Physico-chemical sensor CTNZ

Inductive conductivity / salinity

- **Sensor regulated in temperature**
- **Conductivity (mS/cm), salinity(g/Kg) and temperature (°C)**
- **Ranges 0 to 100 mS/cm**
- **Digital sensor / Modbus RS-485**
- **Compact, rugged and watertight sensor**

Application

- Urban wastewater treatment
- Industrial effluent treatment
- Surface water monitoring
- Fish farming, aquaculture, sea water
- Drinking water

Inductive method

A ring-type coil is excited at fixed intervals and the response is retrieved on a second coil, which is linked to the excited coil. The connectivity between the coils (determined by the degree of conductivity) takes place via the conducting solution. Economic and successful technology that requiring not much maintenance and no consumables.

Affordable and efficient technology requiring only little maintenance and no consumable.

Digital technology

The smart Digital CTZN sensor stores calibration and history data within the sensor. This allows you a “plug and play” system without recalibration. With the Universal Modbus RS485 protocol, the Digital CTZN can be connected to all devices commonly used (Datalogger from the LOG V3 range, controller, PLC, remote system...).

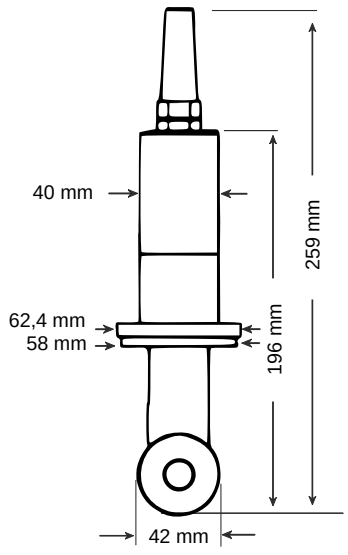
Body

Compact, rugged and light, stainless steel sensor allows a handheld or stationary.

Mesurement features	
Measurement principle	Inductive conductivity sensor regulated in temperature
Conductivity measurement range	0,0 – 100,0 mS/cm
Resolution	0,1 to 1 depending on the range
Salinity measuring range	5-60 g/Kg
Storage temperature	-10°C to + 60 °C
Working temperature	0 °C to + 50 °C
Temperature compensation	Via CTN or external measurement
Accuracy T°C	+/- 0.1 °C range 0 - 40 °C
Response time	T90 < 30 secondes
Interface signal	Modbus RS-485
Measure refreshing time	Maximum < 1 seconde
Sensor power-supply	5 à 28 Volts, max 30 V
Electric consumption	Standby : 50 QA / warm-up time : 100 mS Average RS485 / Gamme 0-100 mS/cm

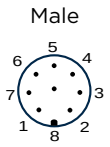
Consumption - 1 mesurement / seconde		
Vin 5 V	Vin 12 V	Vin 24 V
31 mA	15,5 mA	11,5 mA
Max current peak 700 mA for 2 mS, 350 mA for 150 mS		

Capteur	
Dimensions	Max. diameter 62,4 mm, Length 196 mm
Weight	700 g
Housing	EPDM, PVC, Polyamide
Max. Pressure	5 bars
Sealing	IP 68



Dimensions

Wiring



Cable color	Noir	Rouge	Blanc	Vert
8Pts connector	2	3	4	5
Designation	V_{in}	GND	Modbus	Modbus
feature	Alimenta-tion	Masse	RS485H	RS485 L