

Online Ultrasonic Sludge Interface Meter

T6580

Function

The Ultrasound Sludge Interface sensor can be used to continuously and accurately determine the Liquid Level. Stable data, reliable performance; built-in self-diagnosis function to ensure accurate data; simple installation and calibration.

Typical Use

The online Ultrasound Sludge Interface Meter is an online analytical instrument designed to measure the Sludge Interface 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 Interface meter can give continuous and accurate measurement results.

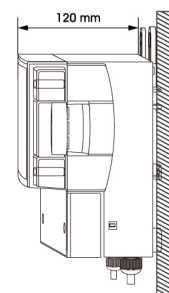
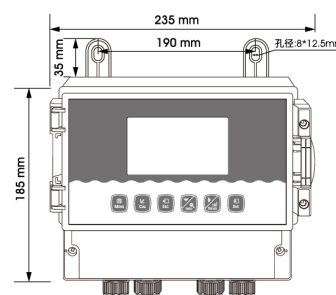
Mains Supply

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

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

Measuring Range

Sludge Interface: 0~5m, 0~10m



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Features

1. Large display, standard 485 communication, with online and offline alarm, 235*185*120mm meter size, 7.0 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 Sludge Interface, temperature data and curves, compatible with all water quality meters of our company.

4. 0-5m, 0-10m, 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.

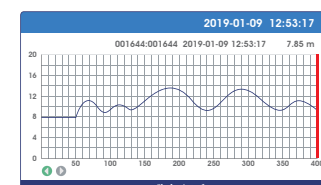
7. Panel/wall/pipe installation, three options are available to meet various industrial site installation requirements.



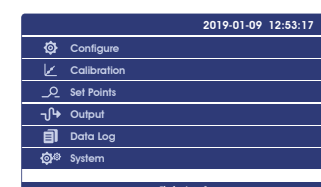
Measurement mode



Calibration mode



Trend chart

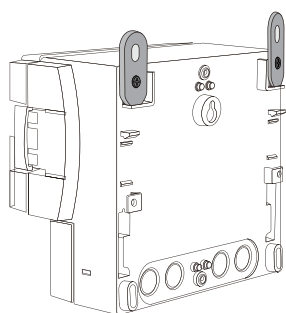


Setting mode

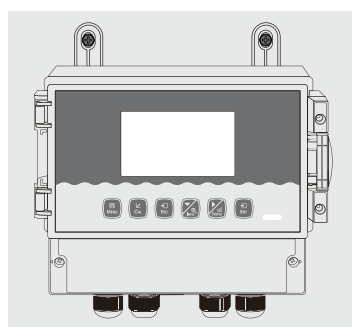
Electrical connections

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



Fix the fixed piece of the instrument

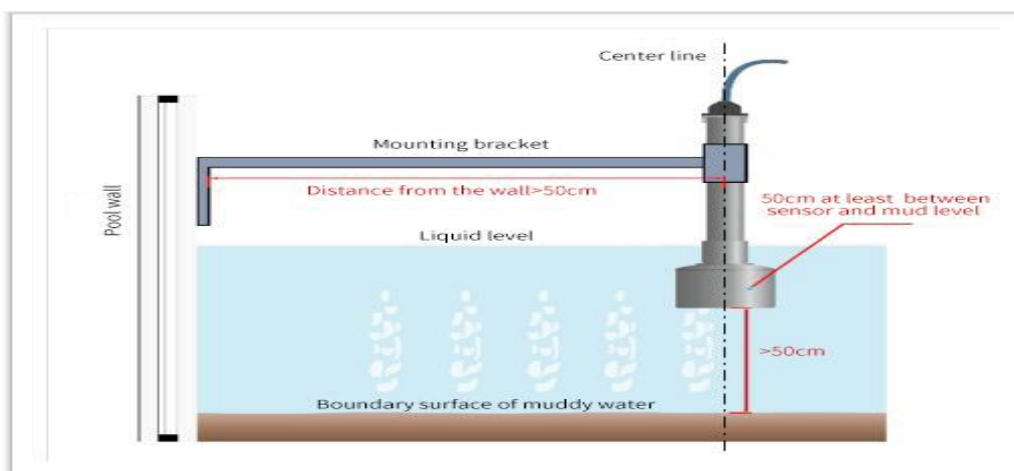
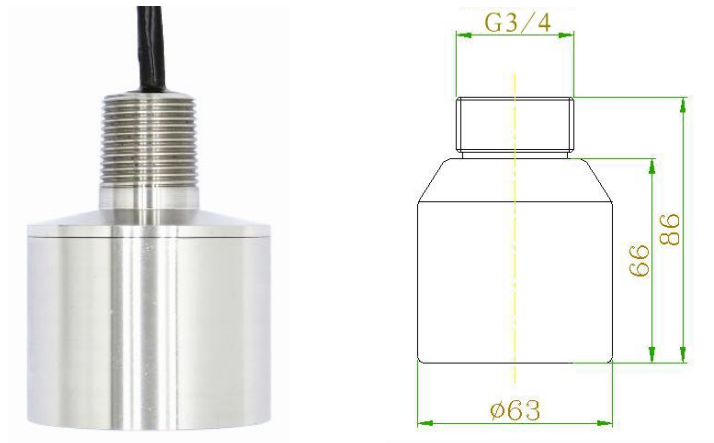


