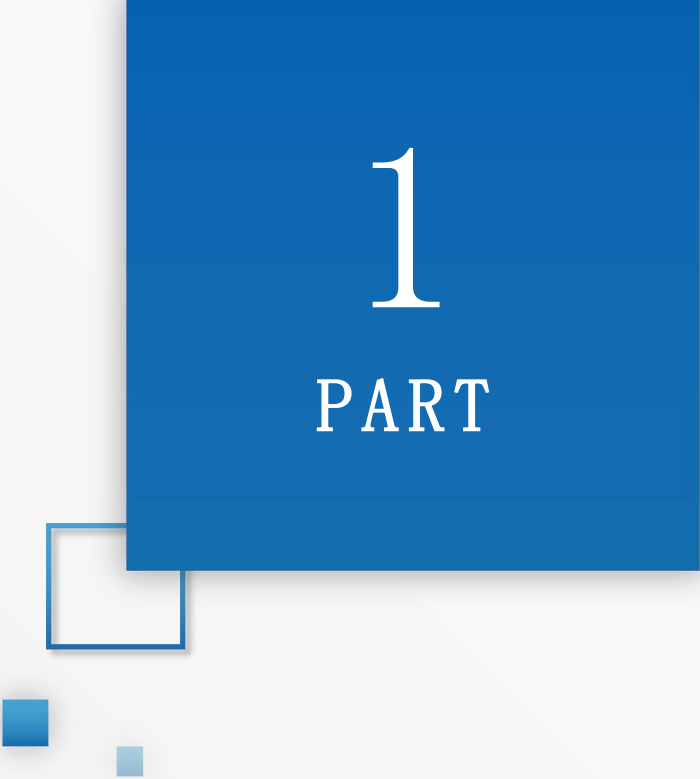




Multi-scenario Application Solutions





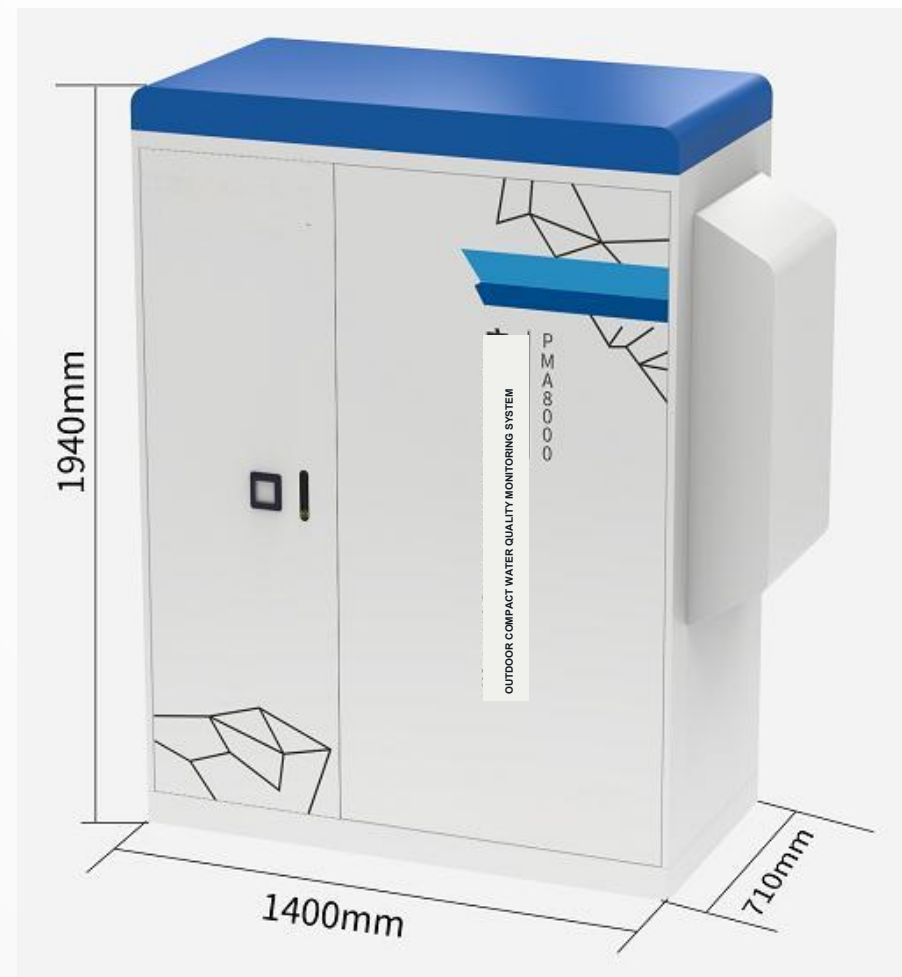
1 PART

PMA8000 Outdoor Compact Automatic Water Quality Monitoring System



PMA8000 Outdoor Compact Automatic Water Quality Monitoring System

- PMA8000: Whole-unit environmental certification, IP55 ingress protection rating;
- The outdoor compact automatic water quality monitoring system features double doors on both front and rear, and side panels designed to be openable for convenient maintenance;
- Communication protocols generally meet standards such as HJ 212, RS232, etc;
- Dimensions: 1585 mm × 900 mm × 2100 mm (including side air conditioner cover and rain shelter);
- Power consumption: ≤2600 W (excluding water pump)



PMA8000 Outdoor Compact Automatic Water Quality Monitoring System



- Clean water (for self-cleaning): DN15 (connected when self-cleaning is required)
- Cable conduit: DN20
- Pressure relief outlet: DN15
- Water inlet: DN20
- Drain outlet: DN25



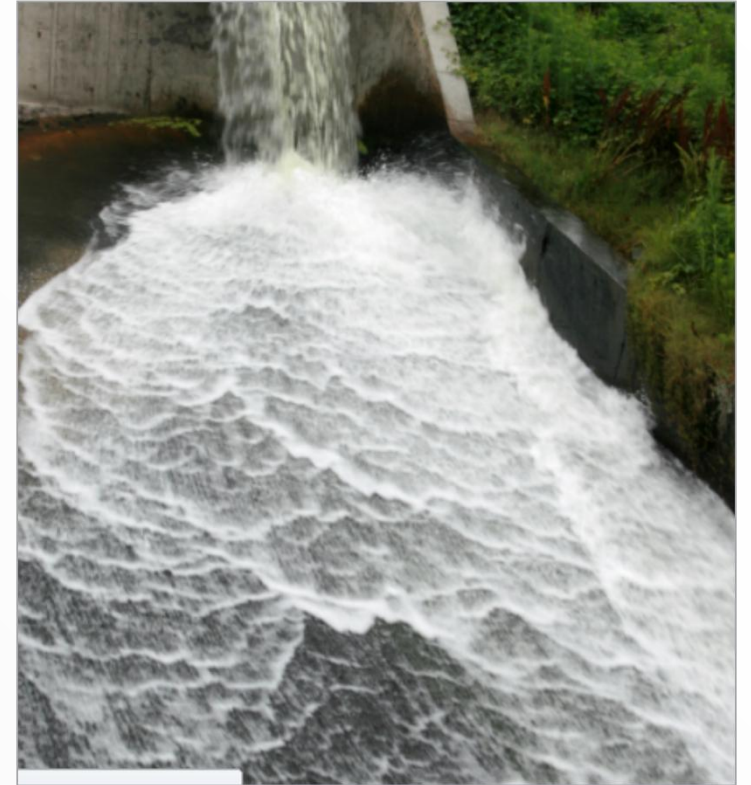
Typical Applications



surface water assessment sections
drinking water sources



Urban River



river outfalls, etc.



