

**Supmea<sup>®</sup>**



# **Water & Wastewater Industry Solutions**

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Committed to process automation solutions

# DIRECTORY

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# Corporation Profile



Supmea is committed to industrial process automation sensors and instrument since its establishment for decades. The main products are liquid analysis instrument, recorder, pressure transmitter flowmeter and other field instruments.

Sumpea Automation Co.,Ltd. is a governing unit of the China Instrument and Control Society. Due to its outstanding achievements in enterprise development in enterprise development in recent years, recent years, it has been awarded the honorary titles of Most Growth Enterprise, Zhejiang Science and Technology

Enterprise, and National High-tech Enterprise since 2013. By 2023, Supmea has a wide quantities of R&D researchers and engineers, more than 400 employees in the total group. With diverse market needs and global customers, Supmea has established and prepared its office in Singapore, Philippines, Malaysia etc.

Customer-centric. Supmea will continuously be committed to process automation sensors and instruments, playing an indispensable role in supporting world industries more intelligent and efficient.

# Qualification Honor

### Honors



National High-Tech Enterprise



Committee unit of SAC/TC124



Council Member of CIS



ISO9001 certificate

### Calibration Certificate



Online pH meter



pH controller



Paperless recorder



Signal generator

### Patent Certificate



pH controller invention patent



pH controller automatic calibration device



A resistivity sampling circuit for aqueous solution



An ultrasonic liquid level detection method



Digital pressure gauge (P6)



pH controller (6.0)



Isolation conversion circuit

### Trademark



Germany



Russia



Philippines



South Korea



Malaysia



America



Thailand



Singapore



Vietnam

### CE Certificate



Electromagnetic flowmeter



Radar level transmitter



Vortex flowmeter



Conductivity controller



Temperature transmitter



Signal isolator



ISET certificate



# Supmea in Water & Wastewater Industry

In the water & wastewater industry, Supmea has a wealth of product solutions to help users better manage and utilize water resources, thereby reducing water costs and protecting water resources.



Supmea, committed to process automation solutions, promotes efficient, green and sustainable development in the industrial field by providing industrial customers with high-quality, high-efficiency, and high-precision process automation instrument products and solutions.

Up to now, a series of process automation instruments, including temperature, pressure, flow, level, analysis, etc., have been widely used in water treatment plants, sewage treatment plants and various industries.

The business scope covers 138 countries and regions around the world, the total number of users exceeds 630,000. Typical users include Wahaha, Nongfu Spring, Nestle, BEWG, Hanlan Environmental, OriginWater, Veolia, ZWEEC, Manila Water, etc.

In the future, Supmea will continue to explore market demand, develop and produce more intelligent, automated and sustainable products, as well as rich IIoT solutions, to help customers realize scientific management and economical use of water resources.



# Water & Wastewater Treatment Progress

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Water pumping station

Measurement parameters  
level, flow, temperature, pH, turbidity, conductivity

Products recommended  
Ultrasonic level transmitter MP-C  
Electromagnetic flowmeter LDG-SUP  
Thermal resistance SUP-WZPK  
Plastic electrode SUP-PH-7004  
Turbidity electrode SUP-PTU-8011  
Conductivity stainless steel electrode SUP-TDS-7001

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Dosing pool

Measurement parameters  
Liquid level, flow, pH

Products recommended  
Ultrasonic level transmitter MP-C  
Electromagnetic flowmeter LDG-SUP  
Glass electrode SUP-PH-5022

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Coagulation sedimentation tank

Measurement parameters  
Liquid level, flow, pH

Products recommended  
80G radar level transmitter SUP-RD1000  
Electromagnetic flowmeter LDG-SUP  
Plastic electrode SUP-PH-7004

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Filter pool

Measurement parameters  
Turbidity, sludge concentration

Products recommended  
Turbidity electrode SUP-PTU-8011  
Sludge concentration electrode SUP-PSS-9011

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Clean water pool/Water storage tank

Measurement parameters  
liquid level

Products recommended  
Ultrasonic level transmitter MP-C

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Regulating pool

Measurement parameters  
Liquid level, flow, pH

Products recommended  
Ultrasonic level transmitter MP-C  
Electromagnetic flowmeter LDG-SUP  
Glass electrode SUP-PH-5022

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User water

Measurement parameters  
Flow, pH, Turbidity, Conductivity, Temperature, Free Chlorine

Products recommended  
Electromagnetic flowmeter LDG-SUP  
Multi-parameter liquid analysis controller SUP-MDX500

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User waste water

Measurement parameters  
flow

Products recommended  
Electromagnetic flowmeter LDG-SUP

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Regulating pool

Measurement parameters  
Liquid level, flow, pH, sludge concentration

Products recommended  
Ultrasonic level transmitter MP-C  
Electromagnetic flowmeter LDG-SUP  
Plastic electrode SUP-PH-7004  
Turbidity electrode SUP-PTU-8011

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Anoxic pool

Measurement parameters  
Turbidity, sludge concentration

Products recommended  
Turbidity electrode SUP-PTU-8011  
Sludge concentration electrode SUP-PSS-9011

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Membrane bioreactor tank

Measurement parameters  
Liquid level, flow, temperature, pH, turbidity, Conductivity, dissolved oxygen

