

# DOUBLE STAGE RO ULTRAPURE WATER PURIFICATION SYSTEM



## DOUBLE STAGE RO ULTRAPURE WATER PURIFICATION SYSTEM

System achieves water quality, little drain and low running cost. Applications like sample dilution, reagent preparation, microbiological analysis, water analysis and general HPLC makes this product an superior choice for water purification. Used in Laboratory, Manufacturing, Reefkeeping, Aquarium, Laboratory, Research.

Also known as Laboratory Double stage RO ultrapure Water Purification System.

## **WPS21** DOUBLE STAGE RO ULTRAPURE WATER PURIFICATION SYSTEM

Automatic microcomputer controlling system, multi-menu operating, real-time animation mode display.

Super-large LCD (Resolution:240×128, dimension:106×57mm) display, display the system running state and various parameters intuitively.

3 way on-line sensor, detect the quality of feed water, RO water, or ultrapure water respectively.

Self-flushing of the reverse osmosis membrane, extend the life of RO membrane.

Multiple alarm functions: such as no water, full water, disqualification of feed water, RO water, deionized water or ultrapure water, cartridge's life-span ends.

The cartridge's life-span can be set, the time used and left can be displayed, replacing auto-reminding, avoiding the decline of water quality.

Level II password, protect all the parameters setting, and prohibit any unauthorized settings change.

Water dispensing function-timing and quality (Time range:1-99min, water quality range:0.1-18.2M $\Omega$ .cm).

RS 232/USB communication port(optional), at least store 1 years' water quality data.

2 built-in tank (capacity:15 liters per tank) to save lab space, and optional exterior tanks meet different need to assure ample water-supply.

High-strength stainless steel shell with powder painting technics, achieve elegant appearance and meeting GLP standard.

The system is floor type, and it is convenient to move with wheels on the bottom.

Enough internal space is reserved to add circulation transportation system for central water supply.

Pipeline and fast-plug adaptor with NSF authorization, assure high quality ultrapure water.

DOW's RO membrane, ensure stable operation and high desalinization rate.

Special large capacity ultrapure polishing technology, to optimize pure water quality maximumly with minimum resin. With DOW's nuclear-grade polishing resin, to ensure ultrapure water's quality up to 18.2 M $\Omega$ .cm, with the lowest TOC dissolution.

Double wavelength (185&254nm) ultraviolet lamp module, restrain bacteria's increase and reduce TOC.

MWCO 5000D ultrafiltration module, effectively eliminate endotoxin precise cell cultivating and IVF.

 $(0.45+0.1)\mu m$  double layer PES terminal disinfection filter, assure the quality absolutely axenic.



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Model	WPS21-063RO	WPS21-094RO	WPS21-063DI	WPS21-094DI
Feed Water Requirements*				
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)			
Temperature	5-45°C			
Pressure		1.0-4.0 I	Kgf/cm²	
Flow Procedure**	PF+AC+R	O+RO+AC	PF+AC+RO+F	RO+AC+DI+TF
Output(25°C)****	1st stage RO water: 63 L/hr, 2nd stage RO water: 30 L/hr	1st stage RO water: 94 L/hr, 2nd stage RO water: 45 L/hr	1st stage RO water: 63 L/hr, 2nd stage RO water: 30 L/hr	1st stage RO water: 94 L/hr, 2nd stage RO water: 45 L/hr
Pure water outlet	1st and 2nd s	tage RO water	2nd stage RO and	d Deionized water
DimensionLxWxH		760x630x	1190 mm	
Weight		80	kg	
Standard configuration	Main body (Including 1	set of cartridges) + built- accesso		gallon pressure tank)+
Power Consumption (W)		300	) W	
Power Supply		AC110-220	V, 50/60 Hz	
Note	*The feed water quality will influence the pure water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, Dl:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.  **The feed water quality will influence the p water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active car RO:reverse osmosis, Dl:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:termin microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200pp 25°C, 50psi and 15% recovery rate.		cartridges life-span. In fiber, AC:active carbon, Is, DI:ion exchange, afiltration, TF:terminal lue of number will be rature and feed water ecifications are tested d water's TDS=200ppm,	
Ultrapure Water Quality				
1st stage RO water's TDS		TDS (ppm, mg/l) < TI	DS of tap water x 5%	
2nd stage RO water's conductivity	1-5µs/cm, Organic reje	ection rate>99% (when M rate>		and bacteria rejection
Heavy metal ion	-	-	<0.1	ppb
Resistivity(25°C)	-	-	-	-
Heavy Metal Ion	-	-	-	-
TOC***	-	-	-	-
Particle (>0.2µm)	-	-	-	-
Endotoxin	-	-	-	-
Rnases	-	-	-	-
Dnases	-	-	-	-
Bacteria	<0.1 cfu/ml			cfu/ml
Deionized water quality				
Resistivity	-	-	>10-18.	2 MΩ.cm
Conductivity	-		<u>-</u>	
Particle(>0.2µm)	-	-	<1	/ml

