



## Suspended Solids Series

### Online Suspended Solids Meter T6075

#### Function

The principle of the 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 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 suspended solids meter is an online analytical instrument designed to measure the sludge concentration 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.

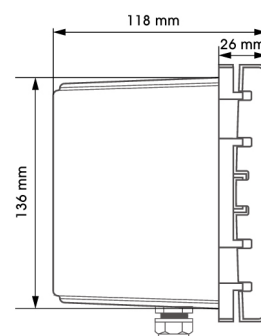
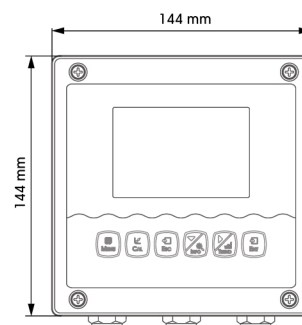
#### Mains Supply

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

9~36VDC,power consumption: $\leq$ 3W;

#### Measuring Range

Suspended Solids(sludge concentration): 0~99999mg/L



## Online Turbidity Meter T6075

### Features

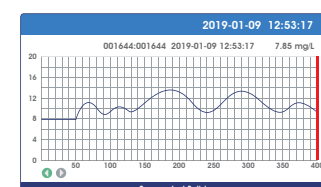
1. Large display, standard 485 communication, with online and offline alarm, 144\*144\*118mm meter size, 138\*138 hole size, 4.3 inch large screen display.
2. The data curve recording function is installed, the machine replaces the manual meter reading, and the query range is arbitrarily specified, so that the data is no longer lost.
3. Real-time online recording of MLSS/SS, temperature data and curves, compatible with all water quality meters of our company.
4. 0-500mg/L, 0-5000mg/L, 0-100g/L, a variety of measuring ranges are available, suitable for different working conditions, the measurement accuracy is less than  $\pm 5\%$  of the measured value.
5. The new choke inductance of the power board can effectively reduce the influence of electromagnetic interference, and the data is more stable.
6. 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.
7. Panel/wall/pipe installation, three options are available to meet various industrial site installation requirements.



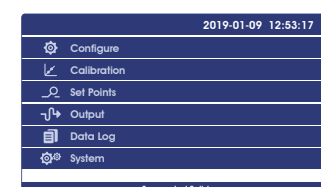
Measurement mode



Calibration mode



Trend chart

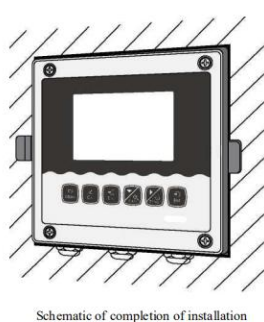


Setting mode

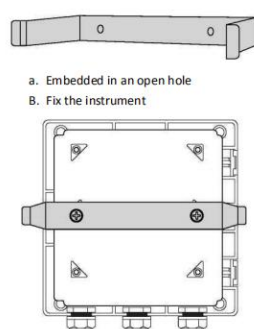
## Electrical connections

**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.

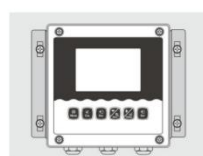
## Instrument installation method



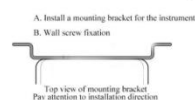
Embedded installation



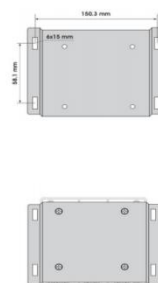
Instrument installation: Wall mounted installation



Schematic of completion of installation



Wall mount



## Technical Specifications

Measurement range	0~500~5000mg/L;0~50~100g/L(Can be extended)
Measurement unit	mg/L;g/L
Resolution	0.001mg/L;0.1g/L
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	0.8kg
Dimensions	144×144×118mm
Installation opening size	138×138mm
Installation methods	Panel & wall mounted or pipeline

## **Digital Suspended Solids (Sludge concentration) Sensor with Automatic Cleaning**



The principle of the Suspended Solids (Sludge concentration) is based on the combined infrared absorption and scattered light method. The ISO7027 method can be used to continuously and accurately determine the 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.

The electrode body is made of 316L stainless steel, which is corrosion-resistant and more durable. The seawater version can be plated with titanium, which also performs well under strong corrosion. Fully automatic electrode scraper, self-cleaning function, effectively prevent solid particles from covering the lens, improve measurement accuracy, and prolong use accuracy.

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.

### **Typical application:**

Suspended Solids (Sludge concentration) 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.



**Main features:**

- 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.
- Communication functions: RS-485 communication interface (Modbus-RTU protocol compatible), the fastest communication interval is 50ms. No instrument, can be directly connected to computers, PLC and other devices with RS485 signal interface for data acquisition. It is convenient for users to integrate the sensor into the upper computer system and the IoT system and other industrial control environment.
- Without meter, the sensor can be set online through software, from the machine address and baud rate, online calibration, restore factory, modify the range, proportional coefficient and incremental compensation settings.

**Technical parameters:**

<b>Model No.</b>	<b>CS7862D</b>
<b>Power/Outlet</b>	9~36VDC/RS485 MODBUS RTU
<b>Measurement mode</b>	135°IR scattered light method
<b>Dimensions</b>	Diameter 50mm*length 223mm
<b>Housing material</b>	PVC+316 Stainless steel
<b>Waterproof grade</b>	IP68
<b>Measurement range</b>	0.1-50000mg/L
<b>Measurement accuracy</b>	< measured value±10%(Depending on the homogeneity of sludge) or 10mg/L, whichever is grater.
<b>Pressure range</b>	≤0.3Mpa
<b>Measuring temperature</b>	0-45℃
<b>Calibration</b>	Standard liquid calibration, water sample calibration
<b>Cable length</b>	Standard 10m,can be extended to 100m
<b>Thread</b>	1 inch
<b>Weight</b>	2.0kg
<b>Application</b>	General applications, rivers, lakes, environmental protection, etc.