WOHUAN TECHNOLOGY

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Water Quality Analyzers (Drinking Water Series)

INSTRUMENTATION
ENVIRONMENTAL
MONITORING

Wuxi Wohuan Instrument Technology Co., Ltd.

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WXWH

Wuxi Wohuan Instrument Technology Co., Ltd. is a high-tech enterprise specializing in the development, production, and sales of various instruments and meters. The company focuses on big data platforms, energy storage microgrid management, online environmental monitoring, and industrial process instrumentation.

With a commitment to excellence and customer service, Wohuan Technology provides safe, eco-friendly products and automation solutions. The company excels in IoT chip design, sensor innovation, big data processing, cloud computing, and AI algorithms, offering intelligent monitoring and management solutions for urban energy, water environments, sewage systems, and river maintenance.

Main products include: trace moisture analyzers, concentration analyzers, pressure transmitters, level transmitters, temperature transmitters, radar level meters, gas detectors, pH meters, oxidation-reduction potential (ORP) meters, conductivity meters, dissolved oxygen (DO) meters, residual chlorine meters, turbidity meters, sludge concentration meters, sludge interface meters, water salinity meters, COD analyzers, ammonia nitrogen analyzers, BOD analyzers, total phosphorus analyzers, total nitrogen analyzers, five-parameter analyzers, spectrophotometers, ultrasonic level meters, various flow meters, flow totalizers, wireless data collectors, RF admittance level controllers, gas analyzers, VOC, TVOC, and system-compatible PLCs, DCS, etc.

These products are widely used in environmental protection, sewage treatment, heating, water supply, petroleum, chemical, power, machinery, metallurgy, pharmaceutical, food, automotive, textile, and light industries. The company is recognized for its reliable products and excellent after-sales service.

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.

Contents

WH-GP100 Multi-Parameter Water Quality Spectrophotometer

Basic Principle

The WH-GP100 Micro Spectrophotometer is a new-generation water quality monitoring system independently developed and produced by our company. The system adopts internationally leading multi-source spectral fusion water quality analysis technology. Based on semiconductor micro-electro-mechanical systems (MEMS) precision processing technology, it features a miniaturized, high-resolution, fast-scanning, and high-wavelength-accuracy Fourier transform spectrometer. Its spectral range covers 190-1900 nm. The system integrates optics, mechanics, and computing into a compact design, achieving miniaturization of the Michelson interferometer and portability and cost-effectiveness of the Fourier spectrometer. It overcomes the technical limitations of traditional methods, such as slow chemical detection, secondary pollution from waste liquids, low accuracy of optical analysis, and poor anti-interference capabilities, significantly enhancing the online analysis performance of comprehensive water quality indicators.

Key Features

- Monitoring cycle can reach the second level, with a maximum monitoring frequency of 25 seconds.
- MEMS multi-source optical fusion technology and multiple dynamic compensation algorithms significantly enhance anti-interference capabilities.
- No chemical reagents required, no risk of secondary pollution, low power consumption, and can be solar-powered.
- A single device can simultaneously monitor key indicators such as turbidity, color, suspended solids, COD (CODmn), NH_3-N, TP, TN, NO_3-N, NO_2-N, and is easily expandable.
- Compact device size with multiple installation options, adaptable to various scenarios, suitable for portable handheld devices, shore-based monitoring stations, unmanned monitoring stations, vehicle-mounted portable monitoring stations, and unmanned boat patrol monitoring.
- Integrated smart management system with functions for sampling, transmission, storage, query, analysis, display, and early warning.
- Real-time and historical water quality data can be visualized and displayed on terminals such as computers, smartphones, and tablets.
- All spectral data is encrypted and stored in the cloud, supporting long-term data analysis and feature element analysis.

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.

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°C~28°C, humidity ≤90% (non-condensing)
Power	AC220V±10%V, 50Hz, 10W
Dimensions	270 (H) x 210 (W) x 100 (D) mm or 144 (H) x 144 (W) x 115 (D) mm