Main Equipment

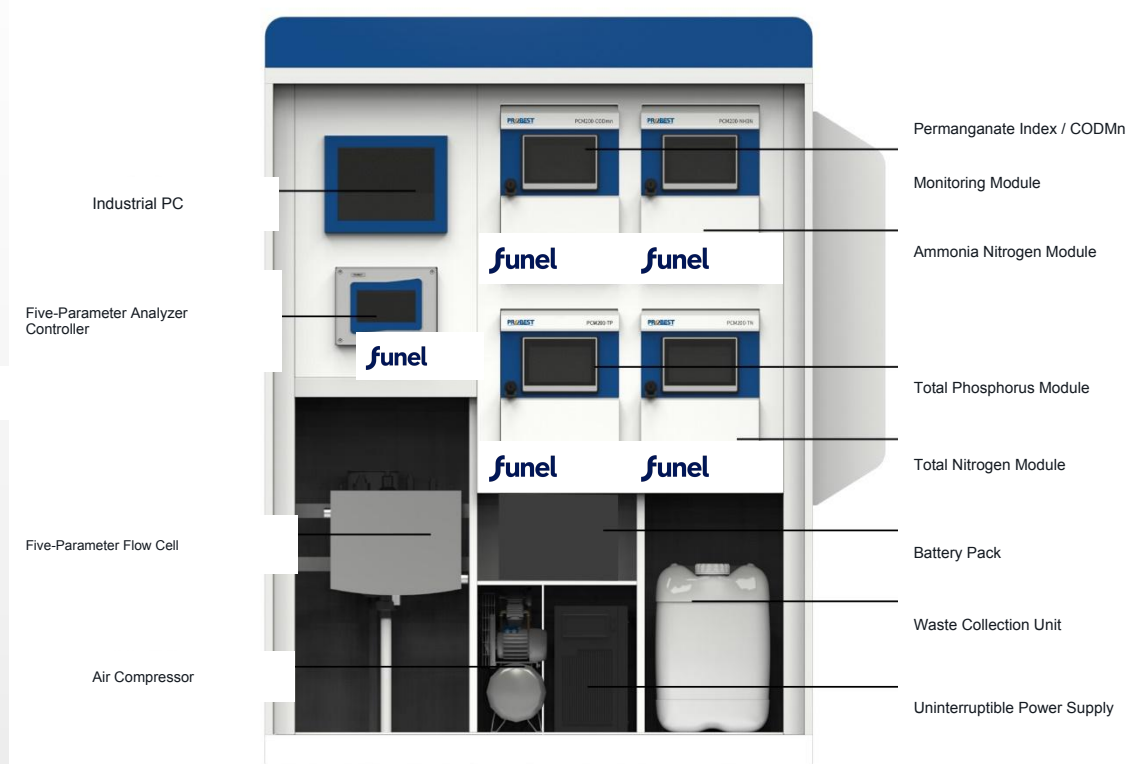
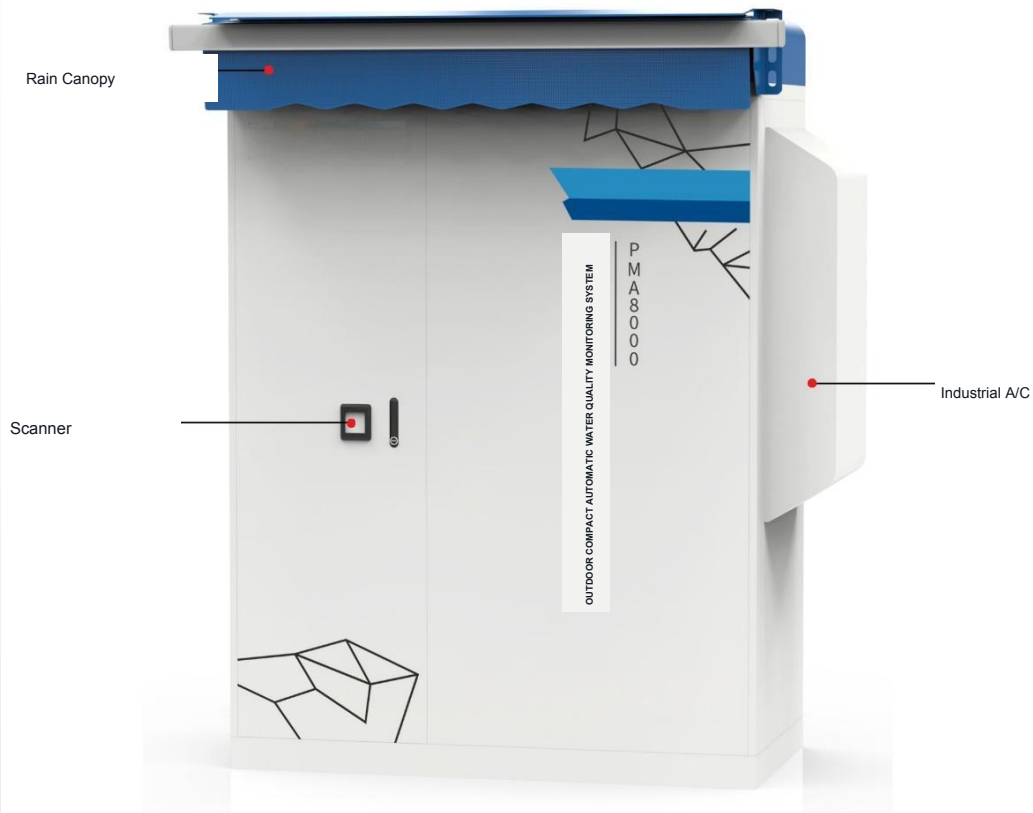


Standard five parameters, expandable to include chlorophyll, blue-green algae, etc.

