

Water Purification Systems AQ Series



Water Purification System AQ Series

Iris AQ series is high-end water purification system. And it is the sole leading brand of Chinese Good Instrument in lab water area. It is the most representative products in Chinese lab water market. The AQ Series Water Purification System is suitable for feed of ultrapure water system, glassware washing, microbiological analysis, sample dilution and reagent preparation, chemical and qualitative analysis, spectrum measurement, water analysis, HPLC applications, disposing of buffer, medium, feed of autoclave sterilizer, biochemical analyzer, immunoassay analyzer, constant temperature and humidity chamber, salt spray test chamber, dampening machine and etc.

AQ-200 produces deionized water and RO water. Its resistivity can reach to 16-18.2MΩ.cm. And its output is 15 or 30 liters/hour. The AQ-400 is designed to produce ultrapure water and RO water. Its resistivity can reach to 18.2MΩ.cm. And its output is 15 or 30 liters/hour. The AQ-400D produces ultrapure water and deionized water. The water source is Distilled water to achieve its resistivity can reach to 18.2MΩ.cm. Its most output is 2.0 liters/minute.



Features

- ◆ 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 waters 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:0.1-18.2MΩ.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 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.



Deionized Water System AQ-200

Iris AQ-200 is designed for general analysis pure water. It has 2 kinds of output, 15 or 30 liters/hour. And the resistivity, reaching to 16-18.2MΩ.cm, is above of the grade I standard of GB6682-2008. It also meets the most requirements of chemical and biological experiments pure water.

Features

- ◆ 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, TF:terminal microfiltration.
- ◆ All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.

Applications

- ◆ Feed of ultrapure water system
- ◆ Glassware washing
- ◆ Microbiological analysis
- ◆ Sampledilution and reagentpreparation
- ◆ Chemical and qualitative analysis
- ◆ Wateranalysis anduniversal HPLC
- ◆ Spectrum measurement
- ◆ Disposing of buffer, medium
- ◆ Feed of autoclave sterilizer, biochemical analyzer, immunoassay analyzer, constant temperature and humidity chamber, salt spray test chamber, dampening machine and etc.



Technical Specifications

Model	AQ-215	AQ-215UT	AQ-230	AQ-230UT
Feed water requirements	Tap water: TDS<200 ppm, 5-45°C, 1.0-4.0Kg/cm ² (Extra pretreatment filter is recommended, if TDS>200ppm)			
Flow procedure	PF+KDF+AC+RO+AC+ DI	PF+KDF+AC+RO+AC+ DI+UV+TF	PF+KDF+AC+RO+AC+ DI	PF+KDF+AC+RO+AC+ DI+UV+TF
Deionized water quality				
Resistivity	>16-18.2MΩ.cm	>16-18.2MΩ.cm	>16-18.2MΩ.cm	>16-18.2MΩ.cm
Heavy metal ion	<0.1ppb	<0.1ppb	<0.1ppb	<0.1ppb
Bacteria	N/A	<0.1cfu/ml N/A <0.1cfu/ml	<0.1cfu/ml N/A <0.1cfu/ml	<0.1cfu/ml N/A <0.1cfu/ml
Particle(>0.2μm)	N/A	<1/ml N/A <1/ml	<1/ml N/A <1/ml	<1/ml N/A <1/ml
RO water quality				
Ion rejection rate	96%-99% (New RO membrane)	96%-99% (New RO membrane)	96%-99% (New RO membrane)	96%-99% (New RO membrane)
Organic rejection rate	>99%, when MW>200 Dalton	>99%, when MW>200 Dalton	>99%, when MW>200 Dalton	>99%, when MW>200 Dalton
Particles and bacteria rejection rate	>99%	>99%	>99%	>99%
Output(25°C)	15 liters/hour 30 liters/hour	15 liters/hour 30 liters/hour	15 liters/hour 30 liters/hour	15 liters/hour 30 liters/hour
Flow rate	2.0 liters/minute(with pressure tank)	2.0 liters/minute(with pressure tank)	2.0 liters/minute(with pressure tank)	2.0 liters/minute(with pressure tank)
Pure water outlet	2: RO water, deionized water	2: RO water, deionized water	2: RO water, deionized water	2: RO water, deionized water
External Dimensions (L×W×H) mm	500×360×540mm	500×360×540mm	500×360×540mm	500×360×540mm
Net Weight	22Kg	22Kg	22Kg	22Kg
Gross Weight	33kg	33kg	33kg	33kg
Standard configuration	Main body (Including 1 set of cartridges)+15 liters tank+ accessory bag			
Power	120W			
Electric requirements	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Catalogue No.	66005051	66005101	66005151	66005201
Electric requirements	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz
Catalogue No.	66005052	66005102	66005152	66005202



