

Turbidity Sensor
TC-3000-D

Specifications

Description	Turbidity Sensor	
Model	TC-3000-D	TC-3000SP-D (for seawater)
Measurement range	0 to 3000 (FTU)	
Display resolution	0.0 to 99.9 FTU: 0.1 100 to 499: 1 500 to 3000: 5	
Power supply voltage	24 VDC ± 10%	
Current consumption	Normal: 15 mA max. During cleaning: 130 mA max.	
Communications (function)	MODBUS (RTU/ASCII)	
Cleaning system	Wiper cleaning system	
Operating temperature	0 to 40°C (unfrozen)	
Major material	Body: SUS316L	Body: SUS329J4L
	Sapphire glass, Fluorocarbon rubber, EPDM, POM	
Dimensions	Φ 32 x 163 mm (excluding Hanging Attachment)	
Weight	Approx. 930 g	
Degree of protection	IP68, maximum depth of 2 meters (underwater type)	

OPTEX sensors line-up

Turbidity
TSC-10-D



Dissolved oxygen
DOS-20



Turbidity
TC-Mi



pH
SE-pH-D



Suspended solids
TS-1000-D



ORP
SE-ORP-D



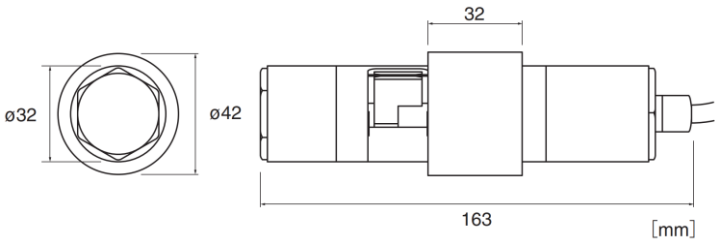
Suspended solids
TS-Mx-D



Conductivity
SE-Cond-D



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



Maintenance kit: TC-MK

Replacement for wiper parts
* Replace once a year is recommended



Mounting attachment: TA-1

* Not include pipes



Easy-to-use compact model has been achieved with well-developed functions



Turbidity Sensor
TC-3000-D
TC-3000SP-D
(for seawater)

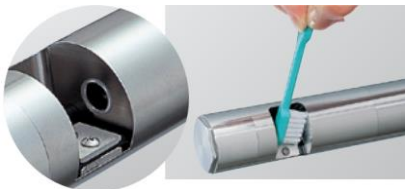
■ Built-in wiping cleaning system certainly keeps lenses clean.

Check and clean the window surface once every month.



■ “Easy to clean” scratch-proof sapphire glass for the optical windows.

The optical windows are made of hard-to-scratch sapphire glass. It enables you to scrub the window surface without problems.



■ Compact size can fit into any installation site.

The compact design makes it possible to install any places.



■ Display resolution automatically switches depending on the measurement range

- Measurement range: 0 to 3000
- Display resolution;
0.0 to 99.9: 0.1
100 to 499: 1
00 to 3000: 5

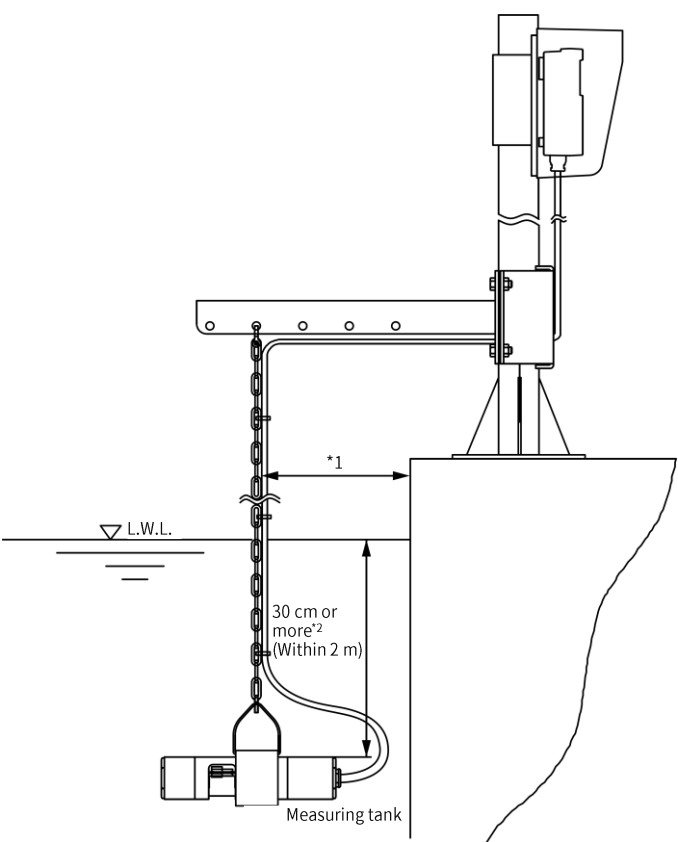
●The appearance and specifications are subject to change for improvement without prior notice. ●The colors might be slightly different from the actual products. ●Safety Precautions: Read the instruction manual carefully and thoroughly before using the appliance, and then use it correctly. ●The products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

