WOHUAN TECHNOLOGY

Water Quality Analyzers

INSTRUMENTATION

ENVIRONMENTAL MONITORING

Wuxi Wohuan Instrument Technology Co., Ltd.

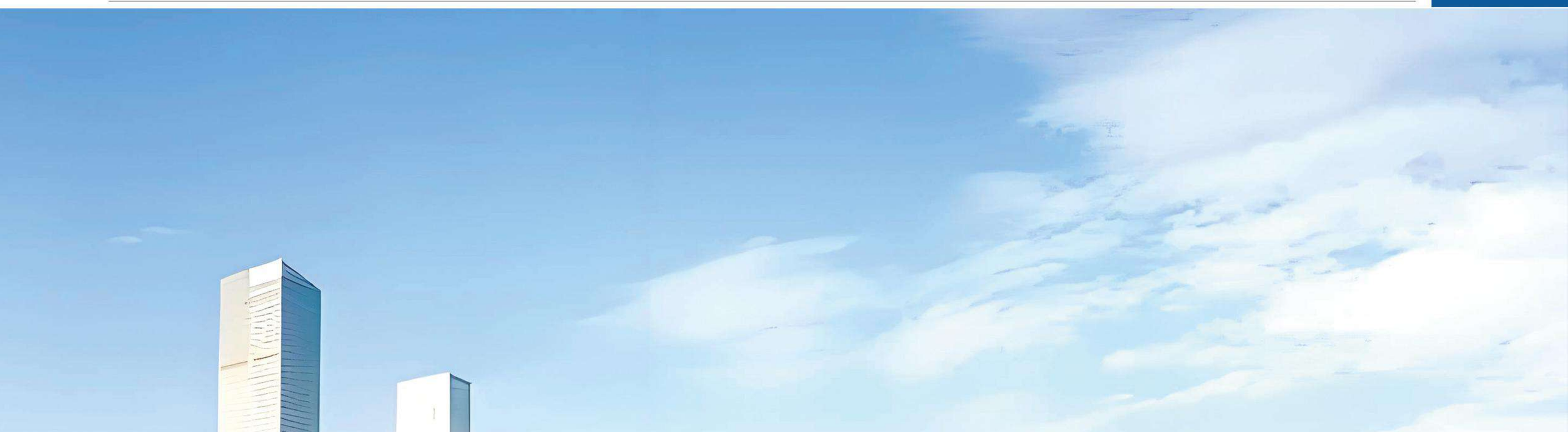
WXWH



Wuxi Wohuan Instrument Technology Co., Ltd. is a national high-tech enterprise specializing in safety monitoring instruments and environmental protection monitoring and analytical equipment. Relying on advanced sensing technology and intelligent application, the company adheres to high-quality instruments as the foundation, focusing on precise monitoring and stable operation. It provides customers with professional, efficient and safe monitoring products and services, drives industrial development through technological innovation, and contributes to the construction of smart environmental protection and digital economy.

Taking water quality monitoring instruments as its core products, the company covers a variety of industrial monitoring equipment including water quality analyzers, gas analyzers, flow meters and level gauges, delivering reliable measurement solutions for environmental monitoring, water management and industrial automation industries.

Main products: COD, ammonia nitrogen, total phosphorus, total nitrogen and heavy metal water quality analyzers; pH, turbidity and residual chlorine monitors; spectral analyzers, gas analyzers, flow meters and level gauges.



Corporate Culture:

Mission: To create a better life for customers, provide a growth platform for employees, and deliver optimal benefits to society.

Spirit: Strive for excellence and continuously improve.

Safety Philosophy: Pursue safe development and ongoing improvement.

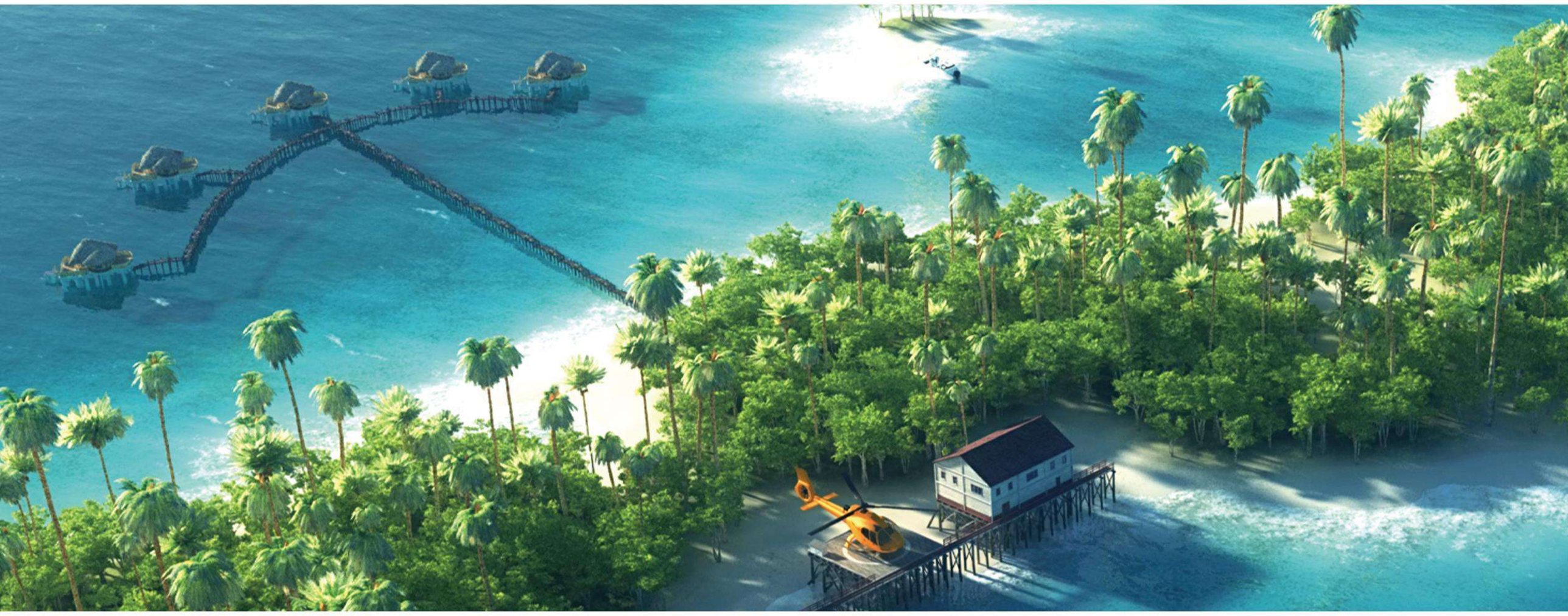
Service Philosophy: Communicate with care and serve with love.

Talent Philosophy: Select and appoint the capable, ensuring everyone reaches their f ull potential.

Learning Philosophy: Study diligently, think wisely, and apply knowledge effectively.



WXWH



05 WH-PH Industrial Online pH/ORP Meter

06 WH-DD Industrial Online Conductivity Meter

07 WH-CL Series Industrial Online Residual Chlorine Meter

08 WH-DOY Series Fluorescence Method Dissolved Oxygen Meter

09 WH-NT Series Photoelectric Turbidity Meter

10 WH-SS Suspended Solids Analyzer

11 WH-WS Series Online Sludge Concentration Meter

12 WH-SJG Series Acid/Alkali/Salt Concentration Meter

13 WH-CL Series Chloride Ion Meter

14 WH-FU Series Fluoride Ion Meter

15 WH-CA Series Calcium Ion Meter

16 WH-JM Ultrasonic Sludge Water Interface Meter

17 WH-8200 Online Wastewater Pollution Monitoring

18 WH-8210 Outdoor Compact Water Quality Automatic Monitoring System

19 WH-8211 Solar-Powered Floating Automatic Monitoring Station

20 WH-GP100 Multi-Parameter Water Quality Spectroscopic Analyzer

21 WH-CL700 Online Residual/Total Chlorine Analyzer (DPD Colorimetric Method)

22 Total Alkalinity & Total Hardness Analyzer

23 WH-GLS700 Boiler Water Quality Online Monitoring System

25 Multi-Parameter Water Quality Analyzer

26 Aquaculture Water Quality Monitoring Analyzer

27 WH-EGS700 Secondary Water Supply Water Quality Analyzer

29 CODcr2101 Automatic Analyzer

30 Ammonia Nitrogen NH_3-N 2111 Automatic Analyzer



Contents

31 Total Phosphorus TP 2121 Automatic Analyzer

32 Total Nitrogen TN 2131 Automatic Analyzer

33 BOD WH2089 Automatic Analyzer

34 Permanganate Index CODMn 2141 Automatic Analyzer

35 Other Parameters Water Quality Automatic Analyzer

36 WHMQ Ultrasonic Open Channel Flow Meter

37 Electromagnetic Radar Flow Meter

38 Ultrasonic Radar Flow Meter

39 WHPL Doppler Velocity/ Flow Meter

40 Radar Flow Meter

41 Radar Level Transmitter

42 Integrated Remote Terminal Unit (RTU)

43 Portable Multi-Parameter Water Quality Analyzer

44 WHCL-20B Portable Residual Chlorine Meter

45 WH-ZDT Portable Photoelectric Turbidity Meter

46 WH-PHG Portable Benchtop pH Meter

47 WH-DDS Portable Benchtop Conductivity Meter

48 WH-DF900 Online Titration Analyzer

49 WH-KLS900 Online Coulometric Trace Moisture Analyzer

50 WH-HF900 Anhydrous Hydrogen Fluoride Moisture Analyzer

51 WH-GXS900 Liquid Phase Trace Moisture Analyzer

52 WH-TM900 Online Trace Moisture Analyzer (Electrolytic Method)

53 WH-LDY200A Online Streaming Current Analyzer

WXWH

WH-PH Industrial Online pH/ORP Meter

Product Overview

The WH-PH Series Industrial Online pH/ORP Meter is a microprocessor-based online water quality monitoring instrument. Equipped with various types of pH and ORP electrodes, it is widely used in industries such as power plants, petrochemicals, metallurgy, electronics, mining, paper manufacturing, bio-fermentation engineering, pharmaceuticals, food and beverage, environmental water treatment, and aquaculture. It provides continuous monitoring and control of the pH (ORP) value and temperature of aqueous solutions.





Key Features

- Large LCD Screen Display;
- Intelligent English Menu Operation;
- Manual/Automatic Temperature Compensation;
- Multiple Automatic Calibration Functions;
- Two Relay Control Switches;
- High/Low Limit and Hysteresis Control;
- RS485/RS232 Communication Interface;
- Simultaneous Display of pH (ORP) Value and Temperature on the Same Interface;
- Password Protection to Prevent Unauthorized Operation by Non-Staff.

Technical Parameters

Specification	Technical Specification Parameters
Measurement Range	pH: 0~14.00pH ORP: -1999~ +1999mV
Temperature (T)	0~110.0°C
Resolution	pH: 0.01PH ORP:1mV T: 0.1°C
Basic Error	pH: ±0.01pH ORP: +2mV T: ±0.5°C
Transmitter Output	4-20 mA or 0-20 mA output
Temperature Compensation Mode	Automatic/Manual switchable
Temperature Compensation Range	0~110°C
Stability	pH: ≤0.02pH/24h ORP: ≤2mV/24h
Relay Output	Two sets of 3A 240VAC
Power Supply	220VAC ±10%, 50±1 Hz, Power ≤5 W; 24VDC, Power ≤1 W
Dimensions	97.5*97.5*132.8 mm; 150*144*117 mm
Installation Method	Panel Mount (Embedded)
Panel Cutout Dimensions	93*93 mm; 138x138 mm
Installation Options	[Flow-through], [Pipeline], [Submersible], etc.
Optional Features	RS485/RS232 communication interface for computer connection
Environmental Temperature	-10~45°C
Relative Humidity	Not more than 90%; no strong magnetic field interference except Earth's magnetic field

WH-DD Industrial Online Conductivity Meter

Product Overview

The WH-DD Industrial Online Conductivity Meter is a microprocessor-based online water quality monitoring instrument. Equipped with electrodes of different constants, it is widely used in industries such as power plants, petrochemicals, metallurgy, electronics, mining, paper manufacturing, semiconductors, pharmaceuticals, food and beverage, environmental water treatment, and modern agriculture. It is suitable for monitoring and controlling the conductivity and temperature of aqueous solutions, including softened water, raw water, steam condensate, seawater distillation, and deionized water.



Key Features

- Large LCD Screen Display;
- Intelligent English Menu Operation;
- Manual/Automatic Temperature Compensation;
- Two Relay Control Switches;
- High/Low Limit and Hysteresis Control;
- RS485/RS232 Communication Interface;
- Dual Signal Output (Current/Voltage Optional);
- Simultaneous Display of Conductivity and Temperature on the Same Interface;
- Password Protection to Prevent Unauthorized Operation by Non-Staff.



Technical Parameters

Specification	Technical Specification Parameters
Measurement Range (Configurable)	Conductivity: 0~20μS/cm; K=0.01 Conductivity: 20~200uS/cm; K=0.1
	Conductivity: 200μS/cm~2mS/cm; K=1.0 Conductivity: 2~10mS/cm; K=10.0
	Temperature: 0~110°C
Resolution	Conductivity: 0.01μS/cm; 0.1mS/cm Temperature: 0.1°C
Basic Error	Conductivity: ±5%F·S Temperature: ±0.5°C
Temperature Compensation Range	0~110°C
Stability	±0.2%F·S/24h
Transmitter Output	0~10 mA (Load Resistance <1.5KΩ); 4~20 mA (Load Resistance <750Ω)
Relay Output	3A 240VAC, 6A 28VDC or 120VAC
Power Supply	220VAC ±10%, 50±1 Hz, Power ≤5 W; 24VDC, Power ≤1 W
Dimensions	97.5*97.5*132.8 mm, 150*144*117 mm
Installation Method	Panel Mount (Embedded)
Panel Cutout Dimensions	93*93 mm, 138x138 mm
Electrode Installation Options	[Flow-through], [Submersible], [Pipeline]
Optional Features	RS485/RS232 communication interface for computer connection
Environmental Temperature	Environmental Temperature: 0~60°C Relative Humidity: ≤90%
Operating Conditions	No vibration, no corrosive gases, no direct sunlight, no magnetic interference except Earth's magnetic field

WXWH

WH-CL Series Industrial Online Residual Chlorine Meter



Product Overview

The WH-CL Series Industrial Online Residual Chlorine Meter is widely used in drinking water treatment plants, drinking water distribution networks, swimming pools, hospitals, cooling circulation systems, and water treatment projects for continuous monitoring and control of residual chlorine content in aqueous solutions.

Key Features

- Multi-parameter Display: Displays residual chlorine, temperature, and pH status on the same screen.
- 192x64 Dot Matrix LCD with Backlight: Supports graphical and English display.
- Adjustable Uniform Backlight: Ensures clear visibility and operation even in low-light outdoor conditions.
- Manual Current Source Function: Allows checking and setting output current values, facilitating inspection of recorders and lower-level devices.
- Software-Configurable Current Output: Software-selectable 0~10 mA or 4~20 mA output.



Technical Parameters

Specification	Technical Specification Parameters
Measurement Range	0~20.00mg/L
Temperature (T)	0-60°C
Resolution	0.001mg/L
Accuracy	0.05 mg/L
Temp. Measurement Range	0~60°C, Resolution: 0.1°C
Temp. Compensation Range	0~60°C (Reference Temperature: 20°C)
Limit Detection	<20 mg/L residual chlorine
Electrode Lifespan	≥1 year
Response Time	<2 minutes (90%, at 20°C)
Polarization Time	≥1 hour
Minimum Flow Rate	15 cm^3/s (maintain constant flow rate)
Stability	Drift <2% F.S. per month at room temperature
Isolated Output	4~20mA
Relay Normally Open Contact	(For alarm or control): 6A 240 VAC
Power Supply	220VAC±10%, 50±1HZ
Power Consumption	≤5W
Dimensions	97.5*97.5*132.8 mm, 150*144*117 mm
Panel Cutout	93*93 mm, 138*138 mm
Environmental Temp.	0~60°C; Relative Humidity: ≤90%
Operating Conditions	No vibration, no corrosive gases, no direct sunlight, no magnetic interference except Earth's magnetic field

WH-DOY Fluorescence Method Dissolved Oxygen Meter

Product Overview

The WH-DOY Series Fluorescence Method Dissolved Oxygen Detector is a state-of-the-art intelligent detector. This product offers high levels of intelligence and flexibility, capable of simultaneously measuring dissolved oxygen levels and water temperature. It is widely used in industries such as aquaculture, municipal wastewater treatment plants, power generation, water supply, pharmaceuticals, chemicals, and food processing.



Key Features

- Large Screen Display Interface, Clear and Convenient;
- Digital Communication Function, Can Connect to Host Computer, Uses Isolation Technology for Strong Anti-Interference Capability;
- Relay Alarm Setting Function, Hysteresis Adjustable to Prevent Frequent Relay Switching;
- Password Management Function, Prevents Misoperation by Non-Professionals;
- Menu Prompt Function, Facilitates User Operation.



Technical Parameters

Specification	Technical Specification Parameters
Measurement Range	Oxygen concentration: 0–50 mg/L; Saturation: 0–500%
Resolution	0.01mg/L, T:0.1°C
Accuracy	±0.1 mg/L or ±1% (0–100% saturation); ±0.2 mg/L or ±2% (100–250% saturation); T: ±0.1 °C
Automatic Temp. Comp.	0-60°C
4-20mA Output	I=4mA+{(D-DL)/(DH-DL)}*16mA
Control Interface	Two sets of relay contacts, high and low alarm signals with optoelectronic isolation output
Signal Isolation Output	Optocoupler isolation protection for 4~20mA signal output
Relay Output	Relay hysteresis can be set arbitrarily, relay load 10A 220VAC
Operating Conditions	Ambient temperature 0~60°C, relative humidity ≤90%
Output Load	Load <500Ω (0-10mA), Load <750Ω (4-20mA)
Operating Voltage	220VAC±10%, 50/60Hz
Dimensions	97.5*97.5*132.8 mm, 150*144*117 mm
Panel Cutout Dimensions	93x93 mm, 138x138 mm
Optional Features	RS485/RS232 communication interface for computer connection
Environmental Temperature	-10~45°C
Relative Humidity	Not more than 90%; no strong magnetic field interference except Earth's magnetic field

WXWH

WH-NT Series Photoelectric Turbidimeter

Product Overview

The WH-NT Series Photoelectric Turbidimeter is used to measure the degree of light scattering caused by insoluble particles suspended in water or transparent liquids and quantitatively characterize the content of these suspended particles. The instrument is calibrated using Formazine turbidity standard solutions as specified in the international standard ISO 7027, with NTU as the turbidity unit. It is widely applicable for turbidity measurement in power plants, water treatment plants, domestic sewage treatment plants, beverage factories, environmental protection departments, industrial water, brewing and pharmaceutical industries, epidemic prevention departments, hospitals, and other sectors.





