

LABO-HUB



Distillation & Purification

RE200-Pro

20L Digital Rotary Evaporator

LCD Digital Rotary Evaporator is mainly used for continuous distillation of a large number of volatile solvents under reduced pressure. It offers an excellent distilling solution in a wide range of applications.

Features

- Large LCD digital display with heating temperature, rotation speed, clockwise and Anti-clockwise, time information
- One-click automatic motor lifting (stroke 180mm), smooth and silent
- Water/oil heating bath with wide temperature range from room temp. to 180°C
- Speed range from 10 to 150rpm, and interval operation in clockwise and anti-clockwise directions for drying process
- Double-layer high-efficiency condensing tube with large condensation area and strong evaporation capacity, ensuring efficient sample recovery
- Patented PTFE double sealing ring with excellent sealing performance
- A switching valve for continuous collection without compromising the system vacuum and solvent distillation



Large LCD display



Overheating protection



Chemical resistance



Double-layer high-efficiency condenser

large condensation area and strong evaporation capacity, ensuring efficient sample recovery.



Switching valve design

A switching valve for continuous collection without compromising the system vacuum and solvent distillation.



Heating bath

- Water&oil bath;
- Enhanced lifetime through exclusive use of corrosion-free stainless-steel;
- The heating bath adopts special heat insulation structure design, so that the surface temperature is far lower than the temperature in the bath, to avoid personnel burns.

Specifications

RE200-Pro

performance	Temperature range	Room temp. ~180°C (both water and oil)
	Control Accuracy	Water: ±1°C Oil: ±3°C
	Rotation Speed	10~150rpm
	Evaporation capacity	Max.4.0L/h (water vapor volume)
	Ultimate vacuum	Less 2.6hpa
function	Temperature control method	Micro processor PID control
	Display	LCD (temperature/speed/clockwise and Anti-clockwise/time)
	Stroke Displacement	Automatic 180mm
constitute	Safety features	Motor over-current protection, Residual Current Device, lifting overload protection, Boil-dry protection, over-temperature protection
	Sample flask	Round flask 20L
	Receiving flask	Round flask 10L with drain valve
Specification	Condenser	Two-section vertical triple serpentine condenser, cooling surface 1.2m ²
	Heating bath size	φ450×240mm
	Takeover caliber	Cooling/suction nozzle outer diameter 16mm, vacuum pump nozzle outer diameter 16mm
Dimension[D×W×H]		1160mm×600mm×1860mm
Power supply		220V/4600W/50/60Hz 380V/6000W/50/60Hz

RE100-Pro Digital Rotary Evaporator



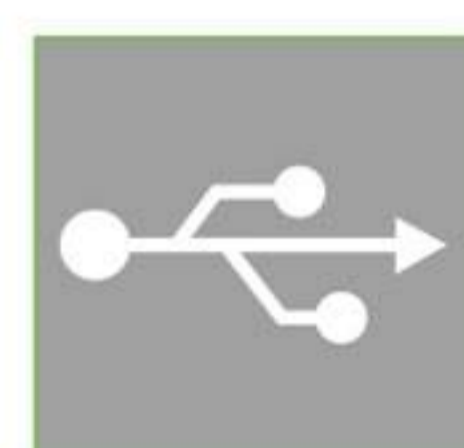
LCD Digital Rotary Evaporator is an essential instrument in chemical laboratories for the efficient and gentle removal of solvents from samples by evaporation. It offers an excellent distilling solution in a wide range of applications.

Features

- Digital display of both rotation speed and heating temperature allows for optimal control of all distillation processes
- Automatic motor lift releases the evaporating flask to a safe position in case of power failure
- 5L heating bath with wide temperature range from room temp. to 180°C, Water/oil heating mode can be changed only through a switch
- Overheating protection temperature at 220°C
- Boil-dry protection, automatically power off if heating without water/oil in the heating bath
- Speed range from 20 to 280rpm, and interval operation in clockwise and anticlockwise directions for drying process
- Patented condenser (cooling surface 1700cm²) with excellent cooling effect
- Ejection mechanism ensures easy removal of evaporating flask
- Patented double spring sealing ring which is made of PTFE provides an excellent sealing performance
- Remote function provides PC control and data transmission
- Optional glassware with explosion proof film available.



Large LCD display



USB connector



Chemical resistance



Overheating protection



Compatible with all range of glassware

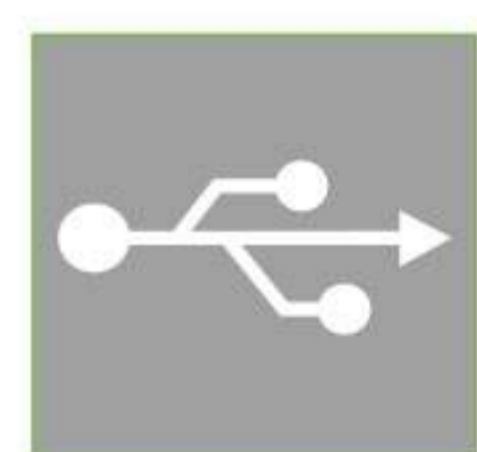
Specifications

	RE100-Pro
Motor Type	Brushless DC motor
Speed Range	20-280rpm
Display	LCD(speed, temperature, time)
Clockwise and Anti-clockwise	Yes
Heating Temperature Range	Room temp. to 180°C
Control Accuracy	water: $\pm 1^{\circ}\text{C}$ oil: $\pm 3^{\circ}\text{C}$
Heating Power	1300W
Stroke Displacement	automatic 150mm
Timer	Yes
Time Setting Range	1-999min
Dimension[D×W×H]	465×457×583mm
Weight	15kg
Permissible Ambient Temperature	5-40°C
Permissible Relative Humidity	80%RH
Protection Class	IP20
USB Interface	Yes
Voltage/Frequency	100-120/200-240V 50/60 Hz
Power	1400 W

LED Digital Rotary Evaporator is a basic chemical laboratory instrument suitable for evaporation, distillation and separation of chemicals. It can be used as a multifunctional system in combination with vacuum pump, vacuum controller and circulating refrigerators to provide excellent distillation solutions in many laboratory applications.

Features

- 5L heating bath with a wide temperature range (room temp. to 180°C), independent temperature control, make it can be used separately. Water/oil heating mode can be changed only through a switch
- Manual lift combined with auxiliary lift for precise positioning of the glassware
- PID control ensures high temperature accuracy at $\pm 1^\circ\text{C}$ (water)
- Overheating protection temperature at 220°C
- Boil-dry protection, automatically power off if heating without water/oil in the heating bath
- Speed range from 20 to 200rpm, timing interval operation in clockwise and anticlockwise directions for drying process
- Patented condenser (cooling surface 1200/1700cm² for selection), double helix condensing tube + center circular arc design to speed up the flow rate of liquid with excellent cooling effect
- Ejection mechanism ensures easy exchange of evaporating flask
- Adjustable immersion angle
- Patented double spring sealing ring which is made of PTFE provides an excellent sealing performance
- Remote function provides PC control and data transmission
- Compatible with the entire range of RE100-Pro glassware
- Optional glassware with explosion proof film available



