

# C.A 10101

## waterproof portable pH-meter



### **Dare to go beyond electrochemical measurement!**

*Ergonomic, rugged and waterproof: the pH-meter which goes everywhere with you*

*Particularly comfortable to read thanks to its extra-wide, multi-display LCD screen*

*Efficiency: save time with guided, ultra-simplified pH calibration (up to 3 buffer solutions)*

*Storage of more than 100,000 time/date-stamped measurements on request (PC software included)*

*Signal stability indicator: to read off the right value at the right time*



Data Logger Transfer  
Automatic report generation

*Measure up*



# WATERPROOF PORTABLE PH-METER

The **C.A 10101** is the first instrument in the new range of portable electrochemistry equipment launched by Chauvin Arnoux. Designed to measure pH, redox potential (ORP) and temperature, this pH-meter is ideal for mobile applications in the field, in the lab or in production. This accurate, versatile instrument has been designed for use in diverse sectors: agri-food, environment, waste water treatment, education, research, agriculture, pharmaceuticals, cosmetics, etc.

Totally leak-tight connector (whether the electrode is connected or not)

Possibility of connecting pH/redox/temperature sensors with BNC/S7/Jack plugs using adapters (see Accessories & Replacement Parts).

**XRGST1** (included)

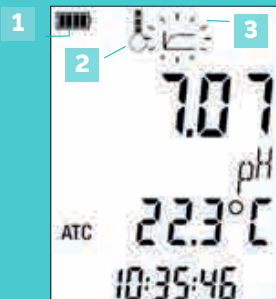
pH combination electrode, ideal for standard aqueous samples and for drinking water. Non-rechargeable gel reference system and built-in temperature sensor (Pt1000).



**Electrode mounting**

Reliable mounting of your pH/redox electrode on the protective sheath when measuring in the field; easy to carry in one hand.

**IP67 totally waterproof casing**  
(including when the pH or ORP sensor is not connected)



**1 / Battery status indicator**

**2 / Electrode status indicator:** determines the status of your electrode by analysing its gradient and the offset

**3 / Signal stability indicator:** for a guaranteed reading of the measurement result

**EASY TO  
CARRY IN ALL  
CONDITIONS**





## APPLICATION SECTORS...

### Environment

pH variations may be a sign of water pollution. pH testing can therefore be used to determine the extent of the pollution in domestic and industrial water reserves.



### Waste water treatment

Using chemical, physical and biological processes, industrial waste water is treated to remove contaminants and then return them to the environment without affecting it. The use of portable pH/mV-meters during effluent treatment is essential for checking the operational processes and the limit values stipulated by the law.

### Agri-food sector

The French and international regulations impose quality-control systems for pH and redox potential in various processes: ripening and fermentation of milk, fermentation of alcohol and wine, stability testing of canned foods, jams and syrups, meat, etc.



### Agriculture

pH and redox potential are two frequently-tested parameters in agriculture because each plant should be grown within the pH/redox value range specific to it. The soil pH determines the CEC (Cation Exchange Capacity) and fertilizer solubility, as well as nutrient assimilation and solubility.

### Shockproof sheath

Extra-rugged for optimum protection. Battery replacement without removing the sheath.

### Extra-wide multi-display LCD screen

Clear display and easy-to-read values.

**Guided calibration** with a customizable list of buffer solutions.

### Backlighting

Comfortable handling in areas with poor lighting.

### Data storage

> 100,000 time/date-stamped measurements.

### Data Logger Transfer

Windows®-compatible PC software for recovering the recorded measurements (samples and calibration) and configuring the instrument (available for free download from our website: [www.chauvin-arnoux.com](http://www.chauvin-arnoux.com)).



Data Logger Transfer  
Automatic report generation

### Micro-USB port for easy transfer onto your computer

The instrument connects to your PC like a USB drive.



Calibration in the field facilitated by the pre-filled carrying case with compartments provided for beakers.

pH/redox analyses and tests are also used in other sectors such as the pharmaceutical and cosmetic industries, the chemical industry, biotechnologies and education.