Key Features

- Equipped with a color compensation function, which compensates for any scattered light filtered by the optical lens.
- The sensor's special anti-bubble device effectively prevents bubble interference.
- English menu display.
- Relay contact output and independent 4~20 mA transmitter output.
- Microprocessor-based digital program controller.
- Large backlit LCD screen.

Technical Parameters

Specification	Technical Specification Parameters
Application Range	Suitable for wastewater with turbidity in the range of 0~2000 NTU.
Measurement Method	90-degree scattering method / laser method
Measurement Range	0~10 NTU, 0-100 NTU, 0-500 NTU, 0~2000 NTU (expandable)
Detection Limit	0.01
Resolution	0.01
Accuracy	±5% or ±0.1 NTU (whichever is greater)
Repeatability	5% or ±0.1 NTU (whichever is greater)
Zero Drift	±0.2 NTU
Range Drift	±10%
Calibration Cycle	Manual calibration based on actual water samples, configurable
Maintenance Cycle	20Min Maintenance interval >1 month, approx. 20 minutes each time
Signal Cable	10 meters (standard), extendable
Self-Check Protection	Saves abnormal faults upon startup, anomalies, or power restoration after outage
Output Interface	1 RS232 digital output, 1 4~20 mA analog output (expandable to 2), 2 relay outputs
Operating Environment	Recommended temp. 5℃~28℃, humidity ≤90% (non-condensing)
Power	AC220V±10%V, 50Hz, 10W
Dimensions	270 *210*100 mm or 150*144*117 mm

WH-SS Suspended Solids Analyzer

System Overview

The suspended solids sensor is based on infrared scattered light technology: the infrared light emitted by the light source is scattered when passing through the tested sample during transmission, and the intensity of the scattered light is directly proportional to the concentration of suspended solids. The suspended solids sensor is equipped with a scattered light receiver at a 90° angle, and the suspended solids value is obtained by analyzing the intensity of this group of scattered light. It is widely used for suspended solids monitoring in fields such as sewage treatment plants, waterworks, water stations, surface water, and industrial processes.



Key Features

- Adopts dual infrared beam detection principle;
- Equipped with LCD display for easy operation;
- Small beam angle within the sensor's measurement range;
- Optimized intelligent signal adaptive processing system;
- Built-in automatic temperature compensation function;
- Added one-key reset function and lightning protection;
- Anti-interference function module for transmission signals;
- Electromagnetic Compatibility (EMC/REI) design.



Technical Specifications

Specification	Technical Specification Parameters
Measuring Range	0-50g/L
Weight	1.35 KG，(including 10m cable)
Accuracy	Less than ±10% of reading (depending on sludge homogeneity) or 10mg/L, whichever is greater
Resolution	0.001mg/l, 0.01mg/l, 0.1mg/l, 1mg/l, depending on the range
Pressure Range	≤0.3MPa
Calibration	Standard solution calibration, water sample calibration
Response Time	6s < T90 < 300s (adjustable setting)
Sensor Supply Voltage	9~36VDC
Output	MODBUS RS-485 Output
Storage Temperature	-15℃~50℃
Operating Temperature	0℃~45℃
Protection Class	IP68 / NEMA6P
Cable Length	Standard 10m cable

WXWH

WH-WS Online Sludge Concentration Meter

Product Overview

The WH-WS Series Online Sludge Concentration Meter is designed for measuring the concentration of suspended solids (sludge) in municipal sewage or industrial wastewater treatment processes. Whether evaluating activated sludge and the entire biological treatment process, analyzing treated wastewater discharge, or detecting sludge concentration at different stages, the photoelectric sludge concentration meter provides continuous and accurate measurements.





Key Features

- Dual Infrared Beam Detection Principle;
- LCD Display, Easy Operation;
- Small Beam Angle for Sensor Measurement Range;
- Optimized Intelligent Signal Adaptive Processing System;
- Built-in Automatic Temperature Compensation;
- Added One-Key Recovery and Lightning Protection;
- New Anti-Interference Signal Transmission Module;
- Electromagnetic Compatibility (EMC/REI) Design.

Technical Specifications

Specification		Technical Specification Parameters
Main Unit	Measurement Range	0-5000mg/L, 0-20g/L, 0-30g/L
	Accuracy	±5%
	Resolution	0.1mg/L
	Repeatability	±1%
	Flow Rate Range	0.2-3m/s
	Power	10VA
	Pressure	10bar
	Power Supply	220VAC,DC24V
	Temperature Range	0-60℃
	Output	4-20 mA analog signal (standard), 2 relay outputs (standard), RS485 digital signal (optional)
	Measurement Unit	g/L and mg/L
	Housing Material	Imported ABS material
	Protection Rating	IP55
	Weight	1.5kg
Sensor	Temperature Range	0-45℃
	Material	316L stainless steel
	Protection Rating	IP68
	Cable Length	10 meters
	Weight	0.5kg

WH-SJG Acid/Alkali/Salt Concentration Meter

Product Overview

The WH-SJG Series Industrial Online Acid/Alkali/Salt Concentration Meter is a microprocessor-based online water quality monitoring instrument. This device is equipped with acid and alkali concentration electrodes for continuous monitoring and control of the concentration and temperature of aqueous solutions. It is widely used in power plants, petrochemicals, metallurgy, paper industry, environmental water treatment, light industry, and electronics. Applications include monitoring and controlling the quality of cooling water, makeup water, saturated water, condensate, and boiler water in power plants, as well as raw and product water in ion exchange, reverse osmosis EDI, and seawater distillation systems.





Key Features

- The instrument uses an LCD display;
- Intelligent English menu operation;
- Features current or communication output, freely adjustable measurement range, high/low limit alarm prompts, and two relay control switches with adjustable hysteresis range, automatic or manual temperature compensation.

Technical Parameters

Specification	Technical Specification Parameters
Measuring Range (varies with electrode constant)	H_2SO_4: 0~30%; 35~80%; 85~92%; 92~100% NO_3:0~25% NaCl:0~30% NaOH: 0~18%; 20~40% HCL:0~20%; 22~40%
Resolution	Measurement: 0.01%, Temperature: 0.1℃
Basic Error	±1.0% F.S., Temperature: ±0.5℃
Auto/Manual Temp Comp Range	0~150℃ (Reference Temperature: 25℃)
Auto Temp Compensation Error	±0.3%F.S.
Electronic Unit Stability	±0.1%F.S. ±/24h
Electronic Unit Repeatability Error	≤0.1%F.S.
Electronic Unit Alarm Error	±1%F.S.
Electronic Unit Output Current Error	±1%F.S.
Signal Output	0~10mA (Load Resistance <1.5KΩ) 4~20mA (Load Resistance <750Ω) 20~4mA (Load Resistance <750Ω)
Two Relay Control Contacts	3A 240VAC, 3A 28VDC or 120VAC
Power Supply (Optional)	85~265VAC ±10%, 50±1Hz, Power ≤3W 9~36VDC, Power ≤3W
Dimensions	97.5*97.5*132.8 mm
Installation Method	Panel Mount (Embedded); Panel Cutout: 93x93 mm
Weight	0.6kg
Operating Environment	-10~60℃; Relative Humidity: ≤90%; No strong magnetic field interference except Earth's magnetic field

WXWH

WH-CL Chloride Ion Meter



Main Features

- Password protection for calibration and settings;
- Large backlit dot matrix LCD;
- On-site technical parameter configuration using buttons;
- High stability and accuracy; suitable for industrial ion and temperature measurement;
- Strong anti-interference circuit design, can be installed and used in high-interference environments; settings and calibration data are retained after power loss; manual/automatic temperature setting and calibration; switches to manual temperature compensation if the temperature electrode is damaged; supports online data verification;
- Multiple output options (relay, 4.00~20.00 mA, RS485).

Technical Parameters

Specification		Technical Specification Parameters
ION	Measurement Range	0.00~20000 ppm
	Resolution	0.01ppm，0.1ppm，1ppm
	Measurement Accuracy	±0.01ppm，±0.1ppm，±1ppm
	Voltage Input Range	0.0~1000.0mV
Temperature Compensation	Compensation Range	-10.0~130.0℃
	Resolution	0.1℃
	Measurement Accuracy	±0.2℃
	Temperature Sensor	PT1000/NTC30K
	Temp. Comp. Mode	Automatic/Manual
Current Signal Output	Signal Output	4~20mA(adjustable)
	Current Accuracy	±0.05mA
Relay	Load	Less than 500Ω
	Load Capacity	5A 230VAC15A 30VDC
Data Communication	RS485	supports MODBUS-RTU
Other	Power Supply	90~265VAC
	Operating Temperature	0~70℃
	Protection Rating	IP65
	Installation Method	Panel Mount
	Dimensions	(H*W*D) 97.5*97.5*132.8 mm
	Panel Cutout Dimensions	93*93 mm
	Weight	0.85kg

WH-FU Fluoride Ion Meter



♦ Main Features

- Password protection for calibration and settings;
- Large backlit dot matrix LCD;
- On-site technical parameter configuration using buttons;
- High stability and accuracy; suitable for industrial ion and temperature measurement;
- Strong anti-interference circuit design, can be installed and used in high-interference environments; settings and calibration data are retained after power loss; manual/automatic temperature setting and calibration; switches to manual temperature compensation if the temperature electrode is damaged; supports online data verification;
- Multiple output options (relay, 4.00~20.00 mA, RS485).

♦ Technical Parameters

Specification		Technical Specification Parameters
ION	Measurement Range	0.00~30000 ppm
	Resolution	0.01ppm，0.1ppm，1ppm
	Measurement Accuracy	±0.01ppm，±0.1ppm，±1ppm
	Voltage Input Range	0.0~1000.0mV
Temperature Compensation	Compensation Range	-10.0~130.0℃
	Resolution	0.1℃
	Measurement Accuracy	±0.2℃
	Temperature Sensor	PT1000/NTC30K
	Temp. Comp. Mode	Automatic/Manual
Current Signal Output	Signal Output	4~20mA(adjustable)
	Current Accuracy	±0.05mA
Relay	Load	Less than 500Ω
	Load Capacity	5A 230VAC15A 30VDC
Data Communication	RS485	supports MODBUS-RTU
Other	Power Supply	90~265VAC
	Operating Temperature	0~70℃
	Protection Rating	IP65
	Installation Method	Panel Mount
	Dimensions	(H*W*D) 97.5*97.5*132.8 mm
	Panel Cutout Dimensions	93*93 mm
	Weight	0.85kg

WXWH

WH-CA Calcium Ion Meter



♦ Main Features

- Password protection for calibration and settings;
- Large backlit dot matrix LCD;
- On-site technical parameter configuration using buttons;
- High stability and accuracy; suitable for industrial ion and temperature measurement;
- Strong anti-interference circuit design, can be installed and used in high-interference environments; settings and calibration data are retained after power loss; manual/automatic temperature setting and calibration; switches to manual temperature compensation if the temperature electrode is damaged; supports online data verification;
- Multiple output options (relay, 4.00~20.00 mA, RS485).

♦ Technical Parameters

Specification		Technical Specification Parameters
ION	Measurement Range	0.00~30000 ppm
	Resolution	0.01ppm，0.1ppm，1ppm
	Measurement Accuracy	±0.01ppm，±0.1ppm，±1ppm
	Voltage Input Range	0.0~1000.0mV
Temperature Compensation	Compensation Range	-10.0~130.0℃
	Resolution	0.1℃
	Measurement Accuracy	±0.2℃
	Temperature Sensor	PT1000/NTC30K
	Temp. Comp. Mode	Automatic/Manual
Current Signal Output	Signal Output	4~20mA(adjustable)
	Current Accuracy	±0.05mA
Relay	Load	Less than 500Ω
	Load Capacity	5A 230VAC15A 30VDC
Data Communication	RS485	supports MODBUS-RTU
Other	Power Supply	90~265VAC
	Operating Temperature	0~70℃
	Protection Rating	IP65
	Installation Method	Panel Mount
	Dimensions	(H*W*D) 97.5*97.5*132.8 mm
	Panel Cutout Dimensions	93*93 mm
	Weight	0.85kg

WH-JM Ultrasonic Sludge Interface Meter

Product Overview

The WH-JM Series Ultrasonic Sludge Interface Meter utilizes reliable ultrasonic echo detection principles to calculate the height and thickness of the sludge layer by measuring the time it takes for the ultrasonic wave to return to the probe. This enables effective monitoring of sludge sedimentation characteristics and precise control of sludge return flow. It allows operators to optimize sludge circulation, compensate for daily wastewater fluctuations, correct abnormal conditions, and monitor separation layers in pre-concentration tanks in real time.

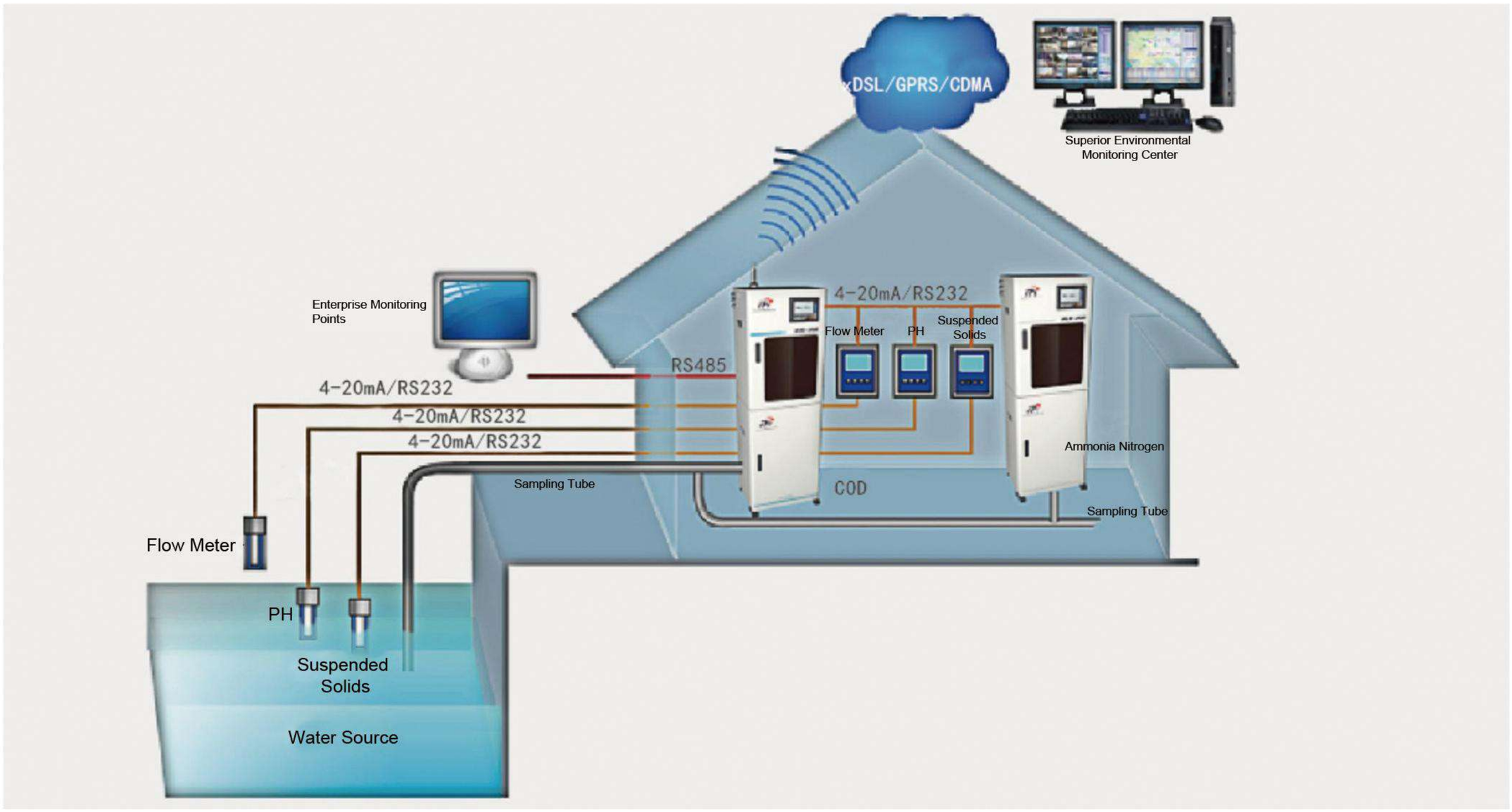




Technical Parameters

Specification	Technical Specification Parameters
Power Supply	AC220V/24V optional, 50Hz AC power supply
Human-Machine Interface	Screen Resolution: 128*64 Key Life: >1 million presses
Signal Output	Analog Current: 4-20 mA, Load 750Ω
	Switch Output: 2 relay outputs, 220VAC/2A
	RS485 Communication: Modbus protocol
Environmental Characteristics	Ambient Temperature: -25℃ to +60℃
	Relative Humidity: 45%-75%RH
	Pressure Range: ±0.1Mpa
Range Specifications	Measurement Range: 5m-20m
	Resolution: 1mm
	Accuracy: ±1%
	Blind Zone: 0.2-0.6m

WH-8200 Wastewater Pollution Online Monitoring

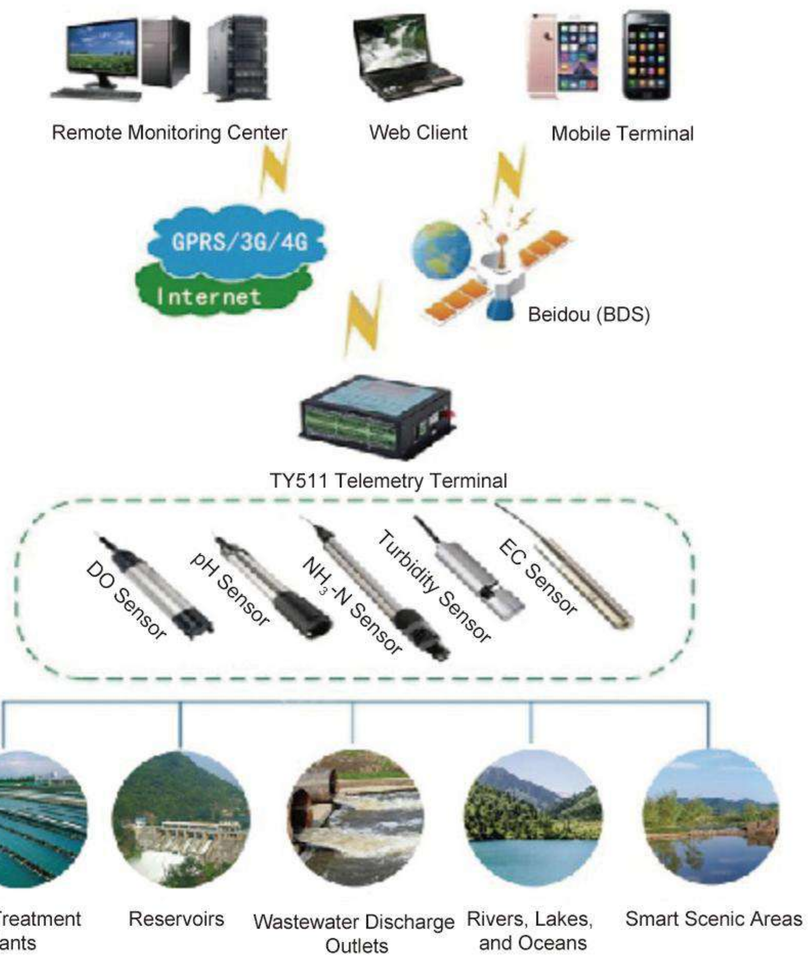


Monitoring Indicators: COD, TOC, Ammonia Nitrogen, Total Phosphorus, Total Nitrogen, Heavy Metals (Hexavalent Chromium/Total Chromium, Total Copper, Total Manganese, Total Zinc, Lead, Cadmium, Copper, Zinc, Arsenic, Mercury), etc.