Model	WPS21-063	WPS21-063UF	WPS21-063UL	WPS21-063UV
Feed Water Requirements*				
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)			
Temperature	5-45°C			
Pressure	1.0-4.0 Kgf/cm <sup>2</sup>			

Flow Procedure**	PF+AC+RO+RO+(UV)+AC+DI+(UF)+TF				
Output(25°C)****	1st stage RO water: 63 L/hr, 2nd stage RO water: 30 L/hr				
Pure water outlet		1st, 2nd stage RC	O and Ultrapure water		
DimensionLxWxH		760x63	0x1190 mm		
Weight		8	80 kg		
Standard configuration	Main body (Inclu	ding 1 set of cartridges) + tank)+ a	- built-in 2 tank (40L PE t ccessory bag	ank+2 gallon pressure	
Power Consumption (W)		3	800 W		
Power Supply		AC110-22	20 V, 50/60 Hz		
Note	**PF:polypropyl UV:ultraviolet, U influenced by temp	*The feed water quality will influence the pure water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.			
Ultrapure Water Quality					
1st stage RO water's TDS		TDS (ppm, mg/l) < TDS of tap water x 5%			
2nd stage RO water's conductivity	1-5µs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%				
Heavy metal ion	-	-	-	-	
Resistivity(25°C)	18.2 MΩ.cm				
Heavy Metal Ion	<0.1 ppb				
TOC***	<3 ppb	<10	) ppb	<3 ppb	
Particle (>0.2µm)		•	<1/ml		
Endotoxin	<0.0	001 EU/ml	-	-	
Rnases	<0.	.01 ng/ml	-	-	
Dnases	<4pg/µl		-		
Bacteria	<0.1 cfu/ml				
Deionized water quality					
Resistivity	-	-	-	-	
Conductivity	-	-	-	-	
Particle(>0.2µm)	-	-	-	-	

Model	WPS21-094	WPS21-094UF	WPS21-094UV	WPS21-094UVF
Feed Water Requirements*				
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)			
Temperature		5	5-45°C	
Pressure		1.0-4	.0 Kgf/cm²	
Flow Procedure**		PF+AC+RO+RO+(UV)+AC+DI+(UF)+TF		
Output(25°C)****	1st stage RO water: 94 L/hr, 2nd stage RO water: 45 L/hr			
Pure water outlet	1st, 2nd stage RO and Ultrapure water			
DimensionLxWxH	760x630x1190 mm			
Weight	80 kg			
Standard configuration	Main body (Including 1 set of cartridges) + built-in 2 tank (40L PE tank+2 gallon pressure tank)+ accessory bag			
Power Consumption (W)		3	300 W	
Power Supply	AC110-220 V, 50/60 Hz			

Note	**PF:polypropyle UV:ultraviolet, U influenced by temp	*The feed water quality will influence the pure water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.		
Ultrapure Water Quality				
1st stage RO water's TDS		TDS (ppm, mg/l)	< TDS of tap water x 5%	
2nd stage RO water's conductivity	1-5µs/cm, Organic re	1-5µs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%		
Heavy metal ion	-	-	-	-
Resistivity(25°C)		18.2 MΩ.cm		
Heavy Metal Ion		<0.1 ppb		
TOC***	<1	<10 ppb <3 ppb		
Particle (>0.2µm)		<1/ml		
Endotoxin	-	<0.001 EU/ml	-	<0.001 EU/ml
Rnases	-	<0.01 ng/ml	-	<0.01 ng/ml
Dnases	-	<4pg/µl	-	<4pg/μl
Bacteria		<0.1 cfu/ml		
Deionized water quality				
Resistivity	-	-	-	-
Conductivity	-	-	-	-
Particle(>0.2µm)	-	-	-	-