# TECHNICAL SPECIFICATIONS

## SPECIFICATIONS

## MEASUREMENT PARAMETERS

## C.A 10101

Measurement range (instrument only)	pH	-2.00 to 16.00 pH*	
	Redox	±199.9 mV	-1999 to -200 and +200 to +1999 mV
	Temperature	-10.0 to +120.0°C / 14.0 to 248.0°F	
Resolution (R)	pH	0.01 pH	
	Redox	0.1 mV	1 mV
	Temperature	0.1 °C / 0.1 °F	
Intrinsic uncertainty of the instrument (without the electrode)	pH	± 0.01 pH ± r*	
	Redox	± 0.1 mV ± r	± 1 mV ± r
	Temperature	< 0.4°C / < 0.7°F	
Calibration	pH	Automatic, up to 3 points, 3 groups of predefined reference solutions (modifiable)	
	Redox	Automatic, 1 point, two values of predefined reference solutions (modifiable)	
Temperature compensation	Automatic (ATC) or manual (MTC), -10°C to +120°C (14°F to 248°F)		
Electrode	pH	XRGST1 (supplied), pH combination electrode with built-in temperature sensor (Pt1000), 8-pin DIN connector	
	Redox	XRPTST1 (option), ORP combination electrode with built-in temperature sensor (Pt1000), 8-pin DIN connector	
Data storage	Date and time	Yes	
	Memory	> 100,000 measurements	
Connectors	Sensor input	8-pin DIN (adapters for BNC, S7 and Jack available as options)	
	Communication interface	Micro-USB type B (USB peripheral)	
Batteries / Battery life	4 x 1.5 V AA or LR6 alkaline batteries / Approx. 300 hours in continuous use Auto power-off after 3, 10 or 15 min of inactivity (adjustable)		
Ingress protection	IP67		
Environmental conditions	Storage location (excluding batteries, electrodes and buffer solutions)	-20 to + 70°C	
	Operating range	-10 to +55 °C	
Dimensions (with sheath)	211 x 127 x 54 mm		
Weight (without electrode)	600 g		
Warranty (instrument only)	2 years		

Instrument + XRGST1 pH electrode: pH 1.00 to 12.00 (0..60°C)

## Standard state at delivery



One C.A 10101 pH-meter delivered in a site-proof case with 1 pH combination electrode with built-in XRGST1 temperature sensor, 4 x AA or LR6 alkaline batteries, 1 protective sheath mounted on the instrument, 2 ready-to-use pH 4.01 and pH 7.00 buffer solutions (compliant with NIST/DIN), 2 plastic beakers, 1 USB - micro USB cable, 1 wrist strap, quick start guides (one per language).

(Complete user's manual available from the Chauvin Arnoux website)

## To order

### C.A 10101 pH-meter..... P01710010

#### ACCESSORIES & REPLACEMENT PARTS

XRGST1 pH combination electrode with built-in temperature sensor .....P01710051  
 XRPTST1 ORP combination electrode with built-in temperature sensor ..... P01710052  
 pH 1.68 buffer solution (NIST)\*\*, 125 mL ..... P01700105  
 pH 4.01 buffer solution (NIST), 125 mL ..... P01700106  
 pH 7.00 buffer solution (NIST), 125 mL ..... P01700107  
 pH 9.18 buffer solution (NIST), 125 mL ..... P01700108  
 pH 10.01 buffer solution (NIST), 125 mL ..... P01700109  
 220 mV ORP buffer solution, 125 mL .....P01700114

468 mV ORP buffer solution, 125 mL .....P01700115  
 Storage solution for KCl 3M electrodes.....P01700121  
 Shockproof sheath .....P01710050  
 Set of 3 beakers .....P01710056  
 Adapter: 8-pin DIN to BNC & Jack\*\*\*  
 .....P01295501  
 Adapter: 8-pin DIN to S7 & Jack.....P01295502

\*\*Delivered with a quality certificate guaranteeing compliance with the NIST (National Institute of Standards and Technology) and DIN 19266 standards

\*\*\*Connection adapters for Chauvin Arnoux pH/redox and temperature sensors

To see our "electrodes and temperature sensors" range, please visit our website at [www.chauvin-arnoux.com](http://www.chauvin-arnoux.com)

FRANCE  
**Chauvin Arnoux**  
 190, rue Championnet  
 75876 PARIS Cedex 18  
 Tel: +33 1 44 85 44 38  
 Fax: +33 1 46 27 95 59  
 export@chauvin-arnoux.fr  
 www.chauvin-arnoux.com

UNITED KINGDOM  
**Chauvin Arnoux LTD**  
 Unit 1 Nelson Ct, Flagship Sq, Shaw Cross Business Pk  
 Dewsbury, West Yorkshire - WF12 7TH  
 Tel: +44 1924 460 494  
 Fax: +44 1924 455 328  
 info@chauvin-arnoux.co.uk  
 www.chauvin-arnoux.com

MIDDLE EAST  
**CHAUVIN ARNOUX MIDDLE EAST**  
 P.O. BOX 60-154  
 1241 2020 JAL EL DIB - LEBANON  
 Tel: +961 1 890 425  
 Fax: +961 1 890 424  
 camie@chauvin-arnoux.com  
 www.chauvin-arnoux.com

 **CHAUVIN  
 ARNOUX**