1. Product overview

The medical central water purification system includes the centralized medical water system to provide medical purified water, demineralized water and direct drinking water that meet their respective water requirements to each water department or department in the form of centralized preparation and quality supply.

The main water departments of medical pure water and softened water include central supply, laboratory department, endoscopy center, stomatology, configuration center, hemodialysis center and other departments. Direct drinking water from the pipe is mainly supplied to public areas outside the bathroom.

2. System water points, water quantity, water quality (reference data).

2.1 Water Point Statistics Table (Medical Pure Water).

Building	Water points	Qty	Design flow rate (L/H)	Subtotal (L/H)	Note:
Outpatient medical technology Surgical ward Complex	Gene amplification	1	10	10	Inspection water
	Sample preparation	1	10	10	Inspection water
	Reagent preparation	1	20	20	Inspection water
	Analysis area	1	10	10	Inspection water
	Amplification area	1	10	10	Inspection water
	Sample preparation	1	10	10	Inspection water
	Reagent preparation	1	20	20	Inspection water
	Identification	1	10	10	Inspection water
	Biochemical Immunology Hall	14	20	280	Inspection water
	cell chamber	1	10	10	Inspection water
	Immunohistochemistry Laboratory	1	10	10	Inspection water
	FISH	1	10	10	Inspection water
	Embedding, staining,	1	10	10	Inspection water

	and slicing				
	laboratory	1	10	10	Inspection water
	Cross-matched blood	1	10	10	Inspection water
	Multifunctional washing center	1	300	300	Primary cleaning water
	Flexible endoscope cleaning machine	2	300	600	Primary cleaning water
	Automatic cleaning machine	3	500	1500	Primary cleaning water
	Pulsating vacuum sterilizer	3	500	1500	Soften the water
	Multifunctional washing center	3	300	900	Soften the water
	Steam room	3	500	1500	Secondary cleaning water
	Endoscopic cleaning workstation	2	200	400	Primary cleaning water
	Endoscopic cleaning and disinfection machine	2	300	600	Primary cleaning water
	Emergency cleaning and disinfection	1	300	300	Primary cleaning water
	Dental chair	9	20	180	Primary cleaning water
	Laundry room	1	200	200	Primary cleaning water
	Washing room	1	200	200	Primary cleaning water
Internal medicine ward Building	dialysis machine	55	50	2750	Water for dialysis
	Central fluid supply	1	300	300	Water for dialysis

istics Table (Direct Drinking Water).

Building	Number of water points	Design flow rate (L/H)	Subtotal (L/H)	Note:
Outpatient medical technology and surgery ward comprehensive Combined building	8	40	320	Open water machine
	4	20	80	Vertical pipeline machine
	3	20	60	Vertical pipeline machine
	3	20	60	Vertical pipeline machine
	3	20	60	Vertical pipeline machine
	1	40	40	Open water machine
	8	40	320	Open water machine
Internal Medicine Ward Building	2	20	40	Vertical pipeline machine
	2	20	40	Vertical pipeline machine
	7	40	280	Open water machine
Rehabilitation ward complex	1	20	20	Vertical pipeline machine
	16	40	640	Open water machine

drinking water terminal pipeline machine and water boiler are not within the scope of this project

2.3 Water quality standard requirements

1.Cleaning water standards

[Refer to the standard for final rinsing water in (WS 310.1-2016)]

Indicator name	Upper limit value of the indicator
Conductivity (25°C)	≤15us/cm

Remarks: At the same time, it meets the sanitary standards for drinking water (GB5749-2022).

2.Quality indicators of sterilization steam supply water (WS310.1-2016).

Indicator name	Upper limit value of the indicator
Gasification residue	≤10mg/L
Silica, SiO2	≤1mg/L

Iron	≤0.2mg/L
Calcium	≤0.005mg/L
Lead	≤0.05mg/L
Trace amounts of heavy metals in addition to iron, calcium, and lead	≤0.1mg/L
Chloride ions (Cl')	≤2mg/L
Phosphorus pentoxide (P2O5)	≤0.5mg/L
Conductivity (25°C)	≤5us/cm
PH (acidity)	5-7
Appearance	Colorless, clean and no precipitation
Hardness (alkaline soil)	≤0.02mmol/L
Samples should be taken at the inlet of the sterilizer	

3.Water standard for biochemical analysis laboratory (GB/T6682-2008).

