Master

water purification system

Models:

Master-Q15 / 30
Master-Q15 / 30UT
Master-S15 / 30
Master-S15 / 30UF
Master-S15 / 30UV
Master-S15 / 30UVF
Master-D
Master-DUF
Master-DUV
Master-DUVF

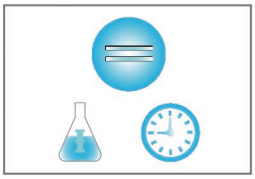
Master series, integrating micro-computer control system with LCD display, 3 way water quality sensors, timing and quality dispensing, single stage RO system and 2 pumps (S-series, and Q / D-series just 1 pump), its output ranges from 15 to 30 liters/hour with tap water inlet. And with distilled water inlet, its output is up to 2 liters/minute.

With tap water inlet, it can produce single stage RO water, deionized water and ultrapure water. And with distilled water inlet, it can produce deionized water and ultrapure water.

The single stage RO water's Ion rejection rate is more than 97%. The deionized water's resistivity is above 16MΩ.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.

Micro-computer control system with LCD display

- LCD (resolution: 240×128, dimension: 106×57mm), intuitively display the system running state and various real-time parameters.

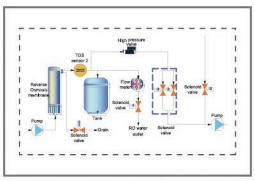


Comprehensive monitoring system

- 3 way online water quality sensors, detect the quality of feed water, RO water, deionized water, or ultrapure water respectively. And warn once water quality's standard exceeding.
- Water dispensing function- timing and quality (time range: 1-99min, water quality range: 0.1-18.2MΩ.cm).water.

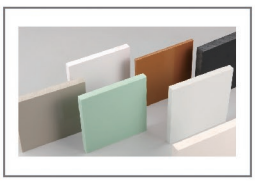
Easy-to-replacing cartridge

- Independent pretreatment design, and integrated subsequent purification unit design, with fast inserted adapters, easy to replace.



Single stage RO and 2 pumps system

- 1st pump, to achieve single stage RO system, easy to maintain.
- 2nd pump, to achieve system sanitizing and circulation.



Whole plastic shell with high-strength

- Excellent ergonomic design, avoid rusting and keep clean, to meet GLP standard.

Features and Advantages

- 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).
- System sanitizing procedure, achieve the disinfection of ultrapure water's tube and valve.
- System circulation function, achieve ultrapure water's circulation to keep top quality of ultrapure water.
- Level II password, protect all the parameters setting, and prohibit any unauthorized setting change.
- External water tanks is optional to meet different need and assure ample water-supply.
- 3 doors 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.
- Optimized pretreatment (including PP fiber, KDF and active carbon cartridge), effectively protect RO membrane.
- RO module with DOW's membrane, ensure long life, stable operation and high desalinization rate.
- 4 in 1 ultrapure cartridge (can be divided to 4 independent cartridge) 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.
- (0.45+0.1)μm double layer PES terminal disinfection filter, assure that terminal pure water is absolutely axenic.

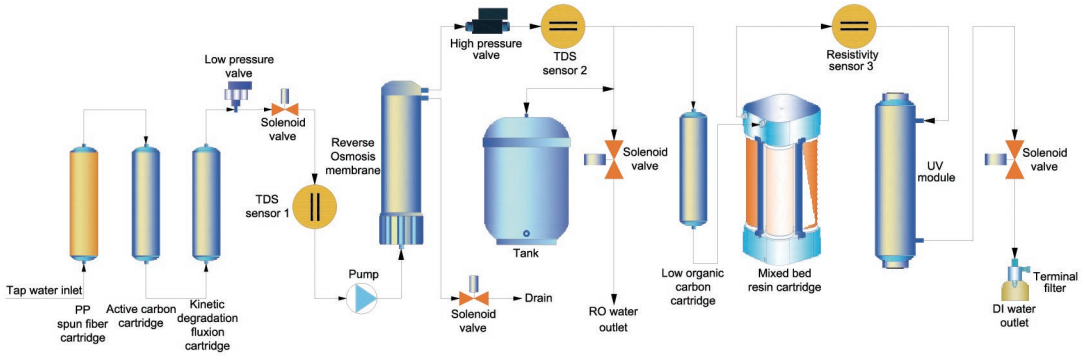
Master-Q series

Deionized water system (Tap water inlet)

With LCD controlling system, 3 way water quality sensors, timing and quality dispensing, single stage RO system and 1 pump, Master-Q series deionized water system is sub-superior choice of deionized water for general grade experiments.

With tap water inlet, its output ranges from 15 to 30 liters/hour. It can produce single stage RO water and deionized water. The single stage RO water's ion rejection rate is more than 97%, and the deionized water's resistivity is more than 16MΩ.cm, near to18.2MΩ.cm. It completely meets the requirements of general chemical or biological experiments for pure water.

