



www.labstac.com

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

# **WR11 SERIES** MEDIUM 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.
- 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 watersupply.
- 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)µm double layer PES terminal disinfection filter, assure the quality absolutely axenic.

Model	WR111	WR112	WR113	
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+AC		
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:125 L/hr, 2nd stage RO water: 60 L/hr	
Pure water outlet		1st and 2nd stage RO water		
DimensionLxWxH		760×630×1190 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.			
1st stage RO water's TDS	TDS (ppm, mg/l) < TDS of tap water x 5%			
2nd stage RO water's conductivity	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%			

# **WR21 SERIES** DEIONIZED 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.
- 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 watersupply.
- 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	WR211	WR212	WR213	
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+AC+DI+TF		
Bacteria		<0.1 cfu/ml		
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:125 L/hr, 2nd stage RO water: 60 L/hr	
Pure water outlet		2nd stage RO and Deionized water		
DimensionLxWxH		760×630×1190 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.			
Resistivity		>10-18.2 MΩ.cm		
Conductivity		-		
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	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%			
Heavy metal ion		<0.1 ppb		

# WR31 SERIES 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.
- 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 watersupply.
- 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)µm double layer PES terminal disinfection filter, assure the quality absolutely axenic.

Model	WR311	WR312	WR313	
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatmen	nt filter is recommended, if	TDS>200 ppm)	
Temperature	5-45	5°C		
Pressure	1.0-4.0 K	(gf/cm²		
Flow Procedure**	PF+AC+RO+RO+(U\	V)+AC+DI+(UF)+TF		
Bacteria	<0.1 c	fu/ml		
Output(25°C)****	1st stage RO water: 63 L/hr, 2nd stage RO water: 30 L/hr	30 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	760×630×	760×630×1190 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.			
Resistivity(25°C)	18.2 M	Ω.cm		
Heavy Metal Ion	<0.1	ppb		
TOC***	<3 ppb	<10 ppb	<3 ppb	
Particle (>0.2µm)	<1/ml			
Endotoxin	<0.001 EU/ml	<0.001 EU/ml -		
Rnases	<0.01 ng/ml -			
Dnases	<4 pg/μl -			
1st stage RO water's TDS	TDS (ppm, mg/l) < TDS of tap water x 5%			
2nd stage RO water's conductivity	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%			

Model	WR314	WR315	
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 H	Kgf/cm²	
Flow Procedure**	PF+AC+RO+RO+(U	V)+AC+DI+(UF)+TF	
Bacteria	<0.1 c	fu/ml	
Output(25°C)****	1st stage RO water: 94 L/hr, 2nd stage RO water: 45 L/hr	1st stage RO water:125 L/hr, 2nd stage RO water: 60 L/hr	
Pure water outlet	1st, 2nd stage RO a	nd Ultrapure water	
DimensionLxWxH	760×630×	1190 mm	
Weight	80	kg	
Standard configuration	Main body (Including 1 set of cartridges) + built- accesso	· · · · · · · · · · · · · · · · · · ·	
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.		
Resistivity(25°C)	18.2 M	1Ω.cm	
Heavy Metal Ion	<0.1	ppb	
TOC***	<3 ppb	<10 ppb	
Particle (>0.2µm)	<1/	/ml	
Endotoxin	<0.001 EU/ml		
Rnases	<0.01 ng/ml		
Dnases	<4 pg/μl		
1st stage RO water's TDS	TDS (ppm, mg/l) < TDS of tap water x 5%		
2nd stage RO water's conductivity	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%		

### WR32 SERIES 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.
- 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 watersupply.
- 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)µm double layer PES terminal disinfection filter, assure the quality absolutely axenic.



Model	WR321	WR322	WR323	WR324		
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+A0	C+RO+RO+(UV)+AC+DI+(UF)+T	F		
Bacteria			<0.1 cfu/ml			
Output(25°C)****		O water:125 L/hr, 2nd O water: 60 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, 2	nd stage RO and Ultrapure water	•		
DimensionLxWxH			760×630×1190 mm			
Weight			80 kg			
Standard configuration	Main body	(Including 1 set of carti	ridges) + built-in 2 tank (40L PE t accessory bag	ank+2 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, 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.					
Resistivity(25°C)			18.2 MΩ.cm			
Heavy Metal Ion			<0.1 ppb			
TOC***		<3 ppb	<10	) 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	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%					
Endotoxin	-	<0.001 EU/ml	-	-		
Rnases	-	<0.01 ng/ml	-	-		
Dnases	-	<4 pg/µl	-	-		
		WD205	NAMES OF THE PARTY	WD207		

Model	WR325	WR326	WR327		
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: 63 L/hr, 2nd stage RO water: 30 L/hr	1st stage RO water:125 L/hr, 2nd stage RO water: 60 L/hr	1st stage RO water: 63 L/hr, 2nd stage RO water: 30 L/hr		
Pure water outlet	1:	st, 2nd stage RO and Ultrapure wate	er		
DimensionLxWxH	760×630×1190 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.			
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	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%			
Endotoxin	<0.001 EU/ml			
Rnases	<0.01 ng/ml		-	
Dnases	<4 pg/μl	-	-	

# **WR41 SERIES** 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)µm double layer PES terminal disinfection filter, assure the quality absolutely axenic.

Model	WR411
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+AC
Output(25°C)****	15-20 L/hr
Pure water outlet	1st and 2nd stage RO water
DimensionLxWxH	500×360×540 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.
1st stage RO water's TDS	TDS (ppm,mg/l) < TDS of tap water x 5%
2nd stage RO water's conductivity	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%
Flow rate	2.0 L/min (with pressure tank)

# **WR42 SERIES** DEIONIZED 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.

### **SPECIFICATIONS**

Model	WR421
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+AC+DI+TF
Bacteria	<0.1 cfu/ml
Output(25°C)****	15-20 L/hr
Pure water outlet	2nd stage RO and Deionized water
DimensionLxWxH	500×360×540 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.
Resistivity	>16-18.2 MΩ.cm
Conductivity	-
Particle(>0.2µm)	<1/ml (with terminal filter )
1st stage RO water's TDS	TDS (ppm,mg/l) < TDS of tap water x 5%
2nd stage RO water's conductivity	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%
Heavy metal ion	<0.1 ppb
Flow rate	2.0 L/min (with pressure tank)

# WR43 SERIES 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.

Model	WR431	WR432	WR433	WR434		
Water Inlet	Tap water: TD:	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)				
Temperature		ī	5-45°C			
Pressure		1.0-4	.0 Kgf/cm²			
Flow Procedure**	PF+KDF+AC+RO+RO	PF+KDF+AC+RO+RO+DI	PF+KDF+AC+RO+RO+U	PF+KDF+AC+RO+RO+UV+		
riow Procedure	+DI+TF	+UF+TF	V+DI+TF	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	500×360×540 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		AC110-2	20 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.			
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	1-5 μs/cm, Organic rejection rate>99% (when MW>200 Dalton), Particles and bacteria rejection rate>99%			
Flow rate	2.0 L/min (with pressure tank)			
Endotoxin	-	<0.001 EU/ml	-	<0.001 EU/ml
Rnases	-	<0.01 ng/ml	-	<0.01 ng/ml
Dnases	-	<4 pg/μl	-	<4 pg/μl