USB connector



Chemical resistance



Overheating protection



Compatible with all range of glassware

RE100-S

LED Digital Rotary Evaporator



Specifications

	RE100-S
Motor Type	Brushless DC motor
Speed Range	20-200rpm
Display	LED (speed, temperature, time)
Clockwise and Anti-clockwise	Yes
Heating Temperature Range	Room temp. to 180°C
Control Accuracy	water: $\pm 1^\circ\text{C}$ oil: $\pm 3^\circ\text{C}$
Heating Power	1200 W
Stroke Displacement	Manual 110mm + auxiliary 100mm
Interval Time Setting Range	1~999s
Dimension [D×W×H]	Main Unit: 440×320×450mm Heating Bath: 300x300x240mm
Weight	Main Unit: 7kg Heating Bath: 3kg
Permissible Ambient Temperature	5~40°C
Permissible Relative Humidity	80%RH
Protection Class	IP20
USB Interface	Yes
Voltage/Frequency	100~120/200~240V 50/60 Hz
Power	1245 W

Condenser



Vertical

Cat. No.	Glassware type	Volume	Cooling surface
18900165	Evaporating flask(NS29/32) Receiving flask(KS35/20)	1000mL	1700cm ²
18900173	Evaporating flask(NS24/40) Receiving flask(KS35/20)	1000mL	1700cm ²
18900166	(COATED)Evaporatingflask(NS29/32) Receiving flask (KS35/20)	1000mL	1700cm ²
18900174	(COATED)Evaporatingflask(NS24/40) Receiving flask (KS35/20)	1000mL	1700cm ²
18202410	evaporating flask (NS 29/32) Receiving flask (KS 35/20)	1000mL	1200cm ²

Diagonal

Cat. No.	Glassware type	Volume	Cooling surface
18900163	Evaporating flask(NS29/32)Receiving flask(KS35/20)	1000mL	1700cm ²
18900171	Evaporating flask(NS24/40)Receiving flask(KS35/20)	1000mL	1700cm ²
18900164	(COATED)Evaporatingflask(NS29/32) Receiving flask (KS 35/20)	1000mL	1700cm ²
18900172	(COATED)Evaporatingflask(NS24/40) Receiving flask (KS35/20)	1000mL	1700cm ²

Heating Bath

Cat. No.	Description	Volume
18900201	Rotary Evaporator, 220V	5L
18900202	Rotary Evaporator, 110V	5L
6033100210	LED heating bath, 100V-120/200-240V,50/60HZ	5L



Glassware



Evaporating flask

Cat. No.	Volume	Size
18300116	50mL	NS 29/32
18300117	100mL	NS 29/32
18300118	250mL	NS 29/32
18300119	500mL	NS 29/32
18300120	1000mL	NS 29/32
18300121	2000mL	NS 29/32
18300655	50mL	NS24/40
18300201	100mL	NS 24/40
18300202	250mL	NS 24/40
18300203	500mL	NS 24/40
18300204	1000m	NS 24/40
18300205	2000mL	NS 24/40



Foam brake

Cat. No.	Volume	Size
18300093	250ml	NS 29/32
18300207	250ml	NS 24/40



Cat. No.	Volume	Size
18100998	/	NS 29/32
18300206	/	NS 24/40



Receiving flask

Cat. No.	Volume	Size
18300107	100ml	KS 35/20
18300108	250ml	KS 35/20
18300109	500ml	KS 35/20
18300110	1000ml	KS 35/20
18300111	2000ml	KS 35/20



Distilling spider with 5 flasks(without flask)

Cat. No.	Volume	Size
18900194	/	NS 29/32, NS24/29
18900177	/	NS 29/42, NS24/40



Connector

Cat. No.	Volume	Size
18300094	/	NS 29/32, NS24/29
18300095	/	NS 29/32, NS19/26
18300096	/	NS 29/32, NS14/23
18300199	/	NS24/40, NS19/22
18300200	/	NS 24/40, NS14/20
18900193	/	NS 24/40, NS 29/42

The low temperature circulator continuously offers chilled coolant to rotary evaporator and other instrument which working in a low temperature condition. It reduces the consumption of tap water and improve the cooling efficiency. With a compact structure and environment-friendly design, it is an ideal choice for academic, analytical and industrial laboratories.

CCP5-15

CCP5-20

Low Temperature Circulator

Features & Advantages

- PID temperature control with built-in PT1000 sensor provides high accuracy of temperature control
- LED display shows the set or actual temperature clearly
- Short circuit protection, over-current/overload protection, and delayed start protection
- Integrated design of drain outlet and coolant circulation outlet for convenient operation
- German-made pump that is environment-friendly, quiet and durable
- The compressor employs state-of-the-art R290 environment-friendly refrigerant to protect environment and human health



- The part in contact with liquid is made of stainless steel or high-quality corrosion-resistant material;



- User-friendly operating panel configuration;



- A large-volume open reservoir allows easy filling and supports cold trap experiment;



- The caster design for free movement and fixing.





Specifications

	CCP5-15	CCP5-20
Range of temperature control	-15°C-Room temperature	-20°C-Room temperature
Temperature adjustment accuracy	0.1°C	0.1°C
Temperature control accuracy	±1.0°C (-20°C ~0°C typical value) ±0.5°C (0°C ~20°C typical value)	±1.0°C (-20°C ~0°C typical value) ±0.5°C (0°C ~20°C typical value)
Reservoir capacity	5L	5L
Range of temperature adjustment	-30°C~30°C	-30°C~30°C
Temperature display	LED	LED
Type of temperature sensor	PT1000	PT1000
Compressor refrigerant	R290	R290
Circulating pump throughput	12L/min	12L/min
Circulating pump head	6m	6m
In-out cycle interface	12mm pagoda-type interface	12mm pagoda-type interface
RS232 interface	Yes	Yes
Machine power	350W	700W
Maximum overall dimensions	370 x 420 x 730(mm) with caster	440 x 460 x 730(mm) with caster
Weight	46kg	50kg
Power supply	220V 50Hz/60Hz	220V 50Hz/60Hz, 110V 50Hz/60Hz
Operating environment	10~40°C, RH≤80%	10~40°C, RH≤80%

Cooling capacity

CCP5-15	°C	-15	-10	-6.7	-5	0	5	7.2
	W	381	460	520	553	661	786	847
CCP5-20	°C	-20	-13	-10	0	10	14	20
	W	607	668	694	785	883	924	989

Low temperature cooling circulation pump

HLX series of low temperature cooling circulation pumps are especially suitable for all kinds of chemical, biological and physical experiments that need to work under low temperature conditions. They are essential equipment for laboratories of medical and health, food industry, metallurgy industry, chemical industry and scientific research institutes of colleges and universities.

Product features

- Imported compressor proportional refrigeration technology and PID technology, refrigeration system life is long, more energy saving;
- Built-in pressure suction pump, large flow, long head, smooth water flow can withstand 80~300°C temperature for a long time;
- High temperature direct drop technology (CIT technology), which can directly cool down even at high temperature;
- Pump head support short time idle, prevent operation error, can test the equipment;
- Equipped with drain outlet, can prevent the occurrence of accidents;
- Resistant to metal and nonmetal hard impurities and external fiber, long service life.