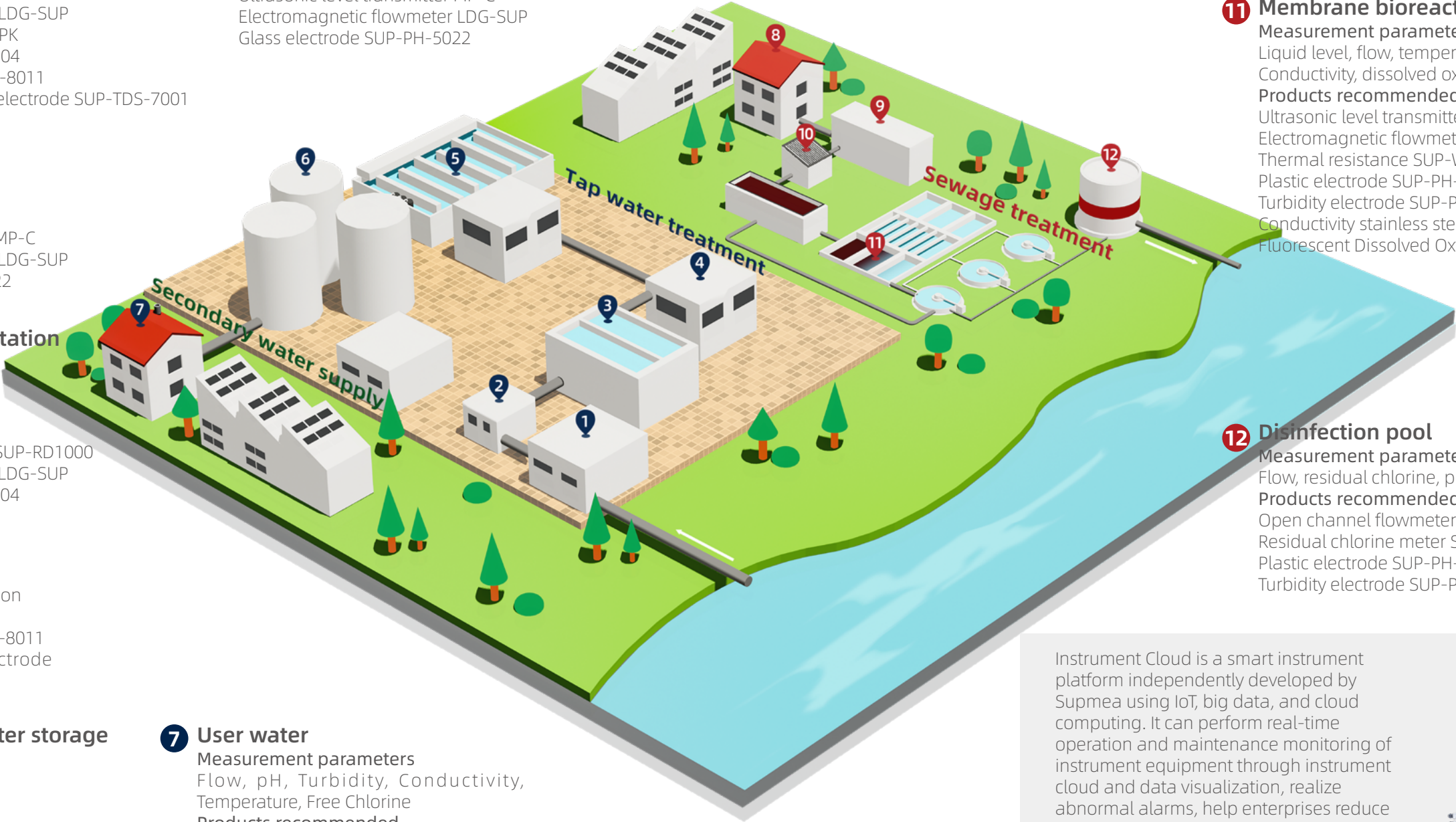
Products recommended  
Ultrasonic level transmitter SUP-MP  
Electromagnetic flowmeter LDG-SUP  
Thermal resistance SUP-WZPK  
Plastic electrode SUP-PH-7004  
Turbidity electrode SUP-PTU-8011  
Conductivity stainless steel electrode SUP-TDS-7001  
Fluorescent Dissolved Oxygen Electrode SUP-DO-7018

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Disinfection pool

Measurement parameters  
Flow, residual chlorine, pH, turbidity

Products recommended  
Open channel flowmeter SUP-LMQ  
Residual chlorine meter SUP-TRC400  
Plastic electrode SUP-PH-7004  
Turbidity electrode SUP-PTU-8011



Instrument Cloud is a smart instrument platform independently developed by Supmea using IoT, big data, and cloud computing. It can perform real-time operation and maintenance monitoring of instrument equipment through instrument cloud and data visualization, realize abnormal alarms, help enterprises reduce costs and increase efficiency through data recording and calculation.

Remote monitoring of multiple devices

Cloud Platform



# Product Recommendation



**01 New millimeter-wave high accuracy 80G radar level transmitter SUP-RD1000**  
Suitable for flow measurement in water treatment process

- 3° -5° extremely narrow beam angle and strong wave focusing ability, the detection blind zone is less than 200mm;
- IP66 high-quality waterproof joints, suitable for complex working conditions with harsh environments;
- 4-digit LCD high-definition backlit liquid crystal display, the data are clearly visible under strong light or dim conditions.



