

# Turbidity Sensor TSC-10-D



## Specifications

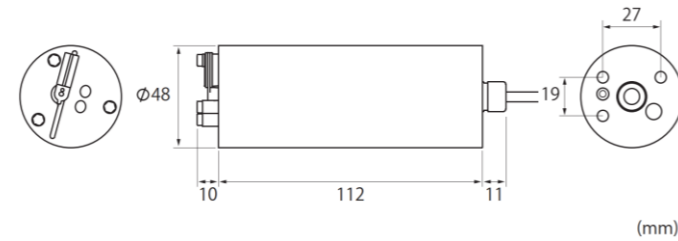
Description	Turbidity Sensor
Model	TSC-10-D
Measurement range	0.00 to 1000.0 NTU
Display resolution	0.00 to 19.99 NTU: 0.01 20.0 to 1000.0 NTU: 0.1
Power supply voltage	24 VDC ± 10%
Current consumption	Normal: 30 mA or less During cleaning: 230 mA max.
Communication (function)	MODBUS (RTU/ASCII)
Cleaning system	Wiper cleaning system
Operating temperature	0 to 40°C (unfrozen)
Major material	SUS316L, Sapphire glass, Fluorocarbon rubber, EPDM, PVC (cable)
Dimension	Φ48 x 133 mm
Weight	Approx. 1.1 kg
Degree of protection	IP68, maximum depth of 2 meters (underwater type)
Cable length	9 m

## OPTeX sensors line-up



●The appearance and specifications are subject to change for improvement without prior notice. ●The colors might be slightly different from the actual product. ●Safety Precautions: Read the instruction manual carefully and thoroughly before using the appliance, and then use it correctly. ●The product has a limited life. Maintenance and replace it regularly.

## Dimensions



## Optional items

### Universal transmitter: SC-U1(E)

- 2 sensors can be installed. (max. 4 sensors can be installed when using expansion board)
- 4-20 mA output
- Relay output



### Mounting attachment: TA-3



### Maintenance kit: TSC-MK

Replacement for wiper parts  
\* Replace once a year is recommended



## Easy Installation, Simple Operation.



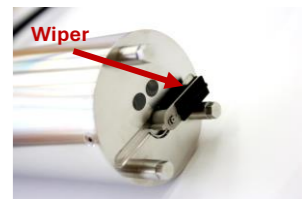
## Turbidity Sensor TSC-10-D

### ■90 degree scattered light method

TSC-10-D uses a method of 90 degrees scattered light as the measuring principle of the world common standard.

### ■Built-in wiper cleaning system

The Built-in wiper cleaning system certainly keeps lenses clean.



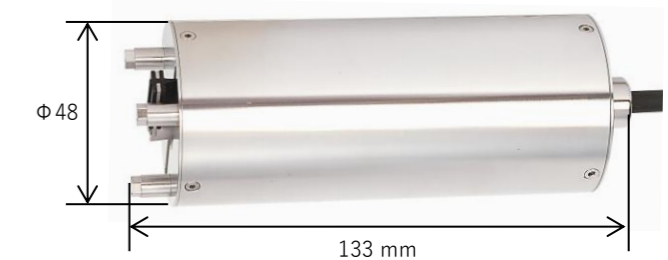
### ■Sapphire glass of the optical windows

The optical windows are made of hard-to-scratch sapphire glass. It enables to scrub the window surface to maintain the Turbidity Sensor.



### ■Compact design

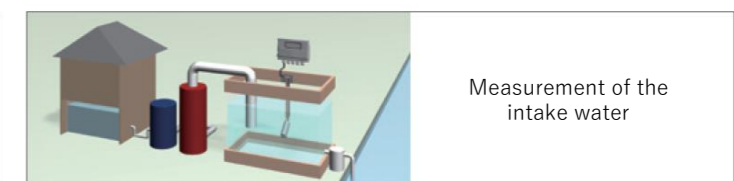
The compact design makes it possible to install easily.



