

# RO WATER PURIFICATION SYSTEM



# RO WATER PURIFICATION SYSTEM

Modularly designed for functional and economical production of high-purity water. It is ideal for laboratory applications such as reagent preparation, constant temperature and humidity chamber, and glassware washing.

Used in Food Industry, Beverage Industry, Agriculture, Boiler Feed, Disaster Relief Environmental, Hospital, Hotel, Marine, Military, Mining, Pharmaceutical, Power.

Also known as Laboratory RO water system.

## WO11 SERIES BASIC RO WATER SYSTEM

- Automatic microcomputer controlling system, LED real-time animation mode display.
- Running status is showed in the LED, such as flushing, producing water, full tank, water shortage, leakage and service.
- Power on self test, power reset, alarm when work more than 6 hours continuously, water shortage, leakage, low pressure and high pressure.
- 3 procedure of the reverse osmosis membrane's self-flushing: power on, water shortage reset and work more than 2 hours continuously, extend the life of RO membrane.
- Bench top and floor stand(except for 45 series and built-in tank type), 2 kind installation method
- High-strength shell with powder painting technics, achieve elegant appearance and meeting GLP standard
- Pretreatment cartridges, RO module, deionized cartridges, all designed to modularization independently. Easy to maintenance and replacement.
- Built-in 12 liters pressure tank (IT series), save lab space and easy to maintain.
- Different external tanks (optional) to meet every need and assure ample 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.
- Precision polishing mixed resin cartridge, combine high pure water quality and low running cost.
- Portable TDS/conductivity test pen, testing feed water, RO water and deionized water's quality.



## SPECIFICATIONS

Model	WO111	WO112	WO113
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 Kg/cm <sup>2</sup>		
Flow Procedure**	PF+AC+RO+AC		
Ion rejection rate	96%-99% (New RO membrane)		
Organic rejection rate	>99% (when MW>200 Dalton)		
Particles and bacteria rejection rate	>99%		
Output(25°C)***	15 L/hrs		30 L/hrs
Pure water outlet	RO water		
DimensionLxWxH	410×320×420 mm	410×400×420 mm	410×320×420 mm
Weight	15 kg	20 kg	15 kg
Standard configuration	Main body (Including 1 set of cartridges) + TDS pen+ accessory bag	Main body (Including 1 set of cartridges)+ built-in 10 liters tank + TDS pen+ accessory bag	Main body (Including 1 set of cartridges) + TDS pen+ accessory bag
Power Consumption (W)	72 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. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.		

Model	WO114	WO115	WO116
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 Kg/cm <sup>2</sup>		
Flow Procedure**	PF+AC+RO+AC		
Ion rejection rate	96%-99% (New RO membrane)		
Organic rejection rate	>99% (when MW>200 Dalton)		
Particles and bacteria rejection rate	>99%		
Output(25°C)***	45 L/hrs	30 L/hrs	45 L/hrs
Pure water outlet	RO water		
DimensionLxWxH	410×320×420 mm	410×400×420 mm	
Weight	15 kg	20 kg	
Standard configuration	Main body (Including 1 set of cartridges) + TDS pen+ accessory bag	Main body (Including 1 set of cartridges)+ built-in 10 liters tank + TDS pen+ accessory bag	
Power Consumption (W)	120 W	72 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, AC:active carbon, RO:reverse osmosis, DI:ion exchange. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.		

# WO12 SERIES BASIC RO 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 MΩ.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.



## SPECIFICATIONS

Model	WO121
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 Kg/cm <sup>2</sup>

Flow Procedure**	PF+AC+RO+AC
Ion rejection rate	96%-99% (New RO membrane)
Organic rejection rate	>99% (when MW>200 Dalton)
Particles and bacteria rejection rate	>99%
Bacteria	<0.1 cfu/ml (with optional 0.45+0.1µm PES terminal filter)
Particles(>0.2µm)	<1/ml (with optional 0.45+0.1 µm PES terminal filter)
Output(25°C)***	15 L/hrs
Pure water outlet	RO water
Water Quality Monitor	Portable TDS/conductivity test pen
DimensionLxWxH	410×220×420 mm
Weight	20 kg
Standard configuration	Main body (Including 1 set of cartridges)+15 liters tank+ TDS pen +accessory bag
Power Consumption (W)	48 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. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.
Flow rate	2.0 L/min (with pressure tank)

## WO13 SERIES MEDIUM RO 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:0.1-18.2MΩ.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 MΩ.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.