HLX-2003/2005/4005



HLX-8005



HLX-2009/4009



HLX-2017

Technical parameters

Model	HLX-2003	HLX-2005	HLX--4005	HLX--8005	HLX-2009	HLX-4009	HLX-2017
Tank capacity (L)	3	4.5	4.5	5	9	9	17
Temperature range (°C)	-20~RT	-20~RT	-40~RT	-80~RT	-20~RT	-40~RT	-20~RT
Temperature fluctuation value (°C)	±0.3	±0.3	±0.3	±0.5	±0.5	±0.5	±0.5
Setting precision (°C)	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
Display accuracy (°C)	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
Cooling power (w)	300	600	650	900	1000	1200	1500
Cooling capacity (w)	450	700	800	400	1200	1500	2400
Refrigerants	R134a	R404A	R404A	R404A+R23	R404A	R404A	R404A
Heating power (w)	/	/	/	/	/	/	/
Display temperature mode	LED	LED	LED	LED	LED	LED	LED
Set mode	Membrane button						
Safety protection	Over temperature protection			Over/High temperature protection	Over temperature protection		
Ambient temperature (°C)	5~32	5~32	5~32	5~32	5~32	5~32	5~32
Supply voltage (V)	200~230	200~230	200~230	200~230	200~230	200~230	200~230
Cycle mode	Outside loop						
Flow rate L/min(max/rated)	18/12	22/15	22/15	18/12	28/15	28/15	28/15
Head M(max/rated)	2.0/1.0	3.0/2.0	3.0/2.0	2.0/1.0	10/8	10/8	10/8
Cycle interface	10mm pagoda connector						
Net weight (kg)	26	28	28	50	35	35	46
Gross weight (kg)	28	30	30	70	43	43	55
External dimension (mm) (W*D*H)	220*420*495	220*420*495	220*420*495	355*455*865	300*500*620	300*500*620	400*550*670
Packing dimension (mm) (W*D*H)	500*290*560	500*290*560	500*290*560	545*430*1300	380*580*800	380*580*800	480*630*820

Additional

MZ 1C Chemistry-design diaphragm pump

Specification

Number of heads / stages: 2 / 2
 Max. pumping speed: 0.75 m³/h
 Ultimate vacuum (abs.): 12mbar
 Nozzle Size: DN 8-10 mm
 Rated motor power: 0.06kW
 Rated motor speed: 1500/1800 rpm
 Noise level: 45dB
 ATEX: II 3G IIC T3 X Internal Atm. only

Cat. No.	Voltage
18900231	Cn plug, 100V-120V/200-230V 50Hz/60Hz
18900232	Euro plug, 100V-120V/200-230V 50Hz/60Hz
18900233	USA plug, 100V-120V/200-230V 50Hz/60Hz
18900234	UK plug, 100V-120V/200-230V 50Hz/60Hz



Seals and other accessories

Cat. No.	Description	
18202027	PTFE vacuum seal	
18900362	Ultra resistant FFKM seal for applications with highly abrasive solutions	
18900190	Evaporation flask clip (red) CS002440	
18900188	Evaporation flask clip (green) CS002942	

C410 Chemistry-design diaphragm pump

Specification

Maximum Vacuum: 13mbar
 Work Mode: Continuous Operation
 Nozzle Size: 8mm, Power: 95W
 Motor speed: 1450rpm
 Flow Rate:

mbar	1000	880	750	600	480	280
L/min	25	22	20	12	7.5	5



Vacuum regulator/moisture trap

Cat. No.	Description
18900186	In use of control small volume, installed in a vacuum between DVR480 and vacuum system. Material: PVDF, PTFE, ABS, Borosilicate Glass, Stainless Steel



Corrosion resistant diaphragm pump

The corrosion-resistant vacuum diaphragm pump is a two-stage pump with gas as the medium. All parts in contact with the gas are made of polytetrafluoroethylene (PTFE). It has high corrosion resistance and a wide range of applications. It can completely replace water circulation pumps and is suitable for chemical The treatment of corrosive gases in the pharmaceutical, petrochemical and other industries, such as suction filtration, vacuum distillation, rotary evaporation, vacuum concentration, centrifugal concentration, solid extraction, etc.

Product features

Strong chemical corrosion resistance

- The corrosion-resistant diaphragm pump uses a special diaphragm (composite PTFE coating on the surface of the diaphragm) and pump head design, including all joints and pipelines, to ensure that the parts in contact with the gas are imported PTFE materials, so it can resist most of the corrosion. At the same time, electrical switches and shells are also treated with corrosion protection, especially the transmission mechanism and circuit parts are made of corrosion-resistant materials to form a closed space, which is completely isolated from the external environment, so that the vacuum pump is not only resistant to corrosive media, but also perfect for In the corrosive environment, the chemical corrosion resistance of the vacuum pump is completely solved;

No pollution and maintenance-free

- Diaphragm diaphragm pumps can achieve complete solvent recovery, eliminating toxic and harmful organic solvents' environmental pollution and health hazards to operators and nearby personnel. Even mixed solvents can be highly recycled; diaphragm pumps are dry, water-free and oil-free. The pump makes the laboratory clean and quiet. The user does not need to clean, change tubes, change water and other maintenance work regularly.

Low noise, low vibration

- The corrosion-resistant diaphragm pump uses electric motor direct drive power transmission, no intermediate transmission parts, and the low-stroke, low-noise characteristics of the diaphragm, so the product noise can be kept below 70dB;

Overheating protection

- Each product is equipped with a temperature protection switch, when the internal temperature of the body is too high, it will automatically stop, wait for the temperature to cool down, and then start automatically to ensure the stability and safety of the system;



Technical parameters

Model	HB-20	HB-20B	HB-40B
Rated voltage/frequency	220V/50Hz	220V/50Hz	220V/50Hz
Rated power (w)	120	120	120
Pump head type	Double pump	Double pump	Double pump
Ultimate vacuum (mbar)	6-8	6-8	6-8
Maximum operating pressure (bar)	1	1	1
Maximum flow rate (L/min)	20	20	40
Interface specifications (mm)	10	10	10
Medium and ambient temperature (°C)	5°C~ 40	5°C~ 40	5°C~ 40
Relative humidity (%)	< 80	< 80	< 80
Pump head material	PTFE	PTFE	PTFE
Composite diaphragm material	HNBR+PTFE(Non-standard products can be customized according to customer requirements)		
Valve material	FKM、FFPM(Non-standard products can be customized according to customer requirements)		
Vacuum gauge	Without vacuum regulator	With vacuum regulating valve	With vacuum regulating valve
Solid discharge valet	Yes	Yes	Yes
Work system	Continuous work	Continuous work	Continuous work
Noise (db)	< 55	< 55	< 55
Rated speed (rpm)	1450	1450	1450
External dimension (LxWxH) (mm)	315*165*210	315*165*210	315*165*210
Weight (kg)	9.6	9.6	9.6

Typical applications

Rotary Evaporator Selling Set



Vacuum suction filter



Circulating water vacuum pump

Application

The circulating water type multi-purpose vacuum pump series uses circulating water as a working fluid, and uses a jet to generate a negative pressure for injection. Vacuum conditions are provided for evaporation, distillation, crystallization, drying, sublimation, vacuum filtration, and the like. Especially suitable for colleges and universities, research institutes, chemical, pharmaceutical, biochemical, food, pesticide, agricultural engineering. Biological Engineering Laboratory and industrial trials in other industries.

Product Features

- Recycling water help save water;
- The special fluid muffler reduces the gas in the water and makes the vacuum higher; reduces gas-liquid friction and reduces noise;
- Double taps, dual display, can be used individually or in parallel;
- Acid ,alkali and solvent corrosion resistant;
- The motor is supplied by a well-known motor manufacturer with a fluoro rubber seal to prevent the inside of the motor from being immersed in corrosive gases;
- The water in the sink should be replaced regularly to ensure the purity of the water and to ensure the vacuum.
- When pumping corrosive gases, shorten the water change cycle;
- SHB-IIIA: Jet. The suction nozzle is made of 304 stainless steel;
- SHB-IIIT: The pump body is a corrosion-resistant transparent box, which is more suitable for acid gas.