Flow Schematic



Specifications

Model	Master-Q15	Master-Q15UT	Master-Q30	Master-Q30UT
Output(25℃)*	15 liters/hour		30 liters/hour	
Flow rate	Up to 2 liters/minute (with pressure tank)			
Pure water outlet	2: reverse osmosis water, deionized water			
Deionized water quality				
Resistivit(25℃)	16-18.2MΩ.cm			
Bacteria	N/A	<0.1cfu/ml	N/A	<0.1cfu/ml
Particle(>0.1μm)	N/A	<1/ml	N/A	<1/ml
RO water quality				
Ion rejection rate	97%-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:500×360×540mm / Weight: about 20Kg			
Electrical requirements	AC100-240V, 50/60Hz			
Power	120W			
Standard configuration	Main body (Including 1 set of cartridge)+15 liters pressure tank			

Remarks:

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

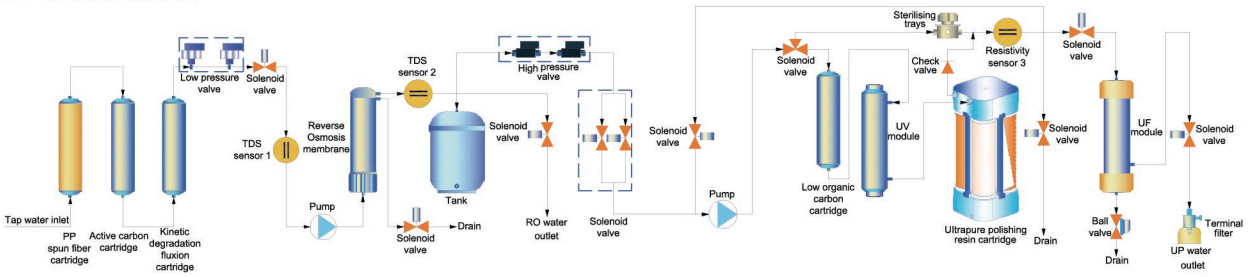
Master-S series

Ultrapure water system (Tap water inlet)

With LCD controlling system, 3 way water quality sensors, timing and quality dispensing, single stage RO system and 2 pumps, Master-S series ultrapure water system is sub-superior choice of ultrapure water for high grade experiments.

With tap water inlet, its output ranges from 15 to 30 liters/hour. It can produce single stage RO water and ultrapure water. The single stage RO water's ion rejection rate is more than 97%, 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
	Master-S15	Master-S15UF	Master-S15UV	Master-S15UVF
	Master-S30	Master-S30UF	Master-S30UV	Master-S30UVF
Output(25℃)*	15series-15 liters/hour, 30 series-30 liters/hour			
Flow rate	Up to 2 liters/minute (with pressure tank)			
Pure water outlet	2: reverse osmosis water, ultrapure water			
Ultrapure water quality				
Resistivity(25℃)	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	<1pg/ml	N/A	<1pg/ml
DNases	N/A	<5pg/ml	N/A	<5pg/ml
RO water quality				
Ion rejection rate	97%-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:500×360×540mm / Weight: about 20Kg			
Electrical requirements	AC100-240V, 50/60Hz			
Power	120W			
Standard configuration	Main body (Including 1 set of cartridge)+15 liters pressure tank			

Remarks:

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

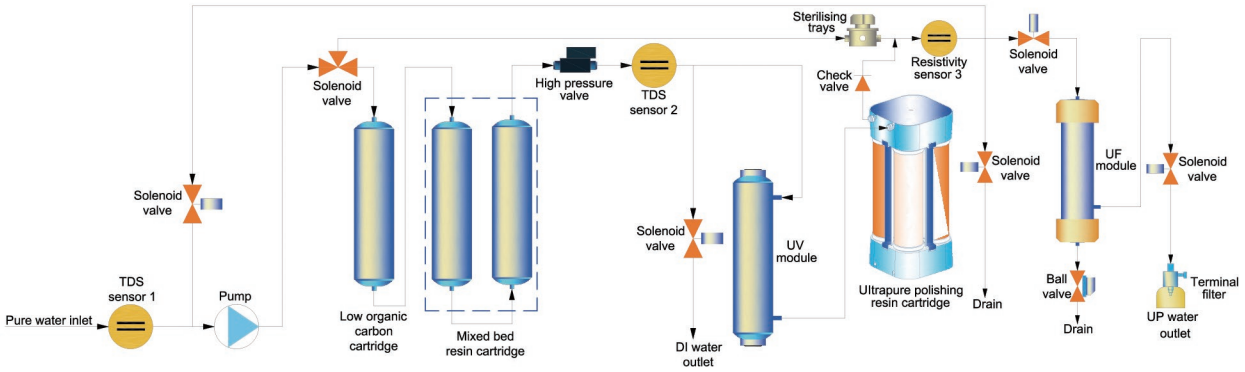
Master-D series

Ultrapure water system (Distilled water inlet)

With LCD controlling system, 3 way water quality sensors, timing and quality dispensing and 1 pump, Master-D series ultrapure water system is sub-superior choice of ultrapure water for high grade experiments.

With pure water or distilled water inlet, its output is up to 2 liters/minute. It can produce deionized water and ultrapure water. The deionized water's resistivity is above 5MΩ.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	Standard	Eliminating endotoxin	Low TOC	Synthesizing
	Master-D	Master-DUF	Master-DUV	Master-DUVF
Output(25℃)	Up to 2 liters/minute (less output with UF cartridge)			
Pure water outlet	2: deionized 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	<1pg/ml	N/A	<1pg/ml
DNases	N/A	<5pg/ml	N/A	<5pg/ml
Deionized water quality				
Resistivity(25℃)	>5MΩ.cm			
Feed water requirements	RO water, distilled water, deionized water, 5-45℃,1atm*			
Dimension and weight	Length×Width×Height:500×360×540mm / Weight: about 18Kg			
Electrical requirements	AC100-240V, 50/60Hz			
Power	120W			
Standard configuration	Main body (Including 1 set of cartridge)			

Remarks:

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