Ultrapure Water System AQ-400

AQ-400 is designed for high grade experiments ultrapure water. With tap water inlet, it has 2 kinds of output, 15 or 30 liters/hour. And the resistivity, absolutely reaching to 18.2MΩ.cm, completely meets the highest grade I standard of GB6682-2008, ASTM, CAP, CLSI, EP and USP.

Features

- ◆ 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, SF:softener, EDI:electrodeionization, UV:ultraviolet, TF:terminal microfiltration.
- ◆ All the specifications are tested under the situation:feed water's TDS=200ppm, 25 °C,
- ◆ 50psi and 15% recovery rate.

Applications

- ◆ HPLC, GC-MS, ICP-AES
- ◆ ICP-MS, AAS, GF-AAS
- ◆ TOC analysis, IC
- ◆ Electrochemistry
- ◆ Organic and inorganic trace analysis
- ◆ Molecular biology, microbiology
- ◆ PCR analysis
- ◆ DNA order analysis
- ◆ Feed of autoclave sterilizer, biochemical analyzer, immunoassay analyzer, constant temperature and humidity chamber, salt spray test chamber, dampening machine and etc.



Technical Specifications

Model	AQ-415	AQ-430	AQ-415UF	AQ-430UF	AQ-415UV	AQ-430UV	AQ-415UVF	AQ-430UVF
Type	Standard	Standard	Eliminating endotoxin	Eliminating endotoxin	Low TOC	Low TOC	Synthesizing	Synthesizing
Flow procedure	PF+KDF+AC+RO+DI+ TF		PF+KDF+AC+RO+DI+ UF+TF		PF+KDF+AC+RO+UV+ DI+TF		PF+KDF+AC+RO+UV+ DI+UF+TF	
Output(25°C)	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°C)	18.2MΩ.cm							
Heavy metal ion	<0.1ppb							
TOC	<10ppb	<10ppb	<10ppb	<10ppb	<3ppb	<3ppb	<3ppb	<3ppb
Bacteria	<0.1cfu/ml							
Particle(>0.1μm)	<1/ml							
Endotoxin	N/A	N/A	<0.001Eu/ml	<0.001Eu/ml	N/A	N/A	<0.001Eu/ml	<0.001Eu/ml
RNases	N/A	N/A	<0.01ng/ml	<0.01ng/ml	N/A	N/A	<0.01ng/ml	<0.01ng/ml
DNases	N/A	N/A	<4pg/μl	<4pg/μl	N/A	N/A	<4pg/μl	<4pg/μl
RO water quality								
Ion rejection rate	<0.001Eu/ml							
Organic rejection rate	<0.01 ng/ml							
Particles and bacteria rejection rate	<4pg/μl							
Feed water requirements	<0.001Eu/ml							
External Dimensions	<0.01 ng/ml							
Net Weight	<4pg/μl							
Power	<0.001Eu/ml							
Standard configuration	<0.01ng/ml							
Gross Weight	<4pg/μl							
Electric requirements	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz	110V/60Hz	220V/50Hz
Catalogue No.	66010051	66010052	66010101	66010102	66010151	66010152	66010201	66010202



Ultrapure Water System AQ-400D

The Iris AQ-400D is designed to meet high grade experiments ultrapure water requirement. With distilled or other pure water inlet, the most output is 2 liters/minute. And the resistivity, absolutely reaching to 18.2MΩ.cm, completely meets the highest grade I standard of GB6682-2008, ASTM, CAP, CLSI, EP and USP.