Product Features

- Double-sided identical multi-purpose vacuum pump;
- The four-tap is simultaneously vacuumed and the four meters are displayed, It does not affect each other. At the same time, four operators can experiment at the same time, reducing the cost of the laboratory.

Technical Parameters

Model	SHB-IIIA/IIIT	SHB-2IIIA
Power (W)	180	250
Voltage (V/Hz)	1 ~ ,110V,60Hz or 220-240V~,50/60Hz	1 ~ ,110V,60Hz or 220V,50Hz or 220V,60Hz
Flow (L/min)	80	80
Lift (m)	10	10
Max Vacuum (MPa)	-0.098 (2KPa)	0.098(20mbar)
Single head pumping volume (L/min)	10	10
Number of pumping heads	2	4
Security function	Check valve	Counterflow prevention valve
Water tank capacity (L)	15	18
Water tank material	PP	PP
Exterior Dimension (mm)	385W*280D*420H	470L*260W*516H
Net weight (kg)	11	17

StainlessSteel ElectricWaterDistiller



Product Features

产品特点

- 水质符合2015版药典标准;
 - 具有防烫外壳, 避免操作烫伤;
 - 具有防缺水干烧功能;
 - 具有节能减排的功效;
 - 具有台式或挂壁两种安装模式。
- Water quality accord with Chinese pharmacopoeia (2015 edt).
 - Shell material can prevent scalding and avoid Operation scald.
 - Equipped with dry-fire protection device-can proof the dry-fire and heating up without water.
 - Energy saving and emission reduction effection.
 - Desk/hanging wall type installation mode.

Technical Parameter

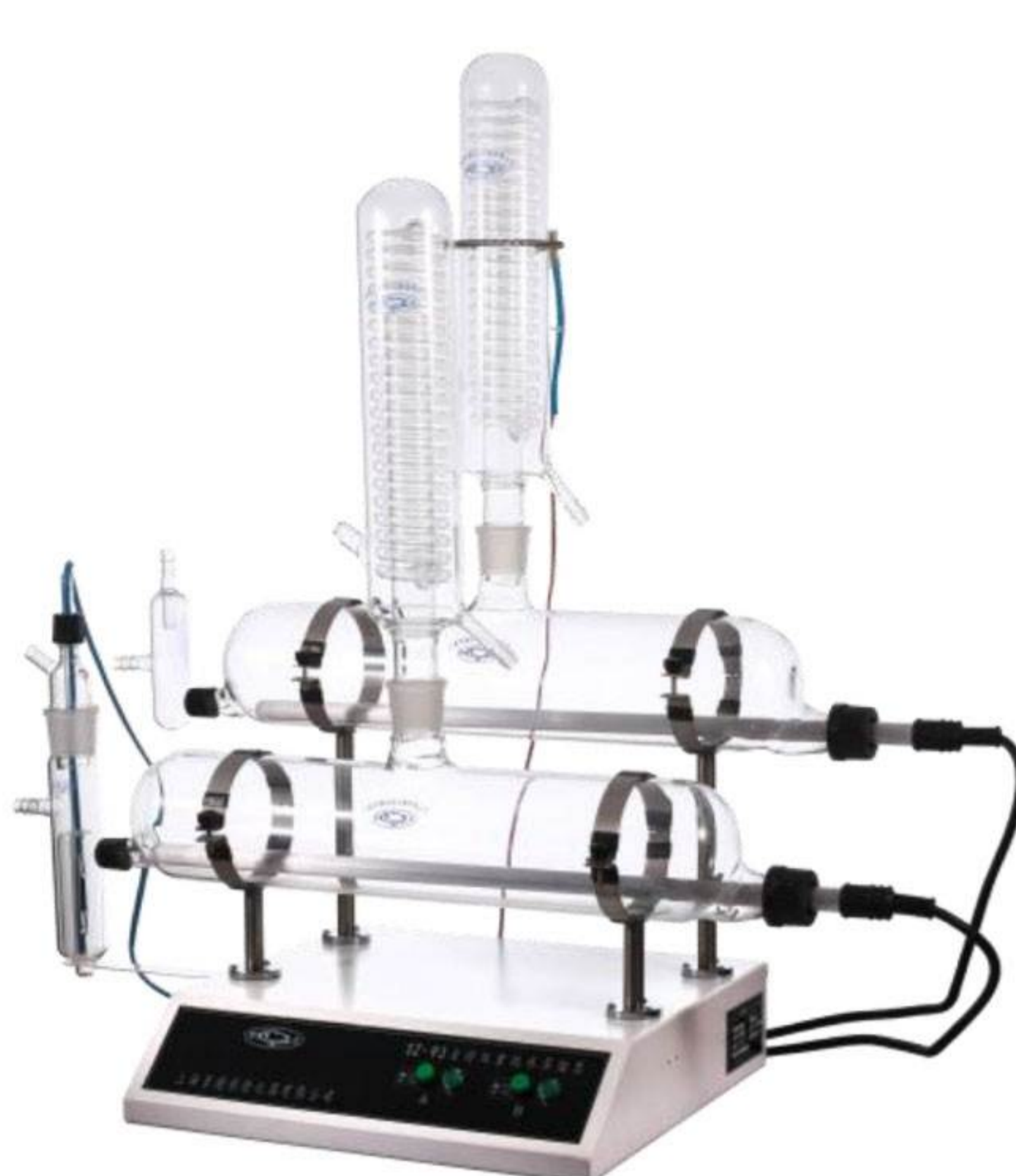
技术参数

参数 / 型号 Parameter / Model	DZS-5	DZS-10
配置 Configuration	自控型 Semi-automatic control	自控型 Semi-automatic control
主体材质 The main material	304不锈钢 Stainless steel	304不锈钢 Stainless steel
出水量 / 毛重 Out of water / GW	5L / h/~9 Kg	10L / h/~12 Kg
电压 / 功率 Voltage / Power	220V / 3kW X 1	380V / 2.7kW X 3
产品尺寸 (长 x 宽 x 高 mm) Product size (L x W x H mm)	230 X 230 X 270	256 X 290 X 340
用水标准 Water category	生活用水 Regular water	生活用水 Regular water

Automatic Water Distiller



SZ-96



SZ-93



SZ-97

Features:

1. The SZ series automatic pure water distiller is heated with quartz heating tube, which is energy-saving, pure, durable and of high radiation rate.
2. The adoption of stainless steel in supporting shelf and clamp; special engineering plastics made of control panel and main distiller body made of quality glass.
3. The pure water distilled does not contact with any metal products.
4. The SZ series automatic water distiller is ideal for the distillation of pure water.
5. With different requirement of the pure water, SZ series automatic water distiller can be classified into the following 3 types:

Single stage automatic pure water distiller	Double stage automatic pure water distiller	Triple stage automatic pure water distiller
Pure water	Purer water	Purest water

6. All SZ series automatic pure water distiller is equipped with reply protection, which is safe and reliable to use.
7. The distiller switch can be controlled with temperature controller and spring gauge controller, which helps avoid glass breakage caused by dry heating of loop heat pipe.
8. Power supply will be automatically connected or cut off in high water line or low water line. So the pure water distiller is fully automatic.