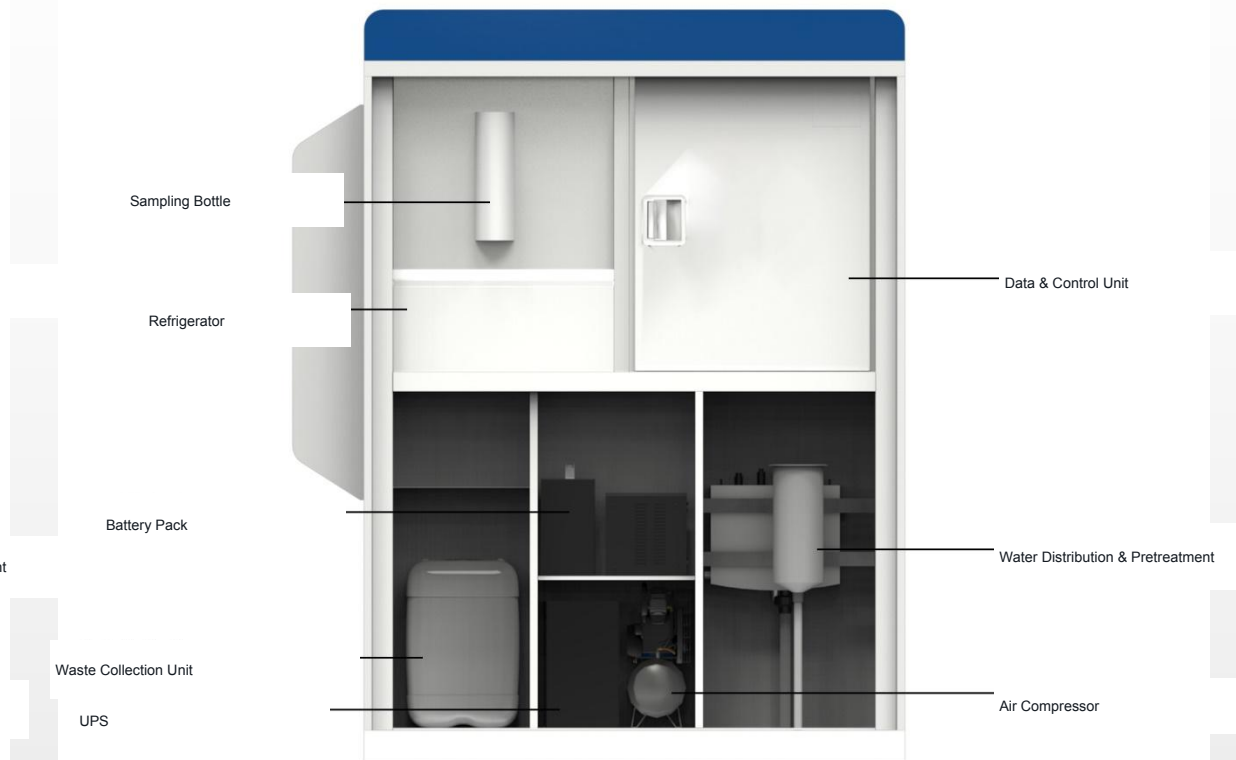
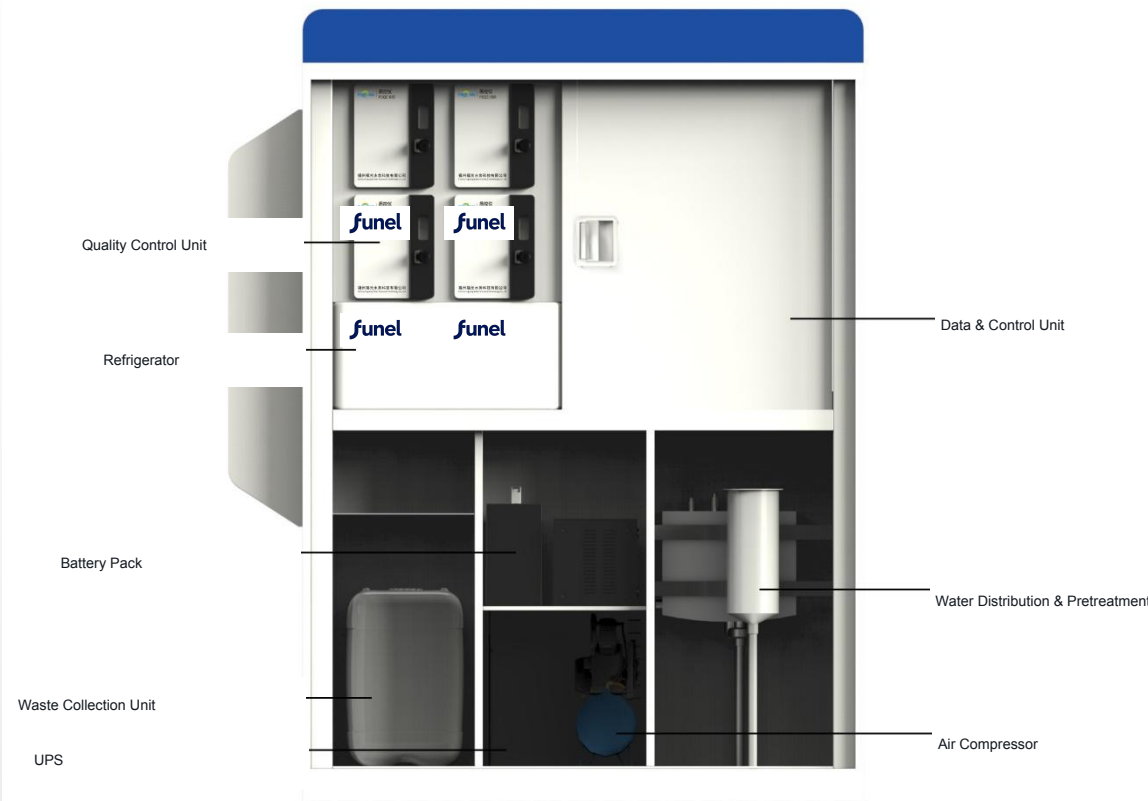