Model	WPS21-125	WPS21-125UF	WPS21-125UV	
Feed Water Requirements*				
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)			
Temperature		5-45°C		
Pressure		1.0-4.0 Kgf/cm²		
Flow Procedure**	P	F+AC+RO+RO+(UV)+AC+DI+(UF	F)+TF	
Output(25°C)****	1st stage	RO water:125 L/hr, 2nd stage RO	water: 60 L/hr	
Pure water outlet	-	lst, 2nd stage RO and Ultrapure w	vater	
DimensionLxWxH		760x630x1190 mm		
Weight		80 kg		
Standard configuration	Main body (Including 1 set of cartridges) + built-in 2 tank (40L PE tank+2 gallon pressure tank)+ accessory bag			
Power Consumption (W)		300 W		
Power Supply	AC110-220 V, 50/60 Hz			
Note	*The feed water quality will influence the pure water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.			
Ultrapure Water Quality				
1st stage RO water's TDS	TDS (ppm, mg/l) < TDS of tap water x 5%			
2nd stage RO water's conductivity	1-5µs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%			
Heavy metal ion	-	-	-	
Resistivity(25°C)	18.2 MΩ.cm			
Heavy Metal Ion	<0.1 ppb			
TOC***	<	10 ppb	<3 ppb	

Particle (>0.2µm)	<1/ml		
Endotoxin	-	<0.001 EU/ml	-
Rnases	-	<0.01 ng/ml	-
Dnases	-	<4pg/µl	-
Bacteria	<0.1 cfu/ml		
Deionized water quality			
Resistivity	-	-	-
Conductivity	-	-	-
Particle(>0.2µm)	-	-	-



## **WPS21-125RO** MEDIUM DOUBLE STAGE RO ULTRAPURE WATER SYSTEM

Human engineering design, high-strength, streamline plastic shell.

One time injection molding process case, material: Polypropylene PP.

Elegant and compact case, integrating pre-filter, RO, DI, UV, UF and terminal filter into one.

All filters are built-in, for the smallest outside space.

Top cap of pre-filters in the case can be rapidly opened to replace the pre-filters without opening the case.

With electronic pressure sensor and microcomputer controlling, the system automatically produces pure water.

Automatic stop without water, automatic stop when water tank full, automatically cutting off water when pump stopping,

guaranteeing 24 hours' work.

Self-flushing of the reverse osmosis membrane, extend the life of RO membrane.

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 tap water

and RO water.

Different external tanks (optional) to meet every need and assure ample water-supply.

Pretreatment cartridges, RO module, ultrapure cartridges, all designed to modularization independently. Easy to

maintenance and replacement.

Pipeline and fast-plug adaptor with NSF authorization, assure high quality ultrapure water.

DOW's RO membrane, ensure stable operation and high desalinization rate.

4 ultrapure cartridges, with DOW's nuclear-grade polishing resin, ensure ultrapure water's quality up to 18.2  $\mbox{M}\Omega.\mbox{cm},$ 

with the lowest TOC dissolution.

Double wavelength (185&254nm) ultraviolet lamp module, restrain bacteria's increase and reduce TOC.

MWCO 5000D ultrafiltration module, effectively eliminate endotoxin precise cell cultivating and IVF.

 $(0.45 + 0.1) \mu m$  double layer PES terminal disinfection filter, assure the quality absolutely axenic.

Model	WPS21-125RO	
Feed Water Requirements*		
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)	
Temperature	5-45°C	
Pressure	1.0-4.0 Kgf/cm <sup>2</sup>	
Flow Procedure**	PF+AC+RO+AC	
Output(25°C)****	1st stage RO water:125 L/hr, 2nd stage RO water: 60 L/hr	
Pure water outlet	1st and 2nd stage RO water	
DimensionLxWxH	760x630x1190 mm	
Weight	80 kg	



Standard configuration	Main body (Including 1 set of cartridges) + built-in 2 tank (40L PE tank+2 gallon pressutank)+ accessory bag	
Power Consumption (W)	300 W	
Power Supply	AC110-220 V, 50/60 Hz	
Note	*The feed water quality will influence the pure water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.	
Ultrapure Water Quality		
1st stage RO water's TDS TDS (ppm, mg/l) < TDS of tap water x 5%		
2nd stage RO water's conductivity	1-5µs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%	

### **WPS22** DOUBLE STAGE RO ULTRAPURE WATER PURIFICATION SYSTEM

Automatic microcomputer controlling system, multi-menu operating, real-time animation mode display.

