Medium series water purification system

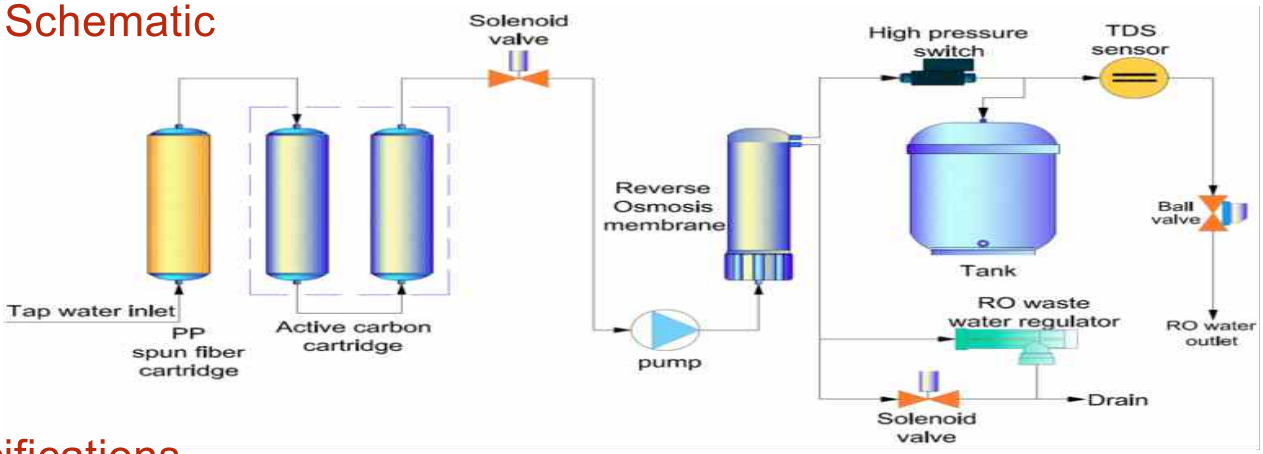
◆ Features And Advantages

LCD (resolution: 240×128, dimension: 106×57mm) controlling system, intuitively display the system running state and various parameters
3 way online water quality sensor, detect the quality of feed water, RO water, deionized water, or ultrapure water respectively. And warn once water quality's standard exceeding
Cartridges replacing alarm function, based on time and water quality, show cartridges' used and residual life
Multiple alarm function: no feed water, full water, water quality's standard exceeding, and cartridge life ending
Auto self-flushing of RO membrane function, extend RO membrane's life
Auto running data storing function through RS232/USB communication port to computer for 1 year at least (optional)
Level II password, protect all the parameters setting, and prohibit any unauthorized setting change
Water dispensing function- timing and quality (time range: 1-99min, water quality range: 0.1-18.2MΩ.cm)
Built-in 2 set 15 liters airtight plastic pressure water tank, easier for installation and maintenance
External water tanks is optional to meet different need and assure ample water-supply
High-strength stainless steel shell with powder painting technics, avoid rusting and keep clean, to meet GLP standard.
Floor type with wheels on the bottom design, convenient to move
3 door and easy-to-replacing cartridge design, convenient to maintain system and replace cartridges
Tube and adapter with NSF authorization and top quality, reduce TOC level and assure ultrapure water's quality
Long life and high-capacity 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
Special high-capacity ultrapure polishing technology, to optimize pure water quality maximumly with minimum resin. With DOW's top polishing resin, ensure ultrapure water's quality up to 18.2 MΩ.cm, with the lowest TOC level
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
0.2μm PES terminal disinfection filter, assure that terminal pure water is absolutely axenic
Medium series can be upgraded to touch screen system, just the same as Master to Master Touch

Medium-RO series reverse osmosis water system (Tap water inlet)

