



# C4E: CONDUCTIVITY/SALINITY, Digital technology for optimized measures

- **Mounting at 4 electrodes:** The electrode works with a technology in 4 electrodes: an alternating current of constant-voltage is established between a primary's pair of electrodes in graphite. The secondary's electrodes in platinum allow of regulate the voltage imposed to primary's electrodes to reflect of the fouling. The voltage measured between the primary's electrodes is in function of the resistance of place and so, of the conductivity.
- **Digital Technology:** The "smart" Digital C4E sensor stores calibration and history data within the sensor. This allows you a "plug and play" system without re-calibration.

Thanks to the Universal Modbus RS485 protocol, the PONSEL Digital C4E can be connected to all devices commonly used (Datalogger, Controller, Automat, Remote System...).



## Applications

- Urban wastewater treatment
- Industrial effluent treatment
- Surface water monitoring
- Sea water
- Drinking water

Technical specifications measures	
<b>Measure principle</b>	Conductivity sensor with 4 electrodes (2 graphic, 2 platinum)
<b>Measure ranges conductivity</b>	<ul style="list-style-type: none"> <li>• 0-200,0 µS/cm</li> <li>• 0 –2000 µS/cm</li> <li>• 0,00 –20,00 mS/cm</li> <li>• 0,0 –200,0 mS/cm</li> <li>• AUTOMATIC RANGE</li> </ul>
<b>Resolution</b>	0,01 to 1 according the range
<b>Accuracy</b>	± 1 % of the full range
<b>Measure range salinity</b>	5-60 g/Kg
<b>Measure range TDS -KCl</b>	0-133 000 ppm
<b>Response time</b>	< 5 s
<b>Working temperature</b>	0°C to + 50°C
<b>Temperature compensation</b>	NTC
<b>Stocking temperature</b>	-10°C to + 60°C
<b>Signal interface</b>	Modbus RS-485 and SDI-12
<b>Maximum refreshing time</b>	Max < 1 s
<b>Sensor power-supply</b>	5 to 12 volts
<b>Electric consumption</b>	Standby : 25 µA Average RS485 (1 measure/second) : 6,3 mA Average SDI12 (1 measure/second) : 9,2 mA Current pulse : 500 mA
Technical specifications sensor	
<b>Dimensions</b>	Diameter : 27 mm ; Length : 177 mm
<b>Weight</b>	300 g (sensor + cable 3 meters)
<b>Material</b>	PVC, DELRIN, stainless steel
<b>Maximum pressure</b>	5 bars
<b>Connection</b>	9 armoured connectors, polyurethane jacket, bare-wires or waterproof Fisher connector
<b>Degree of protection</b>	IP68

## ADVANTAGES



- 4 electrodes (2 graphic, 2 platinum)
- Range 0 to 200 mS/cm and automatic range
- Digital sensor Modbus RS-485 / SDI-12
- Robust and Watertight

## References

- C4E SENSOR WITH FISCHER CONNECTOR Conductivity/TPF-CAP-C-00149 Digital Probe - 3 m cable
- C4E SENSOR WITH FISCHER CONNECTOR Conductivity/TPF-CAP-C-00150 Digital Probe - 7 m cable
- C4E SENSOR WITH FISCHER CONNECTOR Conductivity/TPF-CAP-C-00167 Digital Probe - 15 m cable
- C4E SENSOR, 3 meters cable, bare wire PF-CAP-C-00169
- C4E SENSOR, 7 meters cable, bare wire PF-CAP-C-00170
- C4E SENSOR, 15 meters cable, bare wire PF-CAP-C-00156