**02 For viewing of data Remote type electromagnetic flowmeter LDG-SUP**  
Specifically designed for remote reading applications

- Visualized rectangular flow bar graph;
- Real-time display of instant (Q value) and cumulative value;
- 8 major international liquid measurement units are optional;
- The lining is anti-shedding, anti-shedding and anti-leakage;
- DN10~DN2000 optional.



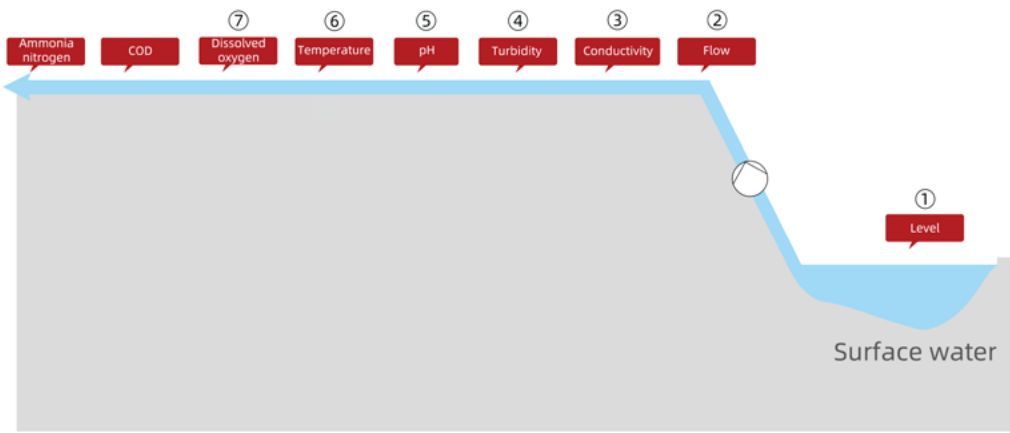
**03 For Conductivity Measurement Stainless Steel Electrode SUP-TDS-7001**  
Meet the conductivity measurement needs of river sections, etc.

- Electrode constant: 0.01/01/1.0;
- Ingress protection: IP68;
- Pressure resistance: 5bar;
- Temperature resistance: 0-50° C;
- 316 high molybdenum corrosion-resistant stainless steel, stable operation under severe working conditions.

Use with SUP-TDS210-B, a conductivity meter with strong anti-interference ability

## Surface water abstraction

Water treatment plant



**04 For measuring turbidity Turbidity electrode SUP-PTU-8011**  
Suitable for raw water turbidity measurement in waterworks

- Accurate and reliable measurement results can be obtained within the value range of 0.01-4000NTU;
- Self-cleaning device, reducing sensor maintenance;
- Probe IP68 protection level, strong waterproof and dustproof, not afraid of harsh working conditions.

Use with the liquid analysis controller SUP-DC2000



**05 For pH measurement Plastic electrode SUP-PH-7004**  
Suitable for continuous monitoring of solution pH in the water industry

- Accurate and reliable measurement results in the 0-14pH range;
- High-quality anti-interference lead wire, which can realize long-distance transmission of 60 meters;
- High-performance PPS shell material, temperature-resistant, corrosion-resistant, Extended sensor life.