Indicator name		Class 1 water
PH range (25°C)		
Conductivity（25℃)	ms/m≤	0.01
	us/cm≤	0.1
Resistivity MΩ（25℃) >		10
oxidizable[in terms of O]mg/L		-
Absorbance (254nm, 1cm path) ≤		≤0.001
Soluble silicon (in terms of silica) content (mgL)		≤0.01
Evaporation residue (mg/L)		-

4. Drinking water quality standard (CJ94-2005)

Item	Upper limit value of the indicator

Color	5degrees
Turbidity (degrees)	0.5NTU
Smell and taste	There is no peculiar smell or smell
Visible to the naked eye	
pH	6.0-8.5
Total hardness (in terms of calcium carbonate)	300mg/L
Iron	0.2mg/L
Manganese	0.05mg/L
Copper	1.0mg/L
Zinc	1.0mg/L
Aluminum	0.2mg/L
Volatile phenols (in phenol)	0.002mg/L
Anionic synthetic detergents	0.20mg/L
Sulfate	100mg/L
Chloride	100mg/L
Soluble total solids	500mg/L
Oxygen consumption (CODMn5 in oxygen)	2.0mg/L
Fluoride	1.0mg/L
Nitrate (in ammonia)	10mg/L
Arsenic（As)	0.01mg/L
Selenium（Se)	0.01mg/L
Mercury（Hg)	0.001mg/L
Cadmium（Cd)	0.003mg/L
Chromium (hexavalent)	0.05mg/L
Lead (Pb)	0.01mg/L
Silver (determined by silver-loaded activated carbon)	0.05mg/L
Chloroform	30μmg/L
Carbon tetrachloride	0.002 mg/L

Total number of bacteria	50cfu/mL
Total coliform bacteria	It should not be detected in every 100mL water sample
Fecal coliform bacteria	It should not be detected in every 100mL water sample

5. Requirements for water standards for hemodialysis and related treatment (YY0572-2015).

Microbial requirements:

The total number of bacteria in dialysis water should not exceed 100CFUs/ml, and the level of intervention should be based on knowledge of systematic microbial dynamics. Typically, the intervention level is 50% of the maximum allowable level.

The endotoxin content in dialysis water should not exceed 0.25EU/ml. Intervention levels must be established, which are usually 50% of the maximum allowable level.

Chemical element requirements:

Table 1 Maximum allowable amounts of toxic chemicals and electrolytes in dialysis water

Contaminants	Maximum permissible concentration mg/L
Contaminants that have been shown to be toxic in hemodialysis	
Aluminum	0.01
Total chlorine	0.1
Copper	0.1
Fluoride	0.2
Lead	0.005
Nitrate (nitrogen)	2
Sulfate	100
Zinc	0.1
Electrolytes in dialysis solution	

Calcium	2(0.05 mmo1/L)
Magnesium	4(0.15 mmo1/L)
potassium	8(0.2 mmo1/L)
Sodium	70(3.0 mmo1/L)
Unless otherwise noted.	

Table 2 Maximum allowable amount of trace elements in dialysis water

Contaminants	Maximum permissible concentration mg/L
Antimony	0.006
Arsenic	0.005
Barium	0.1
beryllium	0.0004
Cadmium	0.001
Chromium	0.014
Mercury	0.0002
Selenium	0.09
Silver	0.005
thallium	0.002

3. Product technical requirements

Tap water is used as raw water. After proper water treatment process, medical pure water, softened water, and direct drinking water that meet the water quality standards of each water department are provided by centralized preparation and quality supply.