- With microcomputer controlling system in LED display, stainless steel shell, built-in 2 set pressure tanks, single stage RO system, 1 pump, portable TDS test pen and on-line conductivity monitor, Medium-RO series reverse osmosis water system is economic choice of RO water's mass usage for general glassware washing.
- With tap water inlet, its output ranges from 45 to 125 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	Medium-RO300	Medium-RO400	Medium-RO600	Medium-RO800
Output(25℃)*	45 liters/hour	63 liters/hour	94 liters/hour	125 liters/hour
Pure water outlet	1: reverse osmosis 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 0.2μm PES terminal filter)			
Particle(>0.1μm)	<1/ml (with optional 0.2μm PES terminal filter)			
Feed water requirements	Tap water, temperature:5-45℃,pressure:1.0-4.0Kgf/cm^2			
Dimension and weight	Length×Width×Height:640×540×1110mm / Weight: about 16Kg			
Electrical requirements	AC110-240V, 50/60Hz			
Power	120W		240W	
Standard configuration	Main body (Including 1 set of cartridge)+2 set built-in 15 liters pressure tank+ TDS/conductivity test pen			

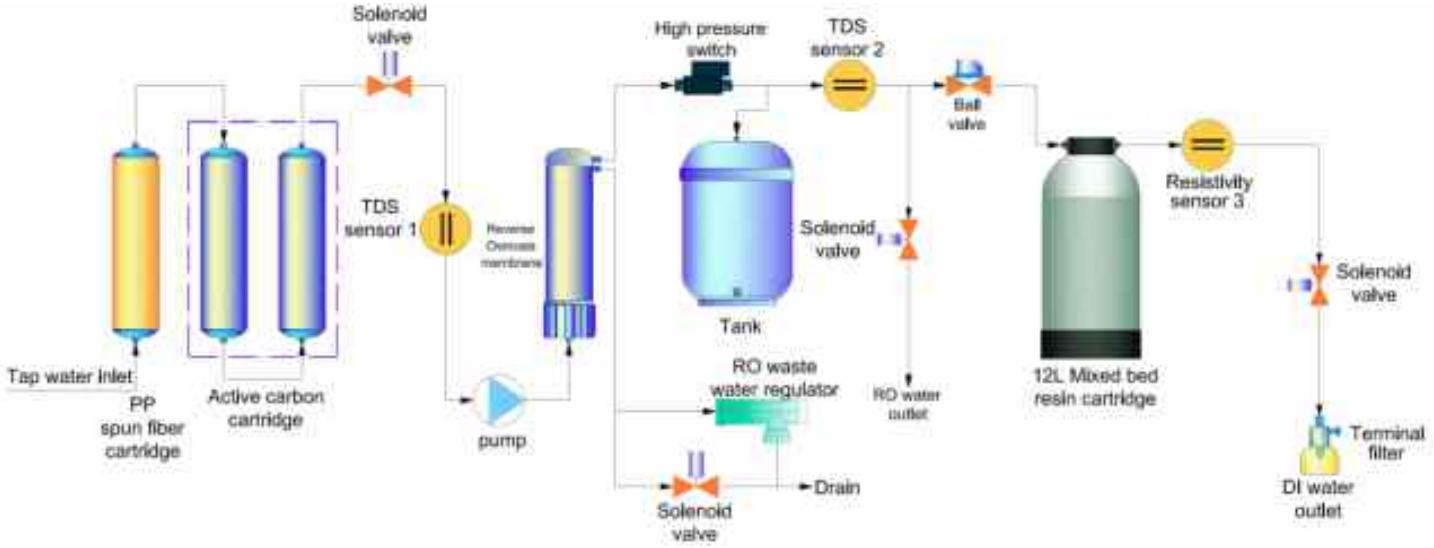
Remarks:

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

Medium-Q series deionized water system (Tap water inlet)

- With LCD controlling system, 3 way water quality sensor, timing and quality dispensing, stainless steel shell, built-in 2 set pressure tanks, single stage RO system and 1 pump, Medium-Q series deionized water system is superior choice of deionized water's mass usage for general grade experiments.
- With tap water inlet, its output ranges from 45 to 125 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 10MΩ.cm, near to18.2MΩ.cm. It completely meets the requirements of general chemical or biological experiments for pure water.

