PROBEST®

A TRUST WORTHY

Water Analyzer Instruments ISO Factory



Fuzhou Probest Intelligent Technology Co., Ltd.

CE,ROHS, ISO(All products are 100% test before shipment.)

COMPANY BRIEF INTRODUCTION

Fuzhou Probest Intelligent Technology Co., Ltd. was established in September 2015, headquartered in Fuzhou, Fujian. The company's production base is more than 10,000㎡. We are a high-tech enterprise focusing on water quality sensors, instruments and automation equipment, integrating scientific research, manufacturing, marketing and services.

THE COMPANY'S HISTORY



2023 Integrated project department is established.

2022 Products are exported to more than 30 countries, and sales exceed 100 million.

2021 The plant area expanded to 7,000㎡, with more than 200 employees.

2020 The cumulative sales of water quality analyzers exceeded 50,000 units.

2019 The plant area expanded to 4,000㎡, and an optical laboratory was established. Sales exceeded 50 million, and Probest products began exporting

2018 Established a precision machining center, obtained ISO9001 certification, obtained national and provincial high-tech enterprise certification, and the cumulative sales of water quality analyzers exceeded 10,000 units.

2017 Sales exceeded 10 million, and a chemical laboratory was established.

2016 Released MP301 integrated multi-parameter, residual chlorine, low turbidity and other

2015 The company was established, and released optical sensors and transmitters for fluorescence method dissolved oxygen, turbidity, suspended solids, chlorophyll, blue-green algae, etc.

2013 R&D+Products Team were established.

WHY CHOOSE US PROBEST?

A direct reliable ISO9001 authorized water analysis manufacturer.
Strong 50+ professional R&D, 10+QA and 16+ QC team ensure superior quality.
Many patents and software copyrights ensure products meet markets requirements.
The most importance is our united team as a PROBEST family.
Worthy to be trusted as long terms partners.

Note: Product information may be subject to change, and Probest has the final interpretation.

FACTORY





TEAM BUILDING





MARKET ACTIVITIES






PROBEST CERTIFICATIONS



















PROBEST CASES

In recent years, guided by market demand, we PROBEST have focused on the research and development of environmental water analyzer monitoring and laboratory monitoring equipments, which has been widely used in tap water, sewage treatment, surface and groundwater monitoring, aquaculture monitoring, industrial process water monitoring, laboratory water quality analysis, smart water services and other fields.











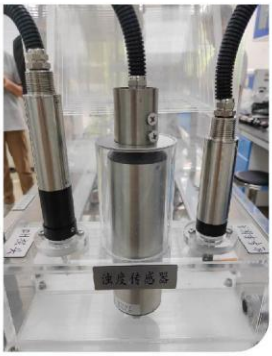

CATALOG

PPH-500A Digital pH sensor 1
PPH-500B Digital PH Sensor 2
PEC-500A Digital Conductivity Sensor 3
POP-500A RS485 Digital ORP Sensor 4
PEC-500B Digital Conductivity Sensor 5
PFDO-800 Dissolved Oxygen Sensor 6
PFDO-700 Dissolved Oxygen Sensor 7
PFDO-500 Aquaculture Fluorescence Dissolved Oxygen Sensor 8
PDCL-400A Digital Residual Chlorine Online Analyzer 9
PDCL-500M Residual Chlorine or Chlorine Dioxide Sensor 10
PDCL-600 Membrane Method Residual Chlorine or total chlorine or chlorine dioxide Sensor 10
PDO3-600 Ozone O3 Sensor 12
PSS-800 SS(Sludge Concentration)Sensor 13
PSS-600 SS(Sludge Concentration)Sensor 14
PTU-800 Turbidity Sensor 15
PTU-600 Turbidity Sensor 16
PLTU-700 Low-Range Turbidity Sensor 17
PLTU-600 Low-range Turbidity Analyzer 18
PCH-800A Chlorophyll Sensor 19
PBA-800 Blue-Green Algae Sensor 20
PDS-300 Transparency Sensor 21
PCT-600 Color Sensor 22
POIL-800 Oil In Water Sensor 23
POIL-700 Oil In Water Sensor 24
MP301 Multi-Parameter Analyzer 25
PUVNO3-900 Spectrometer Nitrate Sensor 27
PINH3-900 Ammonia Nitrogen sensor 28
PISE-900 Ion sensor 29
PUVCOD-900 Spectrometer Organic Sensor 29
PUVCOD-600 Spectrometer Organic Sensor 31
PADV-60 Ultrasonic Doppler Velocimetry 32
PT-30 Hydrostatic level gauge 33

PPH-500A Digital pH sensor

Measurement Principle

The pH sensor uses a composite electrode in which a glass indicating electrode and a reference electrode are combined to measure the pH of the water.

Features

- Power supply and output isolation design to ensure electrical safety.
- Power supply and communication chip built-in protection circuit, strong anti-interference ability.
- With a comprehensive protection circuit design, it can work reliably without additional equipment.
- The circuit part is designed inside the electrode, the environment is well tolerated, and the installation operation is easier.
- RS-485 transmission interface, MODBUS-RTU communication protocol, two-way communication, can receive remote commands.
- Output more electrode diagnostic information, more intelligent.
- Internal integrated memory, memory calibration and setting information can be memorized.

Applications

It is widely used in pH monitoring in water treatment, hydrological monitoring, wastewater treatment, swimming pools, fish ponds and fertilizers, chemicals, and biology.



Technical Specifications

Sensor Main material	Shell: PPS; Cable: PVC; Electrode: Glass core
Measurement range	0-14pH
Resolution	0.01 pH
Precision	±0.1 pH
Repeatability	±0.1 pH
Temperature range	-10-110℃
Temperature resolution	0.1℃
Temperature precision	0.5℃
Pressure range	0-0.1Mpa
Applicable Temperature	0-60℃(Non-freezing)
Power supply	12V DC
Dimension	Dia. 26mm*Length166mm
Water Protective rate	IP68 (Protective casing)
Cable length	Standard: 10 m, the maximum can be extended to 200M

PPH-500B Digital PH Sensor

Introduction



PPH-500B is a digital PH sensor using RS485 communication interface and standard Modbus protocol. It adopts stainless steel corrosion-resistant casing, IP68 protection grade, built-in PT1000 temperature sensitive resistor and compensation algorithm, which has the advantages of high precision, long life and small drift, and is suitable for various harsh working environments.

Main Features

- Built-in PT-1000 temp. sensitive resistor, effective temperature compensation.
- Industrial grade composite pH electrode, suitable for harsh working environment.
- Corrosion-resistant shell, waterproof grade IP68, can work underwater for a long time.
- RS485 communication interface, standard Modbus protocol, easy to integrate.

Typical Application

- Surface water, waterworks, aquaculture
- Municipal sewage, industrial wastewater, sewage treatment, industrial process

Specification

Measuring range	0-14 pH
Main material	316L Stainless steel ;Cable: PUR
Resolution	0.01 pH
Repeatability	±0.1 pH
Precision	±0.1 pH
Temperature range	-15-100℃
Temp. resolution	0.1℃
Temp. accuracy	0.5℃
Electrode withstand voltage	0-0.1Mpa
Electrode Temp. resistance	0-45℃ (Non-freezing)
Response time	<10s
Communication Interface	RS485,Standard Modbus
Operating Voltage	9-36V
Protection class	IP68/NEMA6P
Dimensions	Dia. 34mm* Length 252mm
Mounting thread	Upper thread R3/4
Cable length	Standard cabel:10M,Max extended to 200M.

PEC-500A Digital Conductivity Sensor

Measurement Principle

The conductivity sensor is a glass platinum electrode. In general, the voltage is in the form of a sine wave. Conductivity is determined by the ohmic formula based on voltage and current values.