The centralized system for medical pure water is designed to operate simultaneously as a backup for each other. These include the primary RO host system for medical water, the secondary RO host system, the ultrapure water system for water production, and the hemodialysis center

3.1 Specific technical parameters and requirements

No.	water point water treatment system	Technical parameter
1	Central water purification system	**1. General technical requirements** 1. Water source Water source: municipal tap water 2. System material and requirements The water production system is made of stainless steel above SS304, and the transportation pipeline is made of stainless steel above SS304, with an internal roughness of less than 0.6μm and a glossy surface treatment. It has corrosion resistance characteristics and meets the requirements of relevant management specifications. 3.Pipeline construction and quality requirements Medical pure water pipelines adopt circular design and construction to eliminate stagnant water, and meet the following requirements: The inner and outer walls of pipes and fittings should be smooth and flat, and the color should be basically the same. The end face of the pipe should be perpendicular to the axis of the pipe. The pipe fittings should be complete, without defects, without deformation, and the mold seam should be closed. The specification size and deviation of pipe fittings should comply with relevant regulations, and the size of pipe fittings and sockets should comply with relevant regulations. The basic properties of the raw materials used in pipes and fittings should meet the requirements of the specification. All valves are made of sanitary grade valves and SS304 stainless steel or above. 4.Concentrated water utilization The reverse osmosis concentrated water in the pure water system needs to be partially recycled in the system to improve the utilization rate of tap water. 5.Microbial prevention and control requirements

		The pure water sterilization method combined with supercurrent ultraviolet sterilization + ozone sterilization is adopted. The sterile pure water tank is equipped with a spray device to reduce the disinfection time and the amount of disinfectant water. The flow rate of pure water return water is not less than 1.2m/s to prevent microorganisms from breeding microorganisms if the flow rate is too low. ▲6.Water supply safety requirements The pure water system has the function of automatic monitoring and alarm of water leakage, with extremely high sensitivity, when water leakage occurs, the system automatically enters the protection state,The backup water pump is automatically switched at regular intervals and automatically switches when it fails to ensure uninterrupted water supply. The control system has dual control functions of fully automatic and manual, and is designed for redundancy. The system has the function of unqualified water discharge to prevent unqualified water from entering the sterile water tank and ensure water safety. 7.Instrumentation The online monitoring instrument has the functions of on-site monitoring and digital remote transmission, and can read parameters on the touch screen in real time. ▲8.Water production and energy saving requirements The reverse osmosis system should have the function of stabilizing water production, and the reverse osmosis water yield should not decrease in the low temperature environment in winter. Reverse osmosis systems should adopt energy-saving technologies to reduce energy consumption and make efficient use of energy. 9.Control system performance requirements Dual control mode, automatic and manual coexistence, one-click switching. It has the functions of automatic fault detection, alarm, and suggestion of handling measures.

		Start-up self-test, operation data analysis and automatic adjustment of operating parameters. The functions of online monitoring, storage, display, report, and download of key operating data shall be stored for no less than 1 year. The water tank and pump have the function of liquid level chain control. High and low voltage, water cut-off, power outage, phase loss protection function. Water pump timing automatic switching, fault automatic switching function. Low level transfer pump delay shutdown function. Design service life: Except for seals, consumables and other consumables, all components have a continuous normal service life of more than 8 years. 10.It has remote monitoring function, which can be connected to the central monitoring system of the hospital, and the cloud platform monitoring can understand the operation status of the system in real time on the manufacturer and user side, and provide preventive services. 11.The recording function of fault information will record the operation and alarm of each component of the system, which is convenient for operators to query, such as low water tank level, pressure protection, motor failure, water quality alarm information, etc 2. Technical parameter requirements (1)Laboratory and pathology departments pure water ▲Pure water quality: The water quality meets the first-level water standard of "Specifications and Test Methods for Water Use in Analytical Laboratories" (GB/T6682-2008). Conductivity (25°C) ≤0.01ms/m, soluble silicon ≤0.01mg/L. (2)Configuration center ▲Pure water quality: The water quality meets the standards of "Hospital Disinfection Supply Center - Part I Management Specification (WS310.1-2016)". Conductivity (25°C) ≤15μs/cm, total number of bacteria

