

CA 10141

Watertight portable conductivity meter



For checking the quality of water

- Conductivity/TDS/resistivity/salinity/temperature
- All-terrain instrument: rugged and totally watertight
- Signal stability indicator for reproducible measurements
- Particularly comfortable to read thanks to its extra-wide backlit LCD screen
- Manual or automatic storage of more than 100,000 time/date-stamped measurements (PC software included)



Measure up



# Watertight portable conductivity meter

The **CA 10141** is ideal for inspections and routine measurements of conductivity, TDS (Total Dissolved Solids), salinity, resistivity and temperature. Its numerous applications range from checking the threshold values for drinking water to the treatment of wastewater, whether in the field, in the lab or for the process.

The **CA 10141** is also used for measurements on natural waters thanks to its preset non-linear temperature compensation function compliant with the ISO/DIN 7888 standard.

The XCP4ST1 conductivity cell supplied with the instrument can be used for temperature-compensated measurements.

## XCP4ST1 sensor (included)

Cavec 4-pole conductivity cell with built-in temperature sensor (Pt1000)

## Sensor holder

Easy to carry with just one hand

## Shockproof sheath

Rugged design for optimum protection.  
Battery replacement without having to remove the sheath.

**Totally watertight, IP67**



1 / Battery status indicator

2 / Temperature correction: linear, non-linear or deactivated

3 / Signal stability indicator for reliable measurement readings

4 / Simultaneous display of the conductivity specific to the chosen reference temperature (20 or 25° C) and the actual temperature of the specimen



## IP67 totally watertight connector

(sensor connected or not)

Possibility of connecting conductivity and temperature sensors with BNC/S7/ Jack plugs by means of adapters.

## Extra-wide, backlit, multi-display LCD screen

Clear display for easy reading of the values.

## Automatic calibration

with predefined conductivity reference standards which can be modified by the user.

## Data storage

> 100,000 time/date-stamped measurements.

## Data Logger Transfer

Windows®-compatible PC software for recovering recorded measurements (specimens and calibration operations, configuring the instrument and scheduling recordings. (Available for download free of charge 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 a PC

The instrument can be connected to your PC like a USB drive.



## EASY TRANSPORT WHATEVER THE TERRAIN

Measurements in the field are facilitated by a prefilled carrying case with slots for beakers.

## APPLICATION SECTORS

### Industry

- chemicals
- agri-food
- drinking water
- boiler water
- wastewater treatment

### Agriculture



### Public aquariums

### Swimming pools



### Environment

To discover our range of «temperature probes and sensors», visit our website at [www.chauvin-arnoux.com](http://www.chauvin-arnoux.com)

# TECHNICAL SPECIFICATIONS

## MEASUREMENT PARAMETERS

## CA 10141

Conductivity	Measurement range	0.050 $\mu$ S/cm to 500.0 mS/cm
	Resolution (R)	0.001 to 0.1 (depending on range)
	Intrinsic uncertainty of the instrument (without the sensor)	$\pm$ 0.5% reading $\pm$ R
TDS	Measurement range	0.001 mg/l to 499.9 g/l
	Resolution (R)	0.001 to 0.1 (depending on range)
	Intrinsic uncertainty of the instrument (without the sensor)	$\pm$ 0.5% reading $\pm$ R
Resistivity	Measurement range	2.000 $\Omega$ .cm to 19.99 M $\Omega$ .cm
	Resolution (R)	0.001 to 0.01 (depending on range)
	Intrinsic uncertainty of the instrument (without the sensor)	$\pm$ 0.5% reading $\pm$ R
Salinity	Measurement range	2.0 to 42.0 psu
	Resolution (R)	0.1
	Intrinsic uncertainty of the instrument (without the sensor)	$\pm$ 0.5% reading $\pm$ R
Temperature	Measurement range (instrument only)	- 10.0 to + 120.0 $^{\circ}$ C (14.0 to 248.0 $^{\circ}$ F)
	Resolution (R)	0.1 $^{\circ}$ C (0.1 $^{\circ}$ F)
	Intrinsic uncertainty of the instrument (without the sensor)	< 0.4 $^{\circ}$ C (<0.7 $^{\circ}$ F)
	Reference temperature available	20/25 $^{\circ}$ C (68/77 $^{\circ}$ F)
Calibration	1 point, predefined conductivity reference standards (modifiable by the user) ; possibility of reset to a default calibration	
Temperature compensation	Automatic (ATC) or manual (MTC) – Linear, non-linear	
Conductivity cell	XCP4ST1 (supplied), 4-pole conductivity sensor with built-in Pt1000 temperature sensor (0...100 $^{\circ}$ C), 8-pin DIN connector, 1 m cable	
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	Type B micro-USB (USB device) 12 Mbit/s
Batteries / Battery life	4 x 1.5 V AA or LR6 alkaline batteries, approx. 300 hours of continuous operation – Automatic shutdown after 3, 10 or 15 min without activity (adjustable)	
IP rating	IP67	
Environmental conditions	Storage range (without battery)	- 20 to + 70 $^{\circ}$ C
	Operating range	- 10 to + 55 $^{\circ}$ C
Dimensions (with sheath)	211 x 127 x 54 mm	
Weight (without electrode)	600 g	
Warranty (instrument only)	2 years	

\* L : % de la lecture

## STATE AT DELIVERY

CA 10141 conductivity meter delivered in a site-proof case with 1xXCP4ST1 conductivity sensor with built-in temperature sensor, 4 AA or LR6 alkaline batteries, 1 protective sheath mounted on the instrument, 1 ready-to-use standard reference solution (NIST-compliant) with conductivity of 1408  $\mu$ S/cm, 1 plastic beaker, 1 USB - micro USB cable, 1 wrist strap, quick start-up guides (one per language).  
(Complete user's manual available from the Chauvin Arnoux website)



## TO ORDER

CA 10141 conductivity meter ..... P01710020

### ACCESSORIES & REPLACEMENT PARTS

XCP4ST1 conductivity cell with built-in temperature sensor .....	P01710053
Conductivity reference solution, 147 $\mu$ S/cm, 125 mL* .....	P01700117
Conductivity reference solution, 1408 $\mu$ S/cm, 125 mL* .....	P01700118
Conductivity reference solution, 12.85 mS/cm, 125 mL** .....	P01700119
Concentrated KCl 1 mol/L conductivity reference solution .....	P01700116
Shockproof sheath .....	P01710050
Set of 3 beakers .....	P01710056
8-pin DIN to BNC & Jack*** adapter .....	P01710054
8-pin DIN to S7 & Jack*** adapter .....	P01710055

\*Delivered with a quality certificate guaranteeing traceability to the NIST reference materials

\*\*Delivered with a quality certificate guaranteeing traceability to the OIML (International Organization of Legal Metrology) reference materials

\*\*\*Connection adapters for Chauvin Arnoux conductivity cells and temperature sensors

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