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℃
Resolution	pH: 0.01PH; ORP: 1mV; T: 0.1℃
Basic Error	pH: ±0.01pH; ORP: +2mV; T: ±0.5℃
Transmitter Output	4-20 mA or 0-20 mA output
Temperature Compensation Mode	Automatic/Manual switchable
Temperature Compensation Range	0~110℃
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	96x96x120mm;144x144x115mm
Installation Method	Panel Mount (Embedded)
Panel Cutout Dimensions	92x92mm; 138x138mm
Installation Options	[Flow-through], [Pipeline], [Submersible], etc.
Optional Features	RS485/RS232 communication interface for computer connection
Environmental Temperature	-10~45℃
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℃
Resolution	Conductivity: 0.01μS/cm; 0.1mS/cm Temperature: 0.1℃
Basic Error	Conductivity: ±5%F·S Temperature: ±0.5℃
Temperature Compensation Range	0~110℃
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	96x96x120mm; 144x144x115mm
Installation Method	Panel Mount (Embedded)
Panel Cutout Dimensions	92x92mm, 138x138mm
Electrode Installation Options	[Flow-through], [Submersible], [Pipeline]
Optional Features	RS485/RS232 communication interface for computer connection
Environmental Temperature	0~60℃ Relative Humidity: ≤90%
Operating Conditions	No vibration, no corrosive gases, no direct sunlight, no magnetic interference except Earth's magnetic field

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 cm³/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	96x96x120mm, 144x144x115mm
Panel Cutout	92x92mm, 138x138mm
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-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°C to +60°C
	Relative Humidity: 45%-75%RH
	Pressure Range: ±0.1Mpa
	Measurement Range: 5m-20m
Range Specifications	Resolution: 1mm
	Accuracy: ±1%
	Blind Zone: 0.2-0.6m

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

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

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)℃
Basic Error	Conductivity	±1.0%FS
	Temperature	±0.3℃
Stability	(±0.33%FS)/3h	
Power Supply	AC(220±22)V, (50±1)Hz	
Dimensions	290 x 220 x 90mm	
Weight	1.3kg	

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

WH-LDY200A Online Streaming Current Analyzer

Product Overview

The Streaming Current Analyzer is used for continuous online measurement of the charge present on tiny suspended particles and colloids in liquids. The measurement results of the charge are converted into an A.C. signal or streaming current (SC) through electronic signal processing. The streaming current (SC) value is proportional to the charge density, and the charged state depends on the excess positive or negative charges in the water after flocculation. By detecting changes in the streaming current (SC) value, it can quickly reflect changes in water characteristics (such as color and turbidity), allowing operators to adjust the dosage of coagulants accordingly.
The WH-LDY200A Streaming Current Analyzer can be equipped with a pre-treatment system, enabling long-term trouble-free operation. It features continuous measurement, automatic cleaning, pH measurement, and PID control functions. It can be connected to existing dosing systems and initiate automatic dosing control. The dosage of coagulants will be automatically adjusted based on changes in water characteristics.

Key Features

- Simultaneous display of actual SC value and relative SC value.
- Simultaneous monitoring of pH value (optional) to understand flocculation effects in real time.
- Automatic cleaning function
- SC 4-20 mA and PID 4-20 mA output
- RS485 Modbus RTU communication
- Password protection to prevent unauthorized operation
- Two modes: automatic control and manual control
- Optional pre-treatment system significantly reduces maintenance requirements
- PID control function
- Two high/low alarm outputs
- 4.3-inch color touchscreen for simple and convenient operation
- Data logging function, supports USB export (Excel format)
- Split sensor design for easy on-site installation

Typical Applications

Tap water, wastewater treatment, sludge dewatering, coagulant dosing

Advantages

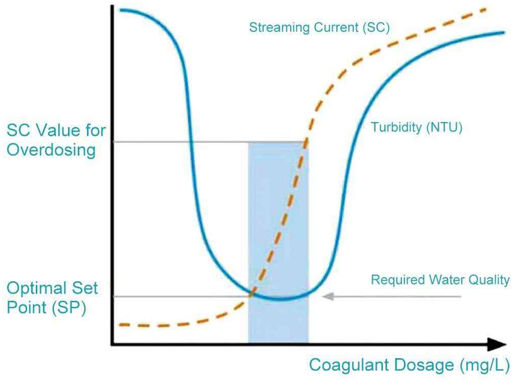
- Automatic control of coagulant dosing
- Saves coagulant costs
- Ensures effluent water quality meets standards
- Low operation and maintenance costs

