

Ficha de Producto SN_Sólidos



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Tips

- Select suitable turbidity sensor and installation method according to the environment.
- You can apply for the online acquisition software of upper computer of the company for free. Other functional software needs to be ordered.

1. PRODUCT CONFIGURATION

1.1. STANDARD CONFIGURATION

- Please confirm the sensor you purchased, the package is complete, if there is any damage to the package or any shortage of accessories, please contact the dealer as soon as possible. The configuration is as follows.
- Submerged turbidity digital sensor×1, Line length 10 meters
- A user manual ×1

1.2. OPTIONAL ACCESSORIES

- 485 to 232 or 485 to USB connector
- Mounting bracket
- DC 12V power supply

2. PRODUCT INTRODUCTION

The soil contains mud, silt, fine organic matter and other microorganisms and colloids to give turbidity in the water. The turbidity sensor is a sensor that detects the turbidity value of a water by using the degree of hindrance that occurs when suspended matter in the water passes through the light. After the infrared light wave transmitted by the transmitter on the sensor is absorbed, reflected and scattered by the measured object during transmission, a part of the transmitted light can be irradiated to the detector in the 180° direction, and the intensity of the light received on the detector is measured and measured. The turbidity of sewage has a certain relationship, so the turbidity of sewage can be calculated by measuring the intensity of transmitted light. It is widely used in the monitoring of turbidity values in chemical, electroplating, paper making, environmental water treatment engineering, pharmaceutical, food, tap water and other solutions. Especially suitable for use in the field and on the spot.

2.1. MAIN FEATURES

- This product is a submersible turbidity digital sensor, which can directly output RS485 signal and 4~20mA signal;
- The shell is made of 316L stainless steel and has good corrosion resistance.
- The transmitted light adopts a stable invisible near-monochromatic infrared light source, which avoids the interference of the chromaticity of the liquid and the visible light of the outside to the sensor measurement; and the built-in photometric compensation improves the measurement accuracy.
- The use of quartz glass lenses with extremely high transmittance on the optical path makes the emission and reception of infrared light waves more stable.
- Wide range of measurement, stable measurement, high precision, good reproducibility, not affected by sample flow rate and pressure
- Communication function: two optical isolation signal output, namely RS-485 communication interface (partially compatible with MODBUS-RTU protocol), the communication interval is up to 50ms; and 4~20 mA current output, 4-20mA can be reverse output; no need The instrument can directly connect to computers, PLCs and other devices with RS485/4-20mA signal interface for data acquisition. It is convenient for users to integrate the sensor into the industrial control environment such as the upper computer system and the physical connection system.
- The sensor can be set by RS485 communication, slave address and baud rate, online calibration, factory reset, 4-20mA output corresponding range, modified range, proportional coefficient and incremental compensation.
- Three-point correction.
- Watchdog function: make sure the meter doesn't crash.
- Power off protects > 10 years.

3. TECHNICAL INDICATORS

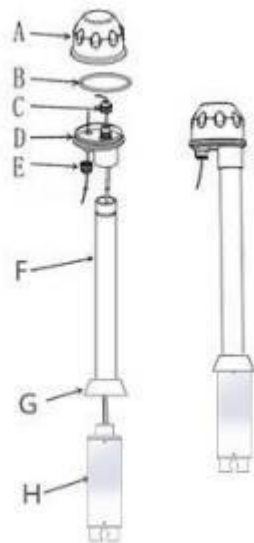
- Measuring Range: 0-10000NTU, measurement range can be customizable.
- Accuracy: $\pm 1.0\%FS$
- Repeatability : $\pm 1.0\%$
- Signal output: equipped with RS485 communication (partially compatible with MODBUS-RTU protocol) and 4~20mA signal output, all of which are optocoupler isolation protection
- Working conditions: Ambient temperature is 0~60°C, Withstand voltage is $\leq 0.6MP$
- Output load: $< 300\Omega$ (4-20mA)
- Working voltage: DC 12V \square 10%
- Size: Length 237mm, maximum outer diameter 64mm
- Installation method: submerged
- Mounting thread: G1 inch pipe thread
- Weight: 0.2kg
- Protection level: IP68

4. SENSOR INSTALLATION AND MAINTENANCE

The sensor is generally calibrated before leaving the factory, and the user can directly put it into use; the general instrument has a low failure rate.

- Sensors are required to be installed indoors or in places where sunlight is not exposed, as strong infrared rays in the sun can seriously affect sensor measurements.
- Since the sensor case is made of 316L stainless steel, it has a certain weight; you need to use the mounting bracket when installing the sensor.
- Use the instrument for the first time, please test it after 24 hours.
- After the sensor is running normally, the output of 4-20mA corresponds to the range.
- After the instrument is used for a period of time, the optical path lens of the sensor may be attached with dirt, causing a large error in the measured value, and the lens needs to be cleaned periodically. Cleaning operation: Clean the deposit on the optical path lens with a tweezers with an alcohol cotton ball until it is clean. After cleaning is completed, the sensor must be re-calibrated.
- Do not disassemble the instrument to avoid affecting or damaging the performance of the instrument.

5. INSTALLATION METHOD



- A - Junction box upper-cover
- B - o-rings
- C - The electrode wire fastens the head
- D - Junction box bottom cover
- E - Electrode wire protection casing
- F - G1 inch Pipe nipple
- G - Turbidity sensor