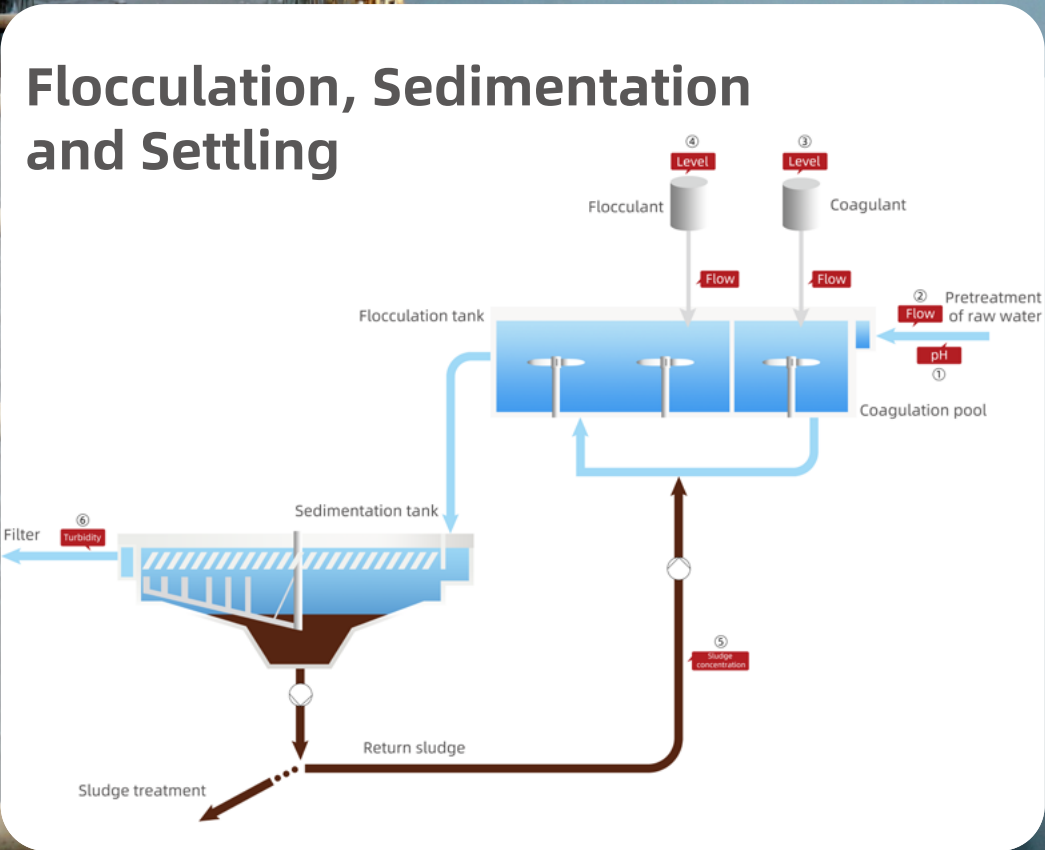
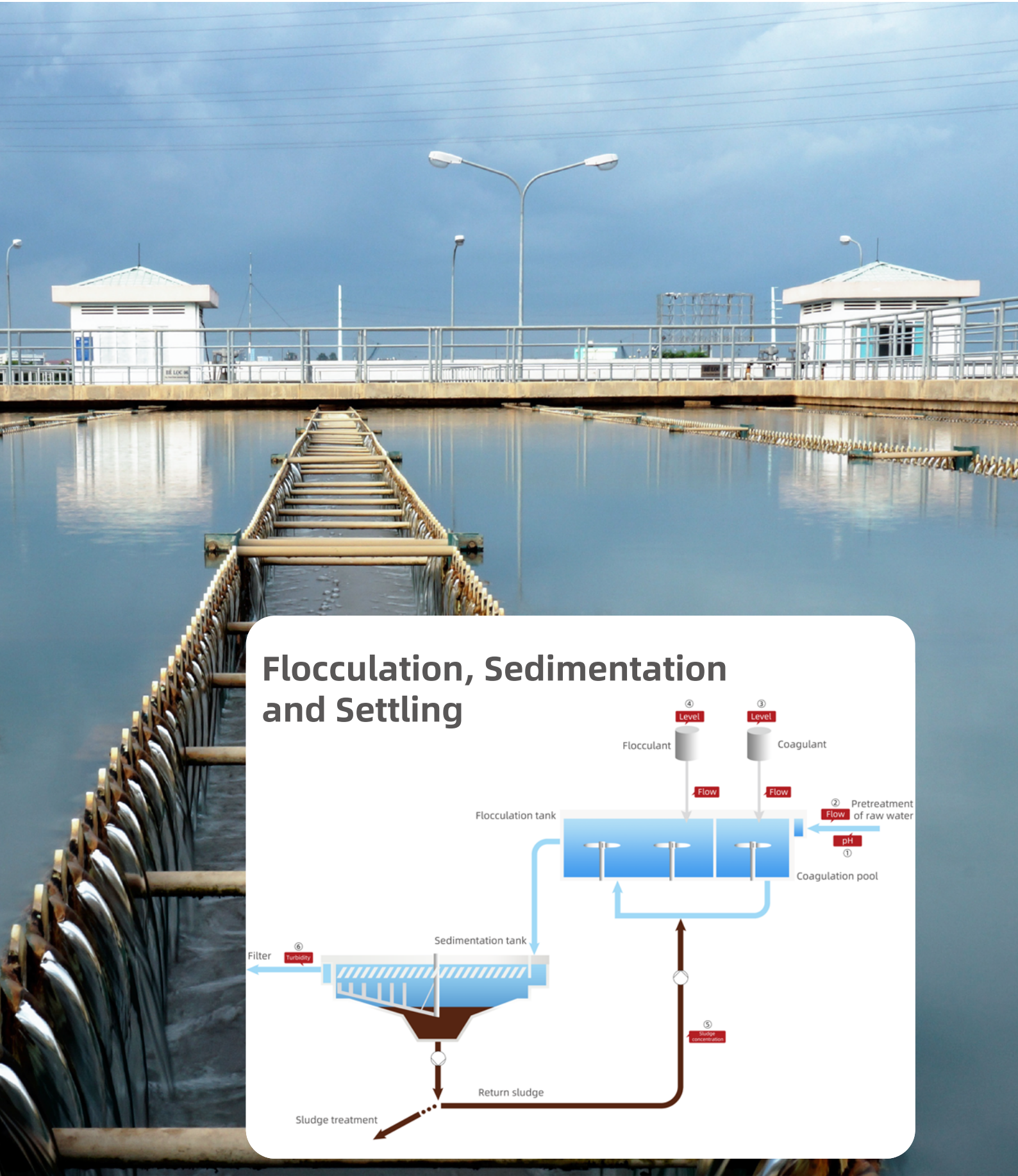
Use with a stable operating pH controller SUP-PH6.5



**06 Rapid response Thermal resistance SUP-WZPK**  
Meet the needs of temperature measurement in solution

- Integrated junction box structure, high-efficiency waterproof and no fear of condensation to protect the internal circuit;
- JUMO chip imported from Germany, A-level precision guarantee, accurate and fast temperature measurement;
- With the temperature change module, it can output 4-20mA signal stably, and the remote transmission will not be delayed.





**01 With excellent pressure resistance  
Glass electrode SUP-PH-5022**

Suitable for continuous monitoring of pH in pretreated raw water

- JUMO HT glass, temperature-resistant up to 135° c and pressure-resistant up to 10 bar;
- PTFE ring-shaped diaphragm, polymerized solid electrolyte, greatly improves the service life, and is applicable to a wider range of working conditions.;
- Measuring range: 0-14pH;
- Mounting thread: PG13.5.