Water Quality Requirements

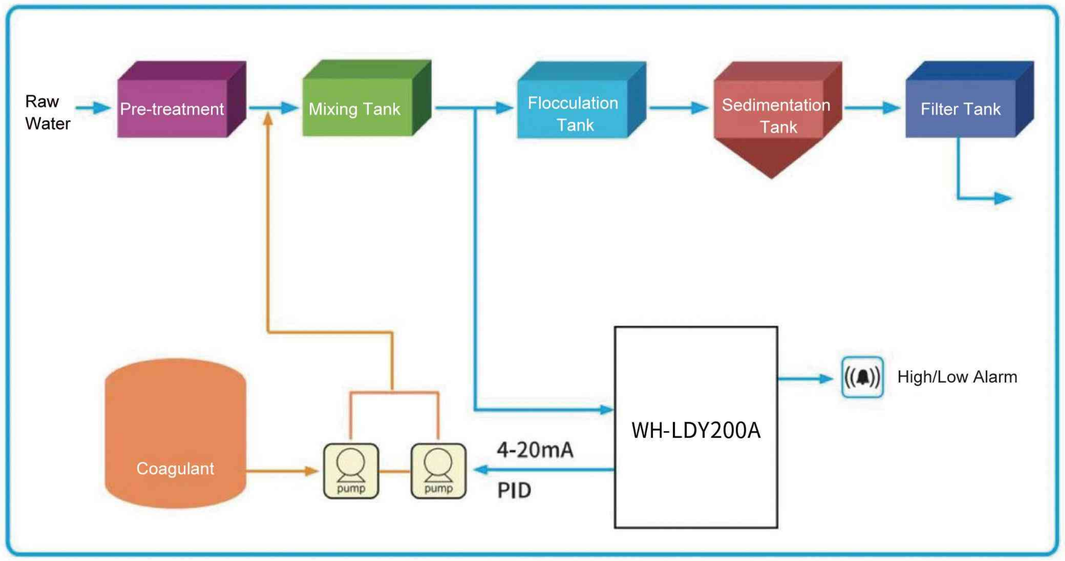
Conductivity: <3000μS/cm

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

WH-LDY200B Online Streaming Current Analyzer

Product Overview

The Streaming Current Analyzer is used for continuous online measurement of the charge present on tiny suspended particles and colloids in liquids. The measurement results of the charge are converted into an A.C. signal or streaming current (SC) through electronic signal processing. The streaming current (SC) value is proportional to the charge density, and the charged state depends on the excess positive or negative charges in the water after flocculation. By detecting changes in the streaming current (SC) value, it can quickly reflect changes in water characteristics (such as color and turbidity), allowing operators to adjust the dosage of coagulants accordingly.

Key Features

- Simultaneous display of actual SC value and relative SC value
- Automatic cleaning function (optional)
- SC 4-20 mA and PID 4-20 mA output
- RS485 Modbus RTU communication
- Data logging function, supports USB export (Excel format)
- Two modes: automatic control and manual control
- Optional pre-treatment system extends maintenance intervals
- Real-time SC trend graph
- PID control function
- Two high/low alarm outputs
- Password protection to prevent unauthorized operation

Typical Applications

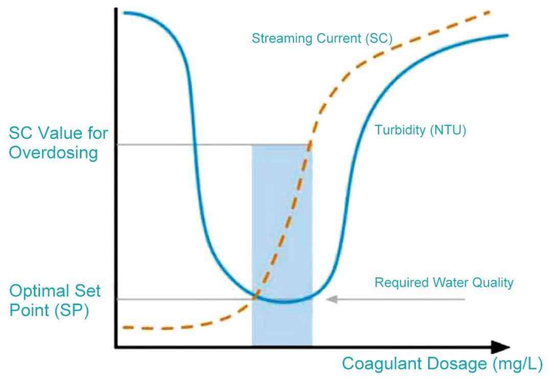
- Water purification, sludge dewatering, wastewater treatment, and processes requiring coagulant dosing

Advantages

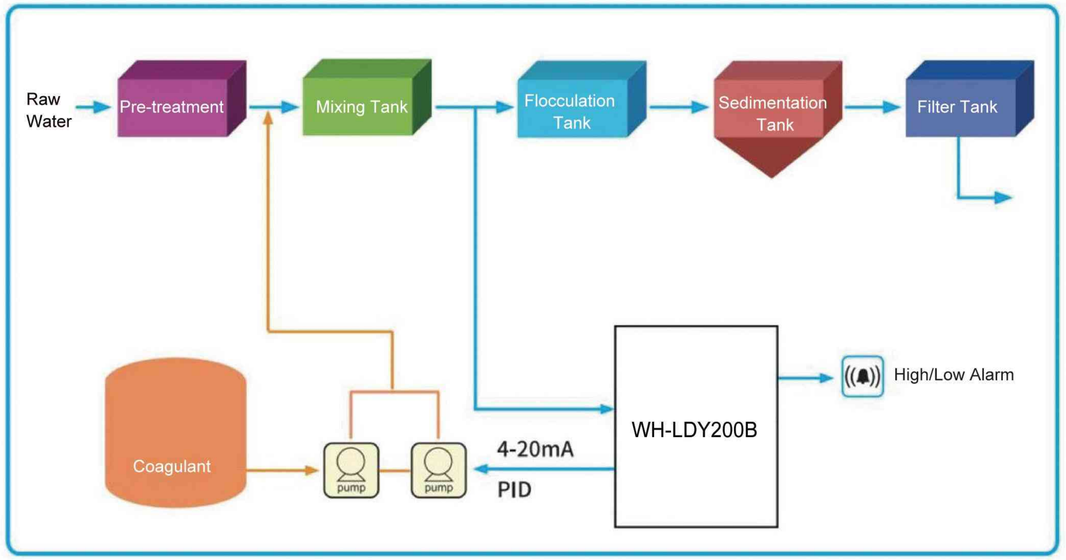
- Automatic control of coagulant dosing
- Saves coagulant costs
- Ensures effluent water quality meets standards
- Low operation and maintenance costs