Application: Enterprise wastewater discharge outlets, Urban wastewater treatment plants, City pipeline networks and sewage pumping stations

System Diagram

- The system consists of four parts: Environmental Protection Bureau Monitoring Center, Communication Network, Monitoring Equipment, and Control Equipment;
- Monitoring Center: Composed of computers, IC card readers, GPRS data transmission modules, and monitoring management system software;
- Communication Network: Supports various communication methods such as PSDN, ADSL, CDMA, and GPRS;
- Monitoring Equipment: Wastewater discharge monitoring and control terminal;
- Control Equipment: Electromagnetic flow meter, COD online analyzer, electric valve.



Main Functions

Real-Time Data Monitoring | Multiple Query Methods | Exceedance Alarms | Remote Control | System Management

WH-8210 Outdoor Compact Water Quality Automatic Monitoring System



System Overview

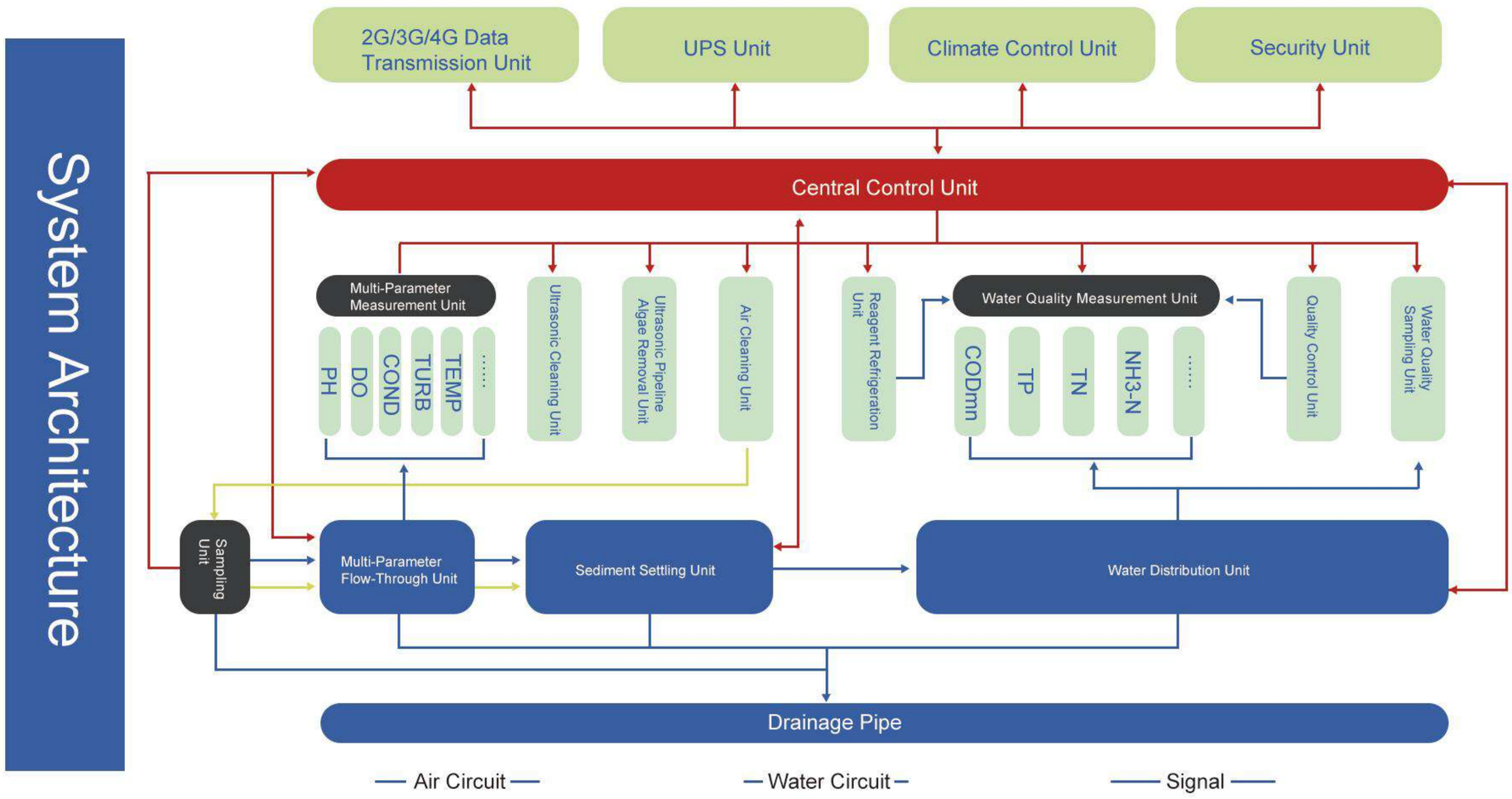
The Environlyzer Station outdoor compact water quality automatic monitoring system is centered around online monitoring instruments and adopts an intelligent design philosophy. It integrates automatic control, wireless communication, and network engineering technologies to enable real-time, continuous multi-parameter monitoring and remote control of water quality. This system helps promptly understand the water quality conditions within a jurisdiction, provides early warning of pollution incidents, and offers reliable information support for environmental management departments.

System Features

- Customizable Monitoring Parameters: Includes water quality parameters, CODcr, CODmn, ammonia nitrogen, total phosphorus, total nitrogen, heavy metals, inorganic anions, etc.
- Self-Developed Visual Central Control System: Built on .NET Framework, highly scalable and user-friendly.
- Centralized Control Integration: Complies with national standards for real-time remote monitoring and management.
- Integrated Quality Control: Supports standard sample mixing for concentration verification and spike recovery testing.
- Ultrasonic Pipeline Cleaning & Algae Removal: Ensures stable operation without cleaning water; optional high-pressure cleaning module.
- Air Compressor: Performs air backflushing on filters, extending maintenance intervals.
- Multi-Parameter Flow-Through Unit: Integrated cleaning device improves accuracy and extends probe life.
- Dedicated Reagent Refrigerator: Prevents reagent degradation in high temperatures.
- Backup Power System: Ensures operation during power outages, meeting national standards.
- Climate Adaptation & Security Monitoring: Suitable for extreme climates.
- Top-Tier Components: Switches, lightning protection, control modules, and cabinets use premium brands.
- Compact Design: Standard nine-parameter station occupies only ~0.8m².



System Architecture



WH-8211 Solar-Powered Floating Automatic Monitoring Station

Product Overview

The WH-8211 Solar-Powered Floating Automatic Monitoring Station is an economical buoy-based water quality monitoring data collection platform. It integrates data transmission technology, cloud computing technology, solar power supply technology, and modular measurement technology into an intelligent online monitoring system. This system features automatic continuous online monitoring, automatic cleaning, solar power supply, wireless transmission, and unmanned operation.

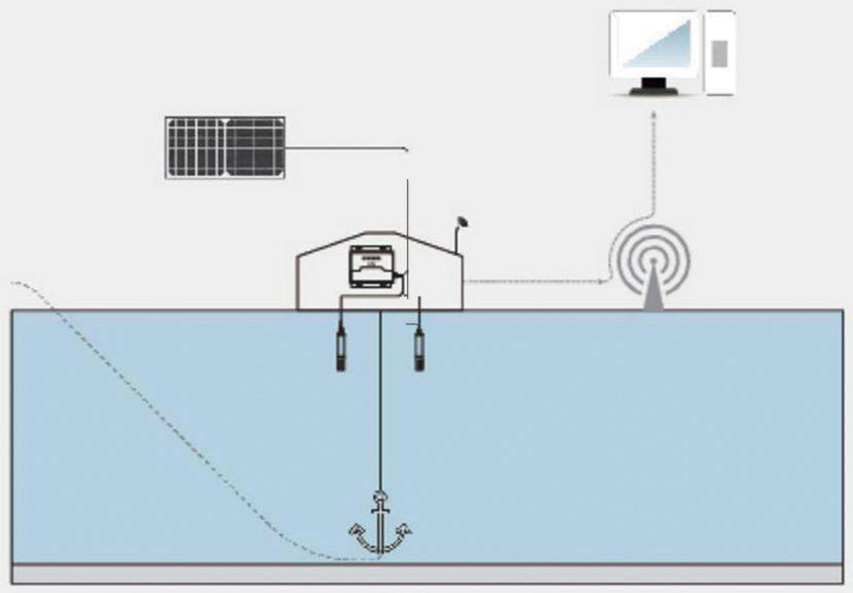


Technical Features

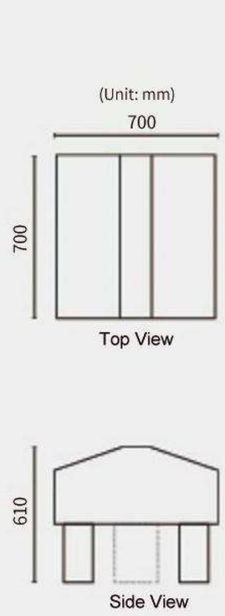
- Integrated Design: Combines water quality monitoring, wireless transmission, and solar power into a single unit for ease of use.
- Cloud Operation: Supports Modbus RTU protocol; offers cloud-based configuration, operation, display, and alarm functions.
- Ultra-Low Power Consumption: Solar-powered, capable of continuous operation even in rainy conditions.
- Wide Operating Range: Reliable performance in temperatures from -20°C to 55°C; customizable for regional needs.
- Easy Installation: No specific site requirements, quick deployment, and labor-saving.
- Automatic Cleaning: Program-controlled cleaning ensures sensor interfaces remain clean.

Application Areas

- Surface Water, Lakes, Reservoirs, Water Source Areas.



Working Principle Diagram



Technical Parameters

Specification	Technical Specification Parameters
Monitoring Parameters	Water quality five parameters; multi-parameters
Protection Facilities	Navigation light; GPS (optional)
Power Supply	48Ah,12VDC
Solar Panel	50W,12VDC
Data Transmission	RS485 (Modbus RTU standard protocol), customizable protocol output upon request
Buoy Dimensions	700*700*610MM
Fixing Method	Single-point or two-point anchor fixation
Parameter Options	pH, Conductivity, DO, Turbidity, Temp, COD, NH3-N, ORP, Chlorophyll, Blue-Green Algae, Fluoride, Chloride, Transparency, Nitrate, etc.

WH-GP100 Multi-Parameter Water Quality Spectrophotometer



Basic Principle

The WH-GP100 micro spectrophotometer is our self-developed new-generation water quality monitor. It adopts advanced multi-source spectral fusion analysis and MEMS precision technology, equipped with high-precision fast-scanning Fourier transform spectrometer covering 190-1900nm.
Integrating optical, mechanical and computing modules, it realizes miniaturization, portability and cost efficiency. It avoids drawbacks of traditional detection like slow reaction, waste liquid pollution, low precision and weak anti-interference, greatly improving online water quality analysis efficiency and accuracy.

Key Features

- It supports second-level monitoring with a minimum interval of 25 seconds. MEMS multi-light fusion and dynamic compensation algorithms greatly boost anti-interference performance.
- It needs no chemical reagents, causes no secondary pollution, features low power consumption and can work with solar power supply.
- One unit can monitor turbidity, color, suspended solids, COD (CODmn),NH_3-N, TP, TN, NO_3-N, NO_2-N, with easy function expansion.
- Compact structure allows diverse installation ways, applicable for handheld use, shore stations, unmanned stations, vehicle and unmanned ship monitoring.
- Built-in intelligent system realizes sampling, data transmission, storage, analysis and early warning. Data is visible on various terminals, and encrypted cloud storage supports long-term data research.

Technical Parameters

Specification	Technical Specification Parameters
Operating Temp.	-10°C~45°C
Operating Humidity	0~95% RH, non-condensing
Data Storage, Query, and Export	Supports local data query, historical data export, and storage of historical data (time), data is retained during power loss
Data Retransmission	If network communication is abnormal, data is automatically retransmitted to the platform once communication is restored.
Data Collection	Real-time data collection and upload. Collection frequency ≤30 seconds.
Electromagnetic Interference Resistance	The device has anti-electromagnetic interference capabilities.
	Passes electrical fast transient burst immunity and electrostatic discharge tests.
Insulation Resistance and Electrical Strength Test	After constant damp heat test, insulation resistance and electrical strength are tested. Apply 500V between current-carrying parts and the housing, no breakdown or flashover, insulation resistance >2 MΩ.
Constant Damp Heat Test	The device is tested under 40°C±2°C, 95%±5% RH for 16 hours according to GB/T 2423.3-2016, and passes.
Vibration Test	The device is tested under a frequency range of 10-150 Hz, acceleration of 10 m/s², and 2 sweep cycles per axis according to GB/T 2423.10-2008, and passes.
Electrical Unit Protection Rating	IP65
Optical Probe Protection Rating	IP68
Positioning Function	Supports GPS + BeiDou positioning systems.
Remote Control	Supports remote configuration, remote upgrade, remote restart, and other remote maintenance functions.
Automatic Cleaning	Ultrasonic automatic cleaning
Electrical Fast Transient Burst Immunity	Passes the electrical fast transient burst immunity test according to GB/T 17626.4-2018.
Electrostatic Discharge Test	Passes the electrostatic discharge test according to GB/T 17626.2-2018.

WXWH

WH-CL700 Online Residual/Total Chlorine Analyzer (DPD Colorimetric Method)

Product Overview

The WH-CL700 Online Residual Chlorine Analyzer is a precise, cost-effective, and low-maintenance instrument designed for continuous online monitoring of residual chlorine. It uses the DPD colorimetric method to detect residual chlorine concentration, automatically adding reagents for colorimetric measurement. It is suitable for residual chlorine measurement during chlorination disinfection processes and monitoring residual chlorine concentration in drinking water distribution networks. By selecting total chlorine reagents, it can also monitor total chlorine concentration online.



Main Features

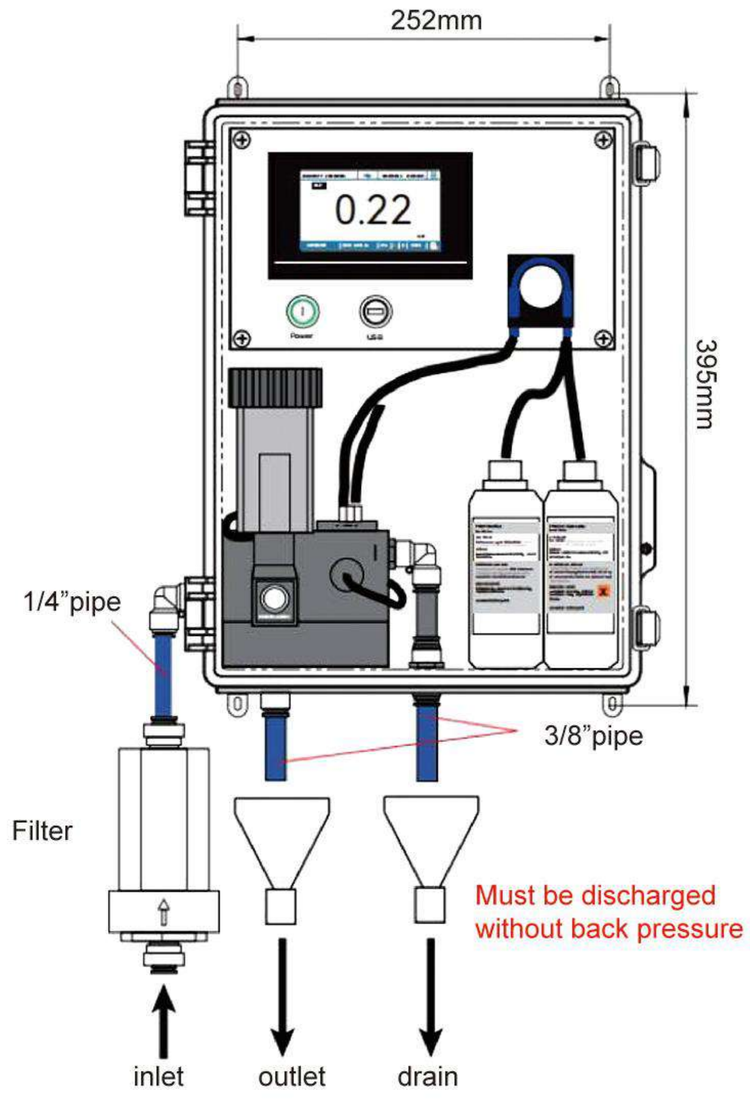
- DPD Colorimetric Method, more precise and stable measurement
- Low reagent consumption, easy to replace
- Analysis cycle about 2.5 minutes
- 4-20mA output
- Password protection, prevents unauthorized operation
- Automatic diagnosis and automatic calibration
- Automatic and manual measurement modes
- IP65 protection rating
- RS485 Modbus communication

Typical Applications

- Tap water, drinking water distribution networks, reverse osmosis, cooling water, swimming pools, bottle washing water, disinfection processes

Technical Parameters

Specification	Technical Specification Parameters
Measurement Parameters	Residual chlorine, Total chlorine
Measurement Principle	DPD colorimetric method
Measurement Range	0.00-5.00 mg/L (ppm) residual chlorine
Resolution	0.01 mg/L (ppm)
Accuracy	±1% F.S.
Cycle Time	Adjustable: 60-3600s (default: 300s)
Display	4.3-inch LCD touchscreen (measurement value, measurement mode, and relay status)
Language	Chinese/English
Power Supply	90-260VAC, 50/60H
Analog Output	4-20mA output, Max. 500Ω
Digital Output	RS485 Modbus
Alarm	2 independent sets of Hi/Lo alarm points with hysteresis setting, 5A/250VAC
Operating Conditions	Working Temperature: 0-50°C, Humidity: 10-95%, non-condensing
	Recommendations: Flow rate: 1L/min; Pressure: 1 bar
Protection Rating	IP65
Installation Method	Wall-mounted
Dimensions	300 x 400 x 180 mm



Total Alkalinity / Total Hardness Water Quality Analyzer

Basic Principle

The online total alkalinity analyzer measures the total alkalinity of water via titration method and colorimetric method. It automatically pumps reagents into the water sample for reaction, determines the reaction endpoint by colorimetry, and then calculates the total alkalinity concentration in the water based on the amount of reagent added. By selecting different reagents, the analyzer can measure different total alkalinity concentrations.