		(CFU/100ml) ≤10. (3)Stomatology pure water ▲Pure water quality: The water quality complies with the "Hospital Disinfection Supply Center Part 1: Management Specifications" (WS310.1-2016). Conductivity (25°C) ≤15μs/cm, total number of bacteria (CFU/100ml) ≤10, PH value 5-7. (4)Endoscopic pure water ▲Pure water quality: The water quality meets the standards of "Hospital Disinfection Supply Center Part 1: Management Code" (WS310.1-2016) and "Hospital Disinfection Supply Center Part 2: Technical Operation Code for Cleaning, Disinfection and Sterilization" (WS310.2-2016). Conductivity (25°C) ≤10μs/cm, total number of bacteria (CFU/100ml) ≤10, PH value 5-7. (5)Supply pure water from the center ▲Pure water quality: The water quality meets the standards of "Hospital Disinfection Supply Center Part 1: Management Code" (WS310.1-2016) and "Hospital Disinfection Supply Center Part 2: Technical Operation Code for Cleaning, Disinfection and Sterilization" (WS310.2-2016). Conductivity (25°C) ≤15μs/cm. **3. Functional requirements for various components** (1) Original water tank There is a cleaning manhole at the top of the original water tank, and there must be a sewage outlet in the middle of the bottom, equipped with valves and hydrostatic pressure liquid level sensors, automatic water replenishment, and high, medium and low liquid level heights can be set. (2) Automatic quartz sand filter It has a blanking port and manhole, with automatic operation, forward punching, and backflush functions, and the filter is filled with refined quartz sand and anthracite filter material, and when it is working normally, the effluent SDI≤5.

		(3) Automatic activated carbon filter It has a discharge port and manhole, with automatic operation, forward punching, and backflush functions, and the filter is filled with high-quality shell carbon filter material, which has sufficient mechanical strength to ensure that it is basically not broken during the backflushing process, and when working normally, the residual chlorine in the effluent ≤ 0.1PPM. (4) Fully automatic softener It has a blanking port and manhole, with automatic operation, forward punching, recoil and regeneration functions, and the filter is filled with softening special resin, which has sufficient mechanical strength to ensure that it is basically not broken during the backflushing process, and the hardness of the outlet water is ≤ 0.03mmol/L when working normally. (5) Precision filter The tank material is SS304, and the filter element is a PP meltblown filter element with a skeleton. (6) High pressure pump The high-pressure pump meets the design flow requirements of the system, and the inlet and outlet are equipped with pressure protection devices. (7) Reverse osmosis system All membrane shells are made of SS304 sanitary membrane shell, no dead cavity, stainless steel end caps, and all water inlets and outlets are connected by sanitary plug-in installation, eliminating the use of threaded connections. It adopts SS304 integrated stainless steel frame, which is strong and durable. Desalination rate: >99.3%. The reverse osmosis system is equipped with local instruments that directly display important parameters such as pressure, flow, and water

		quality of the operating conditions of the device. The unqualified water produced by reverse osmosis is discharged through this valve and does not enter the next process. Reverse osmosis Each pressure membrane tube is equipped with a sampling port on the water production side, which is convenient for sampling. The design flux of reverse osmosis membrane elements should not be greater than the maximum flux value specified in the "Guidelines" of each membrane element manufacturer, and a reasonable arrangement and combination should be selected to ensure the normal operation of membrane elements and a reasonable cleaning cycle. Each section of the reverse osmosis device is equipped with sufficient interfaces and valves on the main pipe of water supply and concentrated water inlet and outlet, so that it can be connected to the inlet and outlet pipes of the cleaning solution during cleaning. Reverse osmosis concentrated water drainage is equipped with flow control valves to control the recovery rate of water. The reverse osmosis membrane assembly is mounted on a one-piece rack with all pipes and joints, including all brackets, fasteners, clamps and other accessories. The design of the reverse osmosis combination frame meets the requirements of seismic intensity and the expansion requirements of components. The measurement and configuration points and number of reverse osmosis systems meet the needs of safe, stable and reliable operation of the system. The instrument is arranged centrally on the dashboard. (8) Sterile pure water tank The top and bottom of the sterile pure water tank should be made of oval stamping heads, and the end caps should not be processed by plate