Water Quality Requirements

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



WH-LDY200B Online Streaming Current Analyzer



Technical Parameters

Specification	Technical Specification Parameters
Measurement Parameters	(Streaming Current): Streaming Current
Measurement Range	-1000~1000SC
Accuracy	±0.1%
Repeatability	±0.1%
Response Time	1 second
Operating Temperature	0-50℃
Power Supply	220VAC, 50/60Hz
Display	7-inch touchscreen
Output	2 channels of 4-20 mA (measurement value and PID), maximum load 500Ω
Communication	RS485 Modbus RTU
Alarm	2 channels of high/low relays, with configurable alarm values
Automatic Cleaning	Cleaning interval: 0-9999 min, cleaning time: 0-999 s
Data Storage	Real-time data logging, supports USB export (Excel format)
Sampling Requirements	Coagulant dosing point to sensor time: approximately 3~5 min
Flow Rate Requirements	1~4L/min
Protection Rating	Controller: IP65, Sensor: IP54
Dimensions	Controller :300x350x200mm; Sensor: 250x350x150mm
Weight	Controller: ~10 kg, Sensor: ~10 kg

WH-CA700 Online Hardness Analyzer

Product Overview

The WH-CA700 Online Hardness Analyzer uses the titration colorimetric method, featuring a compact design, easy operation, and precise measurement. It is an entry-level choice for water softening systems and boiler room water quality monitoring.

Key Features

- Customized for boiler rooms, high cost-performance ratio;
- Automatic measurement and automatic cleaning;
- Graphical backlit LCD display;
- External signal input control for measurement, used to start or stop analysis externally;
- 4-20 mA output (optional RS485 communication module);
- 2 relay outputs;
- Display unit: ppm $CaCO_3$;
- Continuous measurement or interval measurement (5-30 minutes);
- SD card data storage (historical data, fault records).

Typical Applications

- Boiler feed water, boiler water, circulating water, process water

Basic Parameters & Technical Parameters

Basic Parameters	
Measurement Principle	Titration Colorimetric Method
Ambient Temperature	5-45℃
Sample Water Temperature	5-40℃
Sample Water Pressure	0.5-5 bar (recommended 1-2 bar; install a pressure reducing valve if >2 bar)
Water Quality Requirements	Colorless, no suspended solids, no bubbles
	pH: 4-10.5, Fe: <3 ppm, Cu: <0.2 ppm
	Al: <0.1 ppm, Mn: <0.2 ppm
Inlet/Outlet Connection	6 mm OD soft tubing
Humidity	20-90% RH, indoor installation
Power Supply	24 VDC, 25 VA (during operation)
Dimensions/Weight	250x360x110 mm, ~2.5 kg (including housing)
Protection Rating	IP65
Technical Parameters	
Measurement Range	0.2-500.0 ppm $CaCO_3$ (depending on reagent type)
Measurement Time	~3 minutes (depends on water hardness and set rinse time)
Accuracy	±5% of the upper limit of the selected reagent
Repeatability	±5% of the upper limit of the selected reagent
Analysis Cycle	Continuous measurement / Interval measurement (5-30 min) / External start signal
Rinse Time	120 seconds
Water Consumption	~1000 ml per analysis
Display	Backlit LCD display with graphics and values
Unit	ppm $CaCO_3$
Current Output	4-20mA,Max.750Ω
Relay Output	2 passive relay outputs (NC), 250 VAC 4A
Input	External switch signal to start analysis