Features

- Power supply and output isolation design to ensure electrical safety.
- Power supply and communication chip built-in protection circuit, strong anti-interference ability.
- With a comprehensive protection circuit design, it can work reliably without additional isolation equipment.
- The circuit part is designed inside the electrode, the environment is well tolerated, and the installation operation is easier.
- RS-485 transmission interface, MODBUS-RTU communication protocol, two-way.
- Communications, can receive remote commands.
- Output more electrode diagnostic information, more intelligent.
- Internal integrated memory, memory calibration and setting.
- Information can be memorized after power off.

Applications

- It is widely used in the monitoring of conductivity in water treatment, hydrological monitoring, wastewater treatment,
- It is widely used in the monitoring of conductivity in swimming pools
- It is widely used in the monitoring of conductivity in fish ponds
- The monitoring of conductivity in fertilizers, chemicals, and biology.

Technical Specifications

Main materials	PPS Shell
Measurement range	0.0-200.0 us/cm ; 0-2000us/cm ; 0.01-20.00ms/cm (Automatic switch)
Accuracy	±2%F.S.
Resolution	Depending on the range 0.01ms/cm、0.1us/cm、1us/cm(Automatic switch)
Repeatability	±1%
Temperature compensation	0-60℃
Pressure range	0-0.1 Mpa
Electrode Temp. resistance	0-60℃(Non-freezing)
Power supply	12VDC
Communication Protocol	MODBUS RS485
Dimension	Dia26mm*L 166mm
Protective rate	IP68 (Protective casing)
Mounting thread	3/4" thread
Cable length	Standard:10M,the maximum can be extended 200m

POP-500A RS485 Digital ORP Sensor

Features



- Power supply and output isolation design to ensure electrical safety
- Power supply and communication chip built-in protection circuit, anti-interference ability
- With comprehensive protection circuit design, without additional isolation equipment can work reliably
- The circuit is built inside the electrode, which has good environmental tolerance and is easier to install and operate
- RS485 transmission interface, MODBUS RTU communication protocol, two-way communication, can receive remote instructions
- The communication protocol is simple and practical, and it is extremely convenient to use
- Output more electrode diagnosis information, more intelligent
- Internal integrated memory, can still remember the stored calibration and setting information after power off

Technical Specifications

Shell material	PPS Shell
Measuring range	-2000 - 2000 mV
Resolution	1 mV
Precision	±5mV
Temp. compensation	-10.0 -110.0℃
Resolution	0.1℃
Precision	0.5℃
Electrode voltage resistance	0-0.1Mpa
Electrode temp. resistance	0.0-60.0℃(Non-freezing)
Mounting thread	3/4 inch Fore and aft thread
Power	10-28VDC
Cable length	Standard: 10 M

PEC-500B Digital Conductivity Sensor

Introduction

PEC-500B digital quadrupole Conductivity Sensor, suitable for all kinds of harsh working environment. It has the advantages of high precision, long life and small drift. Widely used in surface water, municipal sewage, industrial wastewater, sewage treatment, waterworks, industrial process, aquaculture and other industries.



Main Features

- Core electrode adopts quadrupole working principle, wide range, high accuracy and good stability.
- Electrode is made of graphite, high sensitivity, strong ability to resist pollution.
- Waterproof grade IP68, 316L stainless steel corrosion resistant shell, long-time work underwater.
- Built-in PT-1000 temp. sensitive resistor, effective temperature compensation.
- RS485 communication interface, the standard Modbus protocol, ease of integration.
- Sensor power supply positive and negative reverse connection protection.
- Sensor RS485 A/B terminal is connected to the power supply protection.

Application

- Surface water, water plant, aquaculture.
- Municipal sewage and industrial wastewater, sewage treatment, industrial process.

Technical Specifications

Measuring range	10 us/cm -200 ms/cm
Main material	316L Stainless Steel
Resolution	0.01us/cm-1us/cm depends on measure range
Repeatability	±1% or 1us/cm bigger one
Accuracy	±1% or 1us/cm bigger one
Temp. measuring range	0-100℃
Electrode voltage resistance	0-0.1 Mpa
Electrode temp. resistance	0-45℃ (no icing)
Communication Interface	RS485,Standard Modbus
Operating Voltage	9-36V
Protection class	IP68/NEMA6P
Dimensions	Dia34mm*L 231mm
Mounting thread	Upper thread R3/4
Cable length	Standard cabel:10M,Max extended to 200M.

PFDO-800 Dissolved Oxygen Sensor

Measurement Principle

PFDO-800 Dissolved Oxygen Sensor adopts fluorescence method to measure dissolved oxygen.The cap of the sensor is coated with a luminescent material. Blue light from an LED illuminates the luminescent chemical. The luminescent chemical instantly becomes excited and releases red light. The time and intensity of red light are inversely proportional to the concentration of oxygen molecules, So the concentration of oxygen molecules is calculated.



Features

- The sensor adopts new type of oxygen sensitive membrane, with NTC temperature compensated function, whose measurement result has good repeatability and stability.
- Won't produce oxygen consumption when measuring and no requirement of flow rate and stirring.
- Breakthrough fluorescence technology, without membrane and the electrolyte and almost no maintenance.
- Built-in self-diagnosis function to ensure the accuracy of data.
- Factory calibration, not need calibration for a year and can carry out field calibration.
- Digital sensor, high anti-jamming capacity and far distance transmission.
- Standard digital signal output, can achieve integration and networking with other equipment without controller.

Technical Specifications

Measurement range	0-20 mg/L or 0-200% saturation;Temperature:0-45℃
Measurement Accuracy	±3% or ±0.3 mg/L, whichever is greater ;Temperature:±0.5℃
Resolution	0.01mg/L
Repeatability	±0.3mg/L
Pressure range	≤0.3Mpa
Calibration	Air automated calibration,sample calibration
Main material	Body：SUS316L(fresh water),Titanium alloy(Ocean marine); Cover:PPS+ glass fiber;Cable:PUR
Storage temperature	-15-60℃
Measuring temperature	0-45℃(Non-freezing)
Dimensions	Dia49.5mm*L 251.5mm
Weight	1.4KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m, the maximum may be extended to 100m

PFDO-700 Dissolved Oxygen Sensor

Measurement Principle



PFDO-700 Dissolved Oxygen Sensor adopts fluorescence method to measure dissolved oxygen. The cap of the sensor is coated with a luminescent material. Blue light from an LED illuminates the luminescent chemical. The luminescent chemical instantly becomes excited and releases red light. The time and intensity of red light are inversely proportional to the concentration of oxygen molecules, So the concentration of oxygen molecules is calculated.

Features

- The sensor adopts new type of oxygen sensitive membrane, with NTC temperature compensated function, whose measurement result has good repeatability and stability.
- Won't produce oxygen consumption when measuring and no requirement of flow rate and stirring.
- Breakthrough fluorescence technology, without membrane and the electrolyte and almost no maintenance.
- Built-in self-diagnosis function to ensure the accuracy of data.Plug-and-play sensor, quick and easy installation.
- Factory calibration, not need calibration for a year and can carry out field calibration.
- Digital sensor, high anti-jamming capacity and far distance transmission.
- Standard digital signal output, can achieve integration and networking with other equipment without controller.

Applications

- DO online monitoring of different technological processes such as regulating reservoir, biochemical pool and effluent of sewage treatment plant.
- DO online monitoring of water plant, surface water, industrial process water and aquaculture and etc.