		processing and welding of molding heads, and the end caps should be quickly sealed with earrings, and each set of pure water tanks must have Φ400 and above cleaning manholes, and the air filter membrane accuracy is 0.22μm. The sterile pure water tank adopts a hydrostatic level sensor, which can set the height of high, medium and low liquid level. The inside and outside of the sterile pure water tank need to be polished. (9) EDI device The EDI device has the function of stabilizing the quality of the produced water. Modular integrated design, with water shortage protection, power failure protection, high and low voltage protection, online monitoring and alarm functions of produced water quality. Supporting equipment: pressure, flow, water quality online monitoring instrumentation, EDI special power supply with digital display current, voltage, with alarm function. (10) Inverter water supply unit The inverter water supply unit adopts constant pressure water supply mode, the operating pressure can be set, and the water supply unit adopts an integrated design with overcurrent ultraviolet lamp and terminal microfiltration to reduce the footprint and facilitate maintenance and management. The inverter water supply unit can set different pressure values according to different time periods, which is convenient for different pressures during peak and trough water consumption. (11) Overcurrent ultraviolet lamp The wavelength is stable at 254nm, the material is SS304, and it has the functions of time accumulation and failure alarm.

		(12) Microporous filter The filter material is SS304, and the absolute pore size of the filter element is 0.22μm. (13) Control system The whole system realizes open data standard communication interfaces: provide communication interfaces such as remote monitoring, data communication interfaces at least support OPC specifications, remote monitoring interfaces must provide support for TCP/IP protocols, support browser-based access, and provide free and open protocols, can be connected with the central monitoring system of the hospital and can display various monitoring parameters and dynamic processes of the whole process on a special large screen, and can be remotely monitored through the network and manufacturers. The control system has three or more levels of access: The first level is the operator permission, under which the system can operate normally, manually control to view and reset the processed alarm information by entering the password, but the alarm parameters cannot be set; The second level is the equipment maintenance authority, under which the operator's actions can be reviewed, reports and counters can be viewed and reset by entering the password; The third level is the administrator permission, under which you can view and reset all system operation parameters and alarm parameters by entering the password; The high-privilege access level can perform all operations at the low-privilege access level, and all access levels can perform manual operation on automatically running valves and pumps. Disinfection devices can be manually operated in the order of the process flow, and can be switched according to the touch screen menu for emergency water supply; All alarm information is displayed in a separate

		menu, and listed one by one by date, time, alarm information, suggested solutions, etc., and the alarm information storage time is not less than 1 year.
2	Blood purification water treatment system	Scope of application: The equipment is suitable for the preparation of multi-bed hemodialysis water in the hemodialysis center. ★Provide medical device registration certificate; ▲The quality of the produced water meets the standards of the water standard for hemodialysis and related treatment (YY0572-2015). Endotoxin < 0.03EU/ml, colony count < 10CFU/ml 4. The equipment uses GE or Dow reverse osmosis membrane; 5. With independent thermal disinfection system, non-contact heating method, the temperature requirement of the return water end of the hot water supply pipeline is ≥ 85°C; 6.The system is made of stainless steel of SS304 and above, and the conveying pipeline is made of stainless steel of sanitary grade SS304 or above, with an internal roughness of less than 0.6μm and a bright surface finish. It has corrosion resistance characteristics and meets the requirements of relevant management specifications; 7. The water treatment pipeline system can be automatically flushed and maintained in a standby state; 8. Dual-channel design or fault operation mode, with manual start mode in emergency state; 9. It has the function of program password protection; 10. The reverse osmosis system has the function of anti-leakage online detection; 11. Relevant data shall be kept for ≥ 10 years; 12. It can provide a U-shaped small circulation device without dead cavity for each hemodialysis machine. Configuration standards: 1 set of pretreatment unit, 1 set of reverse osmosis host unit, 1 set of automatic control system, 1 set of hemodialysis circulation pipeline system. 13. The dialysis water system should have an audible and visual alarm function, and the alarm sound signal should not be less than 65dB within 3m 14. The dialysis water system should be equipped with backflow