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/

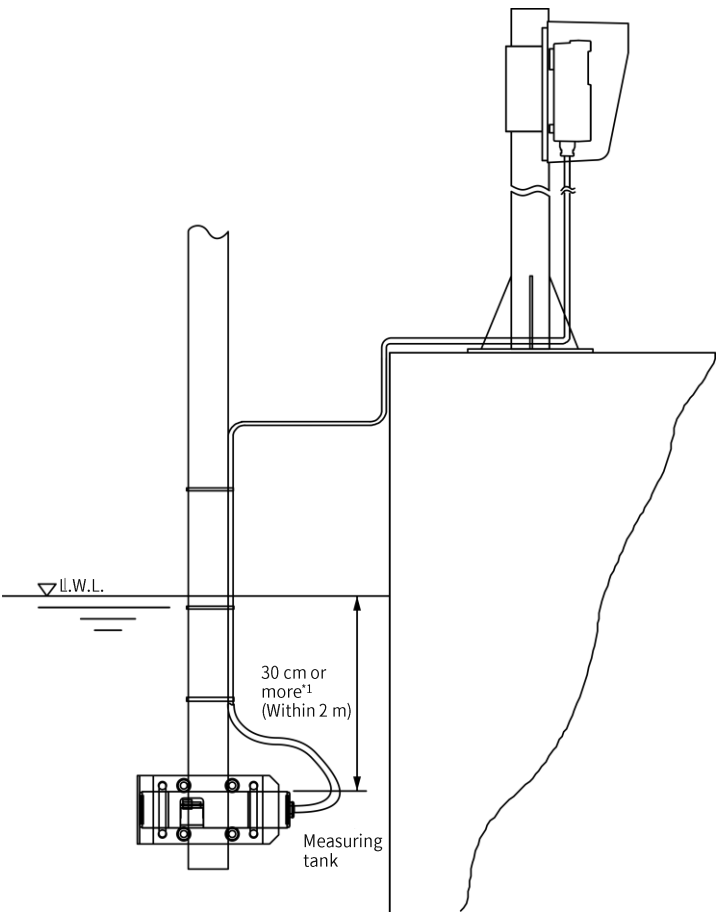
Recommended installation example

Chain suspension method



- *1: The detector may move slightly depending on the flow rate. Mount it so that it does not impact walls.
- *2: Mount the detector so that it remains submerged under the water surface even if the water level fluctuates.

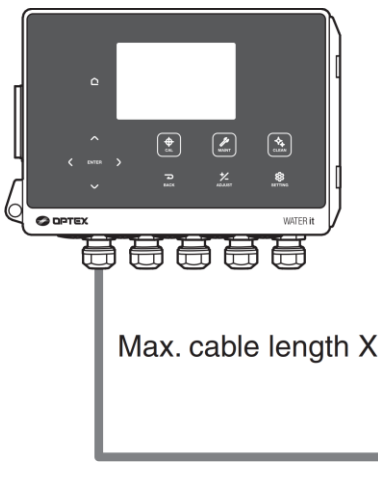
Pipe mounting method



- *1: Mount the detector so that it remains subm

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.

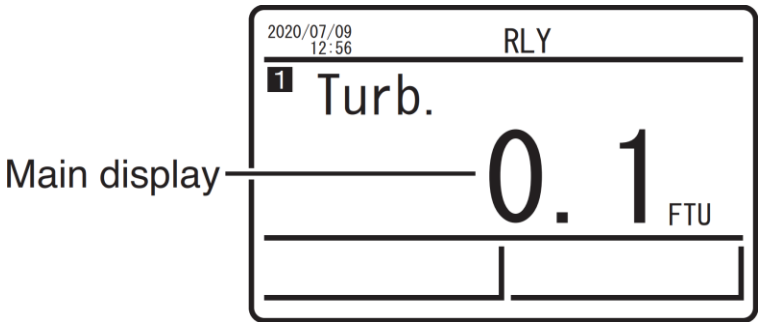


Nominal sectional area	Max. cable length X
0.3 mm ²	20 m
0.5 mm ²	40 m
0.75 mm ²	70 m
1.0 mm ²	100 m

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.	FTU	Turb. FTU
		Turb.	度 *	
		Turb.	No unit	

* 度 : Unit is used only in Japan.

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

TC-3000-D
Instruction Manual
<https://navi.optex.net/manual/05327/?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>