Technical parameter

Model #	SZ-96	SZ-93	SZ-97
Flow rate	1800ml/h	1600ml/h	1500ml/h
Input power	1.5Kw	3Kw	4.5Kw
Voltage	AC220v/50Hz	AC220v/50Hz	AC220v/50Hz
Pack size LWH(cm)	66×37×31(cm)	57×*48×39(cm)	Condenser 57×48×39cm,5.8KG Host 61×45×44cm,10KG
Weight	5.4Kg	10Kg	15.8Kg
Size (cm)	77×20×68cm	77×36×78cm	77×49×89cm

Smart

water purification system



Models:

Smart-R015 / 30
Smart-Q15 / 30
Smart-Q15 / 30UT
Smart-S15 / 30
Smart-S15 / 30UF
Smart-S15 / 30UV
Smart-S15 / 30UVF
Smart-D
Smart-DUF
Smart-DUV
Smart-DUVF

Smart series, the smallest and most compact lab water system from tap to ultrapure water, integrating pretreatment, RO, DI, UV, UF and terminal filter into one.

With injection molding process case, single stage RO system, 1 pump, portable TDS test pen and on-line resistivity monitor, its output ranges from 15 to 30 liters/hour with tap water inlet. And with distilled water inlet, its output is up to 2 liters/minute.

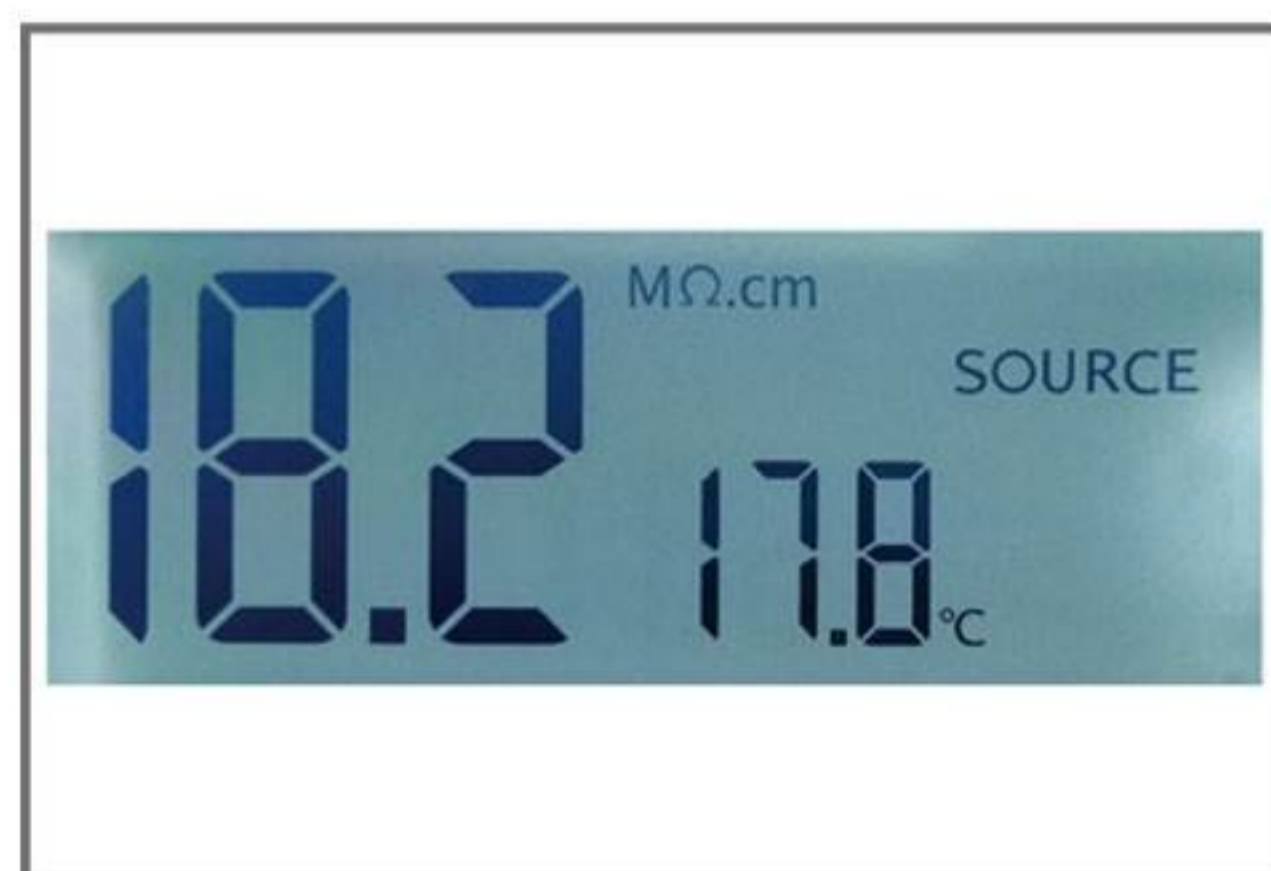
With tap water inlet, it can produce single stage RO water, deionized water and ultrapure water. And with distilled water inlet, it can produce deionized water and ultrapure water.

The single stage RO water's ion rejection rate is more than 97%. The deionized water's resistivity is above 16MΩ.cm, and the ultrapure water's resistivity absolutely reaches to 18.2MΩ.cm. It completely meets the highest grade I standard of ASTM, CAP, CLSI, EP and USP.



Injection molding process case

- Whole case with injection molding process.
- The smallest and most compact lab water system from tap to ultrapure water, integrating pretreatment, RO, DI, UV, UF and terminal filter into one.



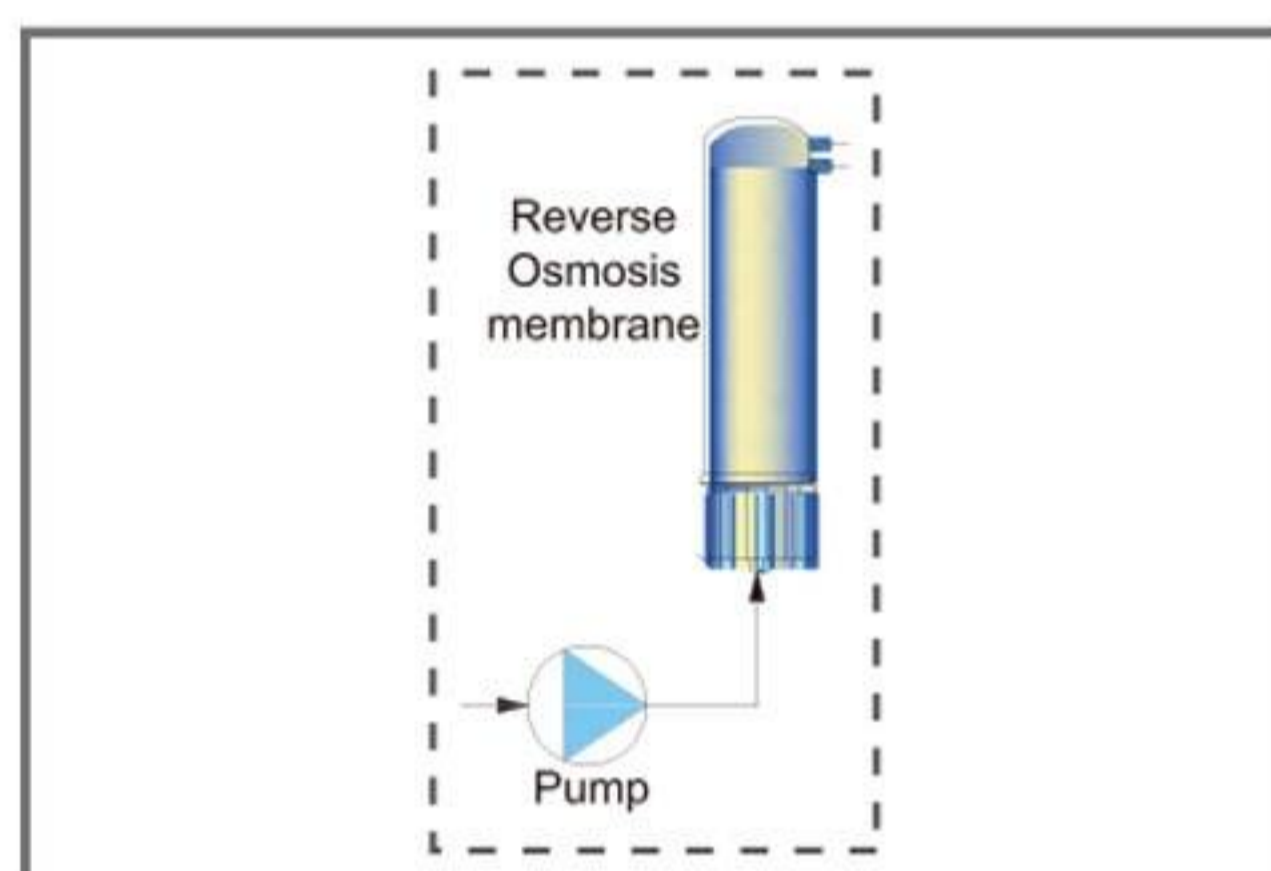
Micro-computer control system with LCD display

