



Smart series water purification system

◆ Features And Advantages

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

Whole case with one time injection molding process, material: polypropylene, avoid rusting and keep clean, to meet GLP standard

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

On-line resistivity monitor, with apheliotropic LCD display, to detect the quality of deionized or ultrapure water

Attached portable TDS (total dissolved solid)/conductivity test pen, with dry cell design, to detect the quality of feed water and RO water

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 desalinization 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

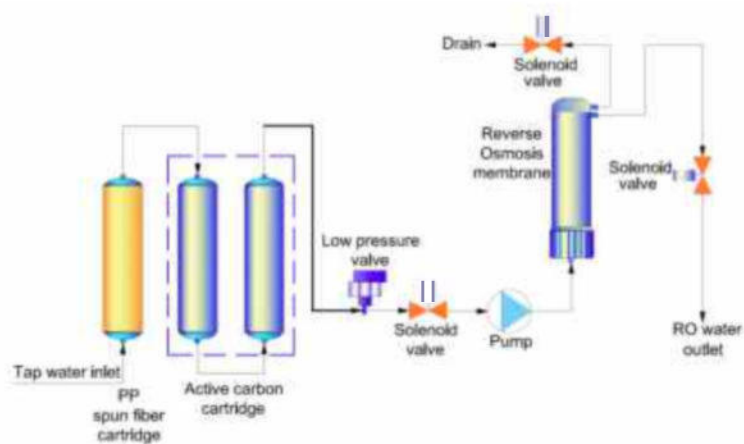
(0.45±0.1)µm double layer PES terminal disinfection filter, assure that terminal pure water is absolutely axenic



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 96% (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-RO30
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, deionized water	
Ro water quality		
Ion rejection rate	96%-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+0.1pm PES terminal filter)	
Particle(>0.1µm)	<1/ml (with optional 0.45+0.1pm 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	AC110-240V, 50/60Hz	
Power	48W	72W
Standard configuration	Main body (Including 1 set of cartridge)+15 liters pressure tank+ TDS/conductivity test pen	

Remarks:

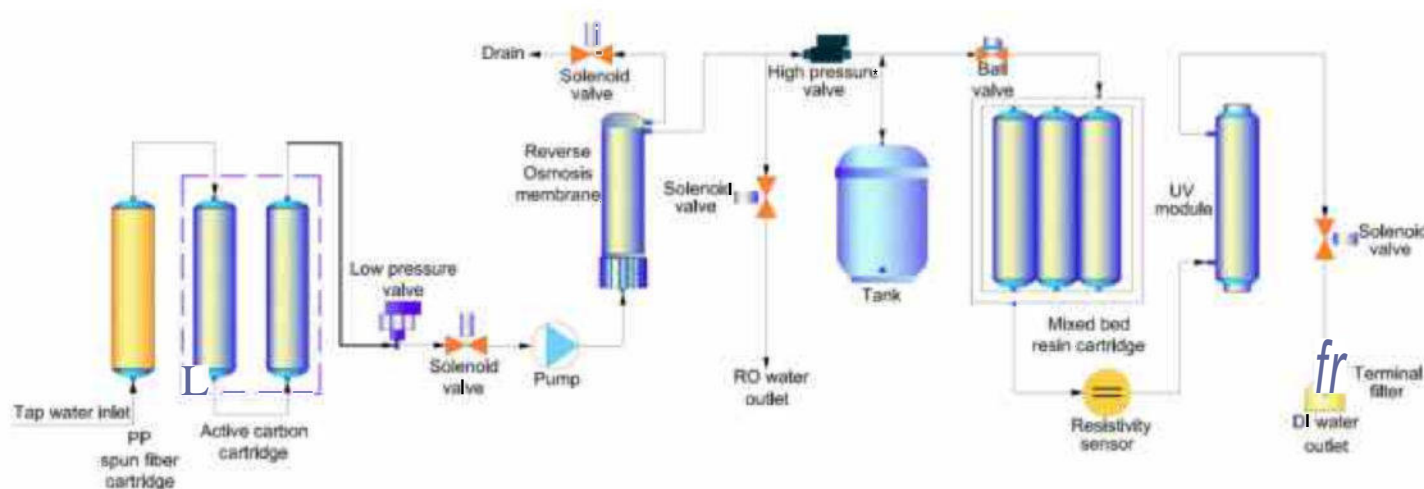
*The value will be influenced by temperature and feed water's quality.



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 96%, 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-015	Smart-015UT	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	15-18.2MQ.cm			
Bacteria	N/A	<0.1cfu/ml	N/A	<0.1cfu/ml
Particle(>0.1pm)	N/A	<1/ml	N/A	<1/ml
RO water quality				
Ion rejection rate	96%-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	AC110-240V, 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.

