories.
Double instrument. With two measuring channels for pH / redox / I.S.E. and possibility for two magnetic stirrers.

Up to four ion selective calibration curves per channel. Calibration with 2...5 standards.
One switch allows connection of up to four I.S.E. per measuring channel.

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 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...

Authorised CRISON dealer:

Software ComLabo (optional). For bi-directional communication with PC. It allows for communication between CRISON's modules, for example, pH measurements with automatic sample changer.

Measured ranges	Resolution	Meas. error (± 1 digit)
pH -2...16	0.1/0.01/0.001	≤ 0.005
mV ± 2000	0.1/1	≤ 0.5
ISE 10^{-6} M ... 10^{-1} M	programmable	--
$^{\circ}$ C -20...150	0.1	≤ 0.2

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 & 10.90 (25 $^{\circ}$ C).
DIN 19266 buffers: 1.679, 4.006, 6.865, 9.180 & 12.454 (25 $^{\circ}$ C).
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.

mV calibration

Automatic recognition of redox standard 220 mV at 25 $^{\circ}$ C.
Calibration at any mV value.

ISE calibration

2...5 programmable standards.
Selectable calibration units mol/l, g/l, mg/l or mmol/l.
Up to 4 calibration curves per channel.

Temperature readjustment

Correction of the temp. probe deviation (A.T.C.) at 25 $^{\circ}$ C and 85 $^{\circ}$ C.

Data Logger

Storage capacity up to 400 readings.

Languages

Spanish, Italian, French, English and Polish.

Display

Graphic, backlit liquid crystal, 128x64 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, banana or telephone connector.

Connectable peripherals

2 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.

Physical parameters

Weight: 800 g. Size: 325 x 155 x 98 mm.

Specifications subject to change without notice.



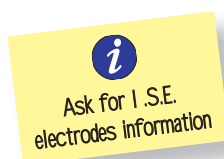
Recommended electrodes

- With fixed cable and BNC connector.
- High tech electrodes, with encapsulated reference element and Ag $^+$ ions barrier.
- There is a version with built-in temperature sensor Pt 1000 for each electrode.

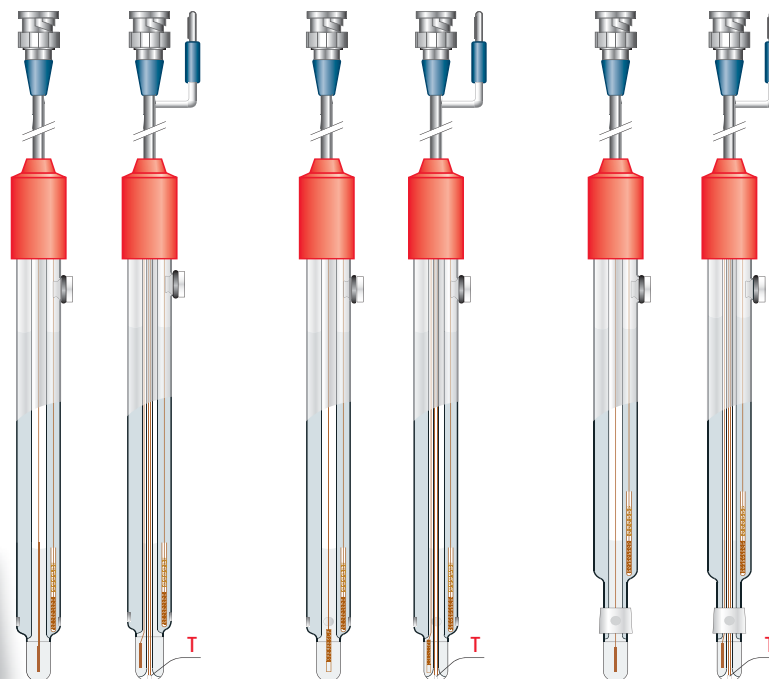
50 14, for aqueous media in general.
50 14 T, with Pt 1000.

50 15, for foodstuff, chemistry and pharmacy.
Excellent response to temperature fluctuations.
Special electrolyte for proteins.
50 15 T, with Pt 1000.

50 21, for difficult samples.
Non clogging diaphragm provides high flow of electrolyte.
50 21 T, with Pt 1000.



T= temperature sensor



Code	50 14	50 14 T	50 15	50 15 T	50 21	50 21 T
pH and temperature range	pH 0 ... 14, -10 ... 100 $^{\circ}$ C		pH 0 ... 14, -5 ... 100 $^{\circ}$ C		pH 0 ... 14, 0 ... 60 $^{\circ}$ C	
Reference element	Encapsulated Ag/AgCl + Ag $^+$ barrier		Encapsulated Ag/AgCl + Ag $^+$ barrier		Encapsulated Ag/AgCl + Ag $^+$ barrier	
Diaphragm	2 ceramics		3 ceramics		Sleeve	
Electrolyte	CRISOLYT		CRISOLYT G		CRISOLYT	