- LCD controlling system, intuitively display the system running state and various parameters.



Easy-to-replacing cartridge

- Independent cartridges design, with fast adapters, easy to replace, and running in low cost.



Single stage RO and 1 pump system

- 1st pump, to achieve single stage RO system, easy to maintain.



Whole plastic shell with high-strength

- Excellent ergonomic design, avoid rusting and keep clean, to meet GLP standard.

Features and Advantages

- Top cap of pretreatment in the case can be rapidly opened to replace the cartridges without opening the case.
- System automatically works, with electronic pressure sensor and microcomputer controlling.
- Automatic stop without water, automatic stop when water tank full, automatically cutting off water when pump stopping, guaranteeing 24 hours' work.
- Auto self-flushing of RO membrane function, extend RO membrane's life.
- External water tanks is optional to meet different need and assure ample water-supply.
- Tube and adapter with NSF authorization and top quality, reduce TOC level and assure ultrapure water's quality.
- Long life pretreatment (including PP fiber, and active carbon cartridge), effectively protect RO membrane.
- RO module with DOW's membrane, ensure long life, stable operation and high desalination rate.
- 4 independent ultrapure cartridges with DOW's top polishing resin, ensure ultrapure water's quality up to 18.2 MΩ.cm, with the lowest TOC level and running cost.
- Double wavelength (185&254nm) ultraviolet lamp module, restrain bacteria's increase and reduce TOC.
- MWCO 5000D ultrafiltration module, effectively eliminate endotoxin, and suitable for precise cell cultivating and IVF.
- (0.45+0.1)µm double layer PES terminal disinfection filter, assure that terminal pure water is absolutely axenic.

Smart-RO series

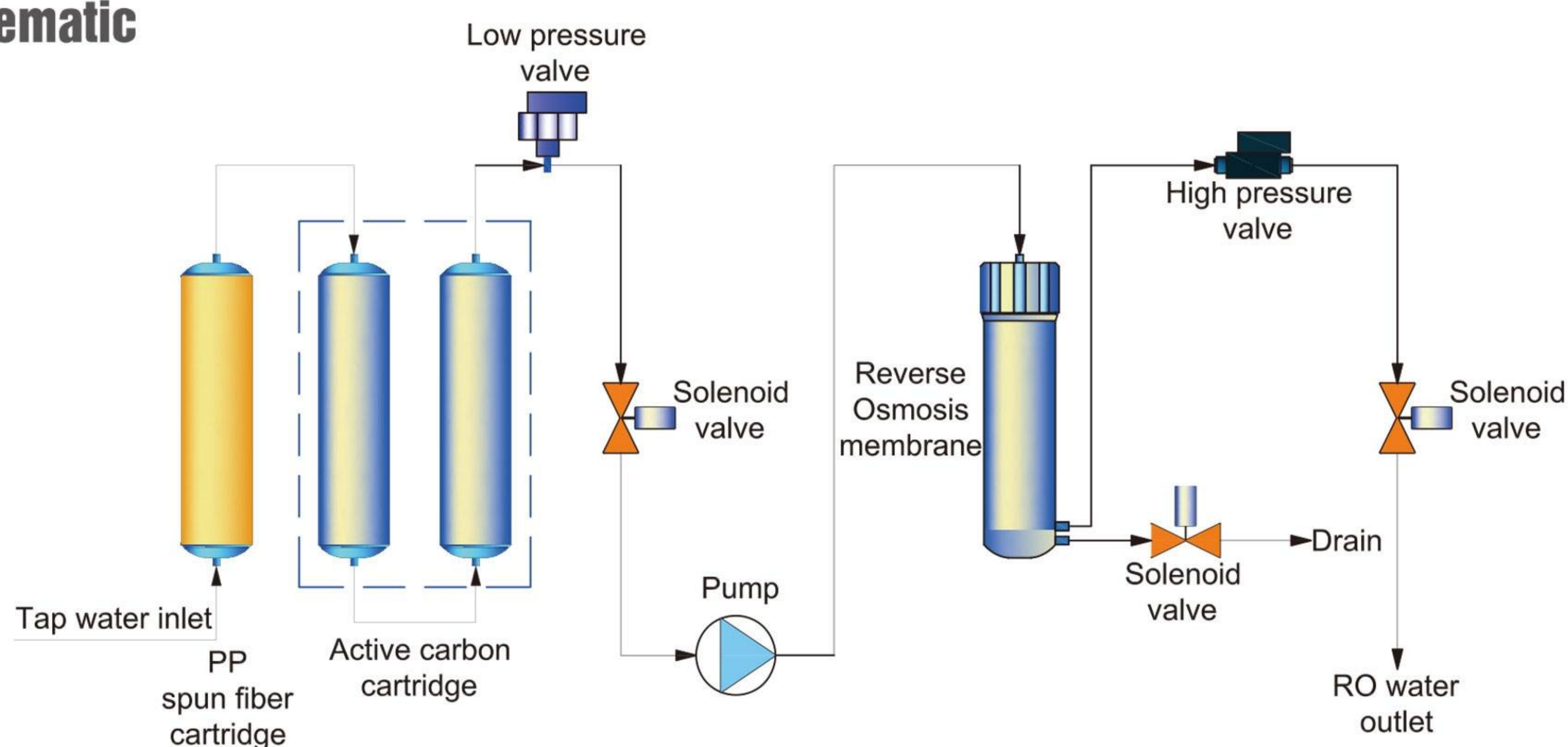
Reverse osmosis water system (Tap water inlet)

With injection molding process case, single stage RO system, 1 pump, and portable TDS test pen, Smart-RO series reverse osmosis water system is economic choice of RO water for general glassware washing.

