
SPS-Color-C Color Water Quality Sensor

Datasheet

Product overview

SPS-COLOR-C is a color online monitoring sensor with self-cleaning for long term reliable and maintenance free real time water quality monitoring. The sensor can be widely used in the fields of drinking water, tap water, water pipeline network, groundwater, and sewage.



Application

- Drinking water and pipeline network water quality monitoring
- Drinking water plant effluent
- Groundwater
- Sewage

Features

- Fast measurement, the fastest measurement cycle is 10 second
- No chemical reagent consumption, environmentally friendly
- Self-cleaning brushes for long maintenance-free cycles and low maintenance costs




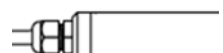
Specifications

Specification	Detail
Parameter	Color (Platinum-Cobalt Scale)
Measurement method	Multi-wavelength absorption spectrometry
Gap	100 mm
Range	Color: 0 - 500 PCU (Platinum-Cobalt Unit) Temperature: 0-50 °C
Accuracy	Color: ± 1.5 PCU or $\pm 3\%$ Temperature: ± 1 °C
Resolution	Color: ≤ 1 PCU Temperature: 0.1 °C
Dimension (Diameter×length)	$\phi 30 \times 301$ mm (1.18×11.85 inch)
Material	316L stainless steel / Titanium (Optional)
Weight	0.9 kg
Power requirements	DC 12 ~ 24 V
Operating temperature	0 ~ 50 °C (32 ~ 122 °F)
Storage temperature	0 ~ 50 °C (32 ~ 122 °F)
Humidity	5% to 95% relative humidity, non-condensing
Sensor cable length	Cable extending directly: 6 m (19.69 ft.), 5 pole airline plugs: 2 m (6.56 ft.) Please contact us for other sizes
Cleaning	Cleaning brush, automatic cleaning
Sample requirements	Flow-through: flow rate 250 to 500 mL/min; Optimal Flow rate: 500 mL/min Submersible: flow rate <3 m/s Pressure: ≤ 0.6 MPa @ 0 °C ~ 50 °C (32 ~ 122 °F)
Communication Interface	Modbus RS485
Wireless communication	Bluetooth
Warranty period	One year

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual. The manufacturer reserves the right to make changes in this manual and the products it describes at any time, without notice or obligation.

Product selection

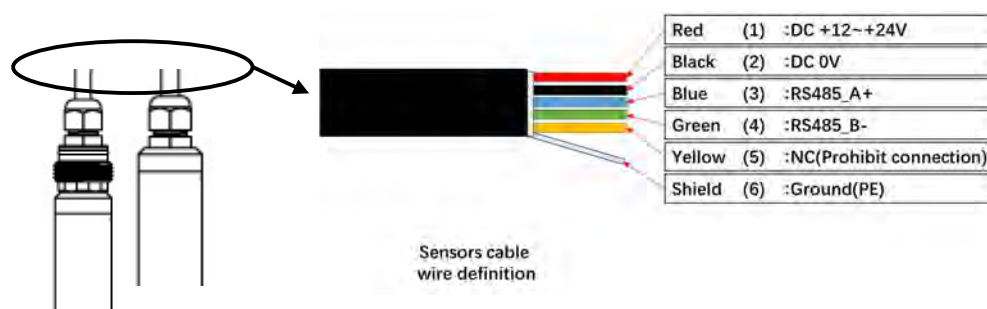
The sensors are available with different tail connections so that customers can choose according to their needs.

Model	Description	IP rating	Pictures
SPS-Color-C-S01	5 pole aviation plug with waterproof connection thread	IP65	
SPS-Color-C-S11	Cable extending directly with waterproof connection thread	IP68	
SPS-Color-C-P01	5 pole aviation plug	IP65	
SPS-Color-C-P11	Cable extending directly	IP68	

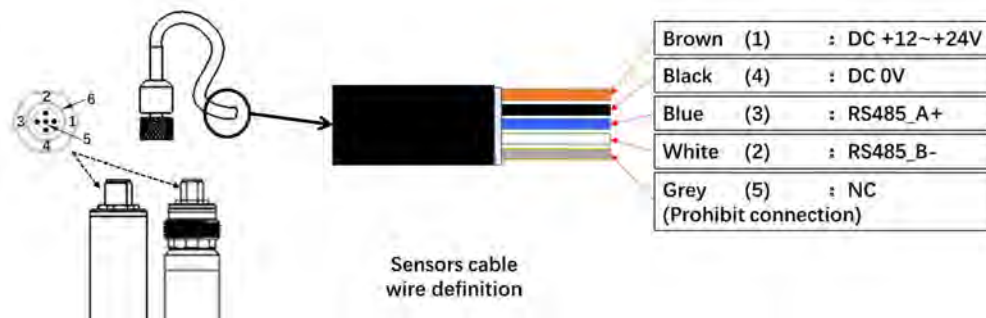
Interface definition

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

Cable extending directly

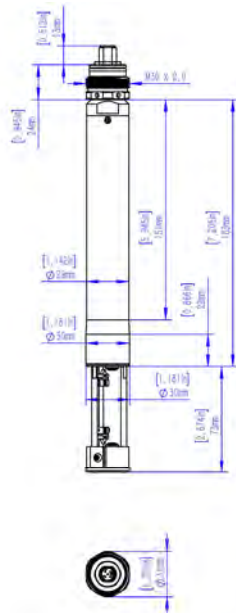


5 pole airline plugs

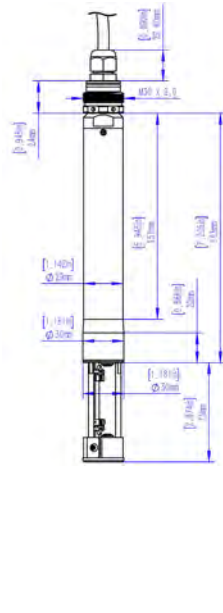


Dimensions

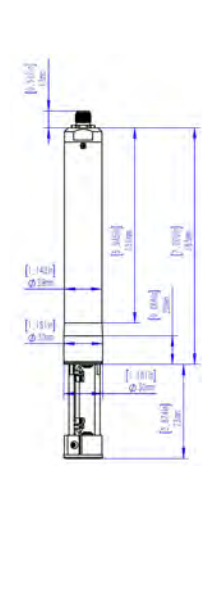
SPS-Color-C-S01



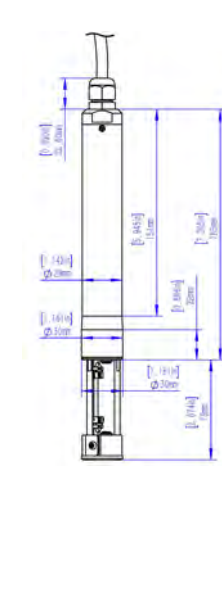
SPS-Color-C-S11



SPS-Color-C-P01



SPS-Color-C-P11



With flow cell