Use with a stable operating pH controller SUP-PH6.5



**02 High-end  
Electromagnetic flowmeter FMC240**

No need for grounding, used for process measurement such as dosing

- Compatible with the operation interface, saving users debugging and learning time;
- IP65 protection to ensure the stable operation of the machine and the safety of users in harsh environments;
- Self-diagnosis technology to help users analyze and solve problems;
- DN10~DN2000 optional;
- Photovoltaic battery power supply optional.



**03 Intelligent compact ultrasonic  
Liquid level transmitter MP-C**

Suitable for continuous non-contact level measurement in free space

- Intelligent algorithm, not afraid of liquid level disturbance, adapt to complex working conditions;
- Intelligent diagnosis, 2-inch backlit large screen, convenient key system, HD interactive;
- Intelligent temperature compensation, reducing temperature interference, accurate measurement in summer and winter.



**04 Remote type Ultrasonic liquid  
level transmitter SUP-ULS-B**

Provides accurate and reliable liquid level measurement in the water industry

- Touch button + menu interface, simple and easy to use;
- Designed for extreme working conditions, easily deal with corrosive gases;
- Integrated self-diagnosis function to make maintenance easier;
- Multi-working condition algorithm selection, stronger field adaptability;
- Precise control, 2 seconds response;
- Automatic temperature compensation, higher measurement accuracy.



**05 Sludge concentration  
electrode SUP-PSS-9011**

Suitable for raw water turbidity measurement in waterworks

- LED light source detection technology, more stable, more durable and lower power consumption than traditional tungsten lamps;
- Self-cleaning device, reducing sensor maintenance;
- Measuring range: 0.1-20000mg/L; 0.5-45000mg/L; 0.1-120000mg/L.



Use with the liquid analysis controller SUP-DC2000



**06 For measuring turbidity  
Turbidity electrode SUP-PTU-8011**

Measures the turbidity of sedimentation tank effluent

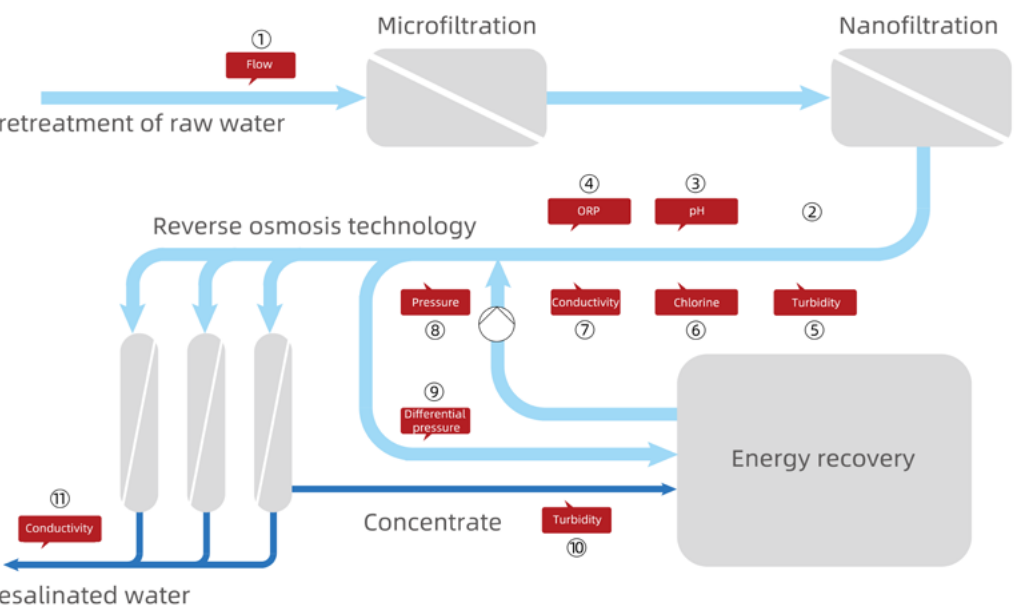
- Accurate and reliable measurement results can be obtained within the value range of 0.01-4000NTU;
- LED light source detection technology, more stable and durable than traditional tungsten lamps, lower power consumption;
- Self-cleaning device, reducing sensor maintenance.



Use with the liquid analysis controller SUP-DC2000



# Membrane Filtration and Reverse Osmosis



**01 With high accuracy and repeatability Turbine flowmeter LWGY-SUP**  
Measurement of volume flow of low viscosity liquids in closed pipes

- Upgraded SMART converter, 11 major international units can be switched with one key, convenient and reliable;
- Imported measuring chip with high accuracy and low pressure loss;
- Compatible with multiple media, accurate flow control;
- Precision machining, impact resistance, stability and high efficiency.



**02 Multi-parameter water quality online analyzer MDX500**  
Applied to drinking water pipe network, secondary water supply etc.

- Simultaneously detect multiple parameters such as turbidity, residual chlorine/chlorine dioxide, pH, temperature, conductivity, ORP, dissolved oxygen;
- Realize long-term stable and high-precision measurement within the turbidity range of < 1NTU;
- Equipped with temperature control heating antifreeze module, it can run outdoors all year round in cold areas.