Technical Specifications

Measurement range	0-20 mg/L or 0-200% saturation;Temperature：0-45℃
Measurement Accuracy	±3% or ±0.3 mg/L, whichever is greater ; Temperature：±0.5℃
Resolution	0.01mg/L
Repeatability	±0.3mg/L
Pressure range	≤0.3Mpa
Calibration	Air automated calibration,sample calibration
Main material	Body：SUS316L(fresh water),Titanium alloy(Ocean marine);Cover：PPS+ glass fiber;Cable：PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-60℃
Measuring temperature	0-45℃(Non-freezing)
Dimensions	Dia49.5mm*L 251.3mm
Weight	1.4KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m, the maximum may be extended to 100m

PFDO-500 Aquaculture Fluorescence Dissolved Oxygen Sensor

Measurement Principle



PFDO-500 aquaculture dissolved oxygen Sensor uses the fluorescence method to measure dissolved oxygen. The top of the sensor is covered with a layer of fluorescent material. When the blue light emitted by the sensor irradiates the fluorescent material, the fluorescent material is excited and emits red light. Because oxygen molecules can take away energy (Quenching effect), so the time and intensity of excited red light are inversely proportional to the concentration of oxygen molecules, and the concentration of dissolved oxygen in water can be obtained by calculation.

Features

- The sensor adopts a new type of oxygen-sensitive membrane, with its own NTC temperature compensation function, and the measurement results have good repeatability and stability
- No oxygen consumption during measurement, no flow rate/agitation requirements
- Breakthrough fluorescent technology, no membrane and electrolyte, basically no maintenance
- Built-in self-diagnosis function to ensure accurate data
- Factory calibration, one year without calibration, can be calibrated on site
- Digital sensor, strong anti-interference ability and long transmission distance
- Standard digital signal output, which can realize integration and networking with other equipment without transmitter

Applications

- DO online monitoring in aquaculture

Technical Specifications

Measuring range	DO: 0-20 mg/L or 0-200% saturation Temp.: 0-45℃
Measurement accuracy	DO: ±3% of measured value or ±0.3mg/l, greater one; temp.: ±0.5℃
Repeatability	±0.3mg/l
Resolution	0.01mg/l
Pressure range	≤0.1Mpa
Calibration	Air automatic calibration, sample calibration
Sensor material	SUS316L
Protocol	MODBUS RS485
Temp	Storage: -15 to 60℃,Operating: 0 to 45℃(Not frozen)
Size	Dia.25.0mm*Length 127mm
Weight	0.3KG
Protection class	IP68/NEMA6P
Cable length	Standard 10M,Max could be extended to 100M

PDCL-400A Digital Residual Chlorine Online Analyzer

Measurement Principle



The PDCL-400A digital residual chlorine/chlorine dioxide sensor uses advanced constant voltage principles to measure residual chlorine/chlorine dioxide in water. The method utilizes a stable potential between the polarized electrode and the reference electrode at which different measured components produce different current intensities. The meter calculates the concentration of the measured component by collecting and analyzing the current signal.

Features

- Easy clean and replace.
- Electrode no need to replace membrane and reagent when operating and the maintenance is simple to ensure the stability, reliability and accuracy of instrument for long-term working.
- Power supply and output isolation design to ensure electrical safety
- Power supply and communication chip built-in protection circuit, strong anti-interference ability
- With a comprehensive protection circuit design, it can work reliably without additional isolation equipment
- The circuit is built in the inside of the electrode, the environment is well tolerated, and the installation operation is easier.
- RS-485 transmission interface, MODBUS-RTU communication protocol, two-way communication, can receive remote commands
- Communication protocol is simple and practical, extremely convenient to use
- Output more electrode diagnostic information, more intelligent
- Internal integrated memory, memory calibration and setting information can be memorized after power off

Applications

- For chlorine water, chlorine dioxide measurement in swimming pools, drinking water distribution networks, swimming pools

Technical Specifications

Principle	Constant voltage method
Measurement range	0-2mg/L,0-20mg/L(optional)
Calibration	two-point calibration
Temperature compensation	Manual or automatic temperature compensation
Temperature coefficient	2%/℃
Power supply	12V DC
Communication protocol	MODBUS RS485
Flow rate	30-60 L/h
Operating temperature	0-50℃(Non-freezing)
Electrode dimensions	Dia. 13.5mm*L 178.5mm
Mounting Dimensions	PG13.5
Electrode materials	316LStainless steel shell
Cable length	Standard 5M cable

PDCL-500M Residual Chlorine or Chlorine Dioxide Sensor

Introduction



PDCL-500M Residual Chlorine or Chlorine Dioxide Sensor, using photopolymer film and silicon crystal semiconductor as conduction elements, built-in chlorine and temperature probe, microelectronic components are injected and packaged by MEMS technology. As the concentration of free chlorine or chlorine dioxide in the water sample changes, the sensor generates different current intensity, which is processed by the regulator and signal amplifier, and converted into the standard MODBUS RS485 signal.

The use of the sensor does not need to change the reagent, simple maintenance, to ensure the long-term stability of the instrument reliability and accuracy.

Application

- Using in waterworks, rural drinking water, water stations, secondary water supply and other fields.

Technical Specification

Measurement content	HCLO、CLO2
Measuring system	Micro-electronic MEMS technology, special membrane structure
Measuring range	0-2ppm, 0-5ppm
Measuring accuracy(25℃,pH=7.2)	0-2ppm：≤2mg/L,±5% or ±0.03mg/L of test value(bigger one) 2-5ppm：±5% or ±0.25mg/L of test value(bigger one)
Resolution	0.01ppm
Polarization time	For the first time, the chlorinated water is first routed for 2 hours and then
Response time	< 30s after polarization
Mini. conductivity	≥100μS /cm, Can not be used for ultra-pure water
Operating temp.	0-40℃ (no condensation)
Temp. compensation	PT1000, Built-in integrated automatic compensation
Max. pressure	10bar
Recommended flow	≥10L/h, (in the supporting circulation tank)
PH range	pH=5-9, Below 5 will damage the membrane head
Communication protocol	MODBUS RS485
Cable length	Standard: 3M, customizable
Probe weight	About 210g
Thread size	NPT 3/4

PDCL-600 Membrane Method Residual Chlorine or total chlorine or chlorine dioxide Sensor

Measurement Principle

PDCL-600 Membrane method residual chlorine\total chlorine\chlorine dioxide electrode is a composite digital electrode using membrane amperometric method. The detection part adopts special permeable membrane technology, which is resistant to chemical (mainly surfactant-based) interference and reduces pH dependence. The sensor is not limited by water quality conditions, and can be used in tap water, swimming pools, medical wastewater sewage treatment, industrial wastewater and other environments. The sensor has fast response, stable performance, low cost and low maintenance, providing users with reliable and accurate data.



Features

- Basically not affected by PH;
- Internal processing of digital signal data, free from electromagnetic interference;
- Stable work and fast response;
- No need for zero calibration;
- Low cost and less maintenance work

Applications

- Conventional drinking water, tap water, swimming pool water, aquaculture, seawater
- Medical wastewater, medical sewage. Dosing equipment, circulating water, cooling water

Technical Specifications

Measurement range	0-2mg/L;0-20mg/L;0.5-200mg/L
pH range	pH value：4-9
Conductivity range	10μS/cm-50mS/cm (Seawater)
Calibration	Air automated calibration, sample calibration
Flow rate	In the flow cell:250~500ml/min
Slope drift	About -1% per month
Response time	T90:About 2minites(Up to 90% of the measured value)
Zero calibration	No need
Slope calibration	On the measuring device, analytical determination by the DPD-1 method
Temp. compensation	Integrated automatic temperature compensation
Material	PVC-U, stainless steel, microporous hydrophilic membrane,
Operating temp.	Measuring water temperature: 0-45℃ (no condensation in water) Room temp.：0-55℃
Output signal	MODBUS RS485
Size	diameter 25mm * length 205mm
Cable length	5m cable

PDO3-600 Ozone O3 Sensor

Introduction



PDO3-600 ozone electrode is a 2-electrode measurement system using the coating method. The detection part adopts a special permeable membrane technology, which has the characteristics of resisting chemical (mainly surfactant) interference and reducing pH dependence.