With tap water inlet, its output ranges from 15 to 30 liters/hour. It can produce single stage RO water. The single stage RO water's ion rejection rate is more than 97% (new RO membrane), organic rejection rate >99% (when mw > 200 Dalton), particles and bacteria rejection rate >99%. It is suitable for glassware washing, feed of ultrapure water system, autoclave sterilizer, constant temperature and humidity chamber, salt spray test chamber, dampening machine and etc.



Flow Schematic



Specifications

Model	Smart-R015	Smart-R030
Output(25°C)*	15 liters/hour	30 liters/hour
Flow rate	Up to 2 liters/minute (with pressure tank)	
Pure water outlet	1: reverse osmosis water	
RO water quality		
Ion rejection rate	97%-99% (new RO membrane)	
Organic rejection rate	>99%, when MW>200 Dalton	
Particles and bacteria rejection rate	>99%	
Bacteria	<0.1cfu/ml (with optional 0.45+0.1µm PES terminal filter)	
Particle(>0.1µm)	<1/ml (with optional 0.45+0.1µm PES terminal filter)	
Feed water requirements	Tap water, temperature:5-45°C, pressure:1.0-4.0Kgf/cm ²	
Dimension and weight	Length×Width×Height:410×220×420mm / Weight: about 16Kg	
Electrical requirements	AC100-240V, 50/60Hz	
Power	48W	72W
Standard configuration	Main body (Including 1 set of cartridge)+15 liters pressure tank+ TDS/conductivity test pen	

Remarks:

*The value will be influenced by temperature and feed water's quality.

Smart-Q series

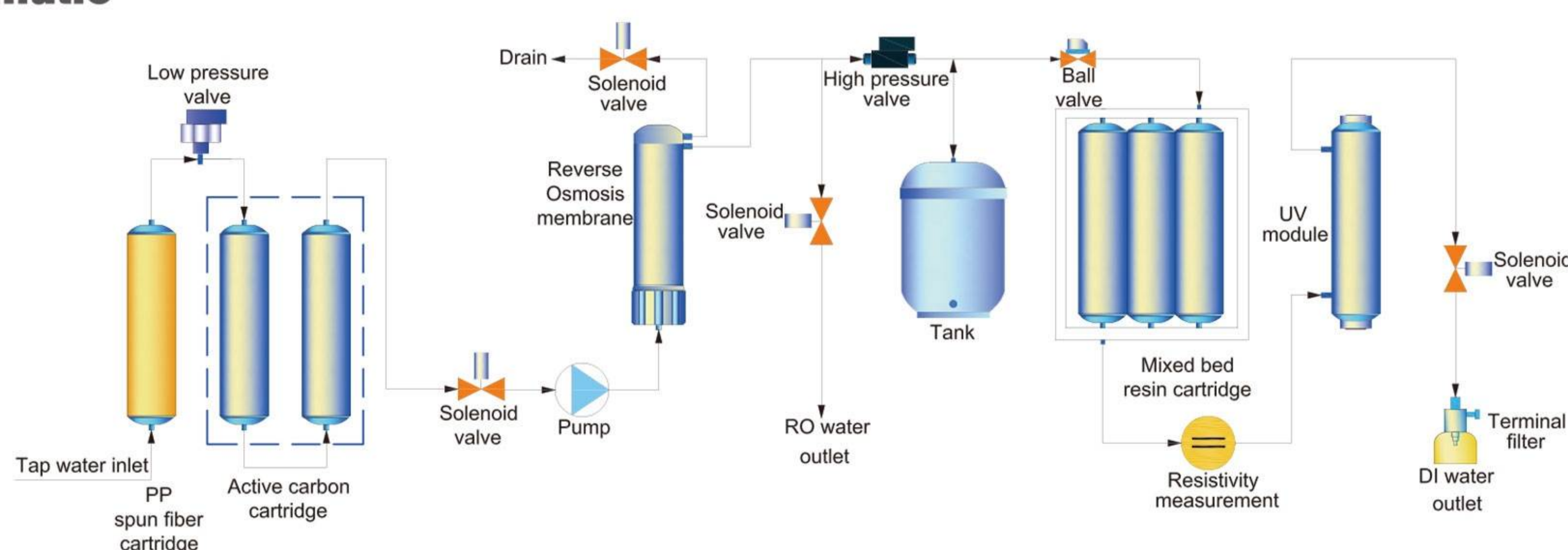
Deionized water system (Tap water inlet)

With injection molding process case, single stage RO system, 1 pump, portable TDS test pen and on-line resistivity monitor, Smart-Q series deionized water system is sub-economic choice of deionized water for general grade experiments.

With tap water inlet, its output ranges from 15 to 30 liters/hour. It can produce single stage RO water and deionized water. The single stage RO water's ion rejection rate is more than 97%, and the deionized water's resistivity is more than 15MΩ.cm, near to 18.2MΩ.cm. It completely meets the requirements of general chemical or biological experiments for pure water.



Flow Schematic



Specifications

Model	Smart-Q15	Smart-Q15UT	Smart-Q30	Smart-Q30UT
Output(25°C)*	15 liters/hour		30 liters/hour	
Flow rate	Up to 2 liters/minute (with pressure tank)			
Pure water outlet	2: reverse osmosis water, deionized water			
Deionized water quality				
Resistivity(25°C)	15-18.2MΩ.cm			
Bacteria	N/A	<0.1cfu/ml	N/A	<0.1cfu/ml
Particle(>0.1µm)	N/A	<1/ml	N/A	<1/ml
RO water quality				
Ion rejection rate	97%-99% (new RO membrane)			
Organic rejection rate	>99%, when MW>200 Dalton			
Particles and bacteria rejection rate	>99%			
Feed water requirements	Tap water, temperature:5-45°C, pressure:1.0-4.0Kgf/cm ²			
Dimension and weight	Length×Width×Height:410×220×420mm / Weight: about 18Kg			
Electrical requirements	AC100-240V, 50/60Hz			
Power	72W			
Standard configuration	Main body (Including 1 set of cartridge)+15 liters pressure tank+ TDS/conductivity test pen			

Remarks:

*The value will be influenced by temperature and feed water's quality.

Smart-S series

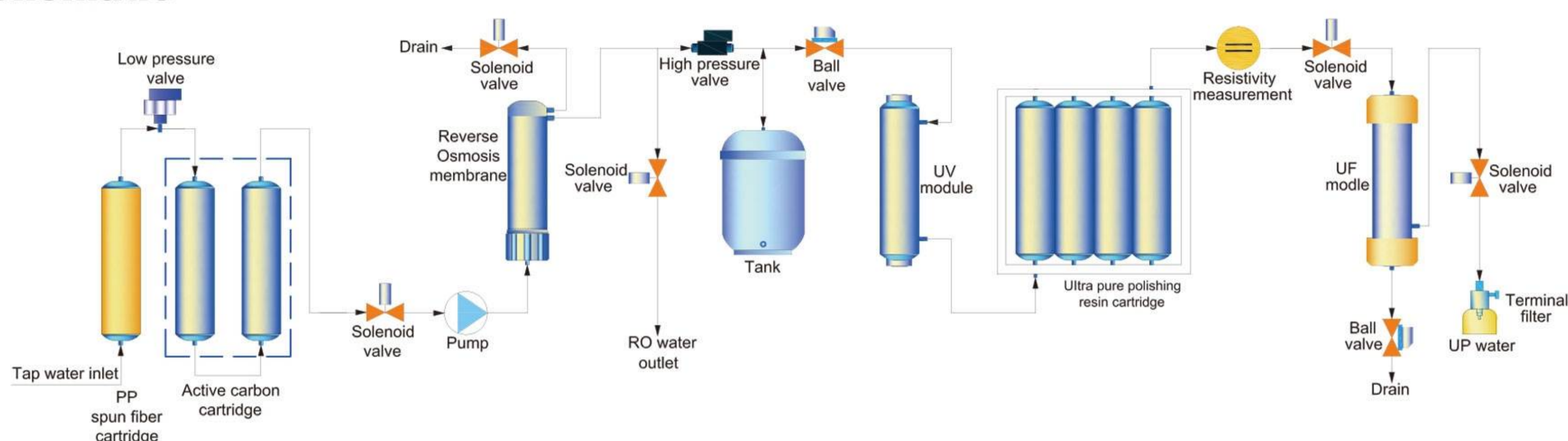
Ultrapure water system (Tap water inlet)

With injection molding process case, single stage RO system, 1 pump, portable TDS test pen and on-line resistivity monitor, Smart-S series ultrapure water system is sub-economic choice of ultrapure water for high grade experiments.