**03 For pH measurement Plastic electrode SUP-PH-7004**  
Suitable for continuous monitoring of solution pH in the water industry

- Accurate and reliable measurement results in the 0-14pH range;
- High-quality anti-interference lead wire, which can realize long-distance transmission of 60 meters;
- High-performance PPS shell material, temperature-resistant, corrosion-resistant, Extended sensor life.



For use with the easy-to-operate pH controller SUP-PH (CCEP version)



**04 For measuring ORP Digital electrode SUP-ORP-8001**  
Accurate and reliable level measurement in the filtration process

- Measuring range: ±1000.0mV;
- Ingress Protection: IP68;
- Accuracy: 0.5° C/0.2mV;
- Temperature resistance: 0-60° C.



Use with the liquid analysis controller SUP-DC2000



**05 For low turbidity conditions Turbidimeter SUP-PTU300**  
Meet the turbidity monitoring before filtration, after filtration, precipitation, etc.

- 0-1NTU\0-20NTU\0-100NTU three ranges are optional, ±2%FS accuracy;
- 3rd generation laser light source technology, no external measuring probe required;
- Built-in RS485 modbus communication, centralized monitoring and remote transmission data, realize automatic control;
- Wall-mounted installation, simple and convenient, less manual maintenance.

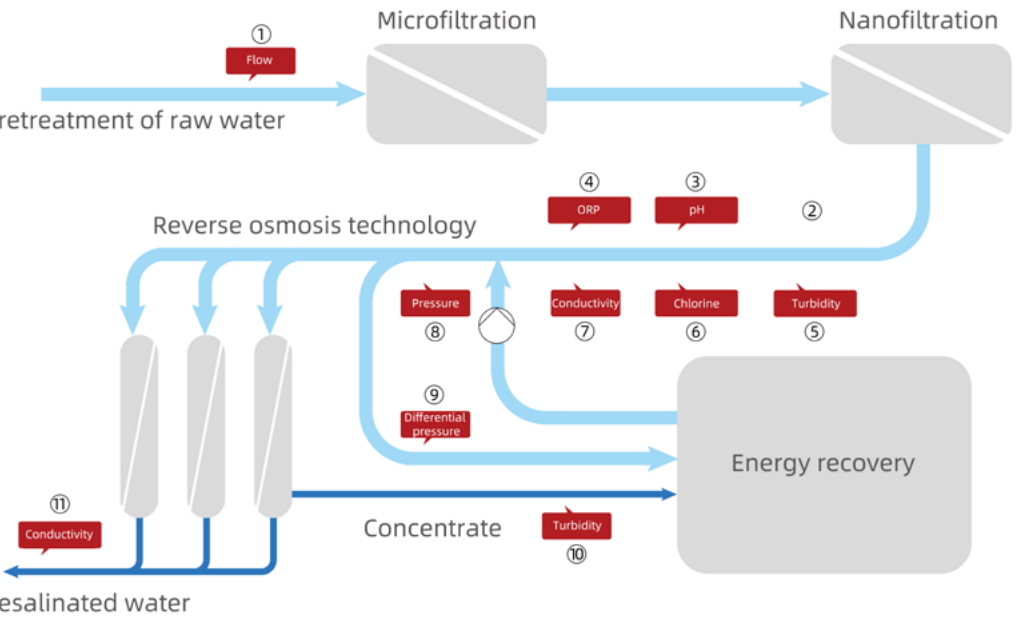


**06 Fast-response Residual chlorine meter SUP-TRC400**  
Used to detect residual chlorine in the membrane treatment processes

- 7-inch color touch screen display, easy to set parameters and read data clearly;
- Microelectronic MEMS technology, compared with traditional sensors, MEMS has the competitive advantages of small size, light weight, low power consumption, and short response time;
- Multiple output modes compatible with various regulators: one (4~20mA) analog output, one 485 output.



# Membrane Filtration and Reverse Osmosis



**07 For Conductivity Measurement  
Stainless Steel Electrode SUP-TDS-7001**  
Meets the conductivity measurement needs of waterworks, etc.

- Cell constant: 0.01/0.1/1.0;
- Protection class: IP68;
- Pressure resistance: 5bar;
- Temperature resistance: 0-50° C;
- 316 high molybdenum corrosion-resistant stainless steel, stable operation under harsh conditions.

Use with conductivity meter SUP-TDS210-B with strong anti-interference ability



**08 High-precision  
Pressure transmitter SUP-PX400**  
Measures water and other media incompatible with 316 stainless steel

- IP65 high protection level, not afraid of harsh sites;
- Double-sealed protective joints effectively isolate water vapor and dust and protect internal circuits;
- LCD high-definition display, data at a glance.



**09 For precise pressure measurement  
Pressure transmitter SUP-2051**  
Measures water and other media incompatible with 316 stainless steel

- 0.075 grade imported chip, high precision, millisecond response speed;
- Double overload protection diaphragm, unidirectional overvoltage up to 1166 times;
- Tight waterproof connector, the protection level can reach IP67.



**10 High-end  
Electromagnetic flowmeter FMC240**  
No need for grounding, used for process measurement such as dosing

- Compatible with the operation interface, saving users debugging and learning time;
- IP65 protection to ensure the stable operation of the machine and the safety of users in harsh environments;
- Self-diagnosis technology to help users analyze and solve problems;
- DN10~DN2000 optional;
- Photovoltaic battery power supply optional.