◆ Flow Schematic



◆ Specifications

Model	MediumQ300	Medium-Q400	Medium-Q600	Medium-Q800
Output(25℃)*	45 liters/hour	63 liters/hour	94 liters/hour	125 liters/hour
Pure water outlet	2: reverse osmosis water, deionized water			
Deionized water quality				
Resistivity	10-18.2MΩ.cm			
Bacteria	<0.1cfu/ml			
Particle(>0.1μm)	<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℃,pressure:1.0-4.0Kgf/cm^2	
Dimension and weight	Length×Width×Height:640×540×1110mm / Weight: about 65Kg	
Electrical requirements	AC110-240V, 50/60Hz	
Power	120W	240W
Standard configuration	Main body (Including 1 set of cartridge)+2 set built-in 15 liters pressure tank	

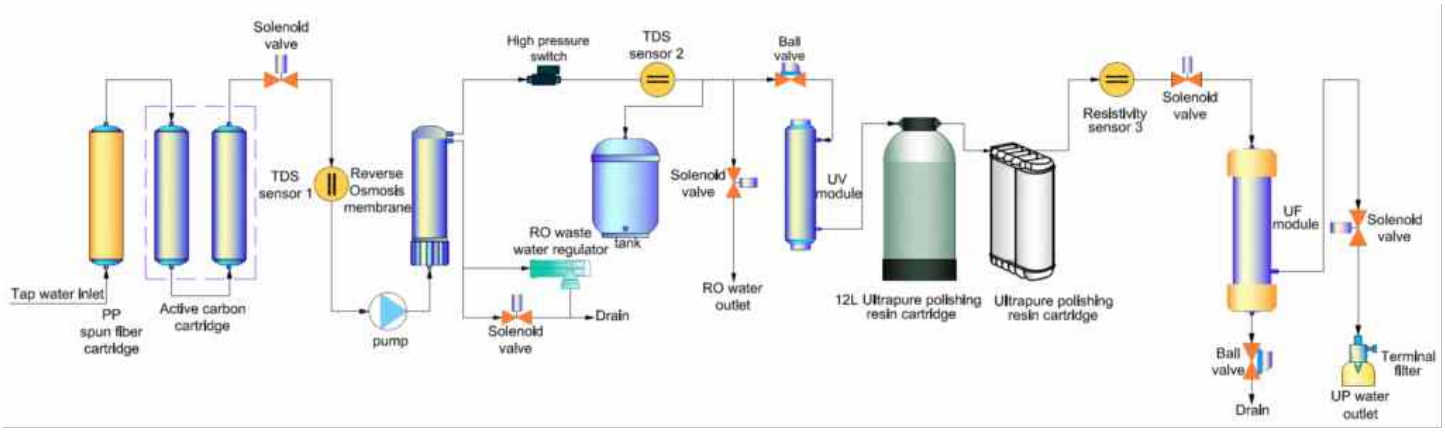
Remarks:

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

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

- With LCD controlling system, 3 way water quality sensor, timing and quality dispensing, stainless steel shell, built-in 2 set pressure tanks, single stage RO system and 1 pump, Medium-S series ultrapure water system is superior choice of ultrapure water's mass usage for high grade experiments.
- With tap water inlet, its output ranges from 45 to 125 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
	Medium-S 300/400/600/800	Medium-S 300/400/600/800UF	Medium-S 300/400/600/800UV	Medium-S 300/400/600/800UVF
Output(25℃)*	300 series:45 liters/hour, 400 series:63 liters/hour, 600 series:94 liters/hour, 800 series:125 liters/hour			
Pure water outlet	2: reverse osmosis water, ultrapure water			
Ultrapure water quality				
Resistivity(25℃)	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/μl	N/A	<4pg/μl

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℃,pressure:1.0-4.0Kgf/cm^2
Dimension and weight	Length×Width×Height:640×540×1110mm/ Weight: about70Kg
Electrical requirements	AC110-240V, 50/60Hz
Power	300/400 series:120W, 600/800 series: 240W,
Standard configuration	Main body (Including 1 set of cartridge)+2 set built-in 15 liters pressure tank