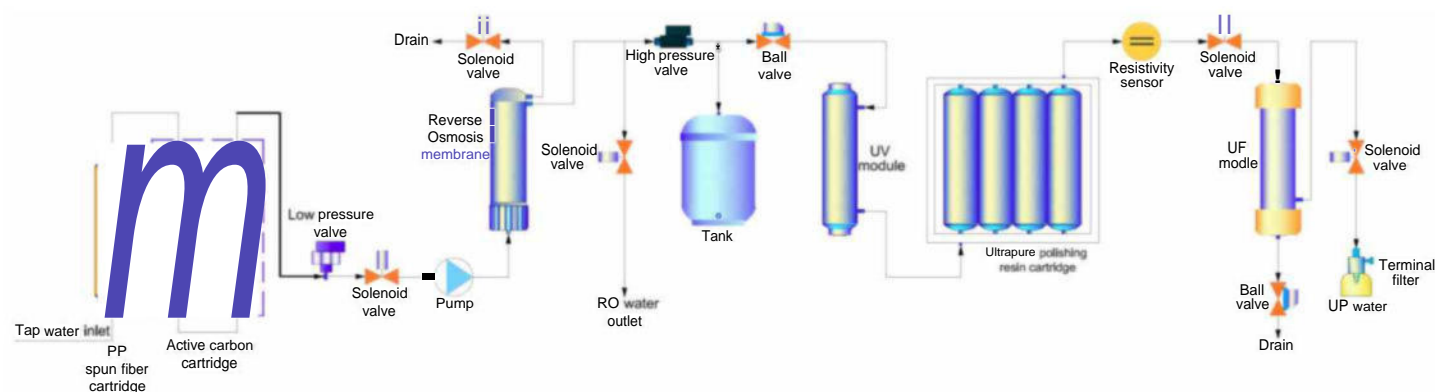




Smart-S series ultrapure water system (Tap water inlet)

- 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 96%, 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	<0.01ng/ml	N/A	<0.01ng/ml
DNases	N/A	<4pg/pl	N/A	<4pg/pl



RO water quality	
Ion rejection rate	96%-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	LengthxWidthxHeight:410x220x420mm/ Weight: about18Kg
Electrical requirements	AC110-240V, 50/60HZ
Power	72W
Standard configuration	Main body (Including 1 set of cartridge)+15 liters pressure tank+ TDS/conductivity test pen

Remarks:

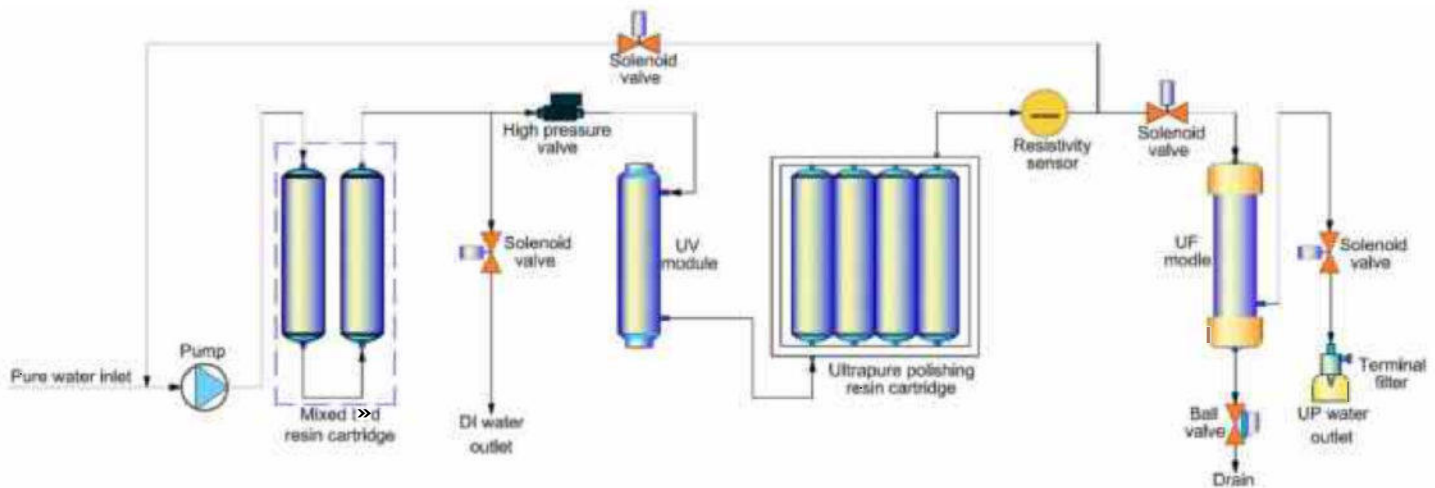
*The value will be influenced by temperature and feed water's quality.



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 5MQ.cm, and the ultrapure water's resistivity absolutely reaches to 18.2MQ.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	Up to 2 liters/minute (less output with UF cartridge)			
Pure water outlet	2: deionized water, ultrapure water			
Ultrapure water quality				
Resistivity(25°C)	18.2MQ.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	<0.01ng/ml	N/A	<0.01ng/ml
DNases	N/A	<4pg/pl	N/A	<4pg/pl
Deionized water quality				
Resistivity(25°C)	>5MQ.cm			

Feed water requirements	RO water, distilled water, deionized water, 5-45°C, 1atm*
Dimension and weight	LengthxWidthxHeight:410×220×420mm / Weight: about 16Kg
Electrical requirements	AC110-240V, 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.