Front View



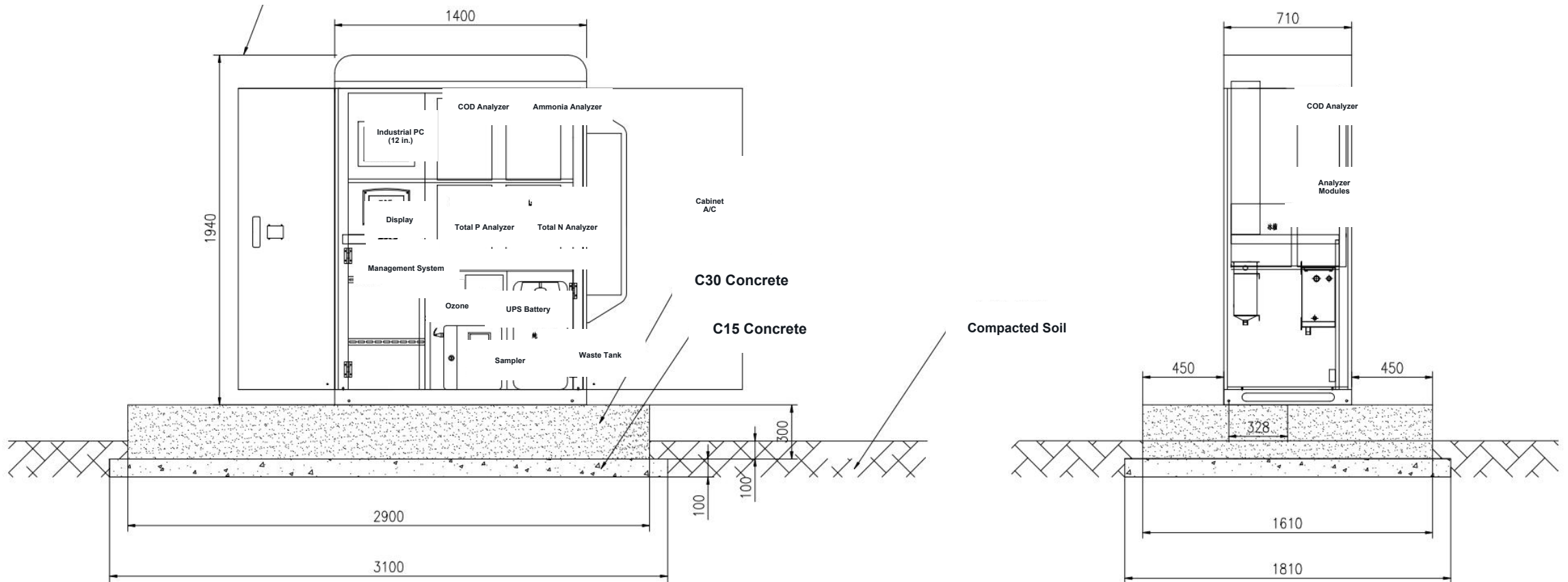
Rear View





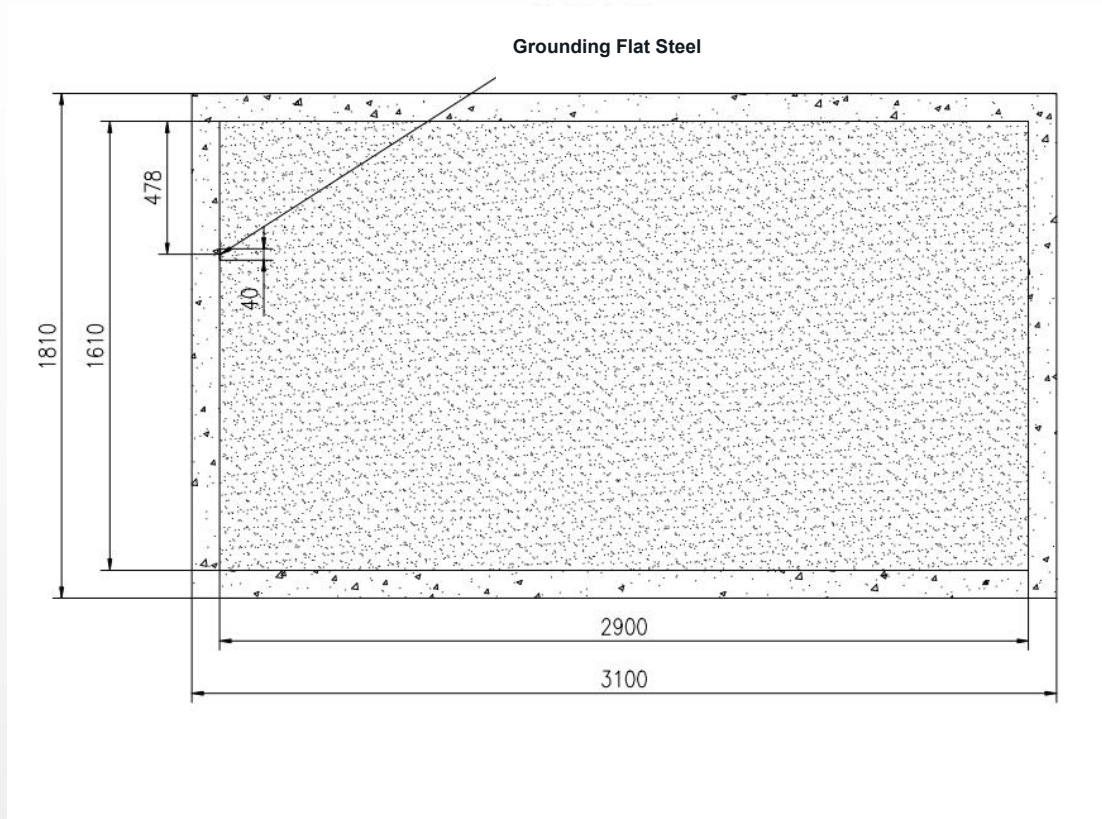
Installation Drawing

Notes: Standard retractable canopy adds 160 mm (overall height 2100 mm).
With optional camera, add 660 mm (overall height 2600 mm).





Installation Drawing



Technical Notes:

- The foundation shall be constructed with C30 concrete with embedded steel reinforcement.
- The cushion layer shall be constructed with C15 concrete.
- If the local soil condition is poor, over-excavate by 400 mm and backfill with 3:7 lime-soil mixture (lime:soil by volume).
- The cabinet base must be connected to the grounding grid. The grounding grid shall have a reserved flat steel grounding conductor for connecting to the cabinet base.

Hoisting





2 PART

PWQ-3000 Multiparameter Water Quality Monitoring System

PWQ3000 Multiparameter Water Quality Monitoring System



Specification	Details
Cabinet Material	FRP (Fiberglass Reinforced Plastic)
Installation Method	Floor-standing
Human-Machine Interface	7-inch touch screen
Ambient Temperature	5–45°C
Ambient Humidity	10–90% RH
Power Supply	220 VAC ±10%, 50 Hz
Power Consumption	Approx. 450 W (including self-priming pump: 420 W)
Communication Interface & Protocol	GPRS (MQTT, HJ212), RS485 (MODBUS-RTU) – optional
Operating Modes	Fixed-point mode, Periodic mode
Dimensions (L×W×H)	750 mm × 595 mm × 1550 mm
Weight	≤160 kg

Inlet piping: DN20, UPVC pipe material.

Drain piping: DN25, UPVC pipe material.



PWQ-3000 Multiparameter Water Quality Monitoring System



The system supports flexible configuration of monitoring parameters, including pH, ORP, transparency, conductivity, turbidity, dissolved oxygen, temperature, ammonia nitrogen, UVCOD, UVNO₃, chlorophyll-a, blue-green algae, and more.



◆ PWQ3000 Multiparameter Water Quality Monitoring System



Inlet piping: DN20, UPVC pipe material.
Drain piping: DN25, UPVC pipe material.

Typical Applications

- **Black-odorous water body monitoring:** dissolved oxygen (DO), ORP, ammonia nitrogen, transparency/turbidity.
- **Urban river monitoring:** pH, dissolved oxygen (DO), conductivity, turbidity, etc.
- **Park landscape lake/wetland monitoring:** pH, dissolved oxygen (DO), conductivity, turbidity, chlorophyll-a, blue-green algae.
- **River rainwater and sewage outfall monitoring:** pH, dissolved oxygen (DO), conductivity, turbidity, UVCOD, ammonia nitrogen.
- **Aquaculture water quality monitoring:** pH, dissolved oxygen (DO), ammonia nitrogen, etc.