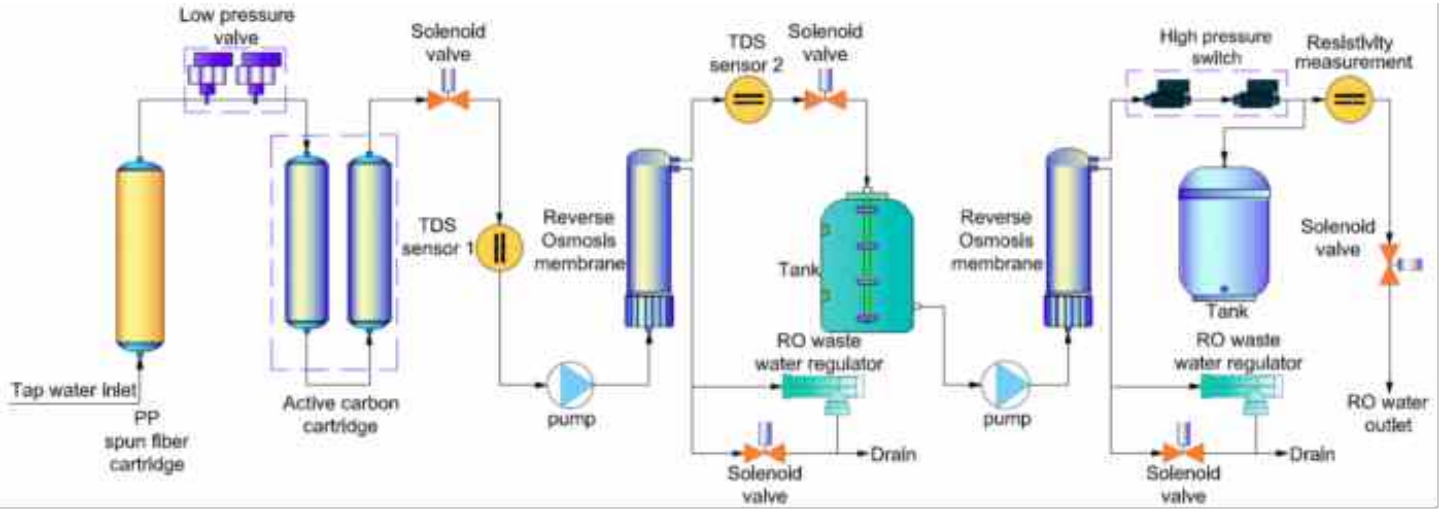
Remarks:

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

Medium-RRO series
Double stage reverse osmosis water system (Tap water inlet)

- Medium-R series is standard double stage reverse osmosis system. With 2 stage pump, 2 stage RO membrane and buffer tank, system achieves stable water quality, little drain, and low running cost.
- Compared with single stage RO system, the quality of RO water is better, and the running cost is lower for less consumables replacement. Moreover, compared with simple 2nd stage RO system (1 pump, 2 RO membrane, without buffer tank), its system design is more rational, and the RO quality is more stable. Even though with the worse source water, the 2nd stage RO water's conductivity also can stay 1-5μs/cm.
- Medium-RRO series is 2nd stage RO water system, with LCD controlling system, 3 way water quality sensor, timing and quality dispensing, stainless steel shell, built-in 2 set tanks (buffer tank and pressure tank). Its output ranges from 30 to 90 liters/hour. And the 2nd stage RO water's conductivity can stay 1-5μs/cm, suitable for glassware washing and general grade experiments.

◆ Flow Schematic



◆ Specifications

Model	Medium-RO300	Medium-RO400	Medium-RO600	Medium-RO800
Output -1st stage RO water*	63 liters/hour	93 liters/hour	125liters/hour	150 liters/hour
Output -2nd stage RO water*	30 liters/hour	45 liters/hour	60liters/hour	90 liters/hour
Pure water outlet	2: 1st and 2nd stage reverse osmosis water,			
RO water quality				
Conductivity - 1st stage RO water	Feed water conductivity×5%*			
Conductivity - 2nd stage RO water	1-5μs/cm*			

Bacteria	<0.1cfu/ml (with optional 0.2μm PES terminal filter)			
Particle(>0.2μm)	<1/ml (with optional 0.2μm PES terminal filter)			
Feed water requirements	Tap water, temperature:5-45℃,pressure:1.0-4.0Kgf/cm^2			
Dimension and weight	Length×Width×Height:640×540×1110mm / Weight: about 70Kg			
Electrical requirements	AC110-240V, 50/60Hz			
Power	240W	240W	240W	360W
Standard configuration	Main body (Including 1 set of cartridge)+built-in 15 liters pressure tank and buffer tank			