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

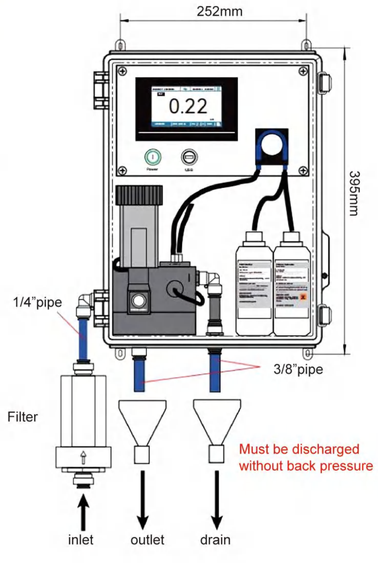
- DPD Colorimetric Method, more precise and stable measurement
- Low reagent consumption, easy to replace
- Analysis cycle about 2.5 minutes
- 4-20mA output
- Password protection, prevents unauthorized operation
- Automatic diagnosis and automatic calibration
- Automatic and manual measurement modes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



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.

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

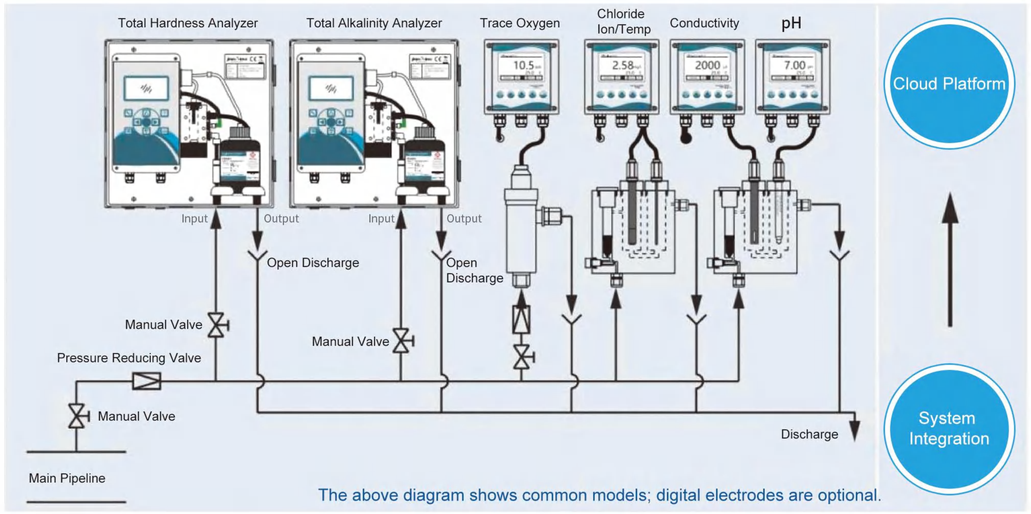
※ The above parameters can be freely integrated and combined.

Typical Applications

- Softened water, Boiler water, Circulating water

Solutions

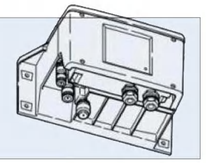
- In accordance with the national standard GB/T 1576, our company offers the following two boiler water quality monitoring solutions:
  1. Controller + Sensor Integration, optional wireless transmission module + cloud-based APP
  2. Digital Sensor Integration + 7-inch Touchscreen Display, optional wireless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



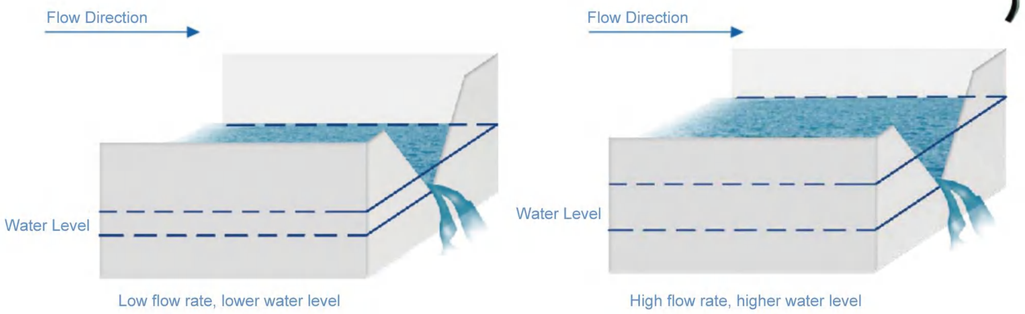
Technical Parameters

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

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)℃; Host (-10~50)℃
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

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℃
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℃