

SPS-T-SC3 Ultra-low Turbidity Water Quality

Sensor Datasheet

Product overview

SPS-T-SC3, turbidity sensor, is a turbidity measurement sensor based on the principle of 90° scattered light, using high parallelism, with automatic light intensity correction laser light source and highly sensitive detector. Its detection performance at low turbidity (<1NTU) is excellent. The turbidity sensor is equipped with automatic optical window cleaning function, which is maintenance-free for a long time for tap water application scenarios. In addition, with the MC-W-S series meter controller and SPS-Server (SPS cloud service), users can realize on-site and remote data viewing.



Advantage

- High precision and high reliability
 - Accuracy comparable to US Hash 1720E and TU5300
 - Pass CE/RoHS/vibration/high and low temperature test
- Self-cleaning and maintenance-free
 - 1-3 months secondary water supply sensor maintenance-free
 - 3 months factory water sensor maintenance-free
- Small size, high pressure resistance
 - 1/4 the volume of 1720E and TU5300
 - Withstand pressure up to 1MPa (10atm)

Application scenarios

- Tap water factory water monitoring
- Water quality monitoring of tap water network
- Monitoring of secondary water supply of tap water

Size comparison of similar products



SPS-T-SC3

1720E

Turbimax CUE22

TU5300

Specifications

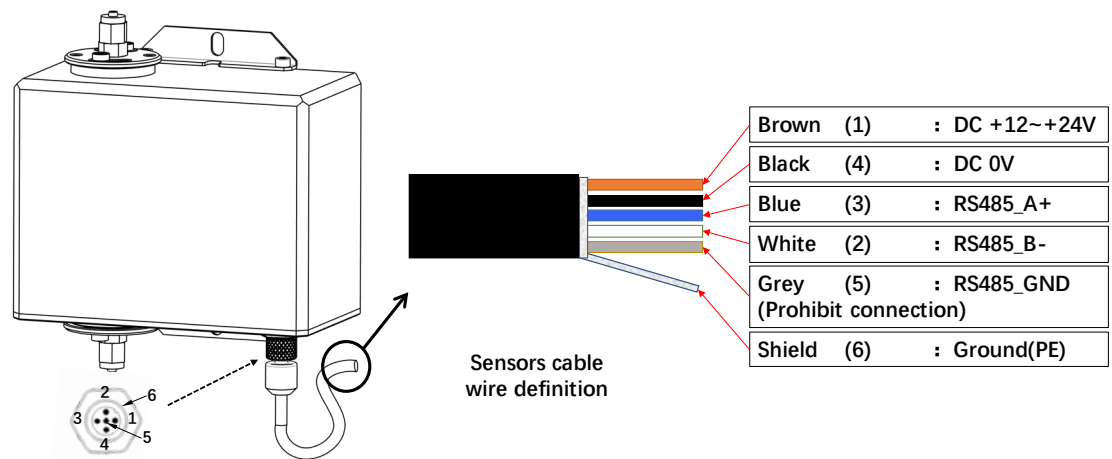
Specification	Detail
Measurement method	Nephelometry with scattered light at a 90-degree angle to the incident light
Dimensions (WxDxH)	150x82x175 mm
Weight	1.6 kg
Power requirements	DC+12 V to +24 V
Protection class	IP68
Mounting	Indoor on a wall
Operating temperature	0 to 50 °C (32 to 122 °F)
Storage temperature	-10 to 50 °C (14 to 122 °F)
Humidity	5% to 95% relative humidity, non-condensing
Sensor cable length	2 m (6.56ft) ,Please contact us for other sizes
Fittings	Sample inlet, and outlet: 6 mm. OD tubing (optional tubing adapter, ¼ in. to 6 mm)
Tubing requirements	Polyethylene, polyamide or polyurethane tubing. Calibrated ¼ in. OD,+0.03 or –0.1 mm (+0.001 or –0.004 in.)
Range	0-100 NTU/FNU
Method detection limit	0.0032 NTU at 25 °C
Measurement period	10s to 255s adjustable
Accuracy	0-40 NTU: ±2% of reading or ±0.015 NTU (the larger value) 40-100 NTU: ±2% of reading
Resolution (display)	0.001NTU
Sample requirements	Temperature: 2-50 °C (35.6-122 °F) Flow rate: 100-1000 mL/min; optimal flow rate: 200-500 mL/min Pressure: 10 bar (145 psi) maximum compared to air, 2 to 50 °C (35.6 to 122 °F) sample
Calibration options	supports up to 5 points calibration
Certifications	CE, RoHS
Warranty	One year

The manufacturer shall not be liable for any direct or indirect damages caused by any insufficiency or omission in this manual.