Super-large LCD (Resolution:240×128, dimension:106×57mm) display, display the system running state and various parameters intuitively.

3 way on-line sensor, detect the quality of feed water, RO water, or ultrapure water respectively.

Self-flushing of the reverse osmosis membrane, extend the life of RO membrane.

Multiple alarm functions: such as no water, full water, disqualification of feed water, RO water, deionized water or ultrapure water, cartridge's life-span ends.

The cartridge's life-span can be set, the time used and left can be displayed, replacing auto-reminding, avoiding the decline of water quality.

Level II password, protect all the parameters setting, and prohibit any unauthorized settings change.

-Water dispensing function-timing and quality (Time range:1-99min, water quality range:0.1-18.2M $\Omega$ .cm).

RS 232/USB communication port(optional), at least store 1 years' water quality data.

2 built-in tank (capacity:15 liters per tank) to save lab space, and optional exterior tanks meet different need to assure ample water-supply.

High-strength stainless steel shell with powder painting technics, achieve elegant appearance and meeting GLP standard.

The system is floor type, and it is convenient to move with wheels on the bottom.

Enough internal space is reserved to add circulation transportation system for central water supply.

Pipeline and fast-plug adaptor with NSF authorization, assure high quality ultrapure water.

-DOW's RO membrane, ensure stable operation and high desalinization rate.

Special large capacity ultrapure polishing technology, to optimize pure water quality maximumly with minimum resin. With DOW's nuclear-grade polishing resin, to ensure ultrapure water's quality up to 18.2 M $\Omega$ .cm, with the lowest TOC dissolution.

Double wavelength (185&254nm) ultraviolet lamp module, restrain bacteria's increase and reduce TOC.

MWCO 5000D ultrafiltration module, effectively eliminate endotoxin precise cell cultivating and IVF.

 $(0.45+0.1)\mu m$  double layer PES terminal disinfection filter, assure the quality absolutely axenic.



Model	WPS22-020RRO	WPS22-020RQ	WPS22-020RUVF
Feed Water Requirements*			
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)		
Temperature		5-45°C	
Pressure		1.0-4.0 Kgf/cm <sup>2</sup>	
low Procedure**	PF+KDF+AC+RO+RO+AC	PF+KDF+AC+RO+RO+AC+DI+TF	PF+KDF+AC+RO+RO+UV+DI+UF+TF
Output(25°C)****		15-20 L/hr	
Pure water outlet	1st and 2nd stage RO water	2nd stage RO and Deionized water	2nd stage RO and Ultrapure water
DimensionLxWxH		500x360x540 mm	
Weight		25 kg	
Standard configuration	Main body (Including 1 set o	of cartridges)+ assorted tank (built-in bag	tank+15 liters external tank)+ accessory
Power Consumption (W)		120 W	
Power Supply		AC110-220 V, 50/60 Hz	
Note	*The feed water quality will influence the pure water's quality and cartridges lifespan. **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.	*The feed water quality will influence the pure water's quality and cartridge life-span. ** PF:polypropylene spun fiber, KDF:kinetic degradation fluxion, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specification are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.	
Ultrapure Water Quality			
1st stage RO water's TDS		TDS (ppm,mg/l) < TDS of tap wat	er x 5%
2nd stage RO water's conductivity	1-5µs/cm, Organic rejection		articles and bacteria rejection rate>99%
Flow rate		2.0 L/min (with pressure tan	k)
Heavy metal ion	-	<0.1 ppb	-
Resistivity(25°C)	-	-	18.2 MΩ.cm
Heavy Metal Ion	-	-	<0.1 ppb
TOC***	-	-	<3 ppb
Particle (>0.2µm)	-	-	<1/ml
Endotoxin	-	-	<0.001 EU/ml
Rnases	-	-	<0.01 ng/ml
Dnases	-	<del>-</del>	<4pg/μl
Bacteria	-	<0.	1 cfu/ml
Deionized water quality			
Resistivity	-	>16-18.2 MΩ.cm	-

Conductivity		-	-
Particle(>0.2µm)	-	<1/ml (with terminal filter )	-







#### WPS21-125DI DEIONIZED DOUBLE STAGE RO ULTRAPURE

#### **WATER SYSTEM**

Integrating with Ionpure Electro deionization technology and module.