The online total hardness analyzer measures the total hardness of water via titration method and colorimetric method. The instrument adds a color indicator (such as methyl orange) to the water sample, which reacts with carbonates and bicarbonates in the water to form colored substances. Then, by measuring the absorbance at a specific wavelength, the hardness content is automatically calculated. This method features fast measurement speed (usually within 3 minutes), high accuracy and strong anti-interference ability. The instrument automatically pumps reagents into the water sample for reaction, determines the reaction endpoint by colorimetry, and then calculates the total hardness in the water based on the amount of reagent consumed. By selecting different reagents, the analyzer can measure different total hardness values.



Instrument Features

- 7-inch LCD touchscreen for quick and easy interaction;
- Accurate and reliable fully automatic total alkalinity / total hardness analyzer;
- Equipped with self-diagnosis, abnormal alarm and data out-of-limit alarm functions;
- Optional interval measurement with a minimum detection interval of 5 minutes;
- Supports Modbus RS485 and 4-20mA signal output;
- Supports 4G and WiFi wireless data transmission;

Technical Parameters

Specification	Technical Specification Parameters
Measuring Principle	Titration Colorimetric Method
Measuring Parameters	Total Alkalinity
Measuring Range	5.34-2050mg/L(ppm)$CaCO_3$(refer to reagent range)
Accuracy	±5% of the upper limit of the respective measuring range of the reagent used
Analysis Time	Minimum duration approx. 2min, analysis time affected by water quality and flushing duration
Automatic Analysis Interval	Default: 15 min, minimum 1 min
Dimensions	300x300x180 mm (11.81x11.81x7.09 inch)
Weight	4.0kg
Protection Class	IP54
Power Supply	100-240 VAC,50/60 Hz
Power Consumption	25W
Operating Temperature	5-45°C(41-113°F)
Storage Temperature	5-45°C(41-113 °F)
Humidity	20%-95%, indoor
Pressure	0.2-2 bar
Cable Length	2m(6.56 ft), contact us for other dimensions
Pipe Requirements	Inlet/Outlet: 6mm outer diameter
Analog Output	0/4-20 mA; Resolution:<100A; Maximum Load: 750Ω
Digital Input	1-channel digital input (for start analysis / flow switch)
Relay Output	2-channel relays (max. 250 VAC / 30 VDC 3A)
Wired Communication	Modbus RTU, RS485
Wireless Communication	WiFi / 4G (optional)
Data Storage	32G SD Card

WXWH

WH-GLS700 BOILER WATER QUALITY ONLINE MONITORING SYSTEM

Product Overview

In recent years, against the backdrop of global resource shortages and the promotion of low-carbon energy conservation, minimizing the operating costs of various steam boilers has become a crucial measure to improve both economic and environmental benefits for enterprises. In any steam boiler facility, online monitoring of boiler feedwater or boiler water is a vital step in reducing energy costs. In accordance with the Industrial Boiler Water Quality Standards, our company has developed the WH-GLS700 Boiler Water Quality Online Monitoring System, based on our featured products: the online hardness analyzer and online alkalinity analyzer. Users can select measurement parameters based on on-site requirements.





Measurement Parameters

- Total Hardness: 0.21-534ppm(dilution device optional)
- Total Alkalinity: 0.107-41.0mmol/L
- Phenolphthalein Alkalinity: 0.8-20.0mmol/L
- Iron Ion: (0.001-0.5ppm/0.2-6.0ppm
- Phosphate: 0-10.0mg/L, 0-50.0mg/L
- pH: 0-14pH
- Conductivity: 0-2000μS/cm
- Turbidity: 0-100NTU
- Dissolved Oxygen: 0-20mg/L
- Chloride Ion: 2-20000ppm

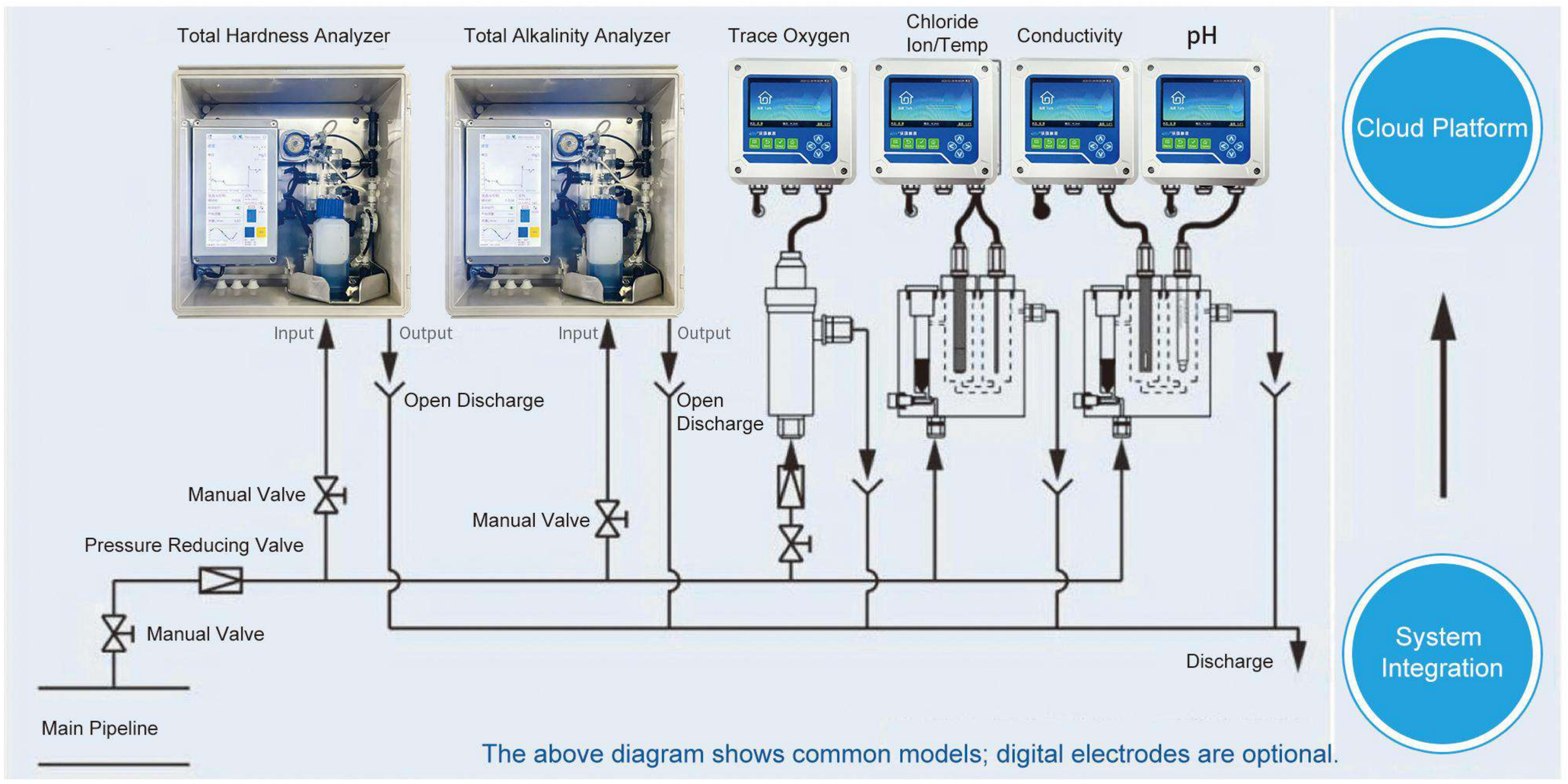
※ The above parameters can be freely integrated and combined.

Typical Applications

- Softened water, Boiler water, Circulating water

Solutions

- In accordance with the national standard GB/T 1576, our company offers the following two boiler water quality monitoring solutions:
  1. Controller + Sensor Integration, optional wireless transmission module + cloud-based APP
  2. Digital Sensor Integration + 7-inch Touchscreen Display, optional wireless transmission module + cloud-based APP

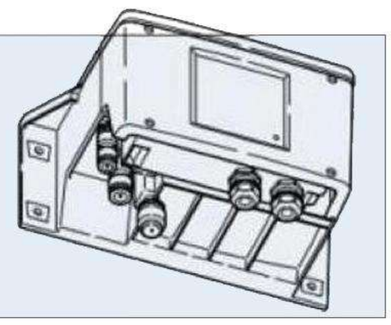


The above diagram shows common models; digital electrodes are optional.

Measurement Range



Total Hardness Total Alkalinity	Measurement Principle:	Titration colorimetric method
	Measurement Range:	Hardness: 0.21–534 ppm, Alkalinity: 5.34–401 ppm (depending on the selected reagent)
	Resolution:	0.01/0.1/1ppm
	Accuracy:	±5% of the maximum value of the selected reagent
	Response Time :	Approximately 3 minutes (depending on measurement concentration)
Iron Ion	Measurement Principle:	Colorimetric method
	Measurement Range:	0.01-0.5mg/L, 0.2-6.0mg/L
	Resolution:	0.01/0.1mg/L
	Accuracy:	±10% F.S.
	Response Time :	Approximately 7 minutes



Turbidity	Measurement Principle:	90° scattered light
	Measurement Range:	0-5/0-100NTU
	Resolution:	0.0001/0.001NTU
	Accuracy:	±2% of reading (whichever is greater) for values <40 NTU, ±5% of reading for values >40 NTU
	Response Time :	≤30 seconds



pH	Measurement Principle:	Glass electrode
	Measurement Range:	0-14pH
	Resolution:	0.01pH
	Accuracy:	±0.01pH
	Response Time :	≤30 seconds
Conductivity TDS	Measurement Principle:	Two-electrode method
	Measurement Range:	0-2000μS/cm,0-99900ppm
	Resolution:	0.1μS/cm,1ppm
	Accuracy:	±1% F.S.
	Response Time :	≤ 30 seconds
Dissolved Oxygen	Measurement Principle:	Polarographic method
	Measurement Range:	0-20mg/L
	Resolution:	0.1mg/L
	Accuracy:	±1% F.S.
	Response Time :	≤ 30 seconds
Chloride Ion	Measurement Principle:	Ion-selective electrode
	Measurement Range:	2-20000ppm
	Resolution:	0.1/1ppm
	Accuracy:	±5% F.S.
	Response Time :	≤ 30 seconds

Technical Parameters

Specification	Technical Specification Parameters	Specification	Technical Specification Parameters
Power Supply	220VAC, 50/60Hz	Protection Rating	IP65
Digital Output	RS485 Modbus RTU	Weight	Approximately 15 kg
Wireless Transmission	Optional wireless transmission module + cloud platform	Inlet Water Pressure	1–2 bar (recommend pressure reducing valve for higher pressure)
Display	7-inch LCD touchscreen with LED backlight	Flow Rate	300-500mL/min
Data Storage	Historical data query, supports USB export	Ambient Temp.	0-50℃
Storage Interval	Configurable: 1–3600s (default: 10s)	Water Sample Temp.	0-40℃
Dimensions	Standard: 380 x 740 x 180 mm (varies based on measurement parameters)	Inlet/Outlet Connections	6 mm / 10 mm tubing

WXWH

Multi-parameter Water Quality Analyzer



♦ Basic Principle

As an important supplementary means to traditional laboratory testing, the online drinking water quality monitoring system has emerged. This system integrates water quality hygiene index monitoring sensors, wireless data transmission equipment and remote monitoring platforms. By applying modern automatic monitoring technology, automatic control technology, computer application technology and supporting professional software, it forms a complete system covering sampling, pretreatment, analysis, data processing and storage.

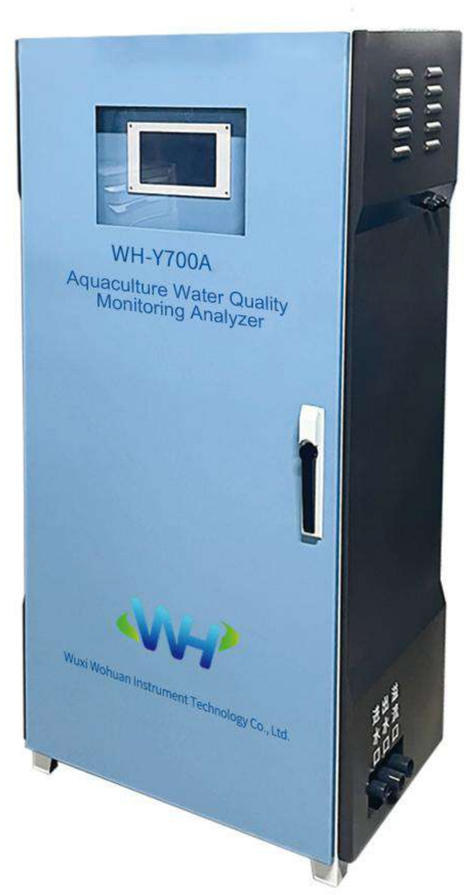
♦ Instrument Features

- Supports customizable detection parameters. This multi-parameter water quality analyzer monitors up to 8 indicators: free chlorine, total chlorine, turbidity, pH, ORP, conductivity, temperature and pressure. It boasts diverse models, low cost and quick deployment.
- Adjustable testing cycle with ultra-low reagent consumption. At 5-minute sampling interval, it achieves around 2-month maintenance-free operation, cutting labor and operational costs efficiently.
- Adopts the latest DPD reagent and patented automatic cleaning colorimetric analysis technology.
- IP65-rated enclosure protection, suitable for various outdoor installation requirements.
- Intuitive and convenient 7-inch touch LCD screen, providing on-site debugging support.
- On-site display of real-time data, historical logs and calibration records in table or graph form.
- Supports mainstream RTU remote transmission, seamlessly connects with SCADA and smart water platforms.

♦ Technical Specifications

Specification Name	Technical Specification Parameters
Monitoring Parameters	pH, ORP, Conductivity, Turbidity, Free Chlorine, Total Chlorine, COD, TOC, Color, Temperature, Pressure, Flow
Chlorine Content Detection	Detection Method: DPD Reagent Colorimetry Chlorine Content Detection Range Detection Accuracy: ±5% or ±10ppb; Detection Unit Cleaning Method: Fully Automatic Cleaning Reagent Mixing Method: Built-in Electromagnetic Drive Mixer
Turbidity Detection	Sensor: LED 90° Scattering Principle Measurement Range:0.001-100NTU
pH Detection	Sensor: Ceramic Diaphragm & Filled Composite Electrode Measurement Range: 0-14
Conductivity Detection	Sensor: K=1 Constant Conductivity Sensing Electrode Measurement Range:20-5000 μS/cm
ORP (Redox)	Sensor: Glass Composite Electrode Measurement Range: 0-1000Cu Measurement Range: 0°C-100°C(32°F to 212°F).m/h (0-11 Mgpd)
Temperature Detection	Measurement Range: 0°C- 100°C (32°F to 212°F)
Pressure Detection	Pipe Network Inlet Pressure: Max. 10 Bar (145 psi)
Data Log	Full Historical Records Accessible: Yes (Cycle Period Configurable) Full Events & Calibration Logs Accessible: Yes (Cycle Period Configurable), USB Drive Supported
Remote Communication Function	Optional Communication Methods: TCP/IP LAN Connection 3G/4G GSM Network (USB Network Card Module Optional) Built-in WiFi Wireless Network Card or External DTU/RTU Module Available
Permission Management	User & Password Permission: Hierarchical Permission Setting Available
About Device	Display Unit: 7-inch LED Full-color Touch Screen External Dimensions (L×W×D): 840×380×180 mm Prepared Weight: Approx. 16KG for Fully Equipped model
Operating Environment Requirements	Operating Sample Pressure:0.5 to 10 Bar (7.25 to 145 psi); Ambient Temperature:2°C to 50°C (35.6°F to 122°F) Ambient Humidity: Max. 90% (at 40°C, altitude below 2000m) Ingress Protection: IP65 (High-strength Polymer Enclosure)
Product Certification	US EPA/US EPA Accepted /UL/ CE

Aquaculture Water Quality Monitoring Analyzer



♦ Basic Principle

Ammonia nitrogen is a vital water quality index for fish and shrimp ponds. Proper concentration ensures their healthy growth and stable yield. It exists as free ammonia and ammonium ions, serving as water nutrients yet easily triggering eutrophication and poisoning aquatic creatures. Nitrite is an unstable intermediate in water nitrogen circulation. It turns toxic under oxygen-deficient conditions, impairing fish and shrimp health and even causing deaths.

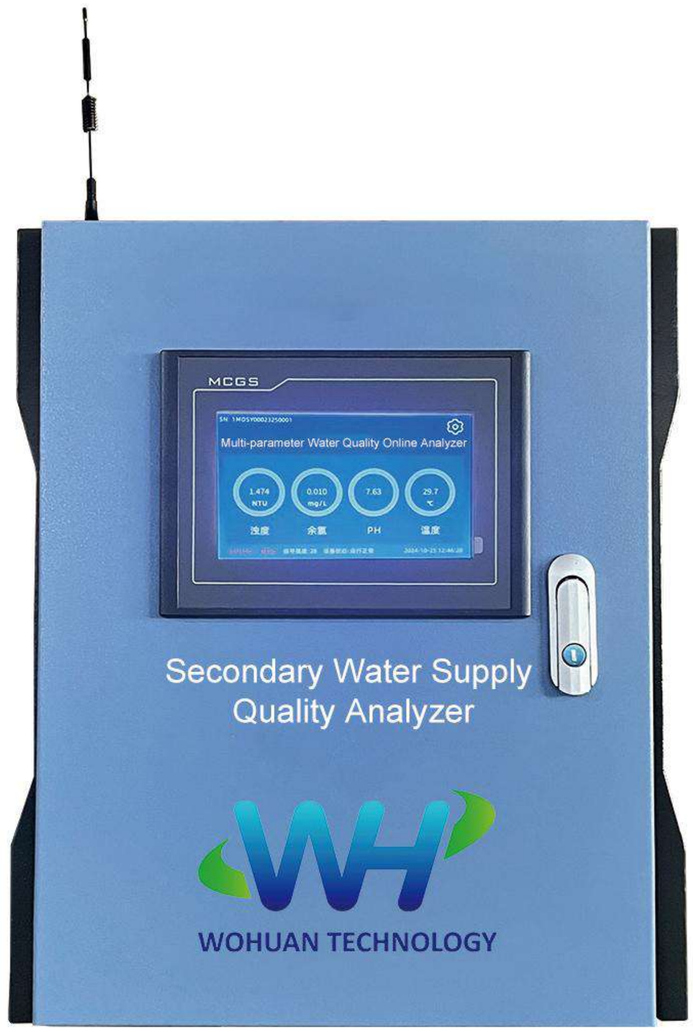
WH-Y700A online water quality monitoring system enables continuous automatic detection of ammonia nitrogen and nitrite in aquaculture water. Data can be remotely uploaded to the cloud for real-time check, helping prevent losses from poor water quality.

