POP-500 ORP Online Analyzer

Measurement Principle



POP-500 ORP sensor is a combination electrode combined precious metals indicator electrode with reference electrode. Firstly measure the potential difference of working battery made up of measuring electrode and reference electrode in the solution,then use linear relation of ORP value of the measuring solution and potential of working battery to realize the ORP on-line monitoring.

Main Features

- Good repeatability and stablity.
- Simple cleaning and activation,quite high balance speed.
- Optional analog-digital conversion module to achieve digital signal output,high anti-jamming capacity and far transmission distance.
- Optional analog-digital conversion module to achieve standard digital signal output （RS485）,can achieve integration and networking with other equipment without controller.
- Quick and easy field installation,adopting terminal connection.
- Sensor power supply positive and negative reverse connection protection
- Sensor RS485 A/B terminal is connected to the power supply protection
- With time display, data storage and historical data viewing function;
- Optional data wireless transmission module.

Application

- ORP monitoring of tap water,municipal sewage and surface water and etc.
- ORP monitoring of industrial process water and in wastewater treatment process.

Technical Specifications

Main materials	Black Polypropylene,Ag/Agcl Reference Gel
Measurement range	-2000mV-+2000mV
Pressure range	≤0.6Mpa
Zero potential mV value	86±15mV（25℃）(in pH 7.00 solution containing saturated quinhydrone)
Range	≥170mV（25℃）(in PH 4 solution containing saturated quinhydrone)
Response time	≤10 sec (Reach 95% of the end value)(After stirring)
Power supply	AC:85-500VAC;DC:9-36VDC
Output	3-way 4-20mA
Relay	Three-way relays,programmed response parameter and response value
Communication Protocol	MODBUS RS485
Medium temperature	0-80℃（Non-freezing）
Dimensions	Sensor:Dia28.7mm*L 195mm Transmitter:145*125*162mm(L*W*H)
Weight	Sensor:0.2KG;Transmitter:1.35KG
Cable length	Standard:10 m, can be extended 20 m