Fast speed, stable performance, low cost and low maintenance, providing users with reliable and accurate data.

Features

- Basically not affected by PH;
- Internal processing of digital signal data, free from electromagnetic interference;
- Stable work and fast response;
- Low cost and less maintenance.

Applications

- Tap water, drinking water, swimming pool water, medical wastewater, sewage, industrial wastewater, seawater, etc.

Technical Specifications

Measurement range	0-20 ppm
Precision (Calibrated at 25°C, pH=7.2, potable water, full scale repeat)	Range: 0-2ppm: < 1% Range: 2-20ppm: < 3%
PH Range	pH：2-11
Flow rate	In the flow cell: 250-500ml/min, the flow rate has little effect on it
Response time	T90: about 15s (up to 90% of the measured value)
Slope calibration	On the measuring device, determined by analytical methods
Temp compensation	Integrated automatic temp. compensation
Material	PVC-U, Semipermeable membrane, ABS
Operating temp	Measuring water temp.: 0-45℃ (no condensation in water) Ambient room temp.: 0-55 ℃
Output signal	Digital signal (MODBUS RS485 with isolation)
Size	Diameter 25mm * length 220mm
Cable length	Standard 5m cable, can be extended up to 100m

PSS-800 SS(Sludge Concentration)Sensor

Measurement Principle



PSS-800 SS (Sludge Concentration)Sensor is based on the method of combination of infrared absorption scattered light.e infrared light emitted by the light source is scattered by the suspended particles in the sample, and finally converted into an electrical signal by a photodetector, and the sludge concentration of the sample is obtained after analog and digital signal processing.

Features

- The sensor adopts dual-beam infrared scattered light.
- photometer detection technology and has good repeatability and stability.
- Built-in self-diagnosis function to ensure the accuracy of data.Plug-and-play sensors,quick and easy installation.
- Optional cleaning brush of automatic cleaning function to reduce the maintenance of sensor.
- Use ISO7027 Standard Method (Infrared light scattering technique) to eliminate effects of sample color.
- Digital sensor,high anti-jamming capacity and far distance transmission.
- Standard digital signal output,can achieve integration and networking with other equipment without controller.

Applications

- Sludge concentration of technological process of sewage treatment plant.
- Online monitoring of industrial process water and Suspended solids (sludge concentration) of waste water treatment process.

Technical Specifications

Measurement range	0.01-20000 mg/L,0.01-45000 mg/L,0.01-120000 mg/L
Measurement accuracy	< the ±5% of measured value. (Depending on the homogeneity of sludge)
Resolution	0.01-1mg/L,base on range
Repeatability	±2%
Pressure range	≤0.4Mpa
Flow rate	≤2.5m/s、8.2ft/s
Calibration	Sample Calibration,Slope Calibration
Main material	Body：SUS316L (fresh water),Titanium alloy (marine);Cable：PUR
Communication protocol	MODBUS RS485
Measuring temperature	0-45℃(Non-freezing)
Dimensions	Dia 60mm*Length 261mm
Weight	1.65KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PSS-600 SS(Sludge Concentration)Sensor



Measurement Principle

PSS-600 Sensor is based on the method of combination of infrared absorption scattered light.Infrared light which the photosource sends out scattered by suspended particles in the sample.And finally converted to electrical signals by photoelectric detector and getting the suspended solids concentration of the sample after treatment by analog and digital signals.

Features

- The sensor adopts the method of combination of infrared absorption scattered light.
- Optional cleaning brush of automatic cleaning function to reduce the maintenance of sensor.
- Digital sensor,high anti-jamming capacity and far distance transmission.
- Standard digital signal output,can achieve integration and networking with other equipment without controller.

Applications

- Sludge concentration of technological process of sewage treatment plant.
- Online monitoring of industrial process water and Suspended solids (sludge concentration) of waste water treatment process.
- Online monitoring of sewage plant outlets, municipal pipe network water quality, and pollution source discharge outlets

Technical Specifications

Measurement range	0.01-1000mg/L,100-50000mg/L
Measurement accuracy	<±10% of the measured value (depending on the homogeneity of the sludge) or 10 mg/L, bigger one
Repeatability	±3%
Resolution	0.01mg/L-1mg/L,base on range
Pressure range	≤0.4Mpa
Calibration	Sample Calibration,Slope Calibration
Main material	Body:SUS316L(fresh water);Cable:PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Measuring temperature	0-45℃(Non-freezing)
Dimensions	Dia 49mm*Length 230.5mm
Weight	0.8KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PTU-800 Turbidity Sensor

Measurement Principle



PTU-800 Turbidity Sensor is based on the method of combination of infrared absorption scattered light.Infrared light which the photosource sends out scattered by suspended particles in the sample.And finally converted to electrical signals by photoelectric detector and getting the turbidity valueof the sample after treatment by analog and digital signals.

Features

- The sensor adopts dual-beam infrared scattered light photometer detection technology and has good repeatability and stability.
- Built-in self-diagnosis function to ensure the accuracy of data.
- Optional cleaning brush of automatic cleaning function to reduce the maintenance of sensor.
- Digital sensor,high anti-jamming capacity and far distance transmission.
- Use ISO7027 Standard Method (Infrared light scattering technique) to eliminate effects of sample color.
- Standard digital signal output,can achieve integration and networking with other equipment without controller.
- Plug-and-play sensors,quick and easy installation.

Applications

- Turbidity online monitoring of water inlet, settling basin of water plant.
- Turbidity online monitoring of sewage plant, industrial process water and waste water treatment.

Technical Specifications

Measurement range	Turbidity：0.01-100 NTU,0.01-4000 NTU
Measurement accuracy	<±2% of the measured value or ±0.1NTU,the bigger one
Resolution	0.01-0.1NTU,base on range
Repeatability	±2%
Pressure range	≤0.4Mpa
Flow rate	≤2.5m/s、8.2ft/s
Calibration	Sample calibration,Slope calibration
Main material	Body：SUS316L(fresh water),PVC,Titanium alloy (marine);Cable：PUR
Communication protocol	MODBUS RS485
Measuring temperature	0-45°C(Non-freezing)
Dimension	Dia 60mm*L261mm
Weight	1.65KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PTU-600 Turbidity Sensor

Measurement Principle



PTU-600 Turbidity Sensor is based on the method of combination of infrared absorption scattered light.Infrared light which the photosource sends out scattered by suspended particles in the sample.And finally converted to electrical signals by photoelectric detector and getting the turbidity valueof the sample after treatment by analog and digital signals.

Features

- The sensor adopts the method of combination of infrared absorption scattered light.
- Optional cleaning brush of automatic cleaning function to reduce the maintenance of sensor.
- Digital sensor,high anti-jamming capacity and far distance transmission.
- Standard digital signal output,can achieve integration and networking with other equipment without controller.

Applications

- Turbidity online monitoring of water inlet, settling basin of water plant.
- Turbidity online monitoring of sewage plant,industrial process water and waste water treatment.

Technical Specifications

Measurement range	0.01-3000 NTU
Measurement accuracy	< ±5% of the measured value or ±0.5NTU,the bigger one
Repeatability	±3%
Resolution	0.01NTU , 0.1NTU , Depend on the measuring range
Pressure range	≤0.4Mpa
Calibration	Sample Calibration,Slope Calibration
Main material	Body：SUS316L(fresh water);Cable：PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Measuring temperature	0-45℃(Non-freezing)
Dimension	Dia49mm*L 230.5mm
Weight	0.8KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PLTU-700 Low-Range Turbidity Sensor

Measurement Principle

The PLTU-700 low-range turbidity sensor guides the parallel light emitted from the light source downward into the water sample in the sensor. The light is scattered by the suspended particles in the water sample, and the scattered light at an angle of 90 degrees with the incident angle is immersed in the silicon photocell in the water sample. The receiver receives the turbidity value of the water sample by calculating the relationship between the 90-degree scattered light and the incident beam.