♦ Technical Indicators

Specification Name			
Measuring Principle /Range	Ammonia Nitrogen: Salicylic Acid Spectrophotometry, 0-10mg/L		
	Nitrite: Ethylenediamine Spectrophotometry, 0-2mg/L		
	pH: Potentiometric Method, 0-14		
	Redox: Potentiometric Method, ±1000mV		
	Dissolved Oxygen: Fluorescence Method, 0-20mg/L		
	Conductivity: Electrode Method, 0-30ms/cm; 0-500ms/cm		
	Salinity: Electrode Method, 0-18ppt; 0-700ppt		
	Turbidity: 90° Infrared Scattering Method, 0-4000NTU		
Repeatability / Zero Drift/ Range Drift/ Measurement Cycle	NH_3-N: ±5%/ ±5%/ ±5%/ 15min	Resolution/ Measuring Lower Limit/ Error	NH_3-N: 0.001/ 0.01/ ±10%
	NO_2^-N: ±5%/ ±5%/ ±5%/ 15min		NO_2^-N: 0.001/ 0.005/ ±10%
	pH: --/ --/ --/ Real-time		pH: 0.01/ 0.01/ ±0.1pH
	Redox: --/ --/ --/ Real-time		Redox: 1/ -1000/ ±10mV
	Dissolved Oxygen:--/ --/ --/ Real-time		Dissolved Oxygen: 0.01/ 0.01/ ±0.2mg/L
	Conductivity:--/ --/ --/ Real-time		Conductivity: 0.01/ 0.01/ ±1F.S
	Salinity:--/ --/ --/ Real-time		Salinity: 0.1/ 0.1/ ±1F.S
	Turbidity:--/ --/ --/ Real-time		Turbidity: 0.01/ 5.00/ ±10%
Measuring Time	Single cycle measurement time less than 30 minutes		
Measuring Mode	Time interval (adjustable), Fixed time or trigger measurement mode can be set		
Calibration Mode	Manual calibration of input standard solution concentration		
HMI Operation	Touch screen display and command input		
Self-Test Protection	Self-diagnosis of instrument working status, no data loss in case of abnormality or power failure; after abnormality reset or power recovery, the instrument automatically flushes residual reactants and resumes operation automatically.		
Data Storage	5-year data storage		
Input Interface	Switch Output		
Signal Output	1-channel RS485 Output; 4G Wireless Remote Transmission		
Operate Env	Indoor operation, recommended temperature 5~28℃, humidity ≤90% (non-condensing)		
Power Supply	AC220V±10%		
Frequency	50±0.5Hz		
Power	≤75W, excluding sampling pump		

WXWH

WH-EGS700 Secondary Water Supply Quality Analyzer



Product Overview

The multi-parameter online analyzer is a drinking water quality online monitoring product independently developed by our company. The system features a wall-mounted design, compact size, and no floor space occupation, making it convenient for on-site deployment. Standard monitoring parameters include turbidity, residual chlorine/chlorine dioxide/ozone, pH, and temperature, with expandable options for ORP and conductivity. The product is equipped with a large-screen human-machine interface and supports remote data monitoring via cloud platforms and mobile devices.

Main Features

- Capable of monitoring multiple water quality parameters simultaneously
- Adapts to complex working conditions with a built-in defoaming and flow-stabilizing chamber
- Easy on-site deployment due to compact size and lightweight design
- Enables data access anytime, anywhere, paired with a water quality platform
- 7-inch color touchscreen with a built-in 4G module

Typical Applications

- Water treatment plants, pipe networks, secondary water supply, end user, swimming pool water and other water treatment equipment

Basic Parameters & Technical Parameters

Technical Parameters	Detailed Information		
Optional Parameters	Turbidity, Disinfectant (Residual Chlorine/Chlorine Dioxide/Ozone), pH, ORP, Conductivity, TDS, Dissolved Oxygen and Temperature		
Measurement Methods			
Turbidity	90-degree light scattering method (laser light source)		
Disinfectant	Reagent-free, electrochemical, three-electrode amperometric system		
pH/ORP	Electrochemical method (electrode method)		
Conductivity/TDS	Conductivity cell method (automatic temperature compensation)		
Dissolved Oxygen	Fluorescence method		
Temperature	Thermistor method		
Measurement Range		Resolution	
Turbidity	0~1/20/100NTU	Turbidity	0.0001NTU(<1NTU), 0.001NTU(≥1NTU)
Disinfectant	0~5/20mg/L	Disinfectant	0.001mg/L
pH	0~14pH	pH	0.01pH
ORP	-2000mV~ +2000mV	ORP	1mV
Conductivity	0~20 (pure water) / 20000 (regular)μs/cm	Conductivity	0.01μS/cm
TDS	0~10 (pure water) / 10000 (regular) mg/L	TDS	0.01mg/L
Dissolved Oxygen	0~20 mg/L (0~20 ppm) / 0~200% saturation	Dissolved Oxygen	0.01mg/L
Temperature	-5~60℃	Temperature	0.1℃
Accuracy			
Turbidity	KD Turbidity: 2% or ±0.02 NTU (whichever is greater)		
	P1 Pressurized Turbidity: 0-40 NTU: 2.5% or±0.02 NTU (whichever is greater); 40-2000 NTU: 10% or±0.5 NTU (whichever is greater)		
	Based on Formazin primary standard solution at 25°C		

Disinfectant	±3% (DPD comparison error +10% or ±0.05 mg/L, whichever is greater)
pH	±0.05 pH (based on standard solution)
ORP	±20 mV (based on standard solution)
Conductivity/TDS	Pure Water: ±3% F.S. ; Regular: ±0.8% F.S. (based on standard solution)
Dissolved Oxygen	±3%
Temperature	±0.4℃

System Parameters	Detailed Information
Installation	Wall-mounted
Product Dimensions	470 mm (W) * 500 mm (H) * 185 mm (D)
Housing Material	Galvanized sheet with spray coating (optional 304 stainless steel)
Display Screen	7-inch color touchscreen
Operating Voltage	(220±20) VAC/ 50Hz
Digital Output	RS485 interface, supports Modbus protocol
Analog Output	6-channel isolated 4-20 mA output (requires external expansion module)
IoT	Supports 4G (accessible via browser, WeChat, WebAPI)
Sample Flow Rate	Adjustable range: 500-1000 mL/min (Recommended flow rate: 700 mL/min)
Sample Inlet Connector	Φ6 mm quick-connect
Sample Outlet Connector	Φ20 mm (outer diameter) PVC pipe

Standard Five-Parameter Sensor Equipment Parameters					
Measurement Parameters	PH	Conductivity	Residual Chlorine	Turbidity	Temperature
Measurement Range	0-14ph	1-2000μs/cm	0-2/20mg/L	0-20NTU	0-40℃
Sensor Resolution	0.01ph	1μs/cm	0.01mg/L	0.1NTU/0.1°C	0.1℃
Accuracy	±0.1ph	±1μs/cm	±2%FS	±1.0FS	±0.4℃

Wall-Mounted Cabinet Standard Equipment Parameters			
Display	7-inch resistive touchscreen	Display Resolution	800*480
Analog Input	8-channel analog input	Digital Communication	RS485, partially compatible with Modbus protocol
Data Storage	≥30,000 records	Operating Temperature	0-50°C
Temperature Range	0℃-40℃	Temperature Compensation	Pt1000
Operating Humidity	0-95% RH	Storage Temperature	-20-70℃
Protection Rating	IP54	Operating Voltage	220VAC
Power Supply	85V~450VAC，50HZ，24Wmax	Dimensions	420 x 185 x 570 mm

Compatible with Additional Sensors		
Expandable Parameters	Measurement Range	Accuracy
ORP	±2000.0mv	±0.01mv
Residual Chlorine	0.00-20.00mg/L	2% or ±10ppb HOCl
COD	0-500mg/l equiv KHP	± 5% equiv.KHP
Ammonia Nitrogen	0-100.0mg/L	0.1mg/L
Suspended Solids	0-1500 (3000) mg/L	≤ ±2% or 2mg/L
Chlorophyll	0-400ug/L or 0-100RFU	±5%
Blue-Green Algae	0-200.000 cells/mL	±5%
Oil in Water	0-50ppm/ 0-0.40flu	±3% F.S.

WXWH

CODcr 2101 Automatic Analyzer



Basic Principle

The analyzer heats a mixture of water sample, potassium dichromate digestion solution, silver sulfate solution (added as a catalyst to effectively oxidize straight-chain fatty compounds), and mercuric sulfate solution to 165℃. The dichromate ions oxidize the organic matter in the solution, causing a color change. The analyzer detects this color change and converts it into a COD value. The amount of dichromate ions consumed corresponds to the amount of oxidizable organic matter.

Reducing inorganic substances in water samples, such as nitrites, sulfides, and ferrous ions, react with potassium dichromate, affecting the measurement results. The amount of potassium dichromate consumed by these substances is included in the measurement, leading to higher results. The interference from chloride ions in water samples can be eliminated by adding mercuric sulfate, as chloride ions form a very stable compound, mercuric chloride, with mercury ions.

Instrument Features

- Auto sample verification.
- Data retention during outages.
- Tagging for test data.
- Serial/network data output.
- Separate waste collection.
- Auto-range switching.
- 5+ years data storage.
- Auto recovery post-outage.
- Full data/log management.
- Flexible, low-maintenance valves.
- Digital interface for remote control.

Technical Specifications

Specification	Technical Specification Parameters	
Method Basis	Dichromate Spectrophotometry	
Execution Standards	HJ 377-2019	
Measurement Range	(0-5000)mg/L	
Quantitative Lower Limit	≤15 mg/L (indication error ±30%)	
Low Concentration Drift	±5mg/L	
High Concentration Drift	≤5%	
Indication Error Basic Range 0-200 mg/L	Standard Solution 40.0 mg/L	±10.0%
	Standard Solution 100.0 mg/L	±8.0%
	Standard Solution 160.0 mg/L	±5.0%
Memory Effect	Standard Solution 40.0 mg/L	±10.0%
	Standard Solution 160.0 mg/L	±8.0%
Actual Water Sample Comparison Test	Water Sample <50.0 mg/L	≤5mg/L
	Water Sample ≥50.0 mg/L	≤10.0%
Extended Range Performance	Indication Error: ±3%; Repeatability: ≤5%; High Concentration Drift: ≤3%	
Repeatability	≤±5%	
Chloride Ion Influence Test	±10%	
Measurement Cycle	Min. 20 minutes; adjustable digestion time from 5 to 120 minutes based on actual water sample	
Sampling Cycle	Adjustable interval (10-9999 minutes) and whole-point measurement mode	
Calibration Cycle	Adjustable interval from 1 to 99 days at any time	
Maintenance Cycle	Typically once a month, about 60 minutes each time	
Output	RS-232, RS-485, 4-20mA (optional)	
Environmental Requirements	Temp-controlled indoor environment, recommended temp. +5~28°C; humidity ≤90% (non-condensing)	
Power Supply	AC220±10%V，50±10%Hz，5A	

Ammonia Nitrogen NH_3-N 2111 Automatic Analyzer



Basic Principle

The water sample is mixed with a masking agent, and the ammonia nitrogen, which exists in the form of free ammonia or ammonium ions, reacts with the salicylic acid color reagent in an alkaline environment and in the presence of a sensitizer to form a colored complex. The analyzer detects this color change and converts it into an ammonia nitrogen value. The amount of colored complex formed corresponds to the amount of ammonia nitrogen.

Instrument Features

- Auto sample verification.
- Data retention during outages.
- Tagging for test data.
- Serial/network data output.
- Separate waste collection.
- Auto-range switching.
- 5+ years data storage.
- Auto recovery post-outage.
- Full data/log management.
- Flexible, low-maintenance valves.
- Digital interface for remote control.

Technical Specifications

Specification	Technical Specification Parameters	
Method Basis	Salicylic Acid Spectrophotometry	
Execution Standards	HJ 101-2019	
Measurement Range	(0-500) mg/L (expandable)	
Quantitative Lower Limit	≤0.15mg/L(indication error ±30%)	
Low Concentration Drift	≤0.02 mg/L	
High Concentration Drift	≤1.0%	
Indication Error	Standard Solution 2.0 mg/L	± 8.0%
	Standard Solution 5.0 mg/L	± 5.0%
	Standard Solution 8.0 mg/L	± 3.0%
Memory Effect	Standard Solution 2.0 mg/L	± 0.3mg/L
	Standard Solution 8.0 mg/L	± 0.2mg/L
Actual Water Sample Comparison Test	Water Sample <2.0 mg/L	0.2mg/L
	Water Sample >2.0 mg/L	10.0%
Extended Range Performance	Indication Error: ±3%; Repeatability: ≤5%; High Concentration Drift: ≤3%	
Repeatability	≤2%	
pH Interference Test	+6.0%	
Measurement Cycle	The minimum measurement cycle is 20 minutes. Depending on the on-site environment, the color development time can be adjusted between 5~120 minutes.	
Sampling Cycle	Adjustable interval (10-9999 minutes) and whole-point measurement mode	
Calibration Cycle	Adjustable interval from 1 to 99 days at any time	
Minimum Maintenance Cycle	>720 hours per session	
Output	RS-232，RS-485，4-20mA(optional)	
Environmental Requirements	Temp-controlled indoor environment, recommended temp. +5~28°C; humidity ≤90% (non-condensing)	
Power Supply	AC220±10%V，50±10%Hz，5A	

Total Phosphorus TP 2121 Automatic Analyzer



Basic Principle

The mixture of water sample, catalyst solution, and strong oxidant digestion solution is heated to 115°C. Polyphosphates and other phosphorus-containing compounds in the water sample are digested and oxidized by the strong oxidant under high temperature, high pressure, and acidic conditions to produce phosphate ions. In the presence of a catalyst, the phosphate ions react in a strong acid solution containing molybdate to form a colored complex. The analyzer detects this color change and converts it into a total phosphorus value. The amount of colored complex formed corresponds to the amount of total phosphorus.

Instrument Features

- Auto sample verification.
- Data retention during outages.
- Tagging for test data.
- Serial/network data output.
- Separate waste collection.
- Auto-range switching.
- 5+ years data storage.
- Auto recovery post-outage.
- Full data/log management.
- Flexible, low-maintenance valves.
- Digital interface for remote control.

Technical Specifications

Specification	Technical Specification Parameters	
Method Basis	Phosphomolybdenum Blue Spectrophotometry	
Measurement Range	0-10 mg/L (expandable and adjustable)	
Detection Limit	0.01mg/L	
Zero Drift	≤0.01mg/L	
Range Drift	≤1.0%	
Repeatability	≤5%	
Linearity	±5.0%	
Indication Error	Standard Solution 80% F.S.	±3.0%
	Standard Solution 50% F.S.	±5.0%
	Standard Solution 20% F.S.	±8.0%
Memory Effect	Standard Solution 2.0 mg/L	±0.3mg/L
	Standard Solution 80 mg/L	±0.2mg/L
pH Interference Test	±6.0%	
Actual Water Sample Comparison Test	Water Sample <2.0mg/L	≤0.2mg/L
	Water Sample ≥2.0mg/L	≤10.0%
Measurement Cycle	Min. 20 minutes; adjustable digestion time from 5 to 120 minutes based on actual water sample	
Sampling Cycle	Adjustable interval (10-9999 minutes) and whole-point measurement mode	
Calibration Cycle	Adjustable interval from 1 to 99 days at any time	
Min. Maintenance Cycle	>720 hours per session	
Output	RS-232, RS-485, 4-20mA (optional)	
Environmental Requirements	Temp-controlled indoor environment, recommended temp. +5~28°C; humidity ≤90% (non-condensing)	
Power Supply	AC230±10%V, 50±10%Hz, 5A	

Total Nitrogen TN 2131 Automatic Analyzer



Basic Principle

The water sample is mixed with a conditioning agent, and the nitrate ions in the sample react with an indicator in an acidic environment to form a colored complex. The analyzer detects this color change and converts it into a nitrate value. The amount of colored complex formed corresponds to the total nitrogen content.

Instrument Features

- Auto sample verification.
- Data retention during outages.
- Tagging for test data.
- Serial/network data output.
- Separate waste collection.
- Auto-range switching.
- 5+ years data storage.
- Auto recovery post-outage.
- Full data/log management.
- Flexible, low-maintenance valves.
- Digital interface for remote control.

Technical Specifications

Specification	Technical Specification Parameters	
Method Basis	Alkaline Potassium Persulfate Spectrophotometry	
Range	0-500 mg/L (expandable)	
Quantitative Lower Limit	≤0.05mg/L (indication error ±30%)	
Zero Drift	≤±5.0%	
Range Drift	≤±10.0%	
Repeatability	≤10%	
Linearity	±10.0%	
Indication Error	Standard Solution 80%F.S	±5.0%
	Standard Solution 50%F.S	±8.0%
	Standard Solution 20%F.S	±10.0%
Memory Effect	80%→20%	±0.3mg/L
	20%→80%	±0.2mg/L
Actual Water Sample Comparison Test	Water Sample <5.0mg/L	≤10.0%
	Water Sample ≥5.0mg/L	≤6.0%
Measurement Cycle	The minimum measurement cycle is 30 minutes	
Sampling Cycle	Adjustable interval (10-9999 minutes) and whole-point measurement mode	
Calibration Cycle	Regular manual calibration and automatic calibration functions	
Min. Maintenance Cycle	>720 hours per session	
Output	RS-232, RS-485, 4-20mA(optional)	
Environmental Requirements	Temp-controlled indoor environment, recommended temp.+5~28°C; humidity ≤90% (non-condensing)	
Power Supply	AC230±10%V, 50±10%Hz, 5A	

BOD WH 2089 Automatic Analyzer



Basic Principle

The analyzer heats a mixture of water sample, potassium dichromate digestion solution, silver sulfate solution (added as a catalyst to effectively oxidize straight-chain fatty compounds), and mercuric sulfate solution to 165°C. The dichromate ions oxidize the organic matter in the solution, causing a color change. The analyzer detects this color change and converts it into a BOD value.