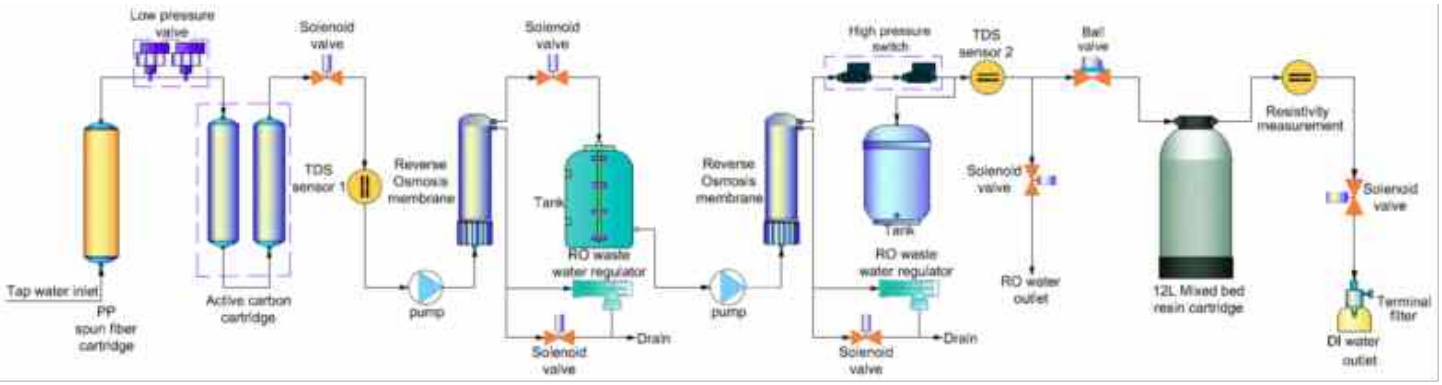
Remarks:

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

Medium-RQ series
Double stage reverse osmosis & deionized water system (Tap water inlet)

- Medium-R series is standard double stage reverse osmosis system. With 2 stage pump, 2 stage RO membrane and buffer tank, system achieves stable water quality, little drain, and low running cost.
- Compared with single stage RO system, the quality of RO water is better, and the running cost is lower for less consumables replacement. Moreover, compared with simple 2nd stage RO system (1 pump, 2 RO membrane, without buffer tank), its system design is more rational, and the RO quality is more stable. Even though with the worse source water, the 2nd stage RO water's conductivity also can stay 1-5μs/cm.
- Medium-RQ series is 2nd stage RO & deionized water system, with LCD controlling system, 3 way water quality sensor, timing and quality dispensing, stainless steel shell, built-in 2 set tanks (buffer tank and pressure tank). Its output ranges from 30 to 90 liters/hour. The 2nd stage RO water's conductivity can stay 1-5μs/cm, and the deionized water's resistivity is more than 10MΩ.cm, near to 18.2MΩ.cm. It completely meets the requirements of general chemical or biological experiments for pure water.

◆ Flow Schematic



◆ Specifications

Model	Medium-RO300	Medium-RO400	Medium-RO600	Medium-RO800
Output -1st stage RO water*	63 liters/hour	93 liters/hour	125liters/hour	150 liters/hour
Output -2nd stage RO water*	30 liters/hour	45 liters/hour	60liters/hour	90 liters/hour
Output -deionized water*	<30 liters/hour	<45 liters/hour	<60liters/hour	<90 liters/hour
Pure water outlet	3: 1st and 2nd stage reverse osmosis water, deionized water			

Deionized water quality				
Resistivity	10-18.2MΩ.cm			
Bacteria	<0.1cfu/ml			
Particle(>0.2μm)	<1/ml			
RO water quality				
Conductivity - 1st stage RO water	Feed water conductivity×5%*			
Conductivity - 2nd stage RO water	1-5μs/cm*			
Feed water requirements	Tap water, temperature:5-45℃,pressure:1.0-4.0Kgf/cm^2			
Dimension and weight	Length×Width×Height:640×540×1110mm / Weight: about 75Kg			
Electrical requirements	AC110-240V, 50/60Hz			
Power	240W	240W	240W	360W
Standard configuration	Main body (Including 1 set of cartridge)+built-in 15 liters pressure tank and buffer tank			