## ■Applications



Measurement of the effluent

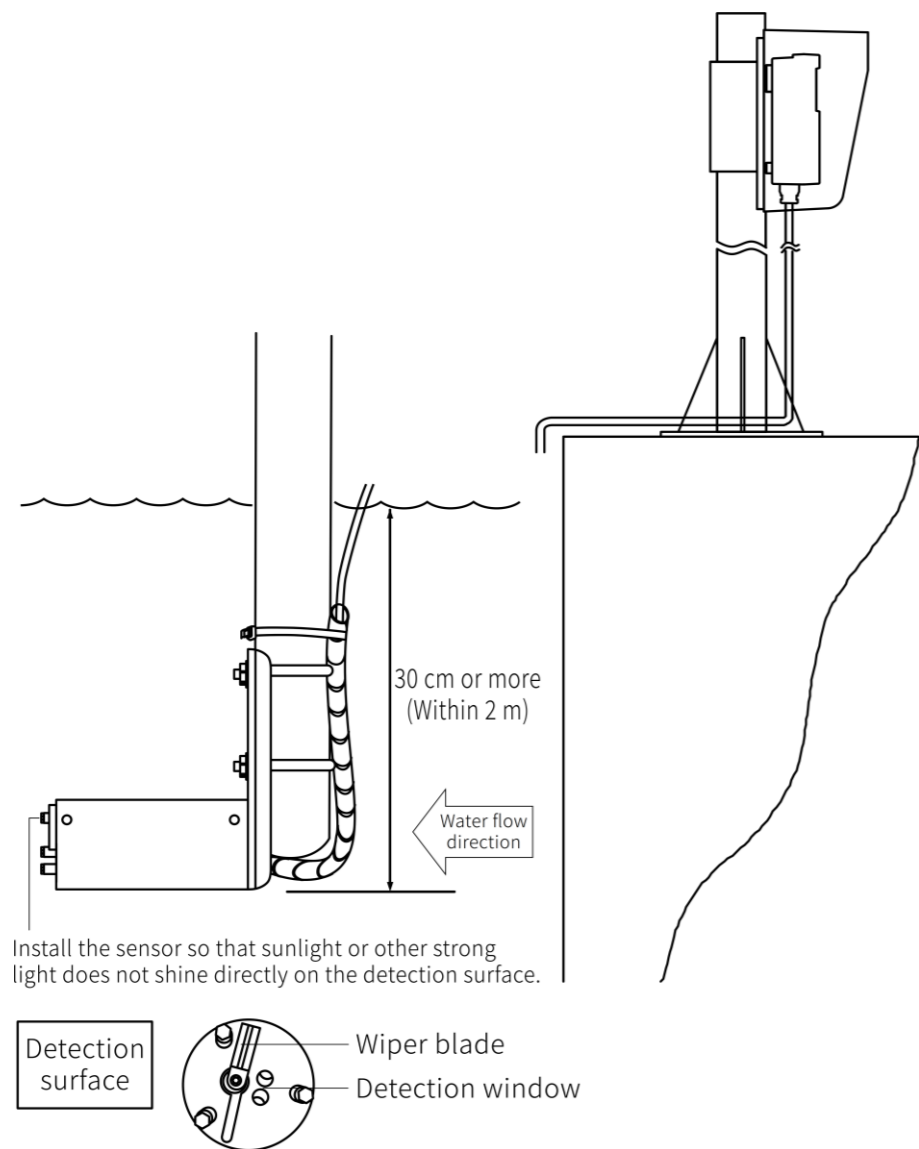


Measurement of the intake water

## OPTeX CO., LTD.

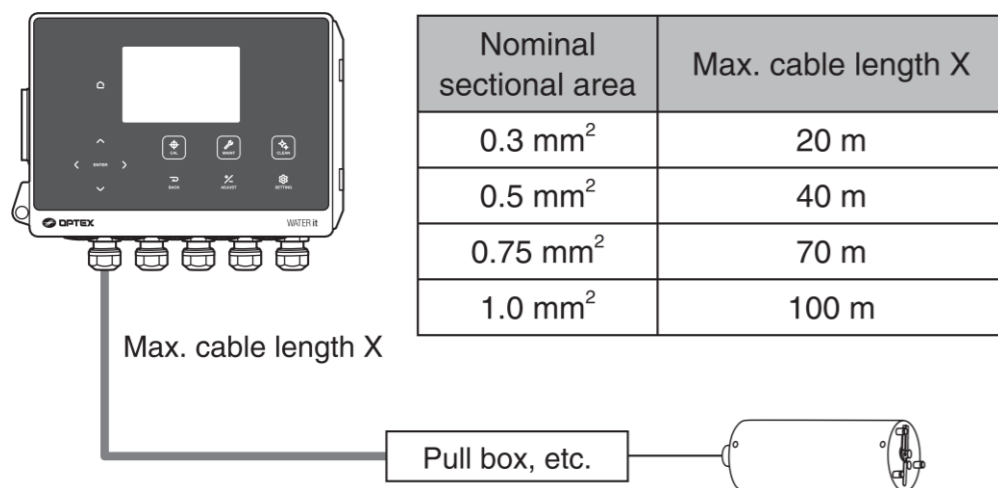
5-8-12, Ogoto, Otsu, Shiga, 520-0101 Japan  
Tel.+81-77-579-8680 Fax.+81-77-579-8199  
www.optex.co.jp/e/

## Recommended installation example



## Extension of sensor cable

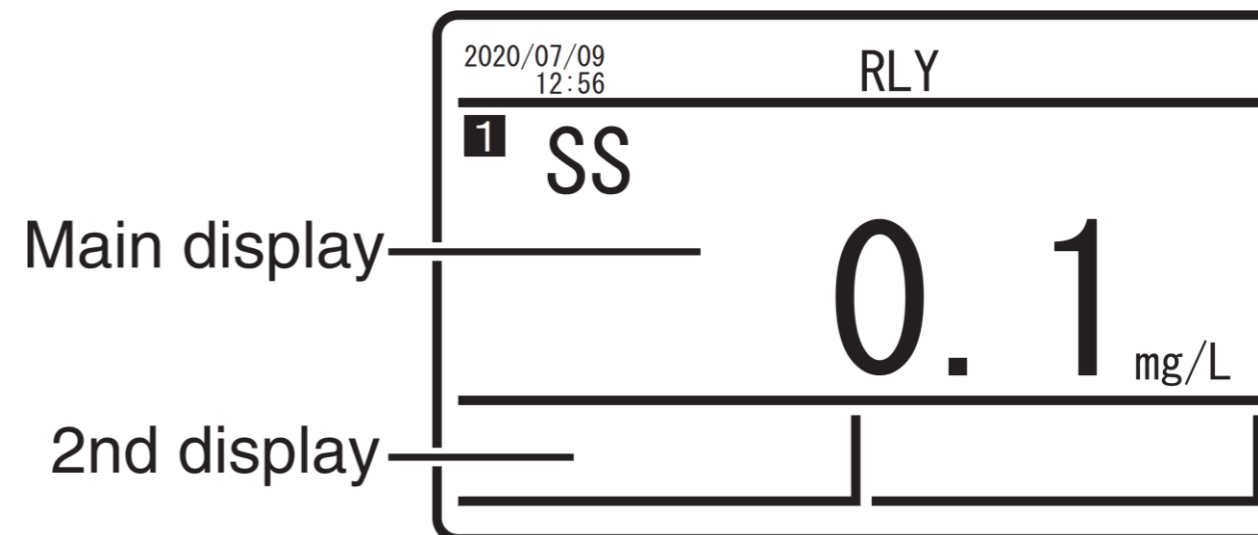
The standard length of the sensor cable is 9 m. To extend the cable, refer to the following. To extend the cable, connection using pull box is recommended.



The cable clamp fits the cable sheath diameter of 6 to 8 mm.

## Display item

Set the unit of turbidity to show on the SC-U1 display.



	Measurement item	Display item		Factory default setting
		item	Unit	
Main display	Turbidity	Turb.	NTU	Turb. NTU
		Turb.	FTU	
		Turb.	mg/L	
		Turb.	度	
		Turb.	No unit	

Installation and setting instructions can be found in the website instruction manual below.

**TSC-10-D**  
 Instruction Manual  
<http://navi.optex.net/manual/05337/?lang=en>



**SC-U1(E)**  
 Installation Manual  
<https://navi.optex.net/manual/05324/en/index.html?type=installationmanual>



Operation Manual  
<https://navi.optex.net/manual/05324/en/index.html?type=operationmanual>