Features

- Stable data and good repeatability.
- Simple clean and maintenance.
- A scattering turbidity meter with continuous readings, designed for low-range turbidity monitoring.
- Plug-and-play sensors,quick and easy installation.

Applications

- Turbidity online monitoring of filtration of water plant, product Water and direct drinking water system.
- Turbidity online monitoring of recirculating cooling water and filter water in all kinds of industrial production and water reuse system.

Technical Specifications

Measurement range	0.001-100 NTU
Measurement Accuracy	±2% of the reading or ±0.015NTU when the range is 0.001-40NTU,whichever is greater; ±5% of the reading when the range is 40-100NTU
Resolution	0.001-0.1NTU,base on range
Repeatability	±2%
Water flow	300mL/min≤X≤700mL/min
Calibration	Sample calibration,Slope calibration
Pipe Fitting	Inlet：1/4NPT;Outlet：1/2NPT
Main material	Body：ABS + SUS316L; Seal: Butyl Cyanide Rubber;Cable：PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-60℃
Measuring temperature	0-45℃(Non-freezing)
Dimension	304 *207*392.5mm(L*W*H)
Weight	2.1KG
Protective rate	IP65(Indoor)
Cable length	Standard: 3m,not recommend to extend.

PLTU-600 Low-range Turbidity Analyzer

Measurement Principle

PLTU-600 low range turbidity analyzer, through the parallel light emitted by the light source into the sensor of the water samples, the light is scattered by the particles in the water samples, and with the incident angle of 90 degrees of the scattered light is submerged in the water samples of the silicon photocell receiver to receive, through the calculation of 90 degrees of the relationship between the scattered light and the incident beam to obtain the turbidity value of the water samples.



Features

- EPA principle 90 degree scattering method, specialized for low range turbidity monitoring;
- Stable and reproducible data;
- Simple cleaning and maintenance;
- Power supply positive and negative reverse connection protection;
- RS485 A/B terminal misconnection power protection.

Applications

- Turbidity online monitoring of tap water plant pre-filtration, post-filtration, factory water, direct drinking water system
- Turbidity online monitoring of various industrial production circulating cooling water, filtered water, water reuse system, etc.
- Online monitoring of turbidity in various industrial production circulating cooling water, filtered water, water reuse system and other links.

Technical Specifications

Measuring range	0.001-100 NTU
Measurement accuracy	0.001-40 NTU: ±2% or ±0.015 NTU bigger one / 40-100 NTU: ±5%
Repeatability	≤±2%
Resolution	0.001-0.1NTU,base on different range
Display	3.5 inch LCD screen
Sample Flow	200mL/min≤X≤400mL/min
Calibration	Sample calibration, slope calibration
Pipe Fittings	Water inlet: Quick-connect switch to hard pipe φ8
	Outlet: Quick-connect to hard tube φ12
	Cleaning port: Quick-insert straight through hard tube φ12
Sensor Main Material	Body：ASA;Cable：PUR
Power	Sensor 9-36VDC / Standard with 220VAC to 12VDC power converter
Relay	1 way relay
Output	1 way 4-20mA
Communication	MODBUS RS485
Storage Temp.	-15-60℃
Operating Temperature	0-45℃(Non-freezing)
Dimension	158*166.2*155mm(L*W*H)
Weight	1KG
Protection class	IP65(Indoor)

PCH-800A Chlorophyll Sensor

Measurement Principle

The principle of PCH-800 Chlorophyll Sensor is using the characteristics of chlorophyll A who has absorption peaks and emission peaks in the spectrum.,and emits monochromatic light of a specific wavelength to the water. The light intensity of chlorophyll A is proportional to the content of chlorophyll A in the water.



Features

- Based on the Fluorescent measuring target parameter of pigment,can be identified before affected by potential water bloom.
- Without extraction or other treatment, rapid detection to avoid the impact of long shelving the water sample.
- Digital sensor,high anti-jamming capacity and far distance transmission.
- Standard digital signal output,can achieve integration and networking with other equipment without controller.
- Plug-and-play sensors,quick and easy installation.
- Reverse polarity protection of sensor power.

Applications

- Chlorophyll online monitoring of water plant inlet,drinking water source and aquaculture and etc.
- Chlorophyll online monitoring of different water bodies,such as surface water,landscape water and seawater and etc.

Technical Specifications

Measurement range	0-500 ug/L
Measurement Accuracy	±5% of the signal level corresponding value of 1ppb RhodamineB Dye
Resolution	0.01ug/L
Repeatability	±3%
Pressure range	≤0.4Mpa
Calibration	Deviation value calibration,slope Calibration
Requirements	Suggest a multipoint monitoring for the distribution of Blue-Green Algaein water is very uneven.Water turbidity is below 50NTU.
Main material	Body：SUS316L(fresh water),Titanium alloy(marine); Cover：POM;Cable：PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Measuring temperature	0- 45℃(Non-freezing)
Dimension	Dia30mm*L 223mm
Weight	0.55KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PBA-800 Blue-Green Algae Sensor

Measurement Principle

The principle of PBA-800 Blue-Green Algae Sensor is using the characteristics of cyanobacteria who has absorption peaks and emission peaks in the spectrum,and emits monochromatic light of a specific wavelength to the water. The light intensity of Blue-Green Algae is proportional to the content of Blue-Green Algae in the water.



Features

- Based on the Fluorescent measuring target parameter of pigment, can be identified before affected by potential water bloom.
- Without extraction or other treatment, rapid detection to avoid the impact of long shelving the water sample.
- Digital sensor, high anti-jamming capacity and far distance transmission.
- Standard digital signal output, can achieve integration and networking with other equipment without controller.
- Plug-and-play sensors, quick and easy installation.

Applications

- Blue-green algae online monitoring of water plant inlet, drinking water source, aquaculture and etc.
- Blue-green algae online monitoring of different water bodies such as surface water.scenic water and etc.

Technical Specifications

Measurement range	0-300,000cells/mL
Detection limit	200cells/mL
Measurement Accuracy	±10% of the signal level corresponding value of 1ppbRhodamine B Dye
Resolution	20cells/mL
Repeatability	±3%
Pressure range	≤0.4Mpa
Calibration	Deviation value calibration,slope Calibration
Requirements	Suggest a multipoint monitoring for the distribution of Blue-Green Algaein water is very uneven.Water turbidity is below 50NTU.
Main material	Body：SUS316L + PVC;Cover：POM;Cable：PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Measuring temperature	0-45℃(Non-freezing)
Dimension	Dia30mm*L 223mm
Weight	0.55KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PDS-300 Transparency Sensor

Measurement Principle



Water body transparency is an important indicator for determining the black odor level of black odorous water bodies. The PDS-300 sensor is based on the combined infrared absorption and scattering method. The infrared light emitted by the light source is scattered by the water sample. Finally, the electrical signal detected by the photoelectric monitor is converted into a transparency value.

Features

- Built-in self-diagnosis function to ensure accurate data.
- Reverse polarity protection of sensor power.
- With time display, data storage and historical data viewing functions.
- The sensor adopts dual-beam infrared scattering photometer detection technology, which has good repeatability and stability.Optional data wireless transmission module.
- Optional cleaning brush automatic cleaning function, greatly reducing the amount of sensor maintenance.
- Digital sensor with strong anti-interference ability and long transmission distance.
- Standard digital signal output, which can be integrated and networked with other equipment without a transmitter.
- On-site installation of the sensor is convenient and quick, enabling plug and play.
- The sensor RS485 A / B end is connected to the power supply for protection.