Features

- ◆ 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, SF:softener, EDI: electrodeionization, UV:ultraviolet, TF:terminal microfiltration.
- ◆ Value of number will be influenced by feed water quality.
- ◆ The output will decrease with terminal filter or UF cartridg

Applications

- ◆ HPLC, GC-MS, ICP-AES
- ◆ ICP-MS, AAS, GF-AAS
- ◆ TOC analysis, IC
- ◆ Electrochemistry
- ◆ Organic and inorganic trace analysis
- ◆ Molecular biology, microbiology
- ◆ PCR analysis
- ◆ DNA order analysis
- ◆ Feed of autoclave sterilizer, biochemical analyzer, immunoassay analyzer, constant temperature and humidity chamber, salt spray test chamber, dampening machine and etc.



Technical Specifications

Model	AQ-400D	AQ-400DUF	AQ-400DUV	AQ-400DUVF
Type	Basic	Eliminating endotoxin	Low TOC	Synthesizing
Feed water requirements	RO water, distilled water, deionized water.5-45°C,1atm			
Flow procedure	AC+DI+TF	AC+ DI+UV+TF	UV+AC+DI+TF	UV+AC+DI+UF+TF
Deionized water quality				
Resistivity	18.2MΩ.cm	18.2MΩ.cm	18.2MΩ.cm	18.2MΩ.cm
Heavy metal ion	<0.1ppb	<0.1ppb	<0.1ppb	<0.1ppb
TOC	<10ppb	<10ppb	<3ppb	<3ppb
Bacteria	N/A	<0.1cfu/ml N/A <0.1cfu/ml	<0.1cfu/ml N/A <0.1cfu/ml	<0.1cfu/ml N/A <0.1cfu/ml
Endotoxin	N/A	<0.001Eu/ml	N/A	<0.001Eu/ml
Particle(>0.2μm)	N/A	<1/ml N/A <1/ml	<1/ml N/A <1/ml	<1/ml N/A <1/ml
RNases	N/A	<0.01ng/ml	N/A	<0.01ng/ml
DNases	N/A	<4pg/μl	N/A	<4pg/μl
Deionized water quality				
Resistivity	>5MΩ.cm			
Ion rejection rate	96%-99% (New RO membrane)	96%-99% (New RO membrane)	96%-99% (New RO membrane)	96%-99% (New RO membrane)
Organic rejection rate	>99%, when MW>200 Dalton	>99%, when MW>200 Dalton	>99%, when MW>200 Dalton	>99%, when MW>200 Dalton
Particles and bacteria rejection rate	>99%	>99%	>99%	>99%
Output(25°C)	up to 2.0 liters/minute(less output with UF cartridge)			
Flow rate	2.0 liters/minute(with pressure tank)	2.0 liters/minute(with pressure tank)	2.0 liters/minute(with pressure tank)	2.0 liters/minute(with pressure tank)
Pure water outlet	2: deionized water, ultrapure water	2: deionized water, ultrapure water	2: deionized water, ultrapure water	2: deionized water, ultrapure water
External Dimensions (L×W×H) mm	500×360×540mm	500×360×540mm	500×360×540mm	500×360×540mm
Net Weight	20Kg	20Kg	20Kg	20Kg
Gross Weight	30kg	30kg	30kg	30kg
Standard configuration	Main body (Including 1 set of cartridges)+15 liters tank+ accessory bag			
Power	120W			
Electric requirements	110V/60Hz	110V/60Hz	110V/60Hz	110V/60Hz
Catalogue No.	66015051	66015101	66015151	66015201
Electric requirements	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz
Catalogue No.	66015052	66015102	66015152	66015202





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