The largest capacity is 240 liters pure water per day.

Automatic microcomputer controlling system, multi-menu operating, real-time animation mode display.

Super-large LCD (Resolution:240×128, dimension:106×57mm) display, display the system running state and various parameters intuitively.

3 way on-line sensor, detect the quality of feed water, RO water, deionized water or ultrapure water respectively.

 $System\ sterilization\ procedure,\ achieve\ the\ disinfection\ of\ ultrapure\ water's\ pipeline.$ 

System circulation function, circulate water when the system stops working, to keep water quality.

Self-flushing of the reverse osmosis membrane, extend the life of RO membrane.

Multiple alarm functions: such as no water, full water, disqualification of feed water, RO water, deionized water or ultrapure water, cartridges' life-span ends.

The cartridges' life-span can be set, the time used and left can be displayed, replacing auto-reminding, avoiding the decline of water quality.

Level II password, protect all the parameters setting, and prohibit any unauthorized settings change.

Water dispensing function-timing and quality (Time range:1-99min, water quality range:0.1-18.2M $\Omega$ .cm).

RS 232/USB communication port (optional), at least store 1 year's water quality data.

Different external tanks (optional) to meet every need and assure ample water-supply.

Human engineering design, molding process, high-strength, streamline plastic shell.

Pretreatment cartridges, RO module, Electro deionization module, ultrapure cartridges, all designed to modularization independently. Easy

to maintenance and replacement.

Pipeline and fast-plug adaptor with NSF authorization, assure high quality ultrapure water.

KDF pretreating cartridge, replace the ordinary active carbon, prolong the life-span to 12 months, reduce the running cost.

DOW's RO membrane, ensure stable operation and high desalinization rate.

4 in 1 ultrapure cartridges (also can be divided to 4 independent cartridge), with DOW's nuclear-grade polishing resin, ensure ultrapure water's quality up to 18.2  $M\Omega$ .cm, with the lowest TOC dissolution.

Double wavelength (185&254nm) ultraviolet lamp module, restrain bacteria's increase and reduce TOC.

MWCO 5000D ultrafiltration module, effectively eliminate endotoxin precise cell cultivating and IVF.

 $(0.45+0.1)\mu m$  double layer PES terminal disinfection filter, assure the quality absolutely axenic.



Model	WPS21-125DI
Feed Water Requirements*	
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)
Temperature	5-45°C
Pressure	1.0-4.0 Kgf/cm <sup>2</sup>



Flow Procedure**	PF+AC+RO+AC+DI+TF
Bacteria	<0.1 cfu/ml
Output(25°C)****	1st stage RO water:125 L/hr, 2nd stage RO water: 60 L/hr
Pure water outlet	2nd stage RO and Deionized water
DimensionLxWxH	760x630x1190 mm
Weight	80 kg
Standard configuration	Main body (Including 1 set of cartridges) + built-in 2 tank (40L PE tank+2 gallon pressure tank)+ accessory bag
Power Consumption (W)	300 W
Power Supply	AC110-220 V, 50/60 Hz
Note	*The feed water quality will influence the pure water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.
Deionized water quality	
Resistivity	>10-18.2 MΩ.cm
Conductivity	-
Ultrapure Water Quality	
1st stage RO water's TDS	TDS (ppm, mg/l) < TDS of tap water x 5%
2nd stage RO water's conductivity	1-5μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%
Heavy metal ion	<0.1 ppb

#### **WPS22** DOUBLE STAGE RO ULTRAPURE WATER SYSTEM

Automatic microcomputer controlling system, multi-menu operating, real-time animation mode display.

Super-large LCD (Resolution:240×128, dimension:106×57mm) display, display the system running state and various parameters intuitively.

3 way on-line sensor, detect the quality of feed water, RO water, or ultrapure water respectively.

System sterilization procedure, achieve the disinfection of ultrapure water's pipeline.

System circulation function, circulate water when the system stops working, to keep water quality.

