

SPS-ORP Oxidation-Reduction Potential Water Quality Sensor

Product overview

SPS-ORP oxidation-reduction potential water quality sensor adopts the electrode principle, can measure the redox potential, can react to the water samples redox strength, the sensor is widely used in water, pipe network, medical wastewater and other fields, can provide customers with accurate and efficient monitoring.

ORP sensor supports RS485 output mode. ORP sensor is widely used in drinking water, pipe network water, surface water, all kinds of sewage.



Application

- Drinking water and pipe network water quality monitoring
- Pool water disinfectant monitoring
- Medical wastewater, disinfected effluent monitoring
- Other industrial water, cooling water and other monitoring

Features

- Digital electrodes, quick connection, no controller required
- No chemical reagent consumption, environmentally friendly
- Long maintenance-free cycle, low maintenance cost
- Compact and easy to install



Specification

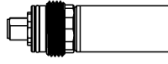
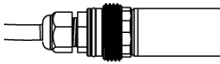
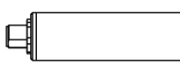
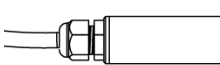
Specification	Detail
Principle	ORP: Glass electrode method Temperature: PT1000
Range	ORP: -1500~+1500 mV Temperature: 2-50 °C
Resolution	ORP: 1 mV Temperature: 0.1 °C
Accuracy	ORP: ±20 mv Temperature: ±1 °C
Dimensions	φ25×261 mm (slightly different sizes for different interfaces)
Weight	0.63 kg (Max. net weight)
Power	DC +12 - +24 V
Installation	Submerged, Flow-through
Operating temperature	2-50 °C (35.6-122 °F)
Storage temperature	2-50 °C (35.6-122 °F)
Sensor cable length	Cable extending directly: 6 m (19.69 ft.) 5 pole aviation plugs: 2 m (6.56 ft.) Please contact us for other sizes
Communication method	Modbus RS485
Sampling requirements	Temperature: 2-50 °C (35.6-122 °F) Flow rate: 300-500 mL/min. Pressure: no more than 1bar, in water flow at 2-50 °C (35.6-122°F)
Warranty period	One year

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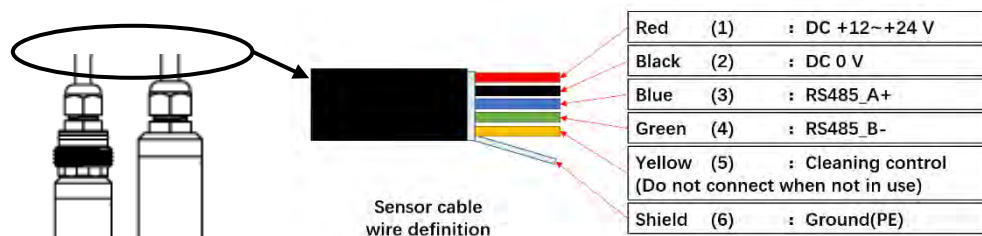
Product selection

The sensors are available with different tail connections so that customers can choose according to their needs.

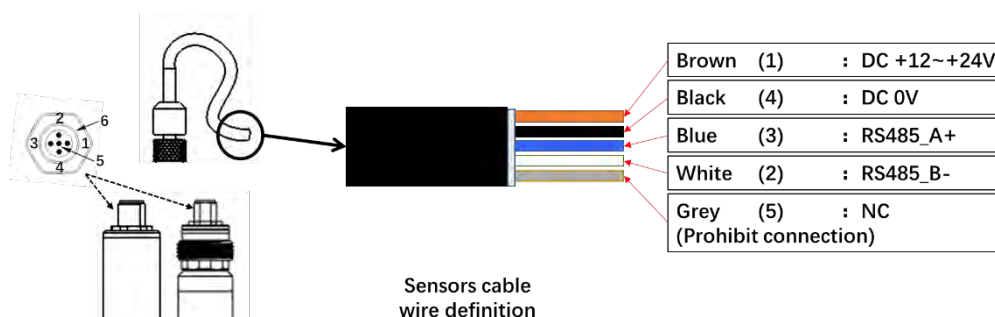
Model	Description	IP rating	Pictures
SPS-ORP-S01	5 pole aviation plug, cable length 2 m with waterproof connection thread	IP65	
SPS-ORP-S11	Cable extending directly, cable length 6 m with waterproof connection thread	IP68	
SPS-ORP-P01	5 pole aviation plug, cable length 2 m	IP65	
SPS-ORP-P11	Cable extending directly, cable length 6 m	IP68	

Interface definition

There are two types of wiring for the sensors, direct out and 5 pole aviation plugs. The two use different cables and have different wiring definitions, see diagram below.



Cable extending directly



Five pole aviation plugs

Dimensions