Applications

- Transparency is an important indicator for determining the black odor level of black odorous water bodies, and is especially suitable for online monitoring of black odorous water bodies;
- Applicable to online monitoring of water body transparency of surface water and aquaculture industries in cities such as inland rivers, lakes and reservoirs.

Technical Specifications

Measuring Range	2-100cm
Measurement Accuracy	±0.3cm or value's 5%
Pressure range	≤0.4Mpa
Flow rate	≤2.5m/s、8.2ft/s
Protocol	MODBUS RS485
Storage temperature	-15 to 50℃
Operating temperature	0 to 45℃(Not freezing)
Size	D60mm*L256mm
Weight	1.65KG
Protection class	IP68/NEMA6P
Cable length	Standard 10m cable, can be extended to 100m

PCT-600 Color Sensor

Measurement Principle



PCT-600 Color Sensor adopts the principle of absorbance spectrophotometry and complies with the platinum-cobalt color standard.PCT-600 Color Sensor can be directly immersed in measurement, no sampling and pretreatment, no chemical reagents, no secondary pollution, to achieve in-situ color online monitoring, easy to install on site.

Features

- Short response time for continuous measurement
- LED light source, small size, low power consumption, easy to integrate on site
- The sensor has an automatic cleaning function to reduce maintenance
- The sensor with power supply positive and negative polarity protection
- The sensor RS485 A/B is incorrectly connected to the power supply protection.

Applications

- Real-time online monitoring of color of tap water, secondary drinking water and agricultural drinking water
- Real-time online color monitoring of surface water and other environmental water

Technical Specifications

Measuring range	0-100 degree
Measurement accuracy	±10% or±1degree, whichever is greater
Repeatability	≤5%
Resolution	0.1 degree
Pressure range	≤0.1 Mpa
Sensor material	Body: SUS316L(normal), Titanium alloy (seawater version); Cable PUR
Communication protocol	MODBUS RS485
Storage temp.	-15 to 50℃
Operating temp.	0 to 45℃(No frozen)
Dimension	Dia. 34mm* L 237mm
Weight	0.8KG
Class of protection	IP68/NEMA6P
Cable length	Standard: 10M cable,Can be extended into 100M

POIL-800 Oil In Water Sensor

Measurement Principle

The POIL-800 oil-in-water sensor uses ultraviolet fluorescence to monitor the oil content in water. It quantitatively analyzes the concentration of oil in water based on the fluorescence intensity emitted by petroleum and its aromatic compounds and conjugated double bond compounds after absorbing ultraviolet light. Aromatic hydrocarbons in petroleum can produce fluorescence under ultraviolet light excitation, and the value of oil in water is calculated based on the intensity of fluorescence.



Features

- Advanced optical monitoring method, no reagents, no dilution, long-term stable operation;
- Short response time, continuous measurement;
- LED light source, small size, low power consumption, easy on-site integration;
- The sensor has an automatic cleaning function to reduce maintenance;
- Unique optical and electronic filtering technology to eliminate the influence of ambient light;
- Wide operating range and high sensitivity;
- All-metal casing, sturdy and durable.

Applications

- Real-time online monitoring of oil in water in water treatment systems and wastewater discharge in industrial fields such as petroleum, chemical industry, and electric power;
- Real-time online monitoring of oil in water in environmental water bodies such as surface water, groundwater, seawater, drinking water, and pollution source emission control.

Technical Specifications

Measuring range	0~100mg/L(NDSA)
Measuring accuracy	Less than ±5% of the measured value or ±0.15mg/L, the bigger one
Repeatability	±2%
Resolution	0.01mg/L
Pressure range	≤0.4Mpa
Calibration	Sample calibration, slope calibration
Main material of sensor	Body: SUS316L (normal version), titanium alloy (seawater version); Cable: PUR
Power supply	DC：9~36VDC
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Operating temperature	0-45℃ (no freezing)
Dimensions	Diameter 60mm*Length 262mm
Weight	2.1KG
Protection level	IP68/NEMA6P
Cleaning method	Automatic scraper cleaning
Cable length	Standard 10m cable, can be extended to 100m

POIL-700 Oil In Water Sensor

Measurement Principle



The POIL-700 oil-in-water sensor uses ultraviolet fluorescence to monitor the oil content in water It quantitatively analyzes the concentration of oil in water based on the fluorescence intensity emitted by petroleum and its aromatic compounds and conjugated double bond compounds after absorbing ultraviolet light. Aromatic hydrocarbons in petroleum can produce fluorescence under ultraviolet light excitation, and the value of oil in water is calculated based on the intensity of fluorescence.

Features

- Advanced optical monitoring method, no reagents, no dilution, long-term stable operation;
- Short response time, continuous measurement;
- LED light source, small size, low power consumption, easy on-site integration;
- The sensor has an automatic cleaning function to reduce maintenance;
- Unique optical and electronic filtering technology to eliminate the influence of ambient light.

Applications

- Real-time online monitoring of oil in environmental water such as surface water, groundwater, drinking water, and pollution source emission control.

Technical Specifications

Measuring range	0~50mg/L(NDSA)
Measuring accuracy	Less than ±10% of the measured value or ±0.3mg/L, the bigger one
Repeatability	±5%
Resolution	0.01mg/L
Pressure range	≤0.1Mpa
Calibration	Sample calibration, slope calibration
Main material of sensor	Body: SUS316L; Cable: PUR
Power supply	DC power supply: 9~36VDC
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Operating temperature	0-45℃（no freezing）
Dimensions	Diameter 60mm*Length 212mm
Weight	1.55KG
Protection level	IP68/NEMA6P
Cleaning method	Automatic scraper cleaning
Cable length	Standard 10m cable, can be extended to 100m

MP301 Multi-Parameter Analyzer

Introduction



MP301 multi-parameter online analyzer: suitable for long-term on-line online monitoring, measuring up to 8 parameters simultaneously, including: Temperature, Depth, pH, ORP, Conductivity & Salinity & TDS, Turbidity, DO, Chlorophyll, Blue-green algae, Ammonia nitrogen Nitrate, Chloride, Fluoride. Optional accessories such as bluetooth module, battery pack, and handheld communicator are also available for easy portable measurement.

Features

- The host can flexibly set the sampling interval, optimize the working/sleep time, and reduce the overall power consumption. It can be applied to battery power, solar power, and mains power supply.
- SensorRS485 A/B terminal is connected to power supply protection.
- The host can select bluetooth communication function to realize data transmission via bluetooth.
- The host has a data storage function, and the amount of stored data is 100,000.
- Self-cleaning system allows the product to obtain accurate data for a long time.
- The electrode can be replaced directly in the field, and the maintenance is simple and fast.
- Sensor power supply positive and negative reverse connection protection.
- The host has LED lights to display the current running status of the host and the working status of bluetooth.
- Standard ModbusRS-485 digital signal output, can be connected with third-party data loggers or remote devices for integration and networking;With built-in battery, optional battery to achieve battery power in a short time; purchase in your local market.

Software Functions

- Operation software of Windows interface has the function of settings,online monitoring,calibration and Historical data download,convenient and efficient parameters settings.Convenient and efficient calibration functions.
- Real-time data and curve display can help users intuitively obtain the data of measured water bodies.
- Intuitively and accurately understanding and tracking the parameters' changes of the measured water bodies in a certain period through the Historical data download and curve display.

Application

- Multi-Parameter water quality online monitoring of rivers, lakes and reservoirs.
- Water quality online monitoring of drinking water source, ground water and sea water.