		protection devices, or technical measures should be taken to prevent pollution of raw water. Sampling ports should be set up at the outlet of the reverse osmosis device and the outlet of the endotoxin filter. 15. The conductivity alarm range of 1μs/cm-199μs/cm can be set, and the sound and light alarm function should be triggered when the alarm limit is exceeded. 16. When the dialysis water system is automatically disinfected, it must be confirmed by the user before exiting the disinfection procedure. 17. The pure water temperature alarm range can be set in the range of 0.9-37.5°C, and the system will automatically activate the safety function when the alarm limit is exceeded. 18. The design of water and electricity separation should be adopted to prevent liquid from entering the electrical line. 19. The electrical requirements of the system meet the requirements of GB9706.1-2007. 20. The material of the part in contact with pure water should meet the requirements of GB/T17219. 21. The recovery rate of the reverse osmosis device should be set within the range of 50%-80%. 22. The operation control panel should be easy for users to operate and use, and the setting of the instrument should be easy to observe.

3	直饮水系统	**Technical requirements:** ▲The quality of the produced water complies with the provisions of the current national standard "Drinking Water Quality Standard for Drinking Water Purification" CJ94-2005. 4. The control system is automatic and manual, fully automatic control during normal operation, can be unattended operation, automatic control in case of fault, manual control can ensure the operation of the equipment and ensure normal water supply. 5.The complete assembly of the pretreatment system, membrane system, and post-treatment system is made of high-quality sanitary stainless steel material. 6. The equipment transportation pipeline part adopts the design of circulation and return pipe network, the water supply pipeline comes out of the pure water tank, and the water supply pipe network returns to the pure water tank to ensure that there is live water flow inside the pipe network at all times, and eliminate the problem of bacterial regeneration and secondary pollution of microorganisms. 7. Inverter water supply system: The system adopts frequency conversion constant pressure water supply design, intelligent control mode, and can automatically adjust the operating power for light/heavy loads to achieve the purpose of energy saving. 8.Purified water storage system: The pure water tank adopts a sterile water tank to eliminate secondary pollution. 9. Consider operating costs and water-saving and power-saving functions. 10. The membrane treatment system and conveying pipeline are designed without dead cavities, and the water produced by the system is live water circulation to avoid secondary pollution of water quality, and the system has the function of automatic flushing and detection when starting. 11. The system monitors the running and dripping phenomenon of equipment online in real time, and can provide timely early warning and automatic handling to prevent safety accidents due to running and dripping. 12. Disinfection method: According to the relevant national design industry specifications, design the disinfection method and frequency of the

		reverse osmosis system to meet the needs of use. 13. Whole system water quality monitoring and safety adjustment system: The intelligent online detection and management system can realize the online detection and analysis of key operation data of the water treatment system, and make automatic adjustment of the operating process (such as pressure, water yield and other parameters) to ensure the safety of water, which can provide an important reference for the management of hospital water treatment equipment. 14. Control system; Fully automatic unattended operation can realize the fully automatic operation of the water treatment system and remote monitoring of various monitoring parameters. Configuration requirements 1. Pretreatment system: This system includes raw water tank, raw water pump, multi-media filter, activated carbon filter, softening filter, etcSecurity filters and other components. A normally closed solenoid valve is installed at the inlet of the original tank, and a set of level sensors is set up in the tank. When the water level in the water tank is low, the solenoid valve is opened, and the raw water enters the original water tank, until the water level of the water tank reaches a high water level, the solenoid valve is closed, and there is an alarm prompt when the water level of the water tank is low for a long time. The pump vibration and noise detection level A, and the motor adopts an energy efficiency level of 2 and above, which meets the GB18613-2020 testing standard. It is filtered by PP cartridge, which has a filtration accuracy of less than 5 μm to filter out fine particles in the pre-treatment. 2. Automatic multi-media filtration system: the filter material filling is made of high-quality quartz sand and anthracite, the top-loading valve head adopts time type, the control mode is automatic backwashing, the material of the overflow pipe is not lower than the food-grade stainless steel material, the suspended impurities, turbidity, suspended matter and colloidal substances in the water are removed, the turbidity and SDI value of the effluent are reduced, and the tank is made of food-grade stainless steelMaterial:

