German Technologies

WSDEC1001 CONDUCTIVITY SENSOR

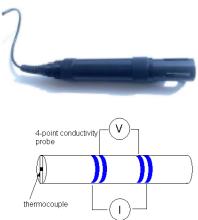
Digital Conductivity Sensor

WSDEC1001 is an online conductivity electrode employing the principle of conductivity with 4 electrodes. Also has a temperature sensor built in.

Working Principle

Electrodes in conductivity cells are constructed of a conductive material, such as graphite, stainless steel, or platinum. An AC voltage is applied between the outer 2 electrodes, this induces an ionic current in the solution.

The ionic current is proportional to the concentration of ions in the water body. The ionic current between the 2 inner electrodes is measured. This current gives the conductivity measurement.



Applications

Continuous monitoring of conductivity in wide range of environments

Features

- Can work stably for a long time
- Built in temperature sensor, real-time temperature compensation, digital signal conversion and other functions.
- Rapid response, low maintenance cost, real-time online measurement characters etc.
- RS485 signal output, strong anti-interference ability, the output range of up to 500m
- Using the standard Modbus RTU (485) communication protocol
- The operation is simple, the electrode parameters can be achieved by remote settings, remote calibration of electrode.

Technical Specification

Consideration	
Specification	
Measuring range	Conductivity: 0~2000µS/cm Resolution: 1µS/cm Temperature:0~50°C Resolution: 0.1°C
Accuracy	Conductivity: ± 25µS Temperature:± 0.5°C
Response time	<60s
Power supply	24V DC
Power dissipation	1W
Communication mode	RS485 (Modbus RTU)
Cable length	5 m (can be modified)
Installation	Sinking type, pipeline etc.
Dimensions	230 (l) x 30 (dia.) mm
Housing material	ABSS