Application Cases





Application Cases



3
PART

PB-060-AY Compact Water Quality Monitoring Buoy



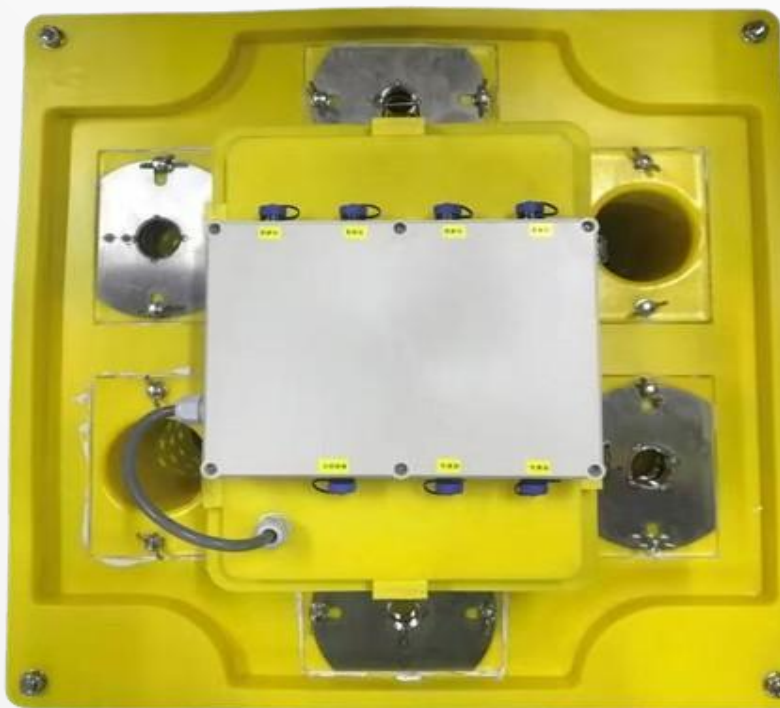
PB-060-AY Compact Water Quality Monitoring Buoy



- Dimensions (W×D×H): 620 × 620 × 700 mm
- Equipment weight: 35 kg (including 42AH battery, electrical enclosure, and corresponding accessories)
- Safe load capacity: 10 kg
- Probe requirements: Accommodates up to 6 probes, each with a diameter ≤ 75 mm and length ≤ 400 mm
- Power supply: Powered by four 18W solar panels, with a total output of 72W
- Warning light: A solar-powered warning light is installed on the top, featuring a built-in photoelectric sensor that automatically activates at night and during overcast/rainy conditions
- Input voltage: DC 12V