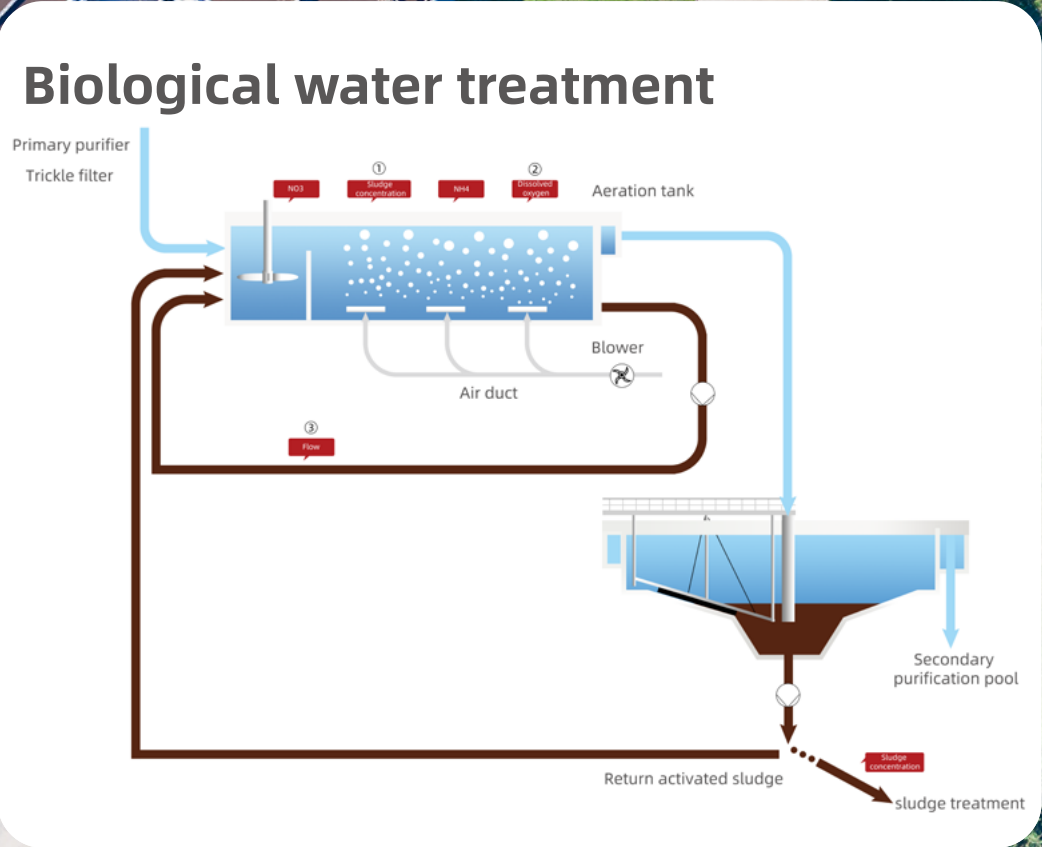
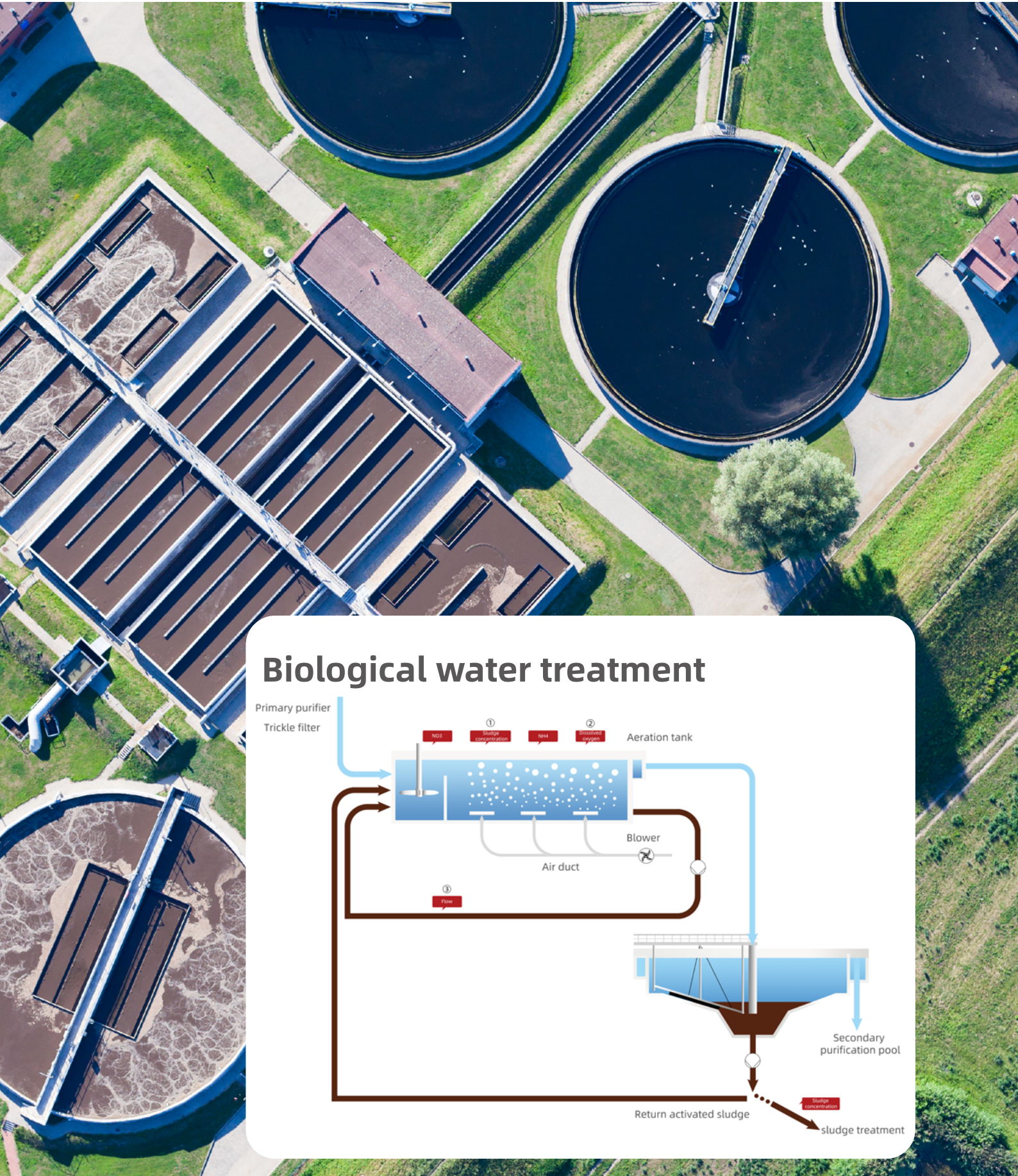