Self-flushing of the reverse osmosis membrane, extend the life of RO membrane.

Multiple alarm functions: such as no water, full water, disqualification of feed water, RO water, deionized water or ultrapure water, cartridges' life-span ends.

The cartridge's life-span can be set, the time used and left can be displayed, replacing auto-reminding, avoiding the decline of water quality.

Level II password, protect all the parameters setting, and prohibit any unauthorized settings change.

Water dispensing function-timing and quality (Time range:1-99min, water quality range:0.1-18.2M $\Omega$ .cm).

RS 232/USB communication port(optional), at least store 1 years' water quality data.

Different external tanks (optional) to meet every need and assure ample water-supply.

Human engineering design, molding process, high-strength, streamline plastic shell.

Pretreatment cartridges, RO module, ultrapure cartridges, all designed to modularization independently. Easy to maintenance and replacement.

Pipeline and fast-plug adaptor with NSF authorization, assure high quality ultrapure water.

KDF pretreating cartridge, replace the ordinary active carbon, prolong the life-span to 12 months, reduce the running cost.

DOW's RO membrane, ensure stable operation and high desalinization rate.

4 in 1 ultrapure cartridges (also can be divided to 4 independent cartridge), with DOW's nuclear-grade polishing resin, ensure ultrapure water's quality up to 18.2  $M\Omega$ .cm, with the lowest TOC dissolution.

Double wavelength (185&254nm) ultraviolet lamp module, restrain bacteria's increase and reduce TOC.

MWCO 5000D ultrafiltration module, effectively eliminate endotoxin precise cell cultivating and IVF.

 $(0.45+0.1)\mu m$  double layer PES terminal disinfection filter, assure the quality absolutely axenic.



Model	WPS22-020R	WPS22-020RUV
Feed Water Requirements*		
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)	
Temperature	5-45°C	
Pressure	1.0-4.0 Kgf/cm <sup>2</sup>	
Flow Procedure**	PF+KDF+AC+RO+RO+DI+TF	PF+KDF+AC+RO+RO+UV+DI+TF
Bacteria	<0.1 cfu/ml	
Output(25°C)****	15-20 L/hr	
Pure water outlet	2nd stage RO and Ultrapure water	
DimensionLxWxH	500x360x540 mm	

Weight	25 kg	
Standard configuration	Main body (Including 1 set of cartridges)+ assorted tank (built-in tank+15 liters external tan accessory bag	k)+
Power Consumption (W)	120 W	
Power Supply	AC110-220 V, 50/60 Hz	
Note	*The feed water quality will influence the pure water's quality and cartridges life-span. ** PF:polypropylene spun fiber, KDF:kinetic degradation fluxion, AC:active carbon, RO:reverse osmosis, Dl:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Valu number will be influenced by temperature and feed water quality. ****All the specifications at tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.	e e of are
Ultrapure Water Quality		
Resistivity(25°C)	18.2 MΩ.cm	
Heavy Metal Ion	<0.1 ppb	
TOC***	<10 ppb <3 ppb	
Particle (>0.2µm)	<1/ml	
1st stage RO water's TDS	TDS (ppm,mg/l) < TDS of tap water x 5%	
2nd stage RO water's conductivity	1-5µs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%	
Flow rate	2.0 L/min (with pressure tank)	





#### WPS22-020RUF DOUBLE STAGE RO ULTRAPURE WATER SYSTEM

Automatic microcomputer controlling system, multi-menu operating, real-time animation mode display.

Super-large LCD (Resolution:240×128, dimension:106×57mm) display, display the system running state and various parameters intuitively.

3 way on-line sensor, detect the quality of feed water, RO water, or ultrapure water respectively.

System sterilization procedure, achieve the disinfection of ultrapure water's pipeline. System circulation function, circulate water when the system stops working, to keep

Self-flushing of the reverse osmosis membrane, extend the life of RO membrane.

Multiple alarm functions: such as no water, full water, disqualification of feed water, RO water, deionized water or ultrapure water, cartridges' life-span ends.

The cartridge's life-span can be set, the time used and left can be displayed, replacing auto-reminding, avoiding the decline of water quality.

Level II password, protect all the parameters setting, and prohibit any unauthorized settings change.

Water dispensing function-timing and quality (Time range:1-99min, water quality range:0.1-18.2M $\Omega$ .cm).