PB-060-AY Compact Water Quality Monitoring Buoy



+

					
COD	pH	Ammonia N	Dissolved O2	Residual Cl	Suspended Solids
					
Turbidity	Water Level	Water Temp.	Conductivity	Chlorophyll	

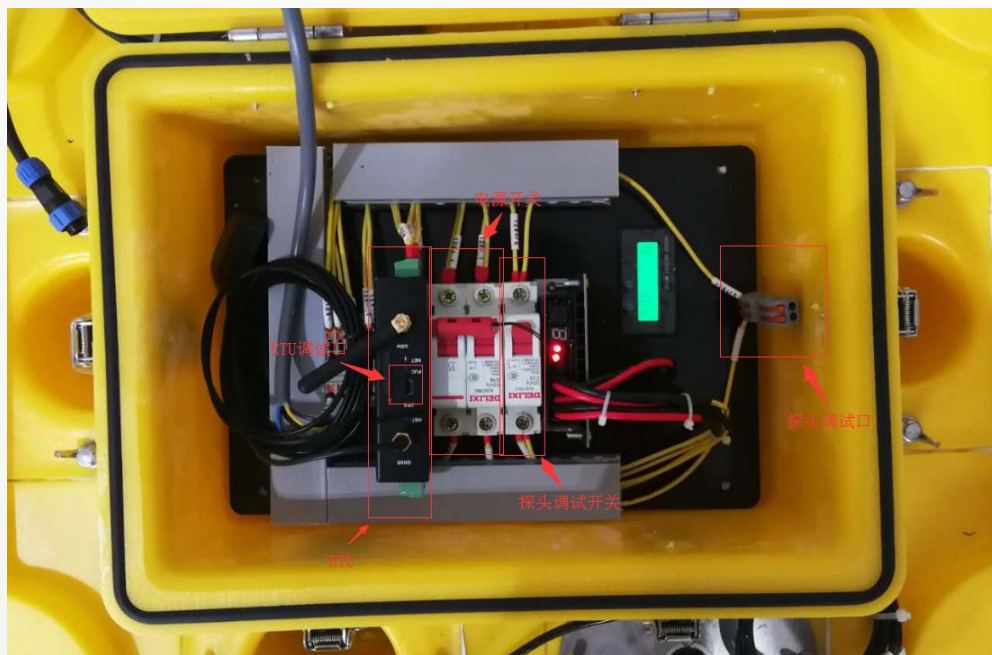


PB-060-AY Compact Water Quality Monitoring Buoy



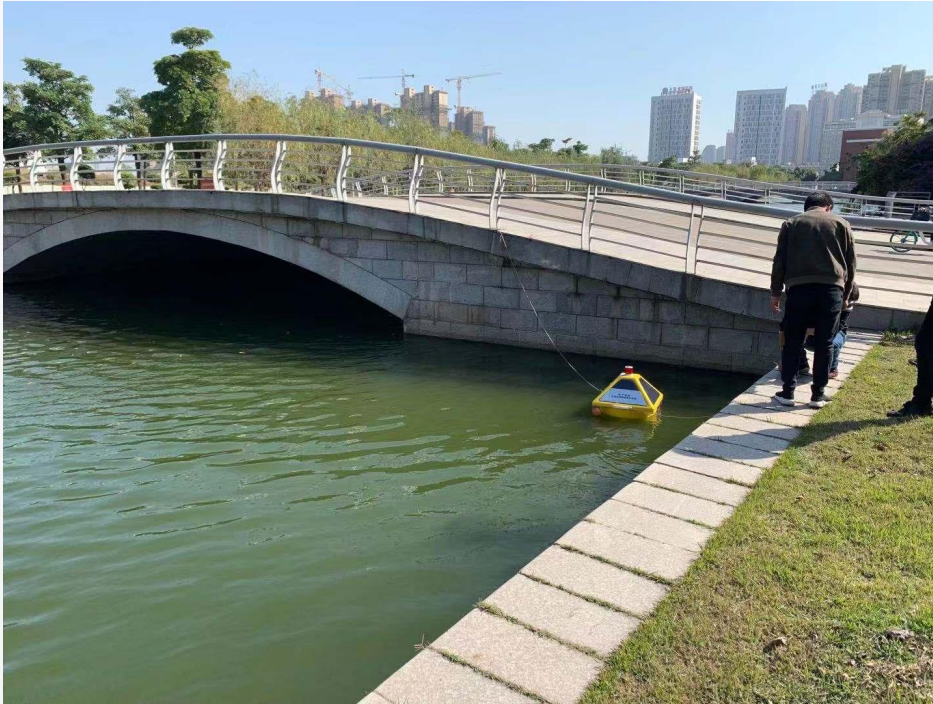


PB-060-AY Compact Water Quality Monitoring Buoy





Application Cases



4
PART

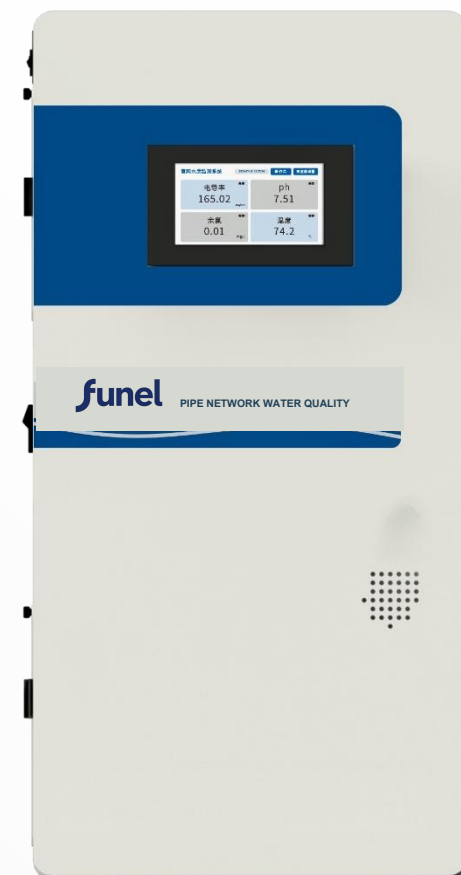
PWQ-2000 Pipe Network Water Quality Monitoring System



PWQ-2000 Pipe Network Water Quality Monitoring System

An integrated system that combines pipeline water quality monitoring sensors, a data processing unit, and an internal water flow piping unit.

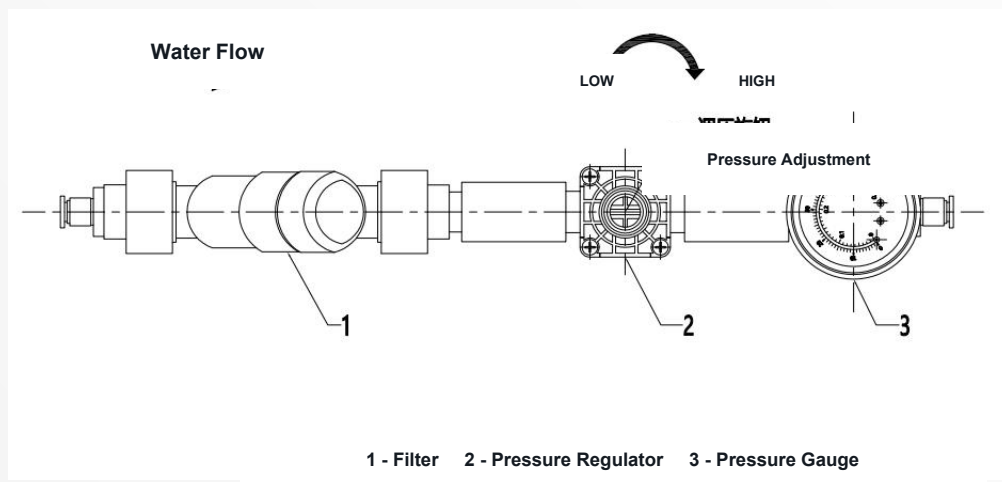
- **High expandability:** Optional parameters include pH, turbidity, residual chlorine, total chlorine, ORP, conductivity, color, and other water quality parameters.



Size:340*450*900mm (L*W*H)

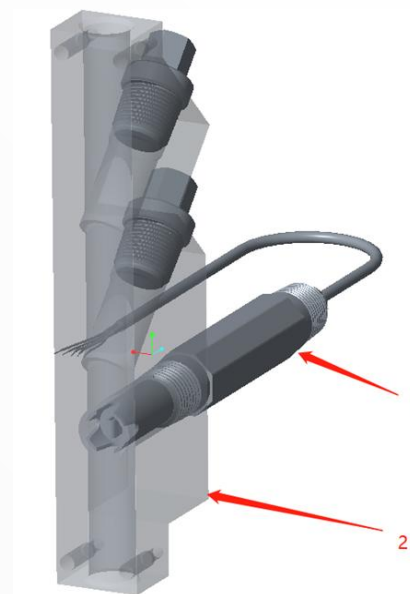
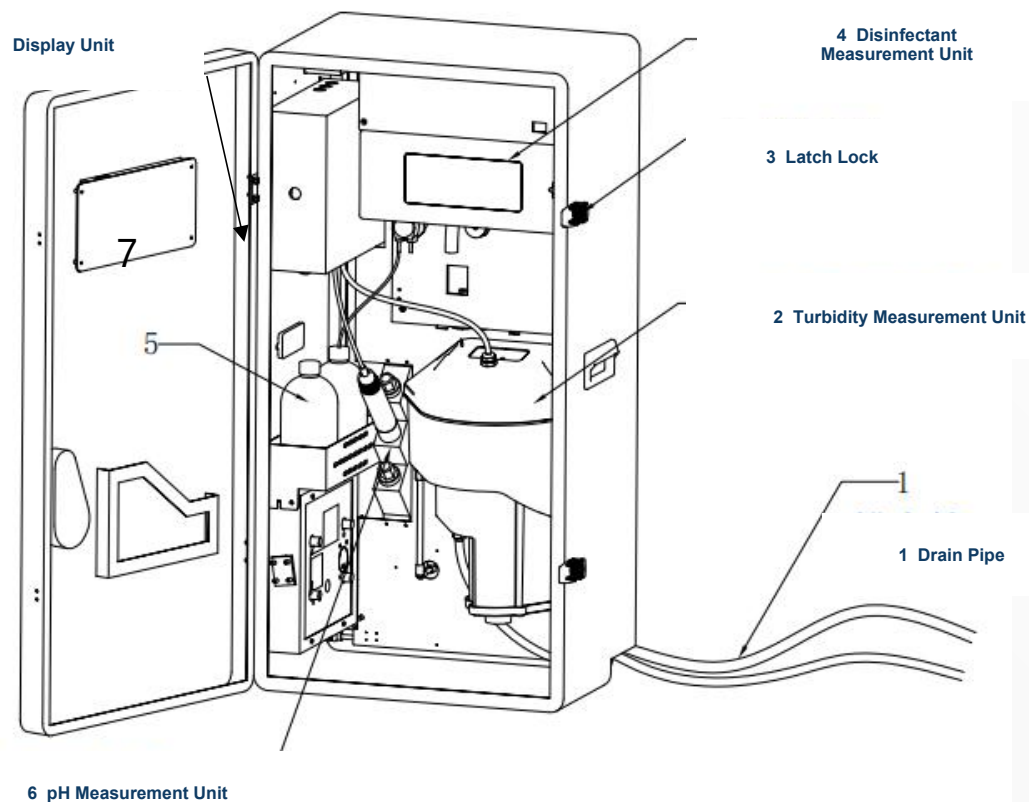


Filter Module





Product Structure



- 1、 The conductivity sensor must be installed only in the bottommost mounting port.
- 2、 Apply PTFE tape to the threads of the conductivity sensor to ensure a watertight seal.



Product Structure

Size: 340*450*900mm (L*W*H)



The system can be custom-integrated with the required water quality sensors.