Mainframe Physical Indicators

Power Supply	9-36VDC	**Measuring Temperature**	0-40℃(non-freezing)
Power Dissipation	3W	**Storage Temperature**	0-50℃(non-freezing)
Communication protocol	MODBUS RS485	**Protection Class**	IP68
Size	Diameter 90*Length 635mm	**Weight**	5KG
Maximum withstand pressure depth	30m(With ion selective elect rode: 10 m)	**Battery capacity**	8 sections, 3.6V lithium sub-battery

Standard Electrode Parameters

pH Sensor :		**Temperature:**	
Principle	Glass electrode method	**Principle**	Thermistor method
Range	0-14 pH(With ion electrode:5-10 pH)	**Range**	0℃-60℃(Mainframe's work temp. 0-40℃)
Resolution	0.01 pH	**Resolution**	0.1℃
Accuracy	±0.1 pH	**Accuracy**	±0.5℃
Conductivity sensor:		**ORP Sensor:**	
Principle	Conductivity cell method	**Principle**	Glass electrode method
Range	10us/cm-200ms/cm	**Range**	-1000mV -+1000mV
Resolution	0.1us/cm-0.01ms/cm(Depending on the range)	**Resolution**	1mV
Accuracy	±1% or 1uS/cmL, the bigger one	**Accuracy**	±5mV
DO sensor:		**Turbidity sensor:**	
Principle	Fluorescence	**Principle**	Light scattering method
Range	0-20 mg/L;0-20 ppm;0-200%	**Range**	0-1000NTU
Resolution	0.1%/0.01mg/l	**Resolution**	0.1NTU
Accuracy	±3% or ±0.3 mg/L, whichever is greater	**Accuracy**	± 5% or 0.3NTU, whichever is greater
Chlorophyll sensor:		**Blue-green algae sensor:**	
Principle	Fluorescence	**Principle**	Fluorescence
Range	0-500 ug/L	**Range**	0-300,000cells/mL
Resolution	0.01 ug/L-0.1 ug/L, Depending on range	**Resolution**	20cells/mL
Accuracy	±5% of the signal level corresponding value of 1ppb Rhodamine B Dye	**Accuracy**	±10% of the signal level corresponding value of 1ppb Rhodamine B Dye
Ammonia Sensor:		**Nitrate Sensor:**	
Principle	Ion selection	**Principle**	Ion selection
Range	0.1-3000mg/L-N	**Range**	0.5-3000mg/L-N
Resolution	0.01mg/L-N	**Resolution**	0.01mg/L-N
Accuracy	±5% or ±0.2mg/L	**Accuracy**	±10% or ±0.2mg/L
Chloride Sensor:		**Fluoride Sensor:**	
Principle	Ion selection	**Principle**	Ion selection
Range	3-3500mg/L	**Range**	0.5-10000mg/L
Resolution	0.01mg/L	**Resolution**	0.01mg/L
Accuracy	±10% or ±0.2mg/L	**Accuracy**	±10% or ±0.2mg/L
Depth (Pressure):		**Potassium ion sensor**	
Principle	Pressure-sensitive Method	**Principle**	Ion selection
Range	0-61m(Maximum withstand pressure depth:30M)	**Range**	0.5-5000 mg/L
Resolution	2cm	**Resolution**	0.01mg/L
Accuracy	±0.3%	**Accuracy**	±10% or ±0.2mg/L

PUVNO3-900 Spectrometer Nitrate Sensor

Measurement Principle

NO3 absorbs at 210 nm UV light. When the Spectrometer NO3 probe is working, the water sample flows through the slit. When the light from the light source in the probe passes through the slit, part of the light is absorbed by the sample flowing in the slit, and the other light passes through the sample and reaches the other side of the probe. Calculate the concentration of nitrate.



Features

- Probe direct immersion measurement without sampling and pre-processing.
- No chemical reagents, no secondary pollution.
- Short response time enables continuous measurement.
- The sensor has an automatic cleaning function that reduces maintenance.
- Sensor power supply positive and negative reverse connection protection
- Sensor RS485 A/B terminal is connected to the power supply protection
- Wireless data transmission module for optional.
- Spectrometer NO3 Probe direct immersion measurement without sampling and pre-processing.

Applications

- Drinking water / surface water / industrial production process water / sewage treatment, etc..
- Continuously monitor the concentration of nitrate dissolved in water, especially for monitoring sewage aeration tanks, controlling denitrification process.

Technical Specifications

Measuring Range	0.1-100.0mg/L(1mm optical path),0.1-50mg/l (2mm optical path)
Accuracy	±5%
Repeatability	± 2%
Resolution	0.01 mg/L
Pressure range	≤0.4Mpa
Sensor material	Body：SUS316L (fresh water), Titanium alloy (marine);Cable:PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Measuring temperature	0-45℃(Non-freezing)
Dimensions	Sensor：Diam69mm*Length 365mm
Weight	Sensor：3.2KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10M,the maximum may be extended to 100m

PINH3-900 Ammonia Nitrogen sensor

Measurement Principle

The ammonia nitrogen concentration was measured by an ion selective electrode method. The ammonia nitrogen sensor is composed of an ammonium ion selective electrode, a potassium ion (optional), a pH electrode and a temperature electrode to form an integrated sensor. These parameters can mutually correct the measurement value of ammonia nitrogen, and at the same time realize multi-parameter measurement.



Features

- Standard digital signal output for integration and networking with other devices without a transmitter.
- The sensor is easy to install on site, enabling plug and play.
- The sensor power supply is reversed and protected. The sensor RS485 A/B terminal is connected to the power supply protection.
- Optional data wireless transmission module.

Applications

- Sewage treatment plants monitoring instruments and ammonia nitrogen values in aeration tanks monitoring instruments
- Industrial processes and river water monitoring instruments.

Technical Specifications

Measurement range	NH4N：0.1-3000 mg/L; K+：0.5-5000 mg/L (Optional); PH：5-10; Temp.:0-40℃
Resolution	NH4N：0.01 mg/l; K+：0.01mg/L(optional);PH：0.01; Temp.: 0.1℃
Accuracy	NH4N：±5 % or ± 0.2 mg/L (bigger one); K+：±10 % or ±0.2 mg/L(optional); Temp.: ±0.5℃; pH：±0.1 pH
Repeatability	±5% or 0.2mg/l, whichever is greater
Communication protocol	MODBUS RS485
Storage temperature	0-50℃ (Non-freezing)
Operating temperature	0-40℃ (Non-freezing)
Dimension	Dia55mm*L 342mm
Weight	<1KG
Protective rate	IP68/NEMA6P
Cable length	Standard 10M cable (Max could be extended to 100M)

PISE-900 Ion sensor

Introduction

The PISE-900 sensor can flexibly select one or two ion-selective electrodes. At the same time, it is equipped with PH and temperature electrodes as standard, so that 4 parameters can be monitored simultaneously. The optional parameters of ion selective electrode include: Ammonia nitrogen (NH4+), Nitrate (NO3N), Potassium ion (K+), Chloride (CL-), Fluoride (F-) Different parameter combinations can also achieve mutual compensation, making the measurement data more accurate.



Features

- You can choose one or two electrodes among ammonium ion, nitrate ion, potassium ion, chloride ion and fluoride ion. Realize flexible combination to meet the needs of different customers.
- Digital sensor, strong anti-interference ability, long transmission distance;
- Standard digital signal output, which can be integrated and networked with other equipment without a transmitter;
- The sensor is convenient and quick to install on site, realizing plug and play;
- The positive and negative polarity of the sensor power supply is reversely connected, and the RS485 A/B end of the sensor is connected to the power supply protection;
- With time display, data storage and historical data viewing functions,Optional data wireless transmission module.

Applications

- Monitor the nitrification and aeration tanks of sewage treatment plants, industrial processes and the ammonia nitrogen value in river water.