Instrument Features

- Auto sample verification.
- Data retention during outages.
- Tagging for test data.
- Serial/network data output.
- Separate waste collection.
- Auto-range switching.
- 5+ years data storage.
- Auto recovery post-outage.
- Full data/log management.
- Flexible, low-maintenance valves.
- Digital interface for remote control.

Technical Specifications

Specification	Technical Specification Parameters	
Method Basis	Spectrophotometry	
Measurement Range	(0-1000)mg/L	
Detection Limit	≤15 mg/L (indication error ±30%)	
Zero Drift	≤5.0%	
Range Drift	≤10.0%	
Repeatability	≤10%	
Linearity	±10.0%	
Indication Error	Standard Solution 80%F.S	±5.0%
	Standard Solution 50%F.S	±8.0%
	Standard Solution 20%F.S	±10.0%
Memory Effect	80%→20%	±10.0%
	20%→80%	±8.0%
Actual Water Sample Comparison Test	Water Sample <5.0mg/L	≤±5mg/L
	Water Sample ≥5.0mg/L	≤10.0%
Measurement Cycle	Min. measurement cycle is 30 minutes; adjustable digestion time from 5 to 120 minutes based on actual water sample	
Sampling Cycle	Adjustable interval (10-9999 minutes) and whole-point measurement mode	
Calibration Cycle	Adjustable interval from 1 to 99 days at any time	
Maintenance Cycle	Typically once a month, about 30 minutes each time	
Output	RS-232, RS-485, 4-20mA(optional)	
Environmental Requirements	Temp-controlled indoor environment, recommended temp.+5~28°C; humidity ≤90% (non-condensing)	
Power Supply	AC230±10%V, 50±10%Hz, 5A	

Permanganate Index CODmn 2141 Automatic Analyzer



Basic Principle

A known amount of potassium permanganate and sulfuric acid is added to the sample, which is then heated at a high temperature for a certain period. The potassium permanganate oxidizes certain organic and inorganic reducing substances in the sample. After the reaction, an excess of sodium oxalate is added to reduce the remaining potassium permanganate. The excess sodium oxalate is then back-titrated with a standard potassium permanganate solution. The potassium permanganate index of the sample is calculated based on this process.

Instrument Features

- Auto sample verification.
- Data retention during outages.
- Tagging for test data.
- Serial/network data output.
- Separate waste collection.
- Auto-range switching.
- 5+ years data storage.
- Auto recovery post-outage.
- Full data/log management.
- Flexible, low-maintenance valves.
- Digital interface for remote control.

Technical Specifications

Specification	Technical Specification Parameters	
Method Basis	Spectrophotometry	
Measurement Range	0-50.00mg/L (expandable)	
Detection Limit	≤0.05mg/L((indication error±30%)	
Zero Drift	≤5.0%	
Range Drift	≤10.0%	
Repeatability	≤10%	
Linearity	±10.0%	
Indication Error	Standard Solution 80%F.S	±5.0%
	Standard Solution 50%F.S	±8.0%
	Standard Solution 20%F.S	±10.0%
Memory Effect	80%→20%	±1mg/L
	20%→80%	±1mg/L
Actual Water Sample Comparison Test	Water Sample <5.0mg/L	≤0.5mg/L
	Water Sample ≥5.0mg/L	≤6.0%
Glucose Test	＜±5%	
Actual Water Sample Comparison Test	＜±8%	
Measurement Cycle	Min. 20 minutes; adjustable digestion time from 5 to 120 minutes based on actual water sample	
Sampling Cycle	Adjustable interval (10-9999 minutes) and whole-point measurement mode	
Calibration Cycle	Adjustable interval from 1 to 99 days at any time	
Maintenance Cycle	Typically once a month, about 30 minutes each time	
Output	RS-232, RS-485, 4-20mA(optional)	
Environmental Requirements	Temp-controlled indoor environment, recommended temp.+5~28°C; humidity ≤90% (non-condensing)	
Power Supply	AC230±10%V, 50±10%Hz, 5A	

Other Parameter Water Quality Automatic Analyzers



Measurable Parameters

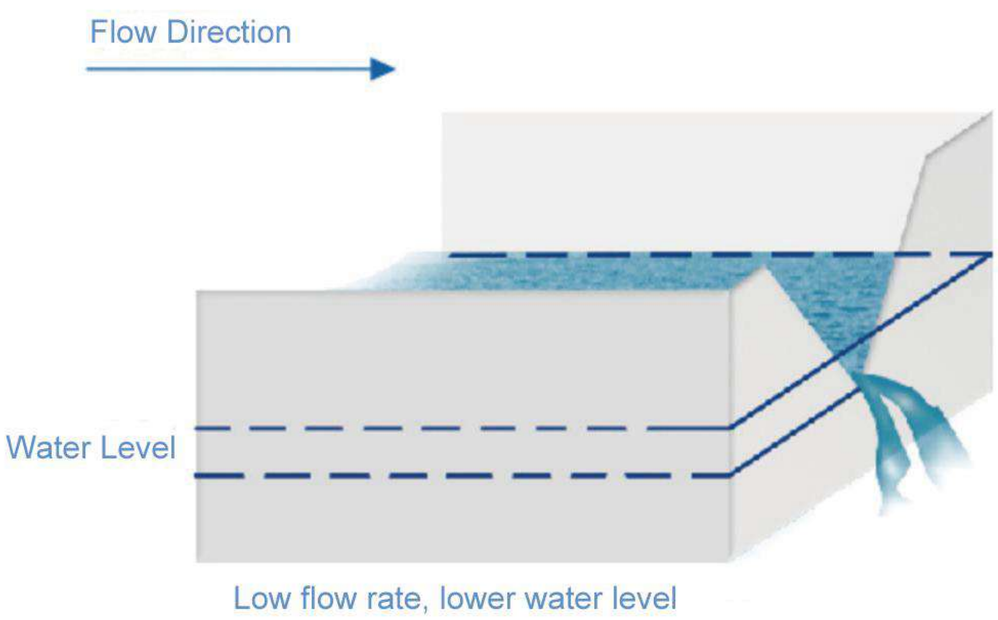
Hexavalent Chromium Cr2181 Automatic Analyzer	Total Chromium TCr2171 Automatic Analyzer
Copper Cu2151 Automatic Analyzer	Manganese Mn2221 Automatic Analyzer
Lead Pb2201 Automatic Analyzer	Zinc Zn2191 Automatic Analyzer
Mercury Hg2231 Automatic Analyzer	Cadmium Cd2271 Automatic Analyzer
Cyanide CN2241 Automatic Analyzer	Fluoride F2281 Automatic Analyzer
Nitrate Nitrogen NO2311 Automatic Analyzer	Orthophosphate PO43301 Automatic Analyzer
Nickel Ni2161 Automatic Analyzer	Silver Ag2261 Automatic Analyzer
Iron Fe2251 Automatic Analyzer	Volatile Phenol 2291 Automatic Analyzer
Arsenic As2211 Automatic Analyzer	TOC (Total Organic Carbon) Online Water Quality Analyzer

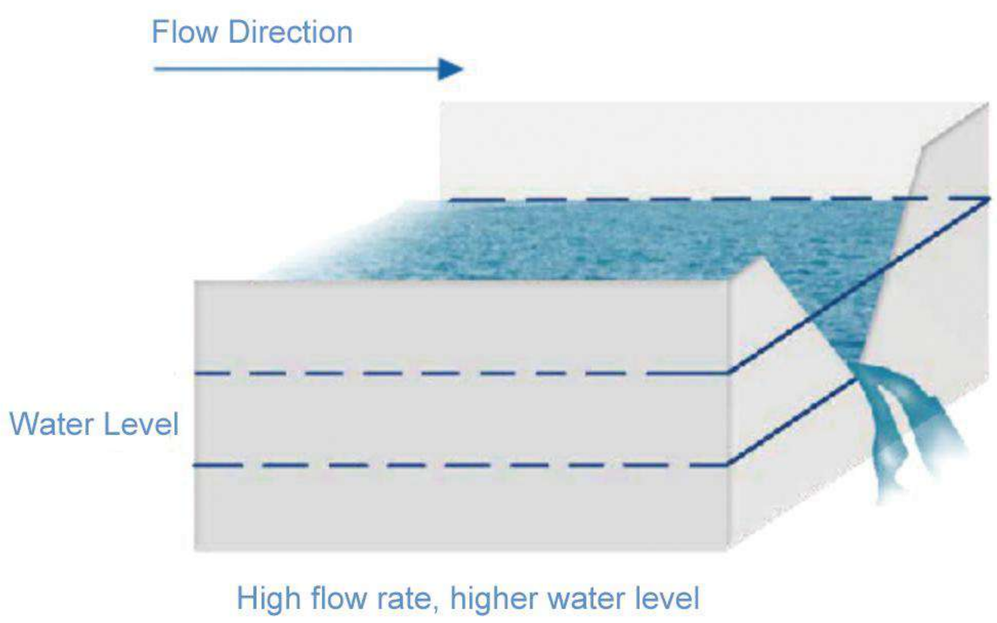
WHMQ Ultrasonic Open Channel Flow Meter

Product Overview

Based on fluid mechanics principles, the flow rate in an open channel is higher when the water level is higher, and lower when the water level is lower. The system mainly consists of a host unit and an ultrasonic probe. The host unit controls the probe to emit and receive ultrasonic waves. Using the echo-ranging principle of ultrasonic waves and their excellent reflectivity and directivity, it accurately measures the water level in the flow measurement weir or flume. The flow rate is then calculated using the corresponding "water level-flow rate" formula for the specific weir or flume.







Technical Features

- Uses envelope detection echo technology, greatly improving the accuracy and stability of liquid level measurement;
- Equipped with a 5-inch industrial-grade LCD touchscreen with 800*480 resolution for user-friendly interaction;
- Supports flow rate calculation for various weirs and flumes;
- Low-power design ensures stable long-term operation with backup power.

Technical Parameters

Specification	Technical Specification Parameters
Operating Voltage	DC(10-14)V
Operating Temperature	Probe (-20~80)°C; Host (-10~50)°C
Water Level Measurement Range	(0-2)m
Water Level Measurement Error	<±5%
Flow Rate Measurement Range	(0-99999999)L/s
Flow Rate Measurement Error	<±5%
Power Consumption	<1W
Output Interface	1. RS232/RS485 digital interface; 2. 12-bit (4-20 mA) analog interfaces
Protection Rating	Probe: IP68; Host: IP65

WXWH

Electromagnetic Radar Flow Meter

♦ Basic Principle

This radar electromagnetic flow meter adopts microwave and electromagnetic dual-mode technology with liquid level detection function. It is widely applied in rainwater/sewage pipes, culverts and pipe networks for flow velocity, water level and flow monitoring, supporting urban water diversion, sewage supervision and inlet-outlet flow control.
It calculates flow via section parameters, free from interference of wind, temperature, sediment and floating matters, and outputs real-time flow velocity, water level and flow data.
Featuring low power consumption, compact structure, high stability and easy maintenance, it combines non-contact radar and contact electromagnetic sensing, enabling seamless switching between full-pipe and non-full-pipe measurement. Built-in tracking algorithm and hydraulic model ensure high measuring accuracy.



♦ Technical indicators

Technical Parameter	Min.	Typical	Max.	Unit	Test Condition
Operating Voltage	9	12	24	V	
Operating Current	40	60	100	mA	12V
Operating Temperature	-40		85	℃	
Baud Rate		115200		bps	Configurable
Communication Mode	RS485				
IP Rating	IP68				
Overall Weight	0.8			kg	
Flow Velocity Radar Sensor					
Measurement Range	0.05-20			m/s	
Measurement Accuracy	±0.01			m/s	
Resolution	0.01			m/s	
Antenna Angle	12			deg	
Transmit Frequency	24			GHZ	
Flow Direction Detect	Bidirectional Automatic Identification				Configurable Filtering
Water Level Radar Sensor					
Measurement Range	0-20			m	
Measurement Accuracy	±2			mm	
Resolution	1			mm	
Antenna Angle	3			°	
Transmit Frequency	120			GHZ	
Electromagnetic Sensor					
Flow Velocity Range	0.03~15			m/s	
Flow Velocity Accuracy	±1			%	
Resolution	1			mm/s	
Pressure Sensor					
Measurement Range	0-10			m	
Measurement Accuracy	±2			mm	

Ultrasonic Radar Flow Meter



♦ Basic Principle

This radar ultrasonic flow meter is tailored for rainwater and sewage pipe networks. It integrates radar and ultrasonic flow measurement plus radar level sensing, supporting full and non-full pipe monitoring, and calculates flow via built-in hydraulic models. It boasts high precision, low power consumption and strong anti-interference performance. Stable for all-weather operation, unaffected by temperature difference, spider webs and dew, it accurately detects flow velocity, flow volume and water level.

♦ Instrument Features

- 24GHz CW continuous wave Doppler + ultrasonic Doppler dual flow measurement modes, suitable for both full and non-full pipe flow measurement;
- Polyester plastic housing, suitable for highly corrosive liquid and gas environments such as underground pipe networks;
- Ultra-low power consumption, ideal for outdoor environments;
- High signal-to-noise ratio and strong anti-interference capability;
- Fully enclosed design, meeting IP68 dust and water resistance requirements with high reliability;
- Small size, light weight, compact design, large range and excellent cost performance;
- Intelligent sensing of pole, bridge deck and water surface fluctuations with synchronous optimization and compensation;
- Passed military-grade stress screening, adaptable to harsh high and low temperature environments.

♦ Technical Indicators

Specification Name	Technical Specification Parameter	Specification Name	Technical Specification Parameter
Radar Velocity Measurement Range	0.1~20m/s	Radar Ranging Frequency	120GHz
Radar Velocity Measurement Accuracy	±3%	Operating Voltage	7-30VDC
Radar Velocity Measurement Frequency	24GHZ	Measurement Power	≤30mA (12V)
Radar Velocity Measurement Beam Angle	12°*24°	ConsumptionProtection Class	IP68
Ultrasonic Velocity Measurement Range	0.06~6m/s	Explosion-Proof Grade	Ex ia IIC T6 Ga
Ultrasonic Velocity Measurement Accuracy	±1%	Operating Temperature	-40℃~+70℃
Ultrasonic Velocity Measurement Beam Angle	5.1°	Digital Interface	RS-485
Ultrasonic Velocity Measurement Pitch Angle	30~70°	Housing Material	Corrosion-Resistant Polymer Plastic
Radar Ranging Range	0.05~10m	Product Dimensions	171*102*134mm
Radar Ranging Accuracy	±3mm	Attitude Compensation	Angle Accuracy±0.5°; Resolution0.1°
Radar Ranging Beam Angle	4°	Temperature Output	Accuracy±1℃, Resolution0.1℃

WXWH

WHPL Doppler Flow Velocity Meter/Flow Meter

Product Overview

The WHPL Series Doppler Flow Velocity Meter/Flow Meter is suitable for flow velocity and flow rate measurement in open channels and non-full pipes. The instrument uses the ultrasonic Doppler principle to measure flow velocity and the ultrasonic time-of-flight method to measure liquid level. By setting the cross-section, it calculates the flow rate. Due to its compact structure, no moving parts, long lifespan, ease of use, and maintenance-free features, it is widely used in scenarios such as sponge cities, water supply and drainage networks, black and odorous water bodies, natural rivers, open channels, and reservoirs. It is also used for flow field analysis and liquid level detection in scientific research.



Online Type



Portable Type



Pipeline Network Type

Technical Specifications

Specification	Technical Specification Parameters
Sensor Dimensions	165*50*29.5mm
Transmitter Dimensions	231*185*119mm
Installation	Dedicated bracket
Material	Metal, plastic, rubber
Protection Rating	IP68
Power Supply	DC 12V/24V
Power Consumption	<70 mA during measurement; <25 mA during sleep
Communication Interface	RS485，Modbus
Operating Temperature	-20~60°C
Operating Pressure	Maximum 6 Bar
Lightning Protection	Supported
Surge Protection	Supported
EMI Suppression	Supported

Technical Features

- Capable of measuring flow velocity in still water;
- Capable of measuring flow rate in non-full pipes, full pipes, and open channels;
- Capable of measuring flow in circular, rectangular, trapezoidal, and triangular cross-sections;
- Wide flow velocity measurement range, 0~10 m/s, bidirectional;
- High flow velocity measurement accuracy, 1 mm/s error;
- High ultrasonic liquid level measurement accuracy: 1 mm error (within 2 m);
- Pure physical measurement method, no calibration or adjustment required;
- Supports static pressure liquid level measurement;
- Supports temperature compensation for flow velocity and liquid level measurement;
- Modbus RTU protocol;
- Sensor protection rating IP68, supports long-term underwater operation;
- Online solution: Display or RTU + sensor + dedicated bracket;
- Portable solution: Sensor + handheld device + measuring rod, all accessories fit in a carrying case.

Performance Indicators

Specification	Technical Specification Parameters
Flow Velocity Range	0~10 m/s, bidirectional
Flow Velocity Resolution	0.001m/s
Flow Velocity Accuracy	0.001 m/s (when flow velocity ≤5 m/s) 0.02 m/s or 0.3% of actual peak velocity (whichever is greater)
Ultrasonic Liquid Level Range	6.5m
Ultrasonic Liquid Level Accuracy	0.001m
Ultrasonic Liquid Level Resolution	0.0005m
Static Pressure Liquid Level Range	0~10m
Static Pressure Liquid Level Accuracy	±0.1%FS
Static Pressure Liquid Level Resolution	0.001m
Temperature Range	-20-60°C

Radar Flow Meter



♦ Basic Principle

This microwave-based radar flow meter integrates liquid level and flow velocity measurement, suitable for rivers, pipelines, canals, water supply and sewage discharge monitoring.

It calculates flow with section parameters, unaffected by weather, sediment and floating matters, outputting real-time flow velocity, water level and flow data. It is low-power, compact, reliable and easy to maintain.

Composed of radar sensors and flow calculation module, it supports RS485 digital data transmission.

♦ Technical indicators

Power supply					
	Min.	Typical	Max.	Unit	Test Condition
Operating Voltage	9	12	24	V	
Operating Current	160	140	100	mA	12V
Operating Temperature	-45		85	℃	
Baud Rate (Bluetooth Version)		115200		bps	Configurable
Communication Mode	RS485				
Flow Velocity Radar Sensor					
Measurement Range	0.05-20			m/s	
Measurement Accuracy	±0.01			m/s	
Resolution	0.01			m/s	
Antenna Angle	12			deg	
Transmit Frequency	24			GHz	
Flow Direction Identification	Bidirectional Automatic Identification				Configurable Filtering
Water Level Radar Sensor					
Measurement Range	0.15-40			m	
Measurement Accuracy	±5			mm	
Resolution	1			mm	
Antenna Angle	14			deg	
Transmit Frequency	80			GHz	
Overall Weight	0.8			kg	

WXWH

Radar Level Transmitter



Basic Principle

The 80GHz radar level gauge series products are Frequency Modulated Continuous Wave (FMCW) radar products operating at 76-81GHz, supporting 4-wire and 2-wire applications. The product has multiple models with a range of up to 120m.