## SPECIFICATIONS

Model	WO131	WO132	WO133
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 Kg/cm <sup>2</sup>		
Flow Procedure**	PF+AC+RO+AC		
Ion rejection rate	96%-99% (New RO membrane)		
Organic rejection rate	>99%, when MW>200 Dalton		
Particles and bacteria rejection rate	>99%		
Bacteria	<0.1 cfu/ml (with optional 0.2μm PES terminal filter)		
Particles(>0.2μm)	<1/ml (with optional 0.2 μm PES terminal filter)		
Output(25°C)****	45 L/hr	63 L/hr	94 L/hr
Pure water outlet	RO water		
Water Quality Monitor	Portable TDS/conductivity test pen + on-line conductivity monitor		
DimensionLxWxH	640×540×1110 mm		
Weight	70 kg		
Standard configuration	Main body (Including 1 set of cartridges)+ 2 built-in15 liters tank+ TDS pen +accessory bag		
Power Consumption (W)	120 W		240 W
Power Supply	AC110-220 V, 50/60 Hz		
Note	<p>*The feed water quality will influence the pure water's quality and cartridges' life-span.</p> <p>**PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.</p>		

Model	WO134	WO135
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 Kg/cm <sup>2</sup>	
Flow Procedure**	PF+AC+RO+AC	PF+AC+RO+RO+AC
Ion rejection rate	96%-99% (New RO membrane)	
Organic rejection rate	>99%, when MW>200 Dalton	>99%(when MW>200 Dalton)
Particles and bacteria rejection rate	>99%	
Bacteria	<0.1 cfu/ml (with optional 0.2µm PES terminal filter)	-
Particles(>0.2µm)	<1/ml (with optional 0.2 µm PES terminal filter)	-
Output(25°C)****	125 L/hr	250 L/hr
Pure water outlet	RO water	
Water Quality Monitor	Portable TDS/conductivity test pen + on-line conductivity monitor	-
DimensionLxWxH	640×540×1110 mm	760×550×1210 mm
Weight	70 kg	85 kg
Standard configuration	Main body (Including 1 set of cartridges)+ 2 built-in15 liters tank+ TDS pen +accessory bag	Main body (Including 1 set of cartridges) + accessory bag
Power Consumption (W)	240 W	480 W
Power Supply	AC110-220 V, 50/60 Hz	
Note	<p>*The feed water quality will influence the pure water's quality and cartridges' life-span.</p> <p>**PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.</p>	<p>*The feed water quality will influence the pure waters quality and cartridges life-span. **PF:polypropylene spun fiber, AC:active carbon, RO:reverse osmosis, DI:ion exchange, ***Value of number will be influenced by temperature and feed water quality. ****All the specifications are tested under the situation:feed waters TDS=200ppm, 25°C, 50psi and 15% recovery rate.</p>



WO135

## WO14 SERIES LARGE CAPACITY RO WATER SYSTEM

- Integration design
- Integrating pretreatment, reverse osmosis, deionization, ultraviolet, ultrafiltration, microfiltration, 250 liters stainless steel tank and pure water supplying and circulation system together.
- Perfect control, monitor and alarm
- This series could monitor and alarm, including shortage of water, leaking, water pressure, water level, flow velocity and water quality etc.
- Operate and record easily
- This series operate automatically, all the status of working has indicator light; it also could connect to the computer, then you can download all the information from the computer.
- Reliable safety
- This series would alarm, when the water quality is not qualified, also has the protection of high/low voltage, electrical overload protection and protection for leaking.
- Good extension



### SPECIFICATIONS

Model	WO141	WO142
Water Inlet	Tap water or ground water	
Flow Procedure**	QZ+AC+SI+MF+RO	
Ion rejection rate	≥98%	
Output(25°C)****	250 L/hr	500 L/hr
DimensionLxWxH	1310×550×1750 mm	
Weight	300 kg	
Power Consumption (W)	3000 W	5000 W
Power Supply	AC380 V, 50 Hz	
Note	-	
Particle(>0.2μm)	-	Particle (>0.2 μm)<1/ml (with terminal filter)

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- 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.
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## SPECIFICATIONS

Model	WO122
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 Kg/cm <sup>2</sup>
Flow Procedure**	PF+AC+RO+AC
Ion rejection rate	96%-99% (New RO membrane)
Organic rejection rate	>99% (when MW>200 Dalton)
Particles and bacteria rejection rate	>99%
Bacteria	<0.1 cfu/ml (with optional 0.45+0.1μm PES terminal filter)
Particles(>0.2μm)	<1/ml (with optional 0.45+0.1 μm PES terminal filter)
Output(25°C)****	30 L/hrs
Pure water outlet	RO water
Water Quality Monitor	Portable TDS/conductivity test pen
DimensionLxWxH	410×220×420 mm
Weight	20 kg

Standard configuration	Main body (Including 1 set of cartridges)+15 liters tank+ TDS pen +accessory bag
Power Consumption (W)	72 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. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.
Flow rate	2.0 L/min (with pressure tank)

**LABSTAC LTD.**

Kemp House 152 – 160 City Road, London EC1V 2NX, United Kingdom.

Email: [contact@labstac.com](mailto:contact@labstac.com)

Website: [www.labstac.com](http://www.labstac.com)