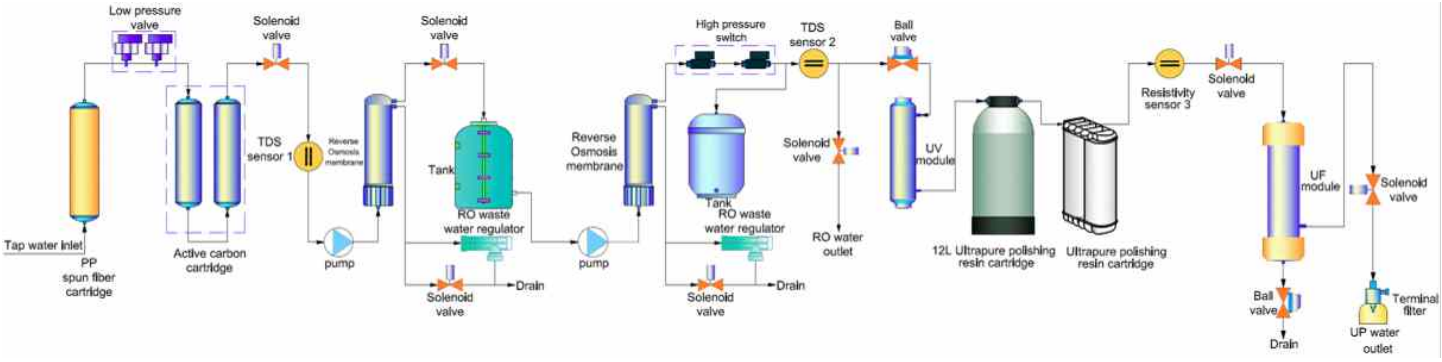
Remarks:

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

Medium-RS series
Double stage reverse osmosis & ultrapure water system (Tap water inlet)

- Medium-R series is standard double stage reverse osmosis system. With 2 stage pump, 2 stage RO membrane and buffer tank, system achieves stable water quality, little drain, and low running cost.
- Compared with single stage RO system, the quality of RO water is better, and the running cost is lower for less consumables replacement. Moreover, compared with simple 2nd stage RO system (1 pump, 2 RO membrane, without buffer tank), its system design is more rational, and the RO quality is more stable. Even though with the worse source water, the 2nd stage RO water's conductivity also can stay 1-5μs/cm.
- Medium-RS series is 2nd stage RO & ultrapure water system, with LCD controlling system, 3 way water quality sensor, timing and quality dispensing, stainless steel shell, built-in 2 set tanks (buffer tank and pressure tank). Its output ranges from 30 to 90 liters/hour. The 2nd stage RO water's conductivity can stay 1-5μs/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	Medium-RS 30/45/60/90	Medium-RS 30/45/60/90UF	Medium-RS 30/45/60/90UV	Medium-RS 30/45/60/90UVF
Output -1st stage RO water*	30 series: 63 liters/hour, 45 series: 93 liters/hour, 60 series: 125 liters/hour, 90 series: 150 liters/hour			
Output -2nd stage RO water*	30 series: 30 liters/hour, 45 series: 45 liters/hour, 60 series: 60liters/hour, 90 series: 90 liters/hour			
Output -deionized water*	30 series: <30 liters/hour, 45 series: <45 liters/hour, 60 series: <60liters/hour, 90 series:< 90 liters/hour			

Pure water outlet	3: 1st and 2nd stage reverse osmosis water, ultrapure water			
Ultrapure water quality				
Resistivity	10-18.2MΩ.cm			
TOC*	<10ppb	<10ppb	<3ppb	<3ppb
Bacteria	<0.1cfu/ml			
Particle(>0.2μm)	<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/μl	N/A	<4pg/μl
RO water quality				
Conductivity - 1st stage RO water	Feed water conductivity×5%*			
Conductivity - 2nd stage RO water	1-5μs/cm*			
Feed water requirements	Tap water, temperature:5-45℃,pressure:1.0-4.0Kgf/cm^2			
Dimension and weight	Length×Width×Height:640×540×1110mm / Weight: about 80Kg			
Electrical requirements	AC110-240V, 50/60Hz			
Power	240W	240W	240W	360W
Standard configuration	Main body (Including 1 set of cartridge)+built-in 15 liters pressure tank and buffer tank			

Remarks:

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