Instrument Features

- Adopts self-developed CMOS millimeter-wave RF chips, featuring compact structure, high signal-to-noise ratio and small blind zone. It resists steam and dust interference and ensures stable measurement on low-reflection media.
- 5GHz bandwidth ensures high measurement precision. 3° narrow beam angle effectively avoids environmental interference, easy to install and applicable for stirring scenes.
- Short wavelength enhances solid surface reflection and lowers installation flange requirements.
- Support remote debugging and upgrade to improve working efficiency.
- Support mobile Bluetooth debugging for easy on-site maintenance.

Technical Indicators

Specification Name	Technical Specifications parameter
Transmit Frequency	76GHz ~ 81GHz
Measurement Range	10m/ 20m/ 30m/ 60m/ 120m
Measurement Accuracy	±2mm
Measurement Interval	Max. 300ms
Beam Angle	3° /8° /20°
Dielectric Constant Range	≥2
Power Supply Range	12~28VDC
Communication Method	MODBUS Bus
Signal Output	4~20mA/ RS-485
Fault Output	3.8mA/ 4mA/ 20mA/ 21mA/Hold
Parameter Setting Mode	Host Computer Setup Software/ Bluetooth
Ambient Temp & Humidity	-40℃~75℃ (PTFE, Stainless Steel High Temperature 120°C); Humidity: 0-95%
Housing Material	POM Polyoxymethylene, 304 Stainless Steel, PTFE
Process Pressure	-0. 1~1. 0 MPa
Product Dimensions	56mm(Diameter) * 80mm(Height)
Cable Entry	M16*1.0
Recommended Cable	φ5~8mm
Ingress Protection Rating	IP67
Explosion-Proof Rating	Ex-db-IIC-T6-Gb
Installation Method	Thread / Bracket

Integrated Remote Terminal Unit (RTU)



Basic Principle

The system includes field monitoring devices and central monitoring equipment. Integrated RTU with sensors collects, processes and stores data, and uploads it via 4G network, equipped with rechargeable battery.

The monitoring center receives and sorts on-site data, stores data by standard norms to support water resource management and dispatch.

It applies to hydrological monitoring, flood control, irrigation, water supply network and other water conservancy monitoring scenarios.

Instrument Features

- Adopts superior hardware and software design with built-in watchdog, high reliability and field maintenance-free.
- Compatible with mainstream national, international and local hydrological protocols, pre-installed and easy to set.
- Supports Bluetooth mobile APP for parameter setting, data check and time synchronization.
- 4G full-network module covers major operators, enabling multi-center data transmission.
- Real-time battery voltage monitoring with remote low voltage alarm function.
- Compatible with communication protocols of 200 types of common sensors.

Technical Indicators

Specification Name	Technical Specifications parameter
Operating Environment	-20°C ~ +55°C, Humidity <95% (at temperature of 40°C)
Input Power Supply	Built-in rechargeable battery (12VDC)
Operating Current	Standby power consumption <0.5mA (11.1VDC), operating power consumption <20mA (11.1VDC); Operating power consumption excludes that of peripheral DTU, remote water meter and other equipment
Data Storage	5000+ records for 11 types of sensors
Communication	4G Full-Network LTE-FDD:B1/ B3/ B5/ B8 LTE-TDD: B34/ B38/ B39/ B40/ B41
Communication Protocol	HJ212, MQTT, (supports automatic data retransmission)
Interface	1-channel RS485 interface, 1-channel multi-function interface
Ingress Protection Rating	IP68
Battery Parameters	60AHrechargeable battery, optional battery specifications (rechargeable lithium battery / disposable replaceable lithium battery)
Appearance Dimensions	Diameter = 110mm, Height = 300mm (height varies according to the built-in battery capacity)

WXWH

Portable Multi-Parameter Water Quality Analyzer

Product Overview

This instrument complies with standards such as HJ/T 399-2007 (Water Quality - Chemical Oxygen Demand - Rapid Digestion Spectrophotometric Method), HJ 535-2009 (Water Quality - Determination of Ammonia Nitrogen - Nessler's Reagent Spectrophotometric Method), and GB 11893-1989 (Water Quality - Determination of Total Phosphorus - Ammonium Molybdate Spectrophotometric Method). It features safe and simple operation, fast and accurate detection, and high intelligence. Utilizing microcomputer control technology, it is lightweight, portable, and comes with pre-prepared reagents for immediate use. It is suitable for the determination of various water pollutants in surface water, groundwater, domestic sewage, and industrial wastewater.



Key Features

- 7-inch color LCD touchscreen, easy and quick operation;
- Patented fiber optic spectrophotometric system ensures high detection accuracy;
- Tube colorimetry: Pre-prepared reagents, ready to use, convenient, and time-saving;
- Electrochemical: Optional digital sensors for fast and accurate measurements;
- 100,000 data storage capacity, uses wear-leveling storage technology for long chip life. Data can be searched by time and fully exported to a computer via USB;
- Supports 4G upload and Type-C data cable upload;
- Allows free switching between electrochemical, photometric, and digestion modes;
- Optional sensor options, Digital sensors for fast and precise measurements;
- Long battery life, up to one week of comprehensive use. Built-in battery level display and supports battery + external power supply;
- Supports GPS and BeiDou positioning, measurement results include location information.

Technical Parameters

Specification	Technical Specification Parameters
Measurement Modes	Concentration, Transmittance (%), Absorbance (Abs)
Light Source	LED light, fiber optic spectrophotometric technology
Display	7-inch color resistive touch LCD screen
Wavelength Configuration	420nm, 610nm, 520nm, 580nm; ±2nm
Sample Device	Tube colorimetry, electrochemical sensors
Photometric Detection Items	Pre-configured for over 40 water quality parameters, including COD, ammonia nitrogen, total phosphorus, total nitrogen, color, turbidity, etc.
Electrochemical Detection Items	Pre-configured for dissolved oxygen, turbidity, conductivity, suspended solids, pH, ORP
Sensors	pH sensor (ORP), conductivity sensor, dissolved oxygen sensor, turbidity sensor (suspended solids), optional sensors
Optical Stability	Absorbance drift less than 0.002A within 20 minutes
Indication Error	≤±5%(F.S)
Repeatability	≤3%
Automatic Calibration	The instrument has automatic calibration; users can add and calibrate curves in addition to the factory pre-set curves
Power Supply	12V/30AH lithium iron phosphate battery with power management, battery life up to one week
Charger	14.6V,10A
Positioning	GPS and BeiDou positioning
Storage	Stores up to 100,000 test data points, wear-leveling database storage, supports time-based search
USB Export	Type-C to USB for exporting data to a computer
4G Upload	Uploads data using MODBUS protocol

WHCL-20B Portable Residual Chlorine Meter

Product Overview

The WHCL-20B Portable Residual Chlorine Meter uses a microcomputer photoelectric colorimetric detection principle to replace the traditional visual colorimetric method. This eliminates human error and significantly improves measurement resolution. The instrument is suitable for residual chlorine concentration detection in large, medium, and small water plants, as well as industrial and domestic water systems, to ensure that the residual chlorine levels meet the specified water quality standards.



Key Features

- Full English menu, microcomputer, touch-sensitive keyboard, and clear LCD digital display for user-friendly operation.
- Uses photoelectric colorimetric principle based on spectrophotometry, making it easy to use. Readings are available 30 seconds after adding reagents to the water sample, with results displayed digitally.
- Proprietary LED light source with automatic control circuit ensures stable light source, eliminating the need for preheating. The light source has a lifespan of up to 20 years and can be used immediately upon startup.
- High-capacity built-in battery allows for on-site quantitative measurements in the field. A 2-hour charge provides 4 hours of continuous use, ready for immediate use after charging.
- Pre-stored calibration curves across the full range with power-off protection, ensuring calibration data is not lost. Features automatic zeroing and 5-point calibration, with non-linear data processing and smoothing functions. The minimum reading is 0.001 mg/L.
- Icorporates multiple proprietary patented technologies, with advanced technology compliant with the national standard GB/T 5750-2006 for drinking water hygiene.

Technical Parameters

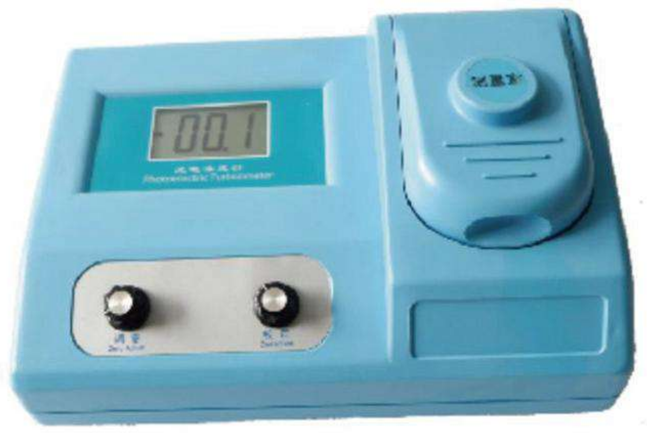
Specification	Technical Specification Parameters
Measurement Range	0-2.5mg/L
Min. Display Value	0.001mg/L
Repeatability	≤2%
Accuracy	±5%FS
Charger	AC 220V 50Hz

WXWH

WH-ZDT Photoelectric Turbidimeter

Product Overview

The WH-ZDT Series Photoelectric Turbidimeter is used to measure the degree of light scattering caused by insoluble particles suspended in water or transparent liquids and quantitatively characterize the content of these suspended particles. The instrument is calibrated using Formazine turbidity standard solutions as specified in the international standard ISO 7027, with NTU as the turbidity unit. It is widely applicable for turbidity measurement in power plants, water treatment plants, domestic sewage treatment plants, beverage factories, environmental protection departments, industrial water, brewing and pharmaceutical industries, epidemic prevention departments, hospitals, and other sectors.



Key Features

- Elegant and streamlined design, suitable for modern laboratory environments.
- Large LCD screen for turbidity display, simple operation, and appropriate measurement range with high cost-performance ratio, suitable for various industries.
- Unique positioning structure and high-precision optical system effectively ensure measurement accuracy and repeatability. The instrument can operate stably for long periods.
- Precise automatic range switching device and reliable linear compensation system ensure more accurate measurement data and better stability.
- Added color compensation system effectively avoids interference caused by sample color, accurately reflecting the turbidity.
- High-quality imported integrated circuits and photoelectric detection components ensure high overall stability, linearity, and repeatability.
- Specially designed high-efficiency, ultra-stable, long-life light source system with a lifespan of up to 100,000 hours, maintenance-free, and no need for replacement.

Technical Parameters

Specification	Technical Specification Parameters			
Model	WHZDT-200	WHZDT-20A	WHZDT-400	WHZDT-2000
Measurement Principle	90° scattered light			
Minimum Display Value (NTU)	0.1	0.01	0.01	
Measurement Range (NTU)	0~199.9	0~19.99	0-400 (0-10, 0-100, 0-400)	0-2000 (0-10, 0-100, 0-400, 0-2000)
Linear Error (Accuracy)	≤2.5%F.S	≤2.0%F.S		
Repeatability	≤1.0%			
Features	High cost-performance ratio and good stability		High accuracy, good stability, automatic range switching, compatible with external printer (optional)	
Dimensions	272x205x118mm			

WH-PHG Benchtop pH Meter

Product Overview

The WH-PHG Series Benchtop pH Meter is a new-generation laboratory testing instrument. Equipped with various types of pH and ORP electrodes, it is widely used in industries such as power plants, petrochemicals, metallurgy, electronics, mining, paper manufacturing, bio-fermentation engineering, pharmaceuticals, food and beverage, environmental water treatment, and aquaculture. It is used for sampling and testing the pH (ORP) value and temperature of aqueous solutions.



Key Features

- Large screen with blue backlight and dual-row digital LCD display.
- Two-point calibration with manual and automatic temperature compensation functions.
- Simultaneous measurement and display of pH, temperature, or mV, temperature.
- Electrical connectors are recessed below the surface, enhancing corrosion resistance and safety.

Technical Parameters

Specification	Technical Specification Parameters		
Instrument Grade	0.1 Class		
Measurement Range	mV: (-1999-+1999)	pH: (0.00-14.00)	Temperature: (0-99.9)°C
Resolution	pH: ±0.01pH	mV: 1mV	Temperature: 0.1°C
Basic Error	pH: ±0.01pH	mV: +0.1%(FS)	Temperature: ±0.3°C
Input Impedance	≥1 x 10^{12} Ω		
Stability	±0.01pH/3h		
Temperature Compensation Range	(0-99.9)°C		
Sample Solution Temperature	(0-60)°C		
Power Supply	AC (220±22)V, (50±l)Hz		
Dimensions	300x200x72mm		
Weight	1.5kg		

WXWH

WH-DDS Benchtop Conductivity Meter





Product Overview

The WH-DDS Series Benchtop Conductivity Meter is a microprocessor-based water quality testing instrument. Equipped with electrodes of different constants, it is widely used in industries such as power plants, petrochemicals, metallurgy, electronics, mining, paper manufacturing, semiconductors, pharmaceuticals, food and beverage, environmental water treatment, and modern agriculture. It is suitable for testing the conductivity and temperature of aqueous solutions, including softened water, raw water, steam condensate, seawater distillation, and deionized water.

Key Features

- Large LCD segment code display, provides clear and easy-to-read measurements.
- Simultaneous display of conductivity and temperature values.
- Conductivity electrode constant compensation function.
- Manual and automatic temperature compensation functions.

Technical Parameters

Specification	Technical Specification Parameters	
Model	WH-DDS Series	
Instrument Grade	0.1 Class	
Technical Parameters	Conductivity	0.00μS/cm~100mS/cm
	Temperature	(0.0~99.9)°C
Basic Error	Conductivity	±1.0%FS
	Temperature	±0.3°C
Stability	(±0.33%FS)/3h	
Power Supply	AC(220±22)V, (50±1)Hz	
Dimensions	290 x 220 x 90mm	
Weight	1.3kg	

WH-DF900 Online Titration Analyzer

Product Overview

The WH-DF900 Explosion-proof Industrial Online Titration Analyzer is equipped with an A8 processor and features a modular design with a 7-inch English human-machine interface full-color touchscreen. It includes a high-precision burette, electromagnetic switching valves, a long-life solvent pump, a high-resolution color acquisition module, and various detection modules. The system can automatically determine the titration endpoint by measuring changes in electrode potential and color. Depending on the sample properties, the instrument can perform automatic color titration, pH titration, redox titration, complexometric titration, non-aqueous titration, and precipitation titration using different electrodes and detectors.



Key Features

- The analyzer fully automates sampling, injection, analysis, cleaning, data calculation, and storage.
- Supports periodic monitoring, timed monitoring, etc.
- Unattended operation, completely replacing manual analysis.
- DCS can remotely monitor the equipment's operating status.

Typical Applications

- Suitable for analysis and monitoring in industries such as chemicals, environmental protection, food, pharmaceuticals, papermaking, textiles, metallurgy, metal surface treatment, oxides, cyanides, hydrofluoric acid, ammonia water, etc. It is also used in water treatment for measuring acidity, alkalinity, and water hardness.

Technical Parameters

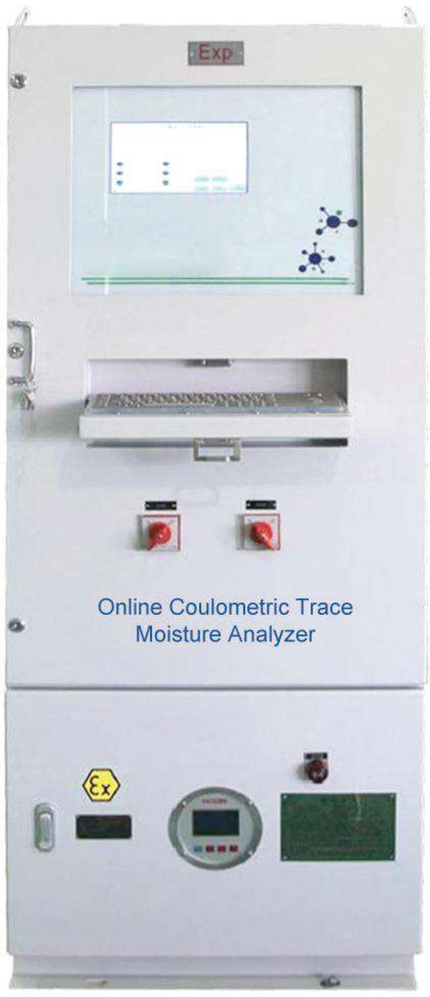
Specification	Technical Specification Parameters
Main Control Unit	10-inch HD full-color touchscreen display
Titration Methods	Potentiometric titration, polarimetric titration, photometric titration, and conductometric titration
Titration Modes	Complexometric titration, automatic inflection point detection, setpoint detection, set/automatic endpoint detection, crossover point (F, B, V1, V2) detection, allocation method, petroleum product road value (oil 1/oil 2), pH auto-stabilizer, dissociation constant detection, calculation mode
Burette Capacity	20 mL transparent glass burette (standard) (optional: 1, 5, 10, 50 mL burettes)
Minimum Titrant Volume	1.25 L (20 mL burette)
Accuracy	Within ±0.1% (full discharge of 20 mL cylinder)
Repeatability	Within 0.01 mL (full discharge of 20 mL cylinder, standard deviation at n=6)
Detection Range	pH: 0 to 14, resolution 0.01 pH; mV: -2000 to +2000 mV, resolution 0.1 mV
Calculation	Concentration calculation, statistical calculation, automatic pH compensation
Burettes	Expandable up to 10 (per titration workstation)
External Output	RS485 Modbus RTU or 4-20 mA
Electrodes	GE-1018 glass composite electrode, RE-201 reference electrode (electrode configuration varies by titration method)
Power Supply	AC100-240V, 50/60 Hz, 220 VA
Explosion-proof Rating	Exdeibmpz Ⅱ CT4Gc
Dimensions	1800(H)x700(W)x600mm(D)

WXWH

WH-KLS900 Online Coulometric Trace Moisture Analyzer

Product Overview

Adopting internationally accredited Karl Fischer coulometric method compliant with ISO, ASTM, DIN and BS standards, the WH-KLS900 Online Coulometric Trace Moisture Analyzer delivers high-accuracy moisture measurement. With Exdeibmpz IICT4 Gc explosion-proof rating via positive pressure ventilation design, this reliable analyzer is applicable for trace moisture testing of chemical liquids, lithium battery electrolytes, organic solvents and gases.