		3. Automatic activated carbon filtration system: coconut shell and fruit shell activated carbon, iodine value > 1000. The filter material filler is in line with food grade, and the material of overflow pipe is not lower than that of food-grade stainless steel. Adopting the method of automated single work, multiple control valves are installed on the top of the tank to control filtration and backwashing, so as to realize the fully automatic operation of the equipment, and the tank is made of food-grade stainless steel 4. Automatic water softener system: filter material: sodium ion positive resin, multi-way control valve is installed on the top of the tank to control, the overflow pipe material is not lower than food-grade stainless steel, normal operation, backwashing, salt absorption, slow washing, quick washing, salt tank water injection to achieve the fully automatic operation of the equipment, the tank is made of food-grade stainless steel 5. Membrane filtration host pressurization system: this system includes high-pressure booster device and related supporting pipe fittings, valves, pressure gauges, etc., the flow rate of the high-pressure water pump must meet the demand of water production, the noise of the pump meets the environmental protection requirements, the vibration and noise detection of the pump are level A, and the motor adopts energy efficiency level 2 and above, which meets the GB18613-2020 testing standard. 6. Membrane filtration host filter system: Reverse osmosis host mainly includes precision filter, inlet water solenoid valve, concentrated water electric valve, reverse osmosis membrane, membrane shell, PC man-machine interface control system, high/low pressure switch, pressure gauge, rotor flow meter, membrane online independent chemical cleaning device. The outlet of the high-pressure water pump is equipped with a high-pressure protection switch, and the inlet is equipped with a low-pressure protection switch, and the head of the high-pressure water pump meets the requirements of the membrane system. The reverse osmosis membrane uses imported brands of ultra-low pressure, energy-saving polyamide composite membranes. 7. Conveying system: This system includes pressurization device, host control, aseptic water tank and other components, and the conveying pump

		unit adopts a frequency conversion pump to ensure that the system runs smoothly, safe and reliable, and the overflow parts are made of stainless steel. Including supporting pipe fittings, valves, supporting instruments and auxiliary materials, etc., the water supply system has the function of detecting water supply pressure. The material of the aseptic water tank is food grade SS304 8. Automatic cleaning system: automatic cleaning host system, supporting medicine pump, filtration device, medicine box, medicine, concentrated water discharge and supporting pipeline system. 9. Sterilization and disinfection system: cavity: stainless steel; The casing adopts quartz casing; Transmittance: 90% or more; Germicidal lamp: high-intensity low-pressure mercury lamp with a wavelength of 2600A°; Lamp running time: The device detects the operation of the lamp through the built-in detection element, and the running time of each lamp is not less than 10,000 hours, and there will be corresponding prompts when the time is exceeded; Real-time clock display: the built-in clock chip is used for time measurement to ensure the accuracy of time, and the time can still work after the equipment is powered off, ensuring the time operation information of 6 months; Ambient temperature display: After powering on, the current ambient temperature can be displayed to detect the temperature of the internal circuit board in real time; Operating status display: The time of fault occurrence can be recorded in real time, accurate to the second, and the cause of the fault. 10. Made of stainless steel; Two-way control system: It can be controlled by linking with the system host program at a timed and fixed point, or it can be configured by the ozone generator itself to set the sterilization time period independently and automatically adjust the ozone dosage. 11. Remote monitoring system: The system includes inverter water supply equipment control software, remote monitoring and monitoring software and supporting equipment, the equipment adopts GPRS or WNCS wireless network monitoring system to realize the storage of operating data and data transmission, and can easily realize remote monitoring, monitoring function and realize remote dynamic monitoring of mobile phone APP terminal

		according to user requirements. 12. Main control cabinet system: the central control system for the safe operation of the whole unit, including the water production process, frequency conversion and constant voltage operation process, online water quality detection of pressure, current, voltage, liquid level frequency, water quality and other data reading, as well as internal intelligent calculation for safe operation. Ensure that the system operates safely as intended. 13. The 24-hour real-time dynamic online detection of water quality information of the equipment can be displayed through the touch screen equipped with the on-site equipment, and integrated and configured with the direct drinking water host system to realize the online real-time dynamic monitoring of equipment water production and the alarm function of exceeding the standard.