

DIGISENS RANGE

C4E: Conductivity/Salinity & Temperature

Digitally optimised measurement technology

- 4 electrode conductivity sensor (2 graphite & 2 platinum)
- Smart sensor stores configuration settings and calibration history
- Range 0-200 mS/cm
- Digital sensor - Modbus RS-485
- Robust and watertight



Applications

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

Sensor electrode technology:

The sensor works with 4 electrodes: An alternating current of constant voltage is established between a primary pair of electrodes in graphite. The secondary electrodes in platinum regulate the voltage imposed to the primary electrodes to reflect the fouling. The voltage measured between the primary electrodes is the function of the resistance and therefore a measurement of the conductivity.

Digital Technology :

The smart digital C4E sensor stores calibration history data within the sensor. This allows a 'plug and play' system without re-calibration.

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Measurement

Measurement principle	Conductivity sensor with 4 electrodes (2 graphite, 2 platinum)
Measured conductivity ranges	• 0-200.0 $\mu\text{S}/\text{cm}$
Resolution	0.01 to 1 according the range
Accuracy	+/- 1 % of the full range
Measured salinity range	5-60 g/Kg
Measured TDS -KCl range	0-133 000 ppm
Response time	< 5 s
Working temperature	0°C to 50°C
Temperature compensation	CTN
Operating temperature	- 10°C to + 60°C
Signal interface	Modbus RS-485 (option SDI-12)
Maximum refreshing time	Max < 1 s
Sensor power-supply	5 to 12 volts
Electric consumption	Standby : 25 μA

Sensor

Dimensions	Dimensions Diameter : 27 mm ; Length : 177 mm
Weight	350g (sensor + 3 metres cable)
Material	PVC, stainless steel
Maximum pressure	5 bars
Connection	9 armoured connectors, polyurethane jacket, bare-wires or waterproof
Degree of protection	IP68 up to gland
Protection	IP68