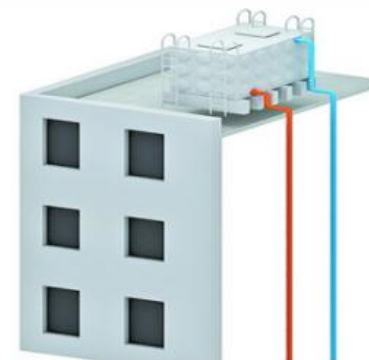


Typical Applications

- Water quality monitoring for drinking water treatment plants and distribution pipe networks.
- Water quality monitoring for secondary water supply systems in residential communities.
- Real-time water quality monitoring for swimming pools, spas, and similar facilities.;
- Drinking water quality monitoring for rural water supply systems.



Drinking Water Plants & Distribution Networks



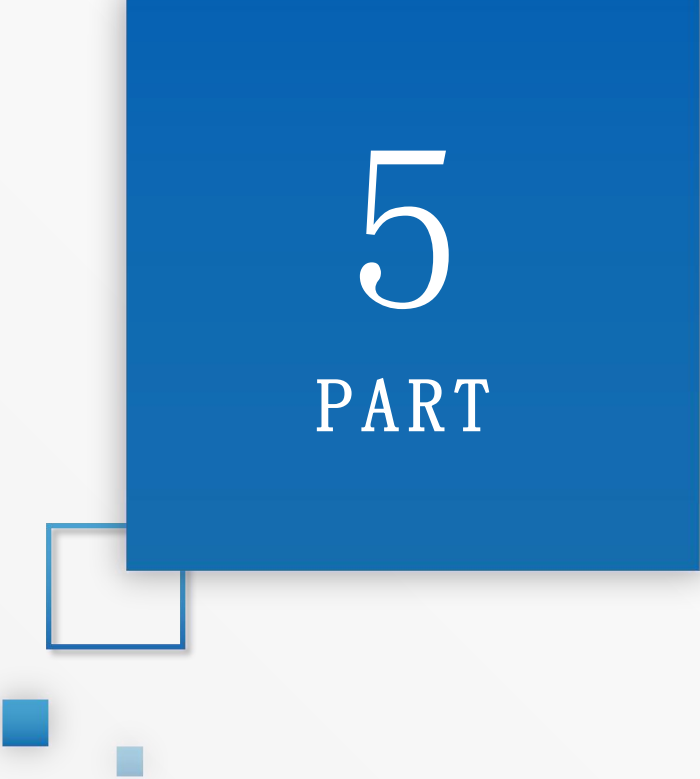
Secondary Water Supply Monitoring



Pools & Spas - Real-Time Monitoring



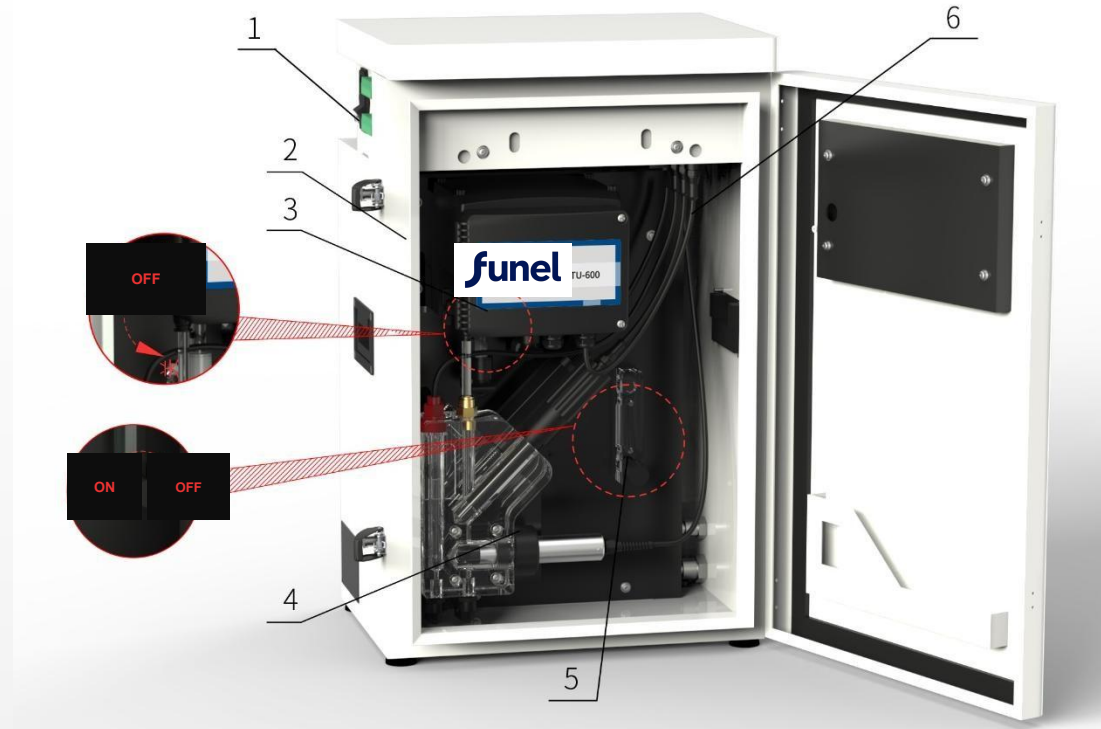
Rural Drinking Water Monitoring



5 PART

PWQ-1000 Pipe Network Water Quality Monitoring System

PWQ-1000 Pipe Network Water Quality Monitoring System



1	Power Connection
2	Latch Lock
3	Low Turbidity
4	Flow Cell
5	Flow Regulating Valve
6	Aviation Connector



Product Features

This product integrates water quality analysis sensors, a data acquisition and processing unit, and an internal water flow piping unit, enabling continuous measurement of temperature, pH, turbidity, and disinfectant parameters.

- 1、 PLTU-600 Turbidity Sensor
- 2、 pH Electrode
- 3、 PDCL-500M Residual Chlorine Sensor
- 4、 Optional: PFDO-500 Dissolved Oxygen Sensor (expandable)

