

Turbidity Meter Series



Online Turbidity Meter T4070

Function

The principle of the turbidity/sludge concentration sensor is based on the combined infrared absorption and scattered light method. The ISO7027 method can be used to continuously and accurately determine the turbidity or sludge concentration. According to ISO7027 infrared double-scattering light technology is not affected by chromaticity to determine the sludge concentration value. The self-cleaning function can be selected according to the use environment. Stable data, reliable performance; built-in self-diagnosis function to ensure accurate data; simple installation and calibration.

Typical Use

The online turbidity meter is an online analytical instrument designed to measure the turbidity of water from waterworks, municipal pipeline network, industrial process water quality monitoring, circulating cooling water, activated carbon filter effluent, membrane filtration effluent, etc. especially in the treatment of municipal sewage or industrial wastewater. Whether evaluating activated sludge and the entire biological treatment process, analyzing wastewater discharged after purification treatment, or detecting sludge concentration at different stages, the sludge concentration meter can give continuous and accurate measurement results.

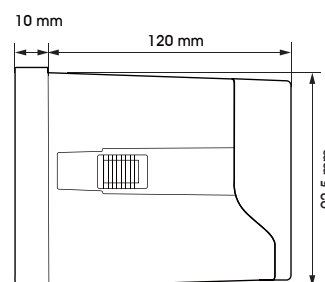
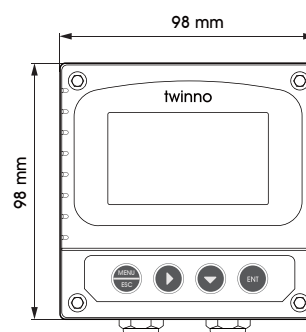
Mains Supply

85 ~ 265VAC \pm 10%, 50 \pm 1Hz, power consumption \leq 3W

9 ~ 36VDC, Power consumption: \leq 3W

Measuring Range

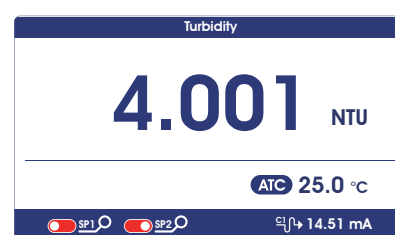
Turbidity: 0~9999NTU



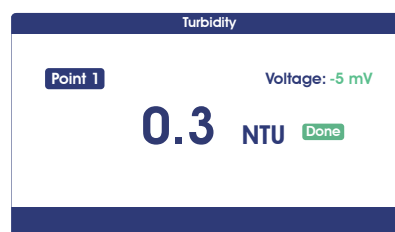
Online Turbidity Meter T4070

Features

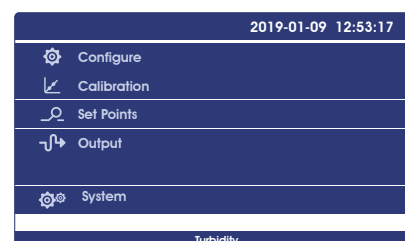
1. Large display, standard 485 communication, with online and offline alarm, 98*98 *130mm meter size, 92.5*92.5mm hole size, 3.0 inch large screen display.
2. Real-time online recording of MLSS/SS, temperature data and curves, compatible with all water quality meters of our company.
3. 0-20NTU, 0-400NTU, 0-4000NTU, a variety of measuring ranges are available, suitable for different working conditions, the measurement accuracy is less than $\pm 5\%$ of the measured value.
4. The new choke inductance of the power board can effectively reduce the influence of electromagnetic interference, and the data is more stable.
5. The design of the whole machine is waterproof and dustproof, and the back cover of the connection terminal is added to extend the service life in harsh environments.
6. Panel/wall/pipe installation, three options are available to meet various industrial site installation requirements.



Measurement mode



Calibration mode



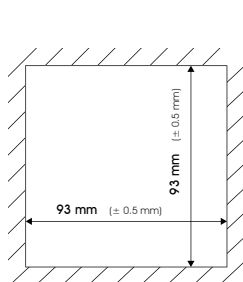
Setting mode

Electrical connections

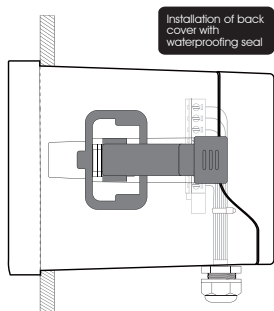
Electrical connection The connection between the instrument and the sensor: the power supply, output signal, relay alarm contact and the connection between the sensor and the instrument are all inside the instrument. The length of the lead wire for the fixed electrode is usually 5-10 meters, and the corresponding label or color on the sensor Insert the wire into the corresponding terminal inside the instrument and tighten it.

Instrument installation method

Embedded installation

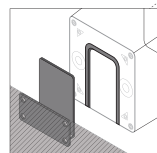
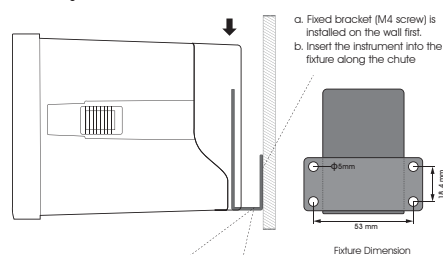


Insert mounting hole size

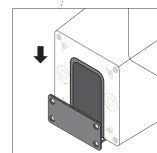


Insert the instrument into the square hole and fix it with the collocated clip.