Specifications

Measuring range	Ammonia nitrogen (NH4N): 0.1-3000 mg/L Nitrate Nitrogen (NO3N):0.5-3000 mg/L Potassium ion (K+): 0.5-5000 mg/L;Chloride (CL-): 3-3500 mg/L Fluoride (F-): 0.5-10000 mg/L;PH: 5-10;Temperature: 0-40℃
Resolution	Ion parameters: 0.01 mg/L;Temperature: 0.1℃;pH:0.01
Measurement accuracy	Ammonia nitrogen (NH4N): ±5% or ±0.2 mg/L, whichever is greater Other Ion parameters: ±10% or ±0.2 mg/L, whichever is greater Temperature: ±0.5℃ pH: ±0.1 pH
Repeatability	±5% or 0.2mg/l greater one
Output	3 way 4-20mA
Relay	Three-way relay, programmed response parameter and response value
Protocol	MODBUS RS485
Sorage&Operating temperature	0 to 50℃(no freezing)&0 to 40℃(no freezing)
Size	D55mm*L342mm
Weight	<1KG
Protection level	IP68/NEMA6P
Cable length	Standard 10 meters cable, can be extended to 100 meters

PUVCOD-900 Spectrometer Organic Sensor

Measurement Principle



Based on the UV absorption reaction by organic matter, the PUVCOD-900 Spectromete Organic Sensor uses the 254 nm spectral absorption coefficient SAC254 to measure the content of soluble organic compound in the water, and it can be converted to COD or BOD values under certain conditions. This method allows continuous monitoring without any reagents.

Features

- Direct-immersion probe measurement without taking sampling and pretreatment.
- No chemical reagents, no secondary pollution.
- Short response time for continuous measurement.
- The sensor has an automatic cleaning function to reduce maintenance time.

Application

- Continuous monitoring of organic load during sewage treatment, online real-time monitoring of influent and effluent water quality of wastewater treatment plants.
- Continuous on-line monitoring of surface water, industrial effluent, and fishery wastewater.

Technical Specifications

Measuring Range	COD (using KHP calibration)：0-2000mg/l COD (2mm) 0-1000mg/l COD (5mm); 0-90mg/l COD (50mm) BOD (using KHP calibration)：0-1500mg/l BOD (2mm) 0-750mg/l BOD (5mm); 0-60mg/l BOD (50mm) TOC(using KHP calibration)：0-800mg/l TOC(2mm) 0-400mg/l TOC(5mm); 0-35mg/l TOC (50mm)
Accuracy	±5%(KHP Standard solution)
Repeatability	±2%(KHP Standard solution)
Resolution	0.01mg/l
Pressure Range	≤0.4Mpa
Sensor material	Body:SUS316L(fresh water),Titanium alloy(Ocean marine);Cable:PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Measuring temperature	0-45℃(Non-freezing)
Dimensions	Diam 69mm*Length 365mm
Weight	3.2KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PUVCOD-600 Spectrometer Organic Sensor

Measurement Principle



Based on the UV absorption reaction by organic matter, the PUVCOD-600 Spectromete Organic Sensor uses the 254 nm spectral absorption coefficient SAC254 to measure the content of soluble organic compound in the water, and it can be converted to COD or BOD values under certain conditions. This method allows continuous monitoring without any reagents.

Features

- Direct-immersion probe measurement without taking sampling and pretreatment;
- No chemical reagents, no secondary pollution;
- Short response time for continuous measurement
- LED light source, small size, low power consumption, easy to integrate on-site
- The sensor has an automatic cleaning function to reduce maintenance time.

Application

- Continuous monitoring of organic load during sewage treatment, online real-time monitoring of influent and effluent water quality of wastewater treatment plants.
- Continuous on-line monitoring of surface water, industrial effluent, and fishery wastewater.

Technical Specifications

Measuring Range	COD (using KHP calibration):0-1000mg/l COD (5mm),0-100mg/L COD (25mm);BOD (using KHP calibration):0-750mg/Lmg/Lmg/L BOD(5mm),0-75mg/L BOD(25mm);TOC(using KHP calibration):0-400mg/L TOC(5mm),0-40mg/L TOC(25mm) Turbidity:10-800 NTU(5mm),10-300NTU(25mm)
Accuracy	COD/BOD/TOC (using KHP calibration)： ± 5% or ± 1mg/L, whichever is greater;Turbidity：±10%
Repeatability	5% (using KHP calibration)
resolution	COD/BOD/TOC：0.01 mg/l;Turbidity：0.01NTU
Pressure Range	≤0.1Mpa
Sensor material	Body:SUS316L(fresh water),Titanium alloy(Ocean marine),Cable：PUR
Communication protocol	MODBUS RS485
Storage temperature	-15-50℃
Measuring temperature	0-45℃(Non-freezing)
Dimensions	Diam 34mm*Length 217mm
Weight	0.8KG
Protective rate	IP68/NEMA6P
Cable length	Standard:10m,the maximum may be extended to 100m

PADV-60 Ultrasonic Doppler Velocimetry

Introduction

PADV-60 Ultrasonic Doppler Velocimetry is a flow meter based on the principle of Doppler effect. The measuring point is in front of the probe, does not destroy the flow field.

With high measuring accuracy, wide range, fast response speed and so on. Internal integrated pressure sensor and temp. sensor, set velocity, liquid level, temp., flow measurement in one. Suitable for open channel, river, drainage pipe network and all kinds of full pipe not full pipe flow rate measurement.



Features

- Integration design, small size.
- RS485 communication, Modbus RTU communication protocol
- No mechanical moving parts, there is no sediment jam or aquatic plants, sundry winding
- Application range is wide, can be used for unattended long-term on-line monitoring;
- High measurement precision, wide range, responsive, high resolution.
- No limited by the starting velocity.

Application

- Municipal water supply and drainage, sewage discharge.
- Water loss/infiltration, irrigation process monitoring.
- Culvert process, roads drainage, river flow monitoring.
- Flood disaster monitoring.

Technical Specifications

Velocity range	-10-10m/s (Customizable)
Velocity accuracy	±1- 3% (Affected by the site working environment, the measurement accuracy changes)
Velocity resolution	1mm/s
Water level range	0.02-10m
Water level accuracy	±3cm
Bathymetric resolution	3mm
Operating temperature	0-60℃(Non-freezing state)
Temperature resolution	0.1℃
Storage temperature	-20-80℃
Working environment	Sediment content: <20g/L; PH: PH value is between 6 and 8.
Communication protocol	Standard ModBus RS485 protocol
Power supply range	10-30VDC
Power consumption	1W±0.1W (12V power supply),1.5W±0.1W (24V power supply)
Working current	≤100mA
Material	Nylon+Fiberglass
Protection class	IP68
Weight	2.5KG including Cable (Standard 20m cable)
Dimension	207.5*105*37.5mm(L*W*H)

PT-30 Hydrostatic level gauge



Technical Specification

Power	RS485 output (8-32V);
Output	RS485
Accuracy	0.5 Level
Range	0~1m...200m Water column
Pressure type	Gauge pressure
Compensation temp.	-10℃-70℃
Operating temp.	-20℃-85℃
Medium temp.	-20℃-85℃
Storage temp.	-40℃-85℃
Zero output temp. drift	±0.3% FS/10℃
Full range output temp. drift	±0.3% FS/10℃
Overload pressure	150% FS
Long-term stability	±0.2% FS/Year
Response time	RS485 output pressure ≤ 100ms (increase to 90% FS)
Insulation resistance	500MΩ/100VDC
Protection class	Probe: IP68, Wiring part: IP65
Load resistance	(U-9V)/0.02A ,U： Power voltage
Material	316L
Size	Φ27mm*138mm

Product Center

You Tube

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