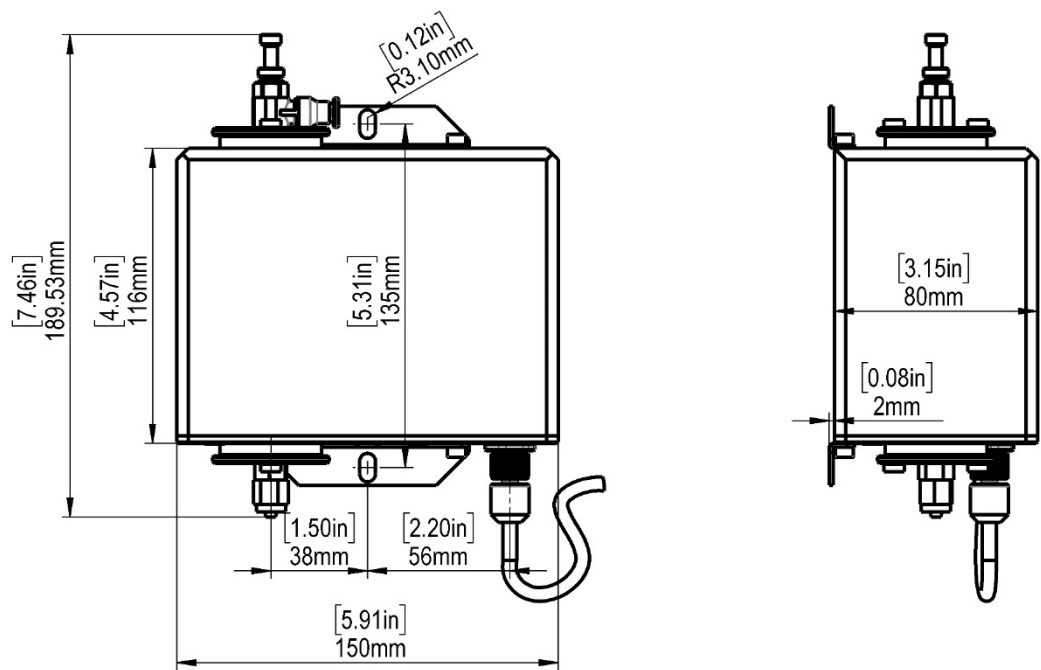


Interface definition

The SPS-T-SC3 series turbidity meter's electrical connection uses a 5-wire and shield interface design, the tail connection uses aviation connector equipped with shielded cable (standard 2m shielded cable).



Sensor dimensions

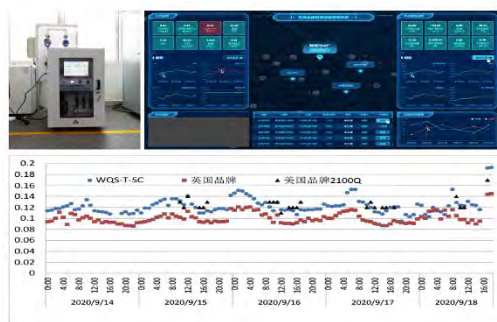


Applications

Comparative test

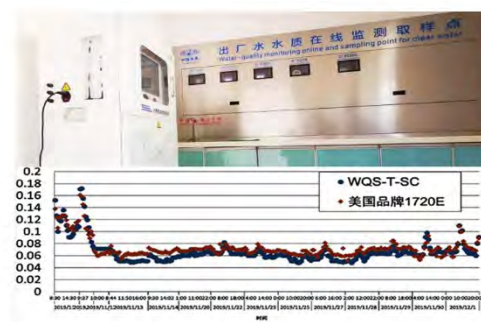


Factory water inspection



Product comparison test: US/UK company

Long-term reliability test: 3 months



Product Comparison Test: USA

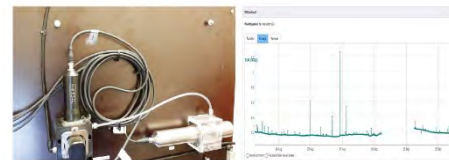
Long-term reliability test: 3 months

Secondary water supply monitoring



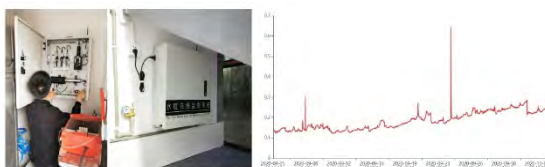
Product comparison test: US/UK company

Long-term reliability test: 3 months



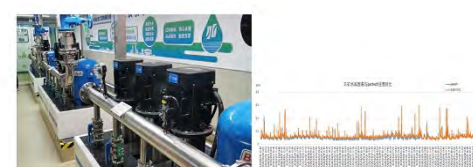
Overseas Finnish Projects

Long-term reliability test: 3 months



Product Comparison Test: USA

Long-term reliability test: 3 months



Product comparison test: UK company

Long-term reliability test: 3 months