Wall mounting



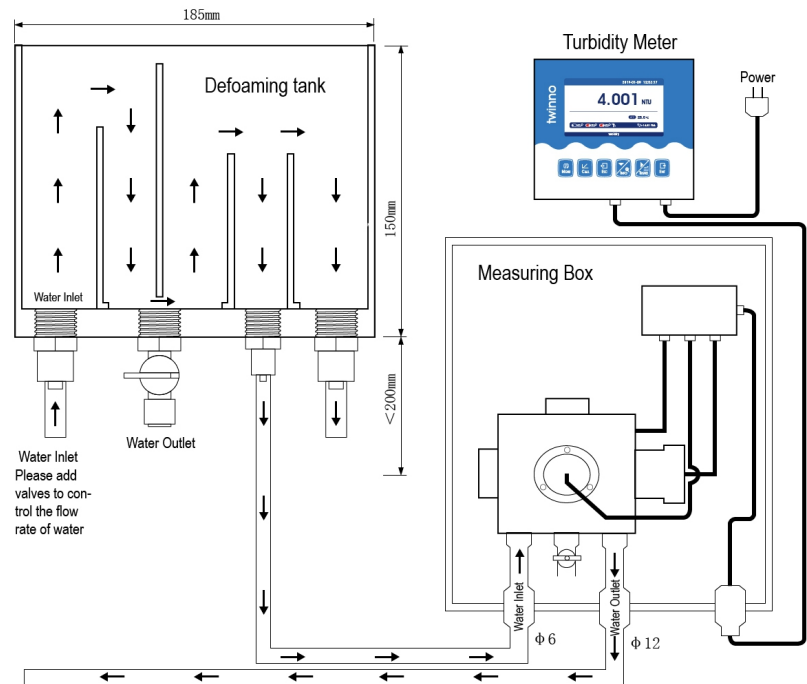
Fixed bracket (M4 screw) is installed on the wall first.



Insert the instrument into the fixture along the chute

Technical specifications

Measurement range	0~9999NTU
Measurement unit	NTU
Resolution	0.001NTU
Basic error	± 1%F.S
Temperature	0~50°C
Temperature Resolution	0.1°C
Temperature Basic error	±0.3°C
Current outputs	Two 4~20mA, 20~4mA, 0~20mA
Signal output	RS485 MODBUS RTU
Other functions	Data record & Curve display
Three relay control contacts	5A 250VAC, 5A 30VDC
Optional power supply	85~265VAC, 9~36VDC, power consumption ≤ 3W
Working conditions	No strong magnetic field interference around except the geomagnetic field.
Working temperature	-10~60°C
Relative humidity	≤ 90%
Waterproof rating	IP65
Weight	0.6kg
Dimensions	98×98×130mm
Installation opening size	92.5×92.5mm
Installation methods	Panel & wall mounted or pipeline



CS7800D Online Turbidity Sensor

The principle of the turbidity sensor is based on the combined infrared absorption and scattered light method. The ISO7027 method can be used to continuously and accurately determine the turbidity value. According to ISO7027 infrared double-scattering light technology is not affected by chromaticity to determine the sludge concentration value. The self-cleaning function can be selected according to the use environment. Stable data, reliable performance; built-in self-diagnosis function to ensure accurate data; simple installation and calibration.

The electrode body is made of POM, which is corrosion-resistant and more durable. The seawater version can be plated with titanium, which also performs well under strong corrosion.

IP68 waterproof design, can be used for input measurement. Real-time online recording of Turbidity/MLSS/SS, temperature data and curves, compatible with all water quality meters of our company.

0.001-20.00NTU-200.00NTU-400NTU, a variety of measuring ranges are available, suitable for different working conditions, the measurement accuracy is less than $\pm 5\%$ of the measured value.

Main features:

- This product is a circulating turbidity digital sensor, which can directly output RS485 signal.
- The internal structure can effectively eliminate water bubbles and improve the measurement accuracy and stability.
- When the outlet joint module is disassembled, the optical path lens and the inner wall of the flow groove can be cleaned, and the maintenance is more convenient.
- The internal upgrade of the sensor can effectively prevent the internal circuit from dampness and dust accumulation, and avoid damage to the internal circuit.
- The transmitted light adopts stable invisible near-monochromatic infrared light source, which avoids the interference of chroma in liquid and external visible light to sensor measurement. And built-in luminosity compensation, improve the measurement accuracy.
- The use of quartz glass lens with high light transmittance in the optical path makes the transmission and reception of infrared light waves more stable.
- Wide range, stable measurement, high precision, good reproducibility.
- Without meter, the sensor can be set online through software, from the machine address and baud rate, online calibration, restore factory, RS485 output corresponding range, modify the range, proportional coefficient and incremental compensation Settings.

Typical application:

Turbidity monitoring of water from waterworks, water quality monitoring of municipal pipeline network; industrial process water quality monitoring, circulating cooling water, activated carbon filter effluent, membrane filtration effluent, etc.

Technical parameters:

Model No.	CS7800D
Power/Output	9~36VDC/RS485 MODBUS RTU
Measurement range	0.001-20.00NTU-200.00NTU-400NTU
Measurement mode	90° IR scattered light method
Weight	10.0kg (Without transmitter)
Housing material	POM+316 Stainless steel
Waterproof rating	IP68
Measurement accuracy	± 5% or 0.5NTU, whichever is grater
Pressure resistance	≤0.3Mpa
Measuring temperature	0-45°C
Calibration	Standard liquid calibration, water sample calibration
Dimensions	400×300×170mm
Cable length	Standard 10m,can be extended to 100m
Installation	wall mounting ; matching with the filter tank;
Application	General applications, municipal pipeline network; industrial process water quality monitoring, circulating cooling water, activated carbon filter effluent, membrane filtration effluent, etc.