

# Conductivity Water Quality Sensor

## WQS-EC Series



RoHS

CE

### Overview

The conductivity water quality sensor operates with an alternating voltage applied between the measuring electrodes, which will generate a corresponding current in the medium. The magnitude of the current is positively correlated with the conductivity of the medium, thus measuring the conductivity of the medium. To compensate for the measurement errors caused by polarization, the WQS-EC has a reference electrode, making the measurement results more accurate.

The WQS-EC sensor has a built-in five-point interpolation algorithm that allows the user to calculate TDS and salinity from conductivity.

The WQS-EC series conductivity sensor uses RS485 communication interface and Modbus RTU protocol communication, which is widely used and easy to use. It is widely used in tap water, surface water, groundwater, domestic sewage and other scenarios to provide customers with stable and reliable water quality monitoring data.



### Main Features

- Easy to install
- Low maintenance costs
- Multiple shapes for different installation conditions

### Specifications

Principle	Coaxial 4 graphite electrodes	Pressure	1 bar
Dimension	φ25×196 mm	Installation	Submerged, flow-through
Power requirements	DC+12 V ~ +24 V	Sample flow rate	200-500 mL/min
Operating temperature	2 to 45°C	Communication	RS485(Modbus RTU), Bluetooth

Electrodes

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### Parameter information

Parameter	Model No.	Range	Resolution	Accuracy
EC	WQS-EC	0.001-200 000 $\mu\text{S}/\text{cm}$	Minimum 0.001 $\mu\text{S}/\text{cm}$	$\pm 5\%$
TDS	WQS-EC	0.01-100 000 mg/L	Minimum 0.01 mg/L	$\pm 5\%$
Salinity	WQS-EC	0.01-120 000 mg/L	Minimum 0.01 mg/L	$\pm 5\%$
Temperature	WQS-EC	0-50 $^{\circ}\text{C}$	0.1 $^{\circ}\text{C}$	$\pm 1^{\circ}\text{C}$

Model	Description	IP rating	Application
WQS-EC-S01	5 pole aviation plug with waterproof connection thread	IP65	
WQS-EC-S11	Cable extending directly with waterproof connection thread	IP68	
WQS-EC-P01	5 pole aviation plug	IP65	
WQS-EC-P11	Cable extending directly	IP68	

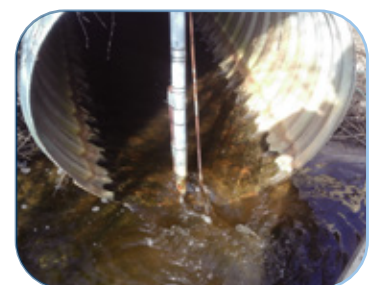
### Application



Municipal Pipe Network,  
Waterwork



Secondary water supply



Surface water, groundwater