**11 For conductivity measurement  
Electrode SUP-TDS-7003**  
Meets the conductivity measurement needs of water purification treatment

- Measuring range: 0.1μS/cm-70mS/cm;
- Protection class: IP68;
- Pressure resistance: 3bar;
- Temperature resistance: 0-80° C;
- Mounting thread: G3/4 thread.

Use with conductivity meter SUP-TDS210-B with strong anti-interference ability





**01 Sludge concentration electrode SUP-PSS-9011**  
Applied to primary settling tank, secondary settling tank, sludge thickening tank

- LED light source detection technology, more stable, more durable and lower power consumption than traditional tungsten lamps;
- Self-cleaning device, reducing sensor maintenance;
- Measuring range: 0.1-20000mg/L; 0.5-45000mg/L; 0.1-120000mg/L.

Use with the liquid analysis controller SUP-DC2000



**02 For measuring dissolved oxygen Electrode SUP-DO-7019**  
Applied to aeration tanks, aerobic/anaerobic digesters, factory water

- Measuring range: dissolved oxygen: 0-20mg/L or saturation: 0-200%;
- Temperature: 0-50° C;
- Accuracy: dissolved oxygen: ±0.3mg/L; temperature: ±0.2° C;
- Sensor temperature drift: < 1%, year;
- Support RS485, MODBUS protocol.

Use with the versatile water quality controller SUP-DC2000



**03 Thermal gas mass flowmeter SUP-MF**  
Measure Common Steady State Gases

- Accurate measurement at gas flow rates up to 120Nm/s to 0.1Nm/s;
- Constant temperature difference measurement, without temperature and pressure compensation, 1 second response;
- RS485 communication, HART protocol, 4-20mA analog signals, realize automation;
- Easy installation and low maintenance cost.



**04 Remote type Ultrasonic liquid level transmitter SUP-ULS-B**  
Provides accurate and reliable liquid level measurement in the water industry

- Touch button + menu interface, simple and easy to use;
- Designed for extreme working conditions, easily deal with corrosive gases;
- Integrated self-diagnosis function to make maintenance easier;
- Multi-working condition algorithm selection, stronger field adaptability;
- Precise control, 2 seconds response;
- Automatic temperature compensation, higher measurement accuracy.



# Applications



**Information Automation Project of Rural Domestic Water Source River Water Replacement Project in Dingxing County, Baoding City, Hebei Province**

**Selected product:** MDX500 multi-parameter water quality online analyzer

**Customer evaluation:** Rich experience in the industry, highly professional after-sales service. The product runs stably, The data of each parameter conforms to the standard and meets the data requirements of remote detection.



**Laobao Water Plant and Crescent Water Plant in Sanjiang Dong Autonomous County, Xuanwei City, Yunnan Province**

**Selected products:** SUP-ULS-B split type ultrasonic liquid level gauge, MP-C integrated ultrasonic liquid level gauge, SUP-PTU300 flow-through turbidimeter, SUP-PH7004 pH plastic case electrode, SUP DO7019 fluorescence method dissolved oxygen electrode ,SUP-PSS9011 sludge concentration electrode

**Customer evaluation:** The after-sales service responds quickly, the on-site guidance is professional, and the product quality is good.



**Safe drinking water improvement and renovation project for an old community in A Town, Yijinhualuo Banner, Ordos City, Inner Mongolia Autonomous Region**

**Selected product:** MDX500 multi-parameter water quality online analyzer

**Customer Evaluation:** Products and services are trustworthy. The system runs stably, and the accuracy meets the requirements. It can implement remote monitoring of tap water quality-related parameters to ensure the safety of drinking water for the people. The application has achieved remarkable results.



**Chongqing Luoqi Kitchen Sewage Treatment Plant**

**Selected product:** LDG-SUP electromagnetic flowmeter

**Customer evaluation:** High product quality, good service. In the future, we will further strengthen cooperation with Supmea

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