Compact dimensions: 350 mm × 270 mm × 550 mm (L × W × H)
Weight: 21 kg





Product Structure

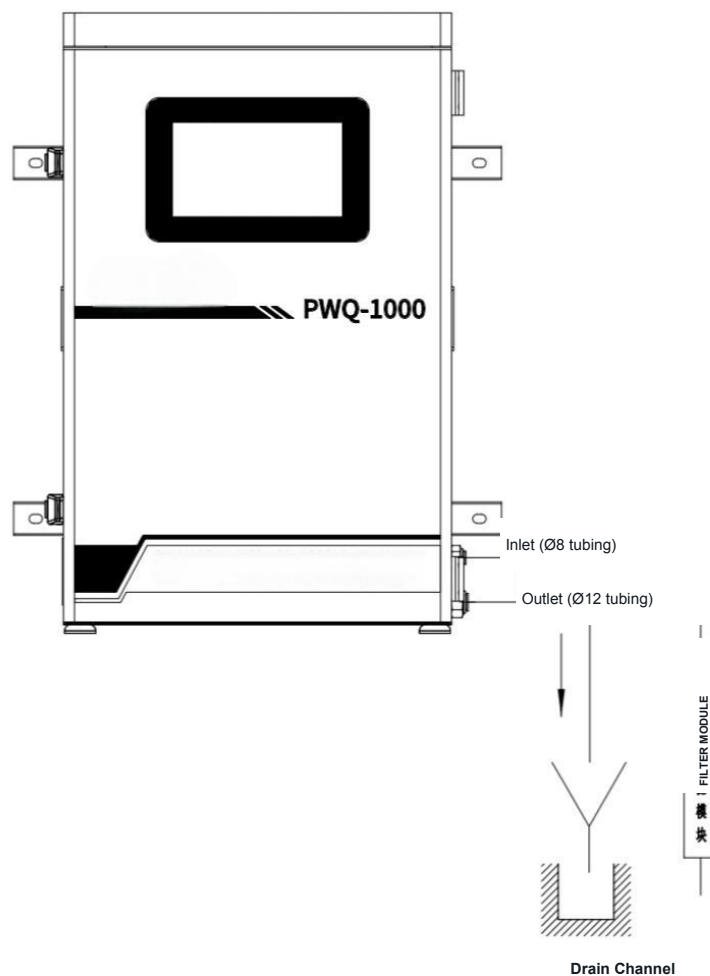
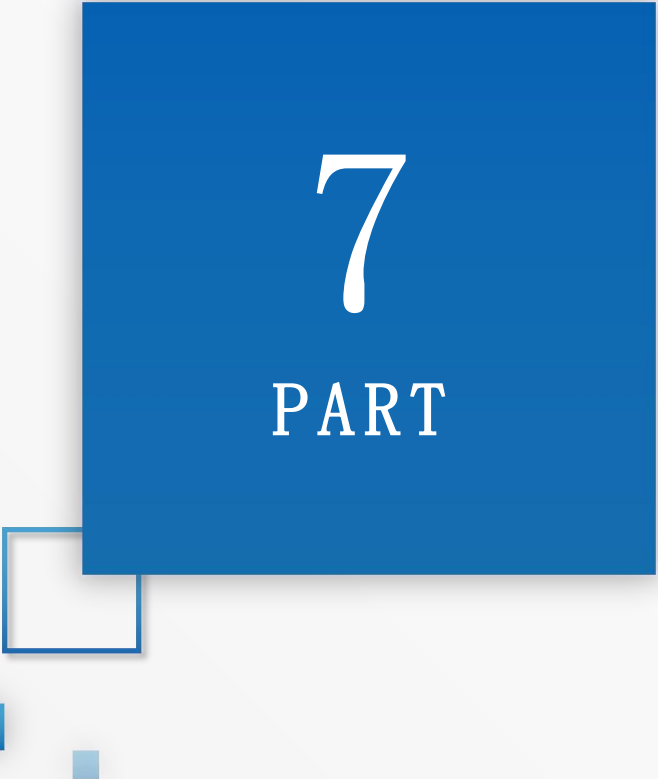


Figure 6. Piping Installation Diagram





7 PART

PLM-800 Waterproof Multi-parameter Measurement and Control Terminal

◆ Features

3 independent MODBUS channels, expandable to up to 6 MODBUS signal inputs. Different channels support sensor inputs with different baud rates, and each channel can independently control the power supply duration.



The enclosure design meets IP68 protection rating, ensuring resistance to water, immersion, and moisture/vapor.

Equipped with a customized antenna, it provides strong signal reception and is suitable for use in locations with poor signal conditions, such as manholes, semi-basements, and similar areas.

The device is equipped with a status indicator light to facilitate on-site assessment of its operating status.

Supports on-site commissioning and parameter configuration, facilitating on-site maintenance.

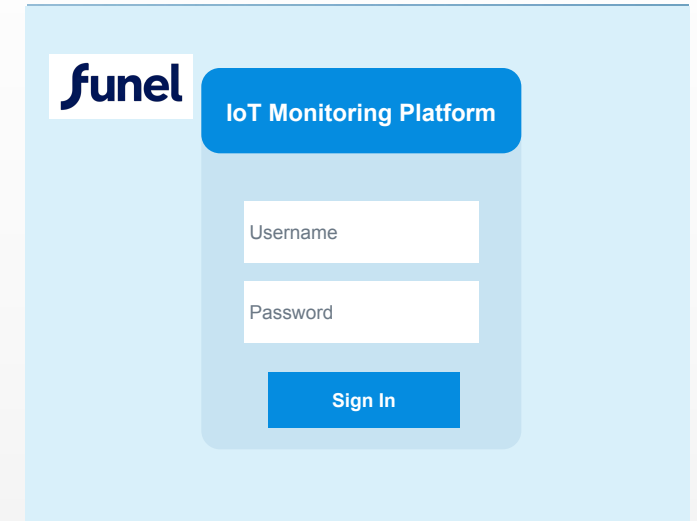
In addition to the built-in battery, the device can also be powered by an external 5–28 VDC power supply, including solar power, external battery packs, conventional mains electricity via a power adapter, and other power sources.

Online Monitoring Solution for Urban Drainage Pipe Networks



**Waterproof Multi-parameter
Measurement and Control
Terminal**

Level: Radar, Hydrostatic, Ultrasonic
Flow: Doppler Flowmeter
Water Quality: pH, Conductivity, SS,
Ammonia Nitrogen, UVCO, DO, etc.



Platform Software
PC Debugging Software for the
Measurement and Control Terminal
PC Configuration Software for
Sensors

PLM-800 Waterproof Multi-parameter Measurement and Control Terminal

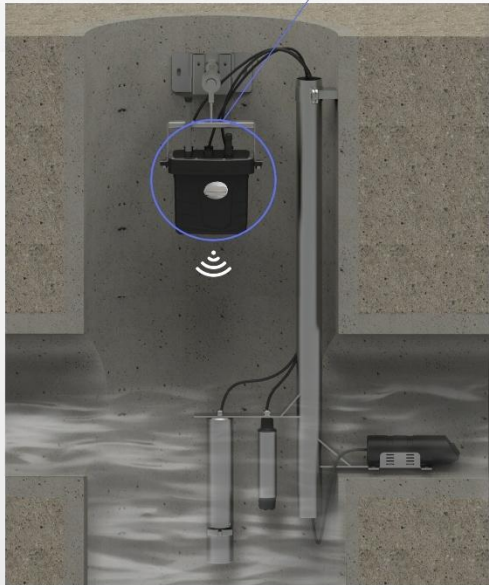


PLM-800 Waterproof Multi-parameter Measurement and Control Terminal
An IP68-rated, low-power main unit that integrates data acquisition and transmission.



It supports a variety of parameters such as pH, conductivity, dissolved oxygen, ammonia nitrogen, COD, turbidity, suspended solids (SS), hydrostatic level, and more.

Built-in radar module enables level monitoring, offering high integration and easy installation.





PLM-800 Waterproof Multi-parameter Measurement and Control Terminal

- Supports parameters including pH, conductivity, dissolved oxygen, ammonia nitrogen, COD, turbidity, SS, hydrostatic level, and **up to 6 MODBUS RS-485 sensors**.
- **Power supply:** Ultra-low power design ensures low energy consumption; an optional battery pack is available based on user requirements.