Installation completion drawing

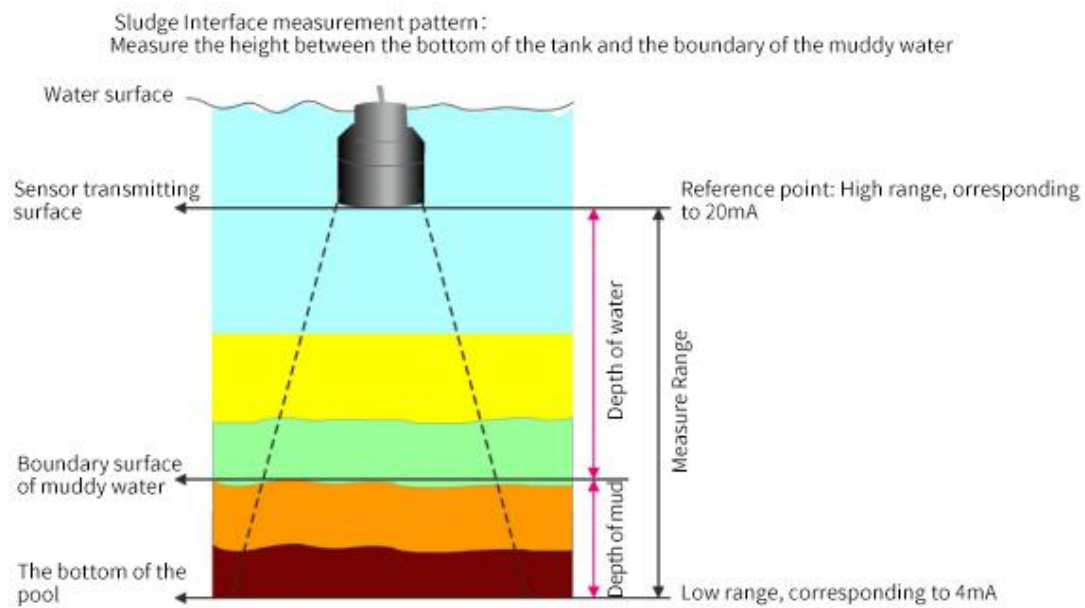
Technical Specifications

Measurement range	0~5m, 0~10m (Optional)
Measurement unit	m
Resolution	0.01m
Basic error	$\pm 1\%F.S$
Temperature	0~50°C
Temperature Resolution	0.1°C
Temperature Basic error	$\pm 0.3^{\circ}C$
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 $\leq 3W$
Working conditions	No strong magnetic field interference around except the geomagnetic field.
Working temperature	-10~60°C
Relative humidity	$\leq 90\%$
Waterproof rating	IP65
Weight	1.5kg
Dimensions	235×185×120mm
Installation methods	Wall mounted

CS6080D Ultrasonic sludge interface sensor



Model NO.	CS6080D
Power/Signal Output	9~36VDC/RS485 MODBUS RTU
Measure methods	Ultrasonic wave
Housing material	304/PTFE
Waterproof grade	IP68
Measurement range	0-5/0-10m (Optional)
Measuring blind zone	<20 cm
Accuracy	<0.3%
Temperature range	0-80℃
Cable length	Standard 10m cable
Application	Sewage, industrial water, river



When selecting the sensor installation location, the following criteria should be followed:

- Keep the sensor perpendicular to the mud surface and the bottom of the pool.
- There should be no obstacles in the transmitting range directly below the probe to avoid the ultrasonic signal being blocked and reflected by obstacles.
- The probe should be installed away from gas foam and active floating solids caused by sudden flow rate to ensure accurate and stable measurement.
- The probe should be installed away from the inlet and outlet.
- The sensor probe should be completely submerged in water. If the wall is vertical up and down and the surface is flat, determine the distance from the wall according to the table below.
- If the pool wall is uneven, or there are supports, pipes and other objects, it is necessary to increase the distance from the pool wall, in order to avoid the interference caused by the above objects to the measurement.