Key Features

- Automatic Workflow: It enables full-automatic sampling, electrolysis endpoint determination and data management, with automatic reagent and water replenishment to maintain electrolysis balance without manual operation.
- Stable Current Control: Background current is automatically regulated to avoid moisture interference. Adjustable electrolysis parameters adapt to different sample sensitivity requirements.
- Reliable Hardware: Imported components and original CPU chip ensure stable, precise and long-lasting data calculation and equipment operation.
- Intuitive Operation: A color touchscreen with English navigation and electronic manual provides simple and convenient human-computer interaction.
- Flexible Transmission: It supports 4-20mA analog signal and RS485 Modbus RTU output, and realizes real-time remote data transmission via 4G/5G network.

Typical Applications

- Suitable for trace moisture analysis in industries such as chemicals, fluorine chemicals, lithium batteries, petroleum and power, pharmaceuticals, etc.
- Examples include: Organic solvents: Electrolytes, alcohols, esters, acids, benzenes, phenols, etc.
- Gases: Natural gas, liquefied gas, butadiene, SF6, ammonia, hydrogen, oxygen, etc.

Technical Parameters

Specification	Technical Specification Parameters
Flow Rate	40ug H_2O/s(MAX)
Measurement Range	0-3000ppm
Electrolysis Current	0-400 mA (adjustable)
Resolution	0.1μg H20
Accuracy	20 mL transparent glass burette (standard) (optional: 1, 5, 10, 50 mL burettes)
Min. Titrant Volume	1.25 L (20 mL burette)
Accuracy	For water content between 100 μg and 1000 μg: error ≤ ±2 μg
	For water content above 1000 μg: error ≤ ±0.2% (excluding sampling error), standard deviation ≤ 0.3%
Special Functions	Automatic drift compensation, automatic deduction of environmental and background moisture, optional computer workstation, fault self-check and prompt
Operating Environment	Temperature: 2°C ~ 50°C; Humidity: ≤90%
Dimensions	1800H x 700W x 700Dmm
Explosion-proof Rating	ExdeibmpzIICT4GC
Power Supply	AC220V 50Hz 1KW
Signal Output	4-20 mA or RS485 Modbus RTU

WH-HF900 Anhydrous Hydrogen Fluoride Moisture Analyzer

Product Overview

The WH-HF900 Anhydrous Hydrogen Fluoride Moisture Analyzer is developed for online moisture monitoring of hydrogen fluoride in industrial processes. It calculates moisture content through the correlation curve of solution conductivity and temperature. Featuring corrosion resistance and great chemical tolerance, the durable sensor adapts well to chemical industries. Its large-caliber design and anti-fouling materials avoid clogging, while the inductive measurement principle ensures complete electrical isolation from the medium.



Key Features

- Integrated Structure: The analyzer is composed of a measuring electrode, corrosion-resistant flow cell and explosion-proof display controller. The flow cell can be directly mounted on pipelines for real-time online monitoring.
- Low Operation Cost: No complicated parameter setting or calibration is needed. The device requires no daily maintenance and has no consumable parts.
- Harsh Environment Adaptability: Equipped with an explosion-proof housing and IP65 protection rating, it is applicable to hazardous and harsh working conditions.
- Stable Detection Performance: The anti-scaling corrosion-resistant electrode ensures long-term stability. High sampling rate with internal damping delivers smooth data output.
- Intelligent Humanized Design: It supports historical trend recording with up to 8-hour storage.
- The failure warning display and intuitive icon interface enable simple operation and maintenance.

Technical Parameters

Specification	Technical Specification Parameters
Measurement Range	0-3000 ppm (factory setting: 0~100 ppm)
Signal Output	4-20 mA, user-programmable, current isolation
Measurement Error	±5%FS
Power Supply	220 VAC, 24 VDC optional
Sensor Material	PFA
Flow Cell Material	Steel-lined PTFE
Medium Temperature	-25~110℃
Medium Pressure	<1.5MPA
Process Connection	DN80 PN25 HG20592 national standard flange (customizable for special specifications)
Ambient Temperature	-25~50℃
Ambient Humidity	Max 80% RH, non-condensing
Alarm	Relay SPDT SA (external audible/visual alarm optional)
Communication	MODBUS 485, other communication protocols optional
Ambient Humidity	7-inch color touchscreen
Explosion-proof Rating	EXDEIICT6
Protection Rating	IP65
Lightning Protection	Surge protection on all I/O and power lines

WXWH

WH-GXS900 Liquid Phase Trace Moisture Analyzer



Product Overview

Adopting capacitance and complex impedance analysis technology, the GXS900 series applies unique floating electrode design to achieve PPM-level trace moisture measurement and wide-range (1%-99%) moisture detection for oil products. PPM-level moisture testing requires an ultra-high aF-level circuit precision, which is easily affected by temperature fluctuation and subtle sensor deformation. Equipped with a full digital demodulation circuit, the analyzer effectively reduces temperature baseline drift, and its crystal and alloy ring sensor ensures long-term structural stability. Crude oil features a non-linear capacitance variation at different water content, causing significant detection errors for conventional low-response measuring methods. Verified by repeated laboratory simulation tests, this series delivers ultra-high response sensitivity to capture transient signals and provide true and stable moisture data.

Key Features

- Safe Installation: Unlike extraction-based methods with leakage risks, the GXS900 series adopts in-situ embedded installation for safer operation and maintenance.
- High Anti-interference Performance: It is equipped with high-precision capacitance sensors to deliver stable measurement without temperature-induced signal drift. Medium temperature compensation further ensures accurate capacitance detection under varying temperatures.
- Advanced Algorithm Design: The unique circuit and algorithm effectively eliminate spatial electromagnetic interference, while identifying the dielectric constant of different media for precise ratio calculation.
- Diversified Sensor Structure: Pipeline-type and insertion-type sensors are available to fit different pipe diameters. The non-contact pipeline sensor prevents clogging, pressure loss and medium contamination.
- Flexible Application: The easy-to-install insertion sensor supports multiple dielectric mixing models for simpler software calibration. An optional oil-water mixer keeps medium emulsified to avoid measurement errors caused by phase separation.

Technical Parameters

Specification		Technical Specification Parameters
Electrical Connection		M20 or 3/4-inch NPT female conduit interface
Process Connection		Flange mounting, DN10~DN250 (pipeline type) or direct insertion
Process Temperature		<150℃ continuous
Process Pressure		<10.0MPa
Wetted Materials		PTFE, ceramic
Explosion-proof Rating		ExdialICT4/T5/T6 Gb; Ex tDA21iaD20 IP66
Ambient Temperature		-40℃~80℃, non-condensing
Explosion-proof Rating		24VDC
Communication Methods		RS485, MODBUS, 4~20 mA signal, HART optional
Water in Organic Matter	Resolution	1 ppm (depends on organic composition and operating conditions)
	Measurement Range	10,000 ppm (depends on organic composition and operating conditions)
	Zero Drift	<0.1%FS
Water in Oil	Resolution	0.1%
	Measurement Range	99% (depends on operating conditions and sensor structure)
	Zero Drift	<0.01% FS

WH-TM900 Online Trace Moisture Analysis System (Electrolytic Method)

Product Overview

The WH-TM900 Online Trace Moisture Analyzer is equipped with a corrosion-resistant gas trace moisture sensor. The moisture analysis principle is based on the P_2O_5 electrolytic method, enabling continuous, fast, and accurate measurement of trace moisture in gases.



Key Features

- Multiple parameter display and settings (humidity, dew point, pressure, PPM).
- Rich parameter settings and query functions, complete display information.
- Sensor with strong corrosion resistance, suitable for various corrosive gases.
- Strong anti-interference capability and high reliability.
- Provides standard MODBUS protocol and interface, facilitating integration into industrial field testing systems.
- Over-limit alarm function: When limits are exceeded, dew point or PPM values flash, and the corresponding alarm relay closes.
- Comprehensive software functionality, user-friendly "human-machine interface," and high-definition LCD display.

Typical Applications

- Fluorochemicals, chlor-alkali, PVC, chemical industry, natural gas, petrochemicals, moisture analysis in gases, polysilicon/organosilicon

Technical Parameters

Specification	Technical Specification Parameters	Specification	Technical Specification Parameters
Measurement Principle	P_2O_5 Electrolytic Method	Operating Temperature	+5~65℃
Measurement Range	0~100~3000ppm	Operating Humidity	<80% RH
Accuracy	±5% of measured value	Storage Temperature	-10~+65°℃(non-condensing)
Repeatability	±2% (at 10.0 ppm)	Storage Humidity	<90% RH
Stability	+1%FS/7d	Sample Gas Pressure	MAX 0.1 MPa (flowing through the sensor)
Response Time	<5S	Bypass Flow Rate	1.5~2L/min
Recovery Time	T50<2min	Analog Output	4~20 mA (optional communication protocols)
Measurement Mode	Online	Load Allowance	<500 Ω
Display	128x64LCD	Relay Output	SPDT5A
Power Supply	85~264VAC，50/60Hz	Cable Glands	2 waterproof glands
Power Consumption	<20 VA (excluding electric heating)	Gas Connection	6 mm double ferrule
Sensor Lifespan	>2 years (under normal use)	Installation Method	Floor-standing

WXWH

WH-LDY200A Online Streaming Current Analyzer

Product Overview

This streaming current analyzer continuously monitors charges of suspended particles and colloids in liquids. It converts detected charges into AC streaming current (SC) signals, which are proportional to charge density. By tracking SC variations, it rapidly reflects water quality changes such as color and turbidity to guide coagulant dosing adjustment.
The WH-LDY200A supports an optional pretreatment system for long-term stable operation. It integrates continuous measurement, automatic cleaning, pH monitoring and PID control, and connects to dosing systems to realize automatic coagulant dosage regulation according to real-time water quality fluctuations.



Key Features

- This analyzer monitors the charge of suspended particles and colloids in liquids. It converts signals into streaming current (SC) values to quickly reflect water quality changes and optimize coagulant dosing.
- It supports simultaneous display of actual and relative SC values, as well as optional pH monitoring for real-time flocculation evaluation. An automatic cleaning function ensures long-term stable operation.
- Equipped with PID control, it offers automatic and manual control modes. An optional pretreatment system greatly lowers maintenance workload for continuous on-site operation.
- It provides SC and PID 4-20 mA outputs, RS485 Modbus RTU communication, and dual high/low alarms. Password protection effectively prevents unauthorized access.
- Featuring a 4.3-inch color touchscreen, it supports USB data export in Excel format. The split sensor structure simplifies on-site installation for industrial applications.

Typical Applications

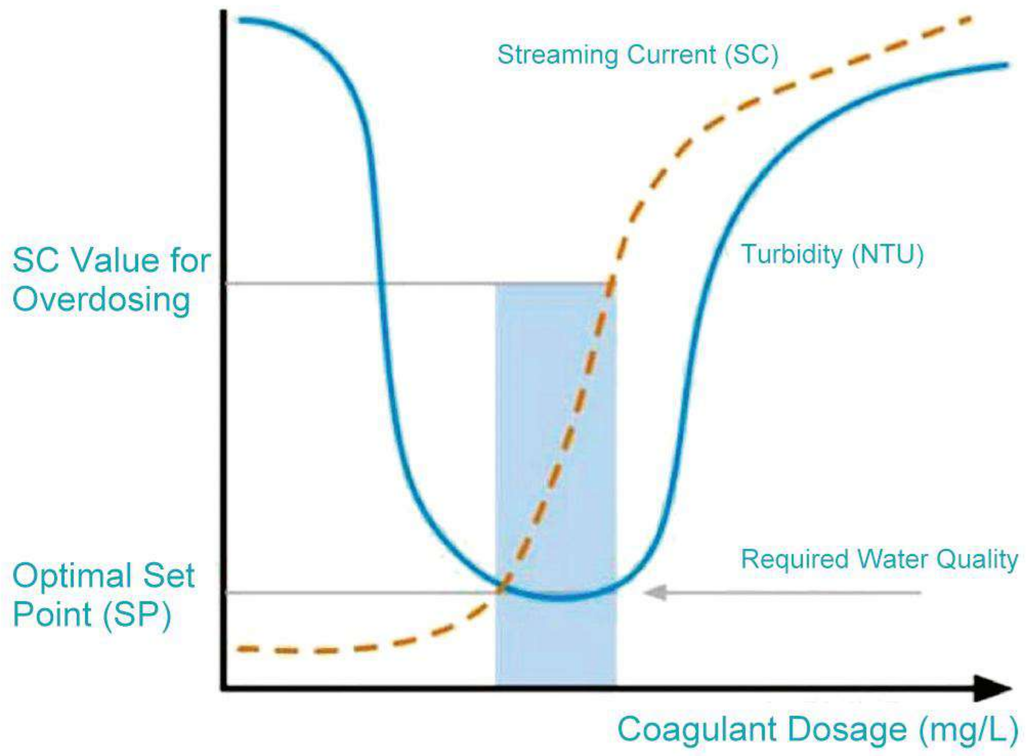
- Tap water, wastewater treatment, sludge dewatering, coagulant dosing

Advantages

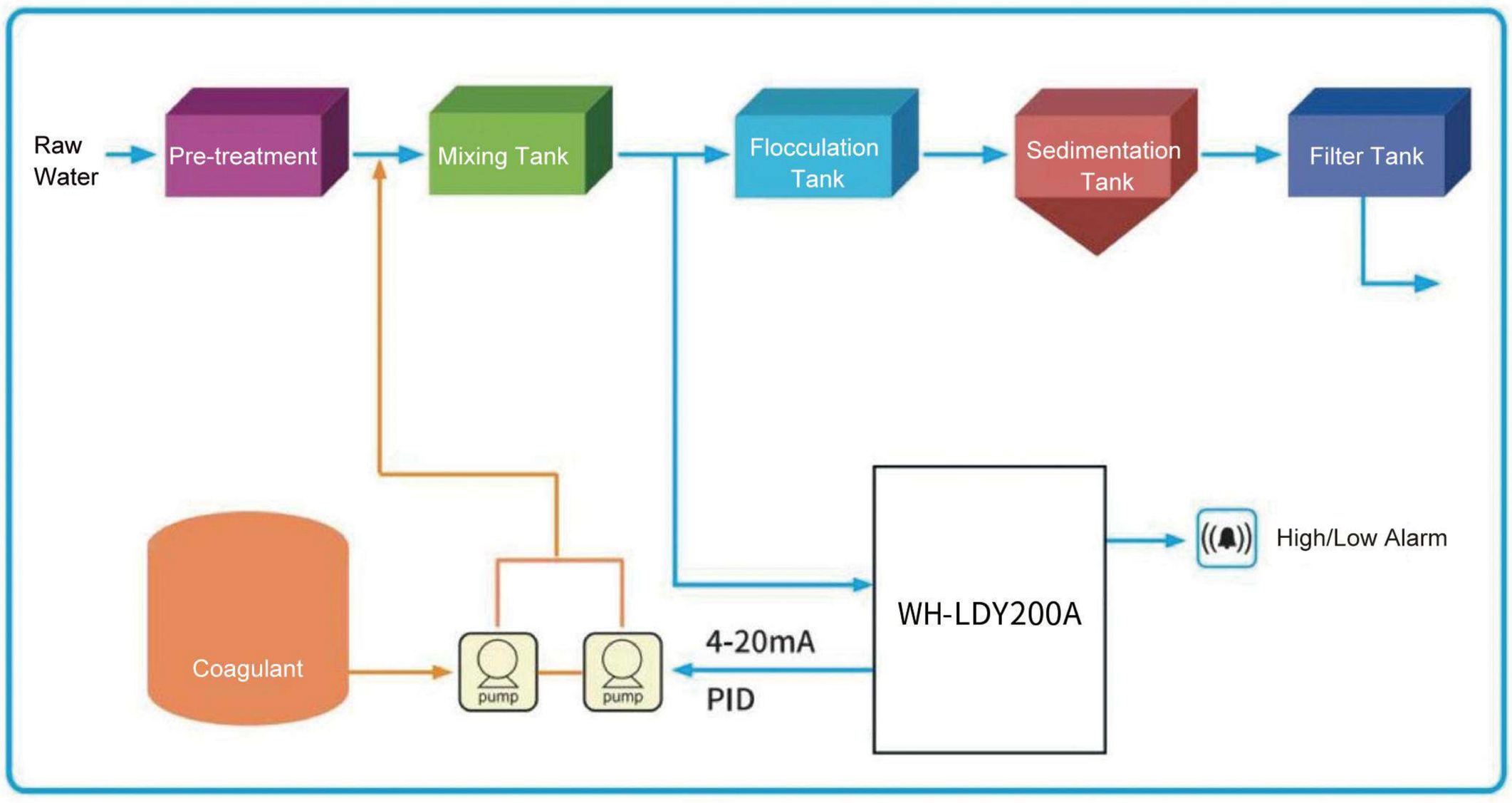
- Automatic control of coagulant dosing
- Saves coagulant costs
- Ensures effluent water quality meets standards
- Low operation and maintenance costs

Water Quality Requirements

- Conductivity: <3000μS/cm
- pH: 4~11 pH
  (optimal SCD measurement when pH <7 after coagulant dosing).
- TSS: <1000 mg/L



WH-LDY200A Online Streaming Current Analyzer



Technical Parameters

Specification	Technical Specification Parameters
Measurement Parameters	Streaming Current/SCD, pH
Measurement Range	-1000~1000SC, 0-14pH
Accuracy	±0.1%, ±0.01pH
Repeatability	±0.1%
Response Time	1 second
Operating Temperature	0-50℃
Wetted Materials	PTFE, POM, SS316
Housing	ABS/PC
Power Supply	220VAC, 50/60Hz
Analog Output	2 channels of 4-20 mA (measurement value and PID), maximum load 500Ω
Relay Output	2 channels of high/low relays, with configurable alarm values and hysteresis
Automatic Cleaning	Cleaning interval: 0-9999 min, cleaning time: 0-999 s
Digital Communication	RS485 Modbus RTU
Data Storage	Real-time data logging, supports USB export (Excel format)
Sampling Requirements	Coagulant dosing point to sensor time: approximately 3-5 min
Protection Rating	IP65
Dimensions	Controller: 200x190x90 mm, Sensor: 250x350x150 mm
Weight	Controller: ~1 kg, Sensor: ~5 kg

WOHUAN TECHNOLOGY

Wuxi Wohuan Instrument Technology Co., Ltd.

www.whinstrument.com

+86-510-83738168 +86 181 1537 2079

Jindonglai Technology Park, No. 9 Huayun Road,
Binhu District, Wuxi, Jiangsu, China