



**STEIEL**  
ELETTRONICA SRL

# **CONDUCTIVITY METER C902**

## **TECHNICAL MANUAL**



STEIEL Elettronica S.r.l. – Viale Europa, 24 – 35020 Ponte San Nicolò – PADOVA (ITALY)  
Tel. +39-049-8961488 – Fax. +39-049-8960184 – [www.steiel.it](http://www.steiel.it) – [info@steiel.it](mailto:info@steiel.it)

---

**Certified Company, according to UNI EN ISO 9001 standards**

---

## WARNINGS



This manual is dedicated to the technical personnel responsible of the installation, management and maintenance of the plants. The manufacturer assumes no responsibility for damages or malfunctions occurring after intervention by non-authorized personnel, or not compliant with the prescribed instructions.



Before performing any maintenance or repair action, ensure that the system is electrically and hydraulically insulated.



Dispose of waste material and consumables accordingly with local regulations.

## Warranty

All our products are warranted for a period of 12 months from the delivery date.

Warranty is not valid if all instructions of installation, maintenance and use, are not strictly followed by the user.

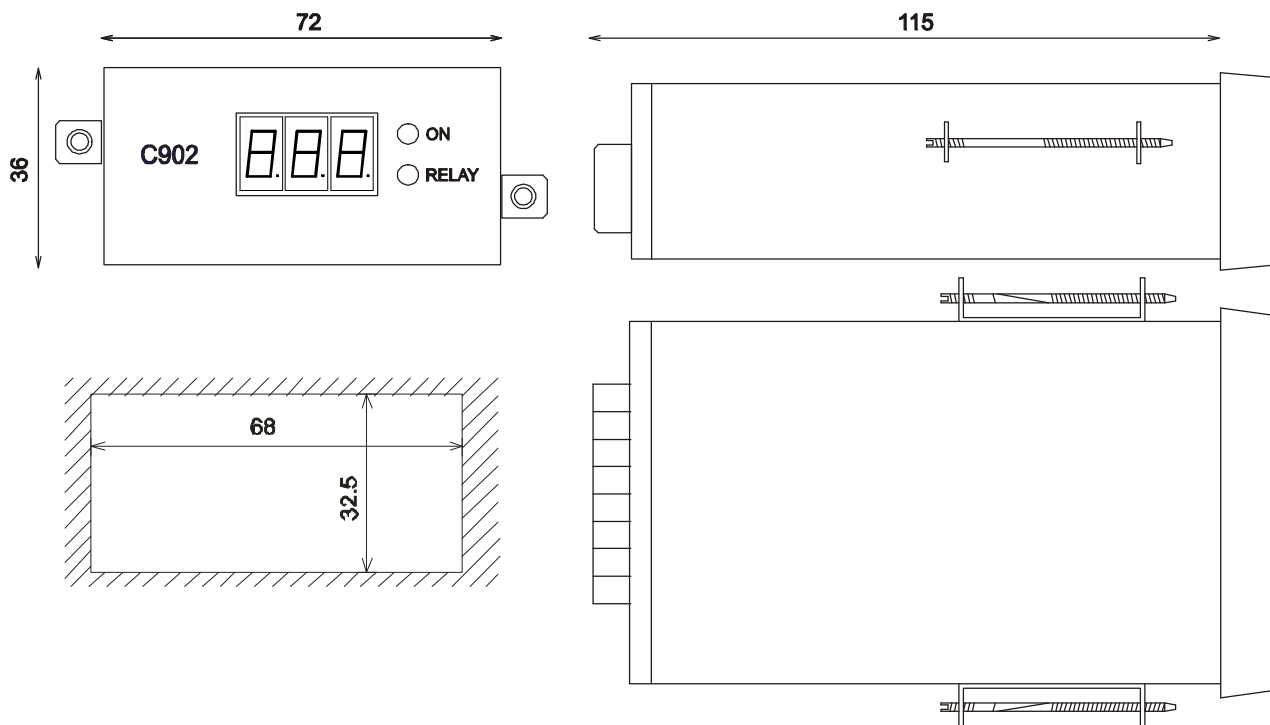
Local regulations and applicable standards have also to be followed.

## PACKING LIST

- C902 panel mounting conductivity meter
- Brackets for panel installation
- Technical manual

## TECHNICAL DATA

Measurement Ranges	0-9.99, 0-99.9, 0-999 $\mu\text{S}/\text{cm}$ / 0-9.99, 0-99.9, 0-999 ppm (to be specified upon order)
Cell	2-electrode; K = 5, 1, 0.1, 0.01 cm (depending on the measure range)
Visual Indications	<ul style="list-style-type: none"><li>• high-efficiency red LED display, 3 digit</li><li>• green LED ON, for signaling that the unit is powered</li><li>• red LED RELAY, for signaling the status of the relay output (ON=active)</li></ul>
Output	1 contact-type relay; load 3A 250V~ (resistive) Threshold at the configured set-point Repeatability of the relay click: min 0.5% f.s.
Working Temperature	-10 to +50 °C
Power Supply	230 V~ 50/60 Hz (24/110 V~ or 24V- upon request) / max 3VA
Electrical Protection	mini-fuse F1 (160mA @ 230V~, 500mA @ 24V~)
Casing	self-extinguish plastic material
Installation	panel mounting, with supplied brackets
Protection Rate	IP21 not mounted; IP42 panel mounted
Dimensions	instrument: DIN 36 x 72 x 110 mm (terminal block included) drilling template: 32 x 68 mm
Weight	approx. 250 g



## PRINCIPLE OF OPERATION

One electrode of the cell is powered with a proper alternate signal (variable depending on the measure range and cell constant), while the second electrode receives a part of the transmitted signal.

This signal is directly proportional to the conductivity of the tested liquid, i.e. the received signal is higher, the higher the conductivity.

This signal is sent to an analogic input of the microcontroller, which linearizes and converts it into  $\mu\text{S}/\text{cm}$  or ppm units, depending on the set measurement range.

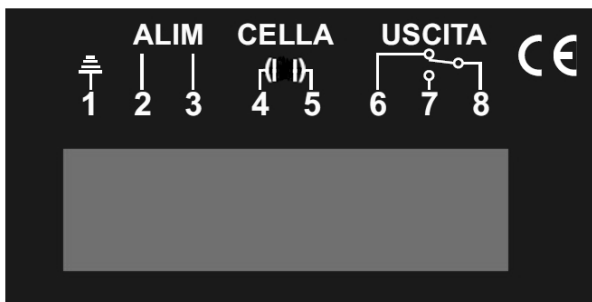
## INSTRUCTIONS FOR USE

### Terminal Block on the Rear Panel

**ALIM.**            **Power supply:** connect the yellow/green grounding wire to terminal 1 and the power voltage to terminals 2 and 3

**CELLA**           **Measure input:** connect the cell to terminals 4 and 5

**USCITA**          **Relay contact:** 6=NC ; 7=NO ; 8 = Common



### Set-Point Adjustment

Remove the front panel by prying the supplied small screwdriver in the top center, and access the front board (see the drawing below).

Press and hold the "PS1" key and use the screwdriver to adjust the trimmer on the right side of the board and set the desired threshold for the relay.