With tap water inlet, its output ranges from 15 to 30 liters/hour. It can produce single stage RO water and ultrapure water. The single stage RO water's ion rejection rate is more than 97%, and the ultrapure water's resistivity absolutely reaches to 18.2MΩ.cm. It completely meets the highest grade I standard of ASTM, CAP, CLSI, EP and USP.



Flow Schematic



Specifications

Model	Standard	Eliminating endotoxin	Low TOC	Synthesizing
	Smart-S15	Smart-S15UF	Smart-S15UV	Smart-S15UVF
	Smart-S30	Smart-S30UF	Smart-S30UV	Smart-S30UVF
Output(25°C)	15series-15 liters/hour, 30 series-30 liters/hour			
Flow rate	Up to 2 liters/minute (with pressure tank)			
Pure water outlet	2: reverse osmosis water, ultrapure water			
Ultrapure water quality				
Resistivity(25°C)	18.2MΩ.cm			
TOC*	<10ppb	<10ppb	<3ppb	<3ppb
Bacteria	<0.1cfu/ml			
Particle(>0.1µm)	<1/ml			
Endotoxin	N/A	< 0.001Eu/ml	N/A	< 0.001Eu/ml
RNases	N/A	<1pg/ml	N/A	<1pg/ml
DNases	N/A	<5pg/ml	N/A	<5pg/ml
RO water quality				
Ion rejection rate	97%-99% (new RO membrane)			
Organic rejection rate	>99%, when MW>200 Dalton			
Particles and bacteria rejection rate	>99%			
Feed water requirements	Tap water, temperature:5-45°C,pressure:1.0-4.0Kgf/cm ²			
Dimension and weight	Length×Width×Height:410×220×420mm / Weight: about 18Kg			
Electrical requirements	AC100-240V, 50/60Hz			
Power	72W			
Standard configuration	Main body (Including 1 set of cartridge)+15 liters pressure tank+ TDS/conductivity test pen			

Remarks:

*The value will be influenced by temperature and feed water's quality.

Smart-D series

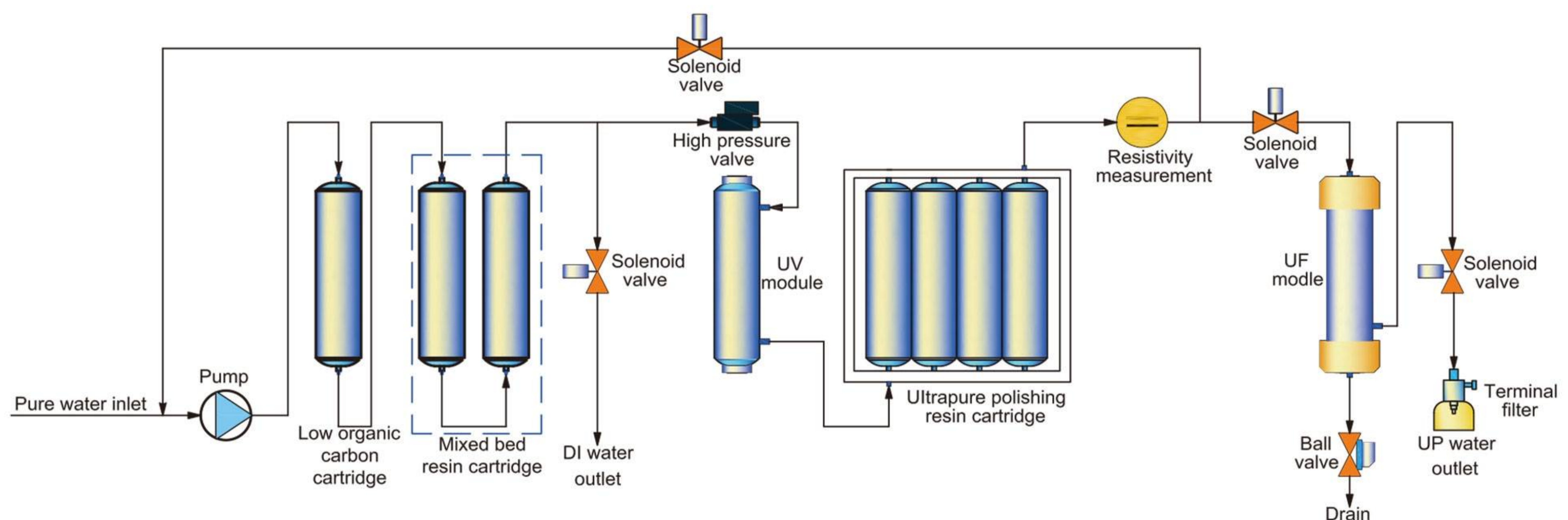
Ultrapure water system (Distilled water inlet)

With injection molding process case, 1 pump, portable TDS test pen and on-line resistivity monitor, Smart-D series ultrapure water system is sub-economic choice of ultrapure water for high grade experiments.

With pure water or distilled water inlet, its output is up to 2 liters/minute. It can produce deionized water and ultrapure water. The deionized water's resistivity is above 5MΩ.cm, and the ultrapure water's resistivity absolutely reaches to 18.2MΩ.cm. It completely meets the highest grade I standard of ASTM, CAP, CLSI, EP and USP.



Flow Schematic



Specifications

Model	Standard	Eliminating endotoxin	Low TOC	Synthesizing
	Smart-D	Smart-DUF	Smart-DUV	Smart-DUVF
Output(25°C)	Up to 2 liters/minute (less output with UF cartridge)			
Pure water outlet	2: deionized water, ultrapure water			
Ultrapure water quality				
Resistivity(25°C)	18.2MΩ.cm			
TOC*	<10ppb	<10ppb	<3ppb	<3ppb
Bacteria	<0.1cfu/ml			
Particle(>0.1μm)	<1/ml			
Endotoxin	N/A	< 0.001Eu/ml	N/A	< 0.001Eu/ml
RNases	N/A	<1pg/ml	N/A	<1pg/ml
DNases	N/A	<5pg/ml	N/A	<5pg/ml
Deionized water quality				
Resistivity(25°C)	>5MΩ.cm			
Feed water requirements	RO water, distilled water, deionized water, 5-45°C, 1atm*			
Dimension and weight	Length×Width×Height:410×220×420mm / Weight: about 16Kg			
Electrical requirements	AC100-240V, 50/60Hz			
Power	72W			
Standard configuration	Main body (Including 1 set of cartridge)+ TDS/conductivity test pen			

Remarks:

*The value will be influenced by temperature and feed water's quality.