RS 232/USB communication port(optional), at least store 1 years' water quality data.

Different external tanks (optional) to meet every need and assure ample water-supply.

Human engineering design, molding process, high-strength, streamline plastic shell.

Pretreatment cartridges, RO module, ultrapure cartridges, all designed to modularization independently. Easy to maintenance and replacement.

Pipeline and fast-plug adaptor with NSF authorization, assure high quality ultrapure water.

KDF pretreating cartridge, replace the ordinary active carbon, prolong the life-span to 12 months, reduce the running cost.

DOW's RO membrane, ensure stable operation and high desalinization rate.

4 in 1 ultrapure cartridges (also can be divided to 4 independent cartridge), with DOW's nuclear-grade polishing resin, ensure ultrapure water's quality up to 18.2  $M\Omega$ .cm, with the lowest TOC dissolution.

Double wavelength (185&254nm) ultraviolet lamp module, restrain bacteria's increase and reduce TOC.

MWCO 5000D ultrafiltration module, effectively eliminate endotoxin precise cell cultivating and IVF.

 $(0.45+0.1)\mu m$  double layer PES terminal disinfection filter, assure the quality absolutely axenic



#### **SPECIFICATIONS**

water quality.

Model	WPS22-020RUF	
Feed Water Requirements*		
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)	
Temperature	5-45°C	
Pressure	1.0-4.0 Kgf/cm <sup>2</sup>	
Flow Procedure**	PF+KDF+AC+RO+RO+DI+UF+TF	
Bacteria	<0.1 cfu/ml	
Output(25°C)****	15-20 L/hr	
Pure water outlet	2nd stage RO and Ultrapure water	
DimensionLxWxH	500x360x540 mm	

Weight	25 kg
Standard configuration	Main body (Including 1 set of cartridges)+ assorted tank (built-in tank+15 liters external tank)+ accessory bag
Power Consumption (W)	120 W
Power Supply	AC110-220 V, 50/60 Hz
Note	*The feed water quality will influence the pure water's quality and cartridges life-span. ** PF:polypropylene spun fiber, KDF:kinetic degradation fluxion, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration.  ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.
Ultrapure Water Quality	
Resistivity(25°C)	18.2 MΩ.cm
Heavy Metal Ion	<0.1 ppb
TOC***	<10 ppb
Particle (>0.2µm)	<1/ml
Endotoxin	<0.001 EU/ml
Rnases	<0.01 ng/ml
Dnases	<4pg/µl
1st stage RO water's TDS	TDS (ppm,mg/l) < TDS of tap water x 5%
2nd stage RO water's conductivity	1-5µs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%
Flow rate	2.0 L/min (with pressure tank)

#### WPS21-125UVF DOUBLE STAGE RO ULTRAPURE WATER SYSTEM



Model	WPS21-125UVF	
Feed Water Requirements*		
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)	
Temperature	5-45°C	
Pressure	1.0-4.0 Kgf/cm <sup>2</sup>	
Flow Procedure**	PF+AC+RO+RO+(UV)+AC+DI+(UF)+TF	
Bacteria	<0.1 cfu/ml	
Output(25°C)****	1st stage RO water:125 L/hr, 2nd stage RO water: 60 L/hr	
Pure water outlet	1st, 2nd stage RO and Ultrapure water	

DimensionLxWxH	760x630x1190 mm
Weight	80 kg
Standard configuration	Main body (Including 1 set of cartridges) + built-in 2 tank (40L PE tank+2 gallon pressure tank)+ accessory bag
Power Consumption (W)	300 W
Power Supply	AC110-220 V, 50/60 Hz
Note	*The feed water quality will influence the pure water's quality and cartridges life-span.  **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, UV:ultraviolet, UF:ultrafiltration, TF:terminal microfiltration. ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.
Ultrapure Water Quality	
Resistivity(25°C)	18.2 MΩ.cm
Heavy Metal Ion	<0.1 ppb
TOC***	<3 ppb
Particle (>0.2µm)	<1/ml
Endotoxin	<0.001 EU/ml
Rnases	<0.01 ng/ml
Dnases	<4pg/µl
1st stage RO water's TDS	TDS (ppm, mg/l) < TDS of tap water x 5%
2nd stage RO water's conductivity	1-5µs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%



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