









This medium series is an excellent choice of high-performance water purifying system. The self-flushing of the reverse osmosis membrane, extend the life of RO membrane. These systems are Level II password protected for all the parameters setting, and forbid any unauthorized settings change also It has multiple alarm functions. Used in Laboratory, Manufacturing, Reefkeeping, Aquarium, Laboratory, Research.

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

#### **100 MEDIUM 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.

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:0.1-18.2 $M\Omega$ .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 watersupply.

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.

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## **SPECIFICATIONS**

Model	BDPS-101	BDPS-102	BDPS-103	
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+AC+DI	PF+KDF+AC+RO+AC+DI+UV+TF	PF+KDF+AC+RO+AC+DI	
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/hr	30 L/hr	
Pure water outlet	RO water and Deionized water			
DimensionLxWxH	500x360x540 mm			
Weight	22 kg			
Standard configuration	Main body (Including 1 set of cartridges)+15 liters 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, TF:terminal microfiltration. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.			
Deionized water quality				
Resistivity	>16-18.2 MΩ.cm			
Conductivity	-			
Particle(>0.2µm)	<1/ml		<1/ml	
Ultrapure Water Quality				
Heavy metal ion	<0.1 ppb			
Flow rate	2.0 L/min (with pressure tank)			
Bacteria	- <0.1 cfu/ml -			







#### **BDPS-104 MEDIUM 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)µm double layer PES terminal disinfection filter, assure the quality absolutely axenic.

### **SPECIFICATIONS**

Model	BDPS-104
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**	PF+KDF+AC+RO+AC+DI+UV+TF
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
Output(25°C)****	30 L/hr

Pure water outlet	RO water and Deionized water	
DimensionLxWxH	500x360x540 mm	
Weight	22 kg	
Standard configuration	Main body (Including 1 set of cartridges)+15 liters 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, TF:terminal microfiltration. ***All the specifications are tested under the situation:feed water's TDS=200ppm, 25°C, 50psi and 15% recovery rate.	
Deionized water quality		
Resistivity	>16-18.2 MΩ.cm	
Conductivity	-	
Particle(>0.2µm)	<1/ml	
Ultrapure Water Quality		
Heavy metal ion	<0.1 ppb	
Flow rate	2.0 L/min (with pressure tank)	



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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:0.1-18.2 $M\Omega$ .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 watersupply.

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.

## **SPECIFICATIONS**

Model	BDPS-401	BDPS-402	BDPS-403	BDPS-404
Feed Water Requirements*				
Water Inlet	RO water, Distilled water, Deionized water			
Temperature	5-45℃			
Pressure	1 atm*			
Flow Procedure**	AC+DI+TF AC+DI+UF+TF UV+AC+DI+TF UV+AC+DI+UF+TF			
Bacteria	<0.1 cfu/ml			
Output(25°C)****	Utmost up to 2.0 L/min (less output with UF cartridge)			
Pure water outlet	Deionized water and Ultrapure water			

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DimensionLxWxH	500x360x540 mm			
Weight	20 kg			
Standard configuration		Main body (Including 1	set of cartridges)+ acces	sory 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. ** AC:active carbon,DI:ion exchange,UV:ultraviolet,UF:ultrafiltration,TF:terminal microfiltration. ***Value of number will be influenced by feed water quality. ****The output will decrease with terminal filter or UF cartridge.			
Deionized water quality				
Resistivity	>5 MΩ.cm			
Ultrapure Water Quality				
Resistivity(25°C)	18.2 MΩ.cm			
Heavy Metal Ion	<0.1 ppb			
T0C***	<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
Water Quality Monitor			-	











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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:0.1-18.2 $M\Omega$ .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 watersupply.

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

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## **SPECIFICATIONS**

Model	BDPS-201	BDPS-202	BDPS-203	BDPS-204
Feed Water Requirements*				
Water Inlet	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200 ppm)	Tap water: TDS<200 ppm (Extra pretreatment filter is recommended, if TDS>200ppm)		
Temperature	5-45°C			
Pressure	1.0-4.0 Kgf/cm²			

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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			
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	
Output(25°C)****			15 L/hr	
Pure water outlet		R0 water a	and Ultrapure water	
DimensionLxWxH		500x	360x540 mm	
Weight			25 kg	
Standard configuration	Main body (Including 1 set of cartridges)+15 liters 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)		1	8.2 MΩ.cm	
Heavy Metal Ion			<0.1 ppb	
T0C***	<10 ppb <3 ppb			
Particle (>0.2µm)	<1/ml			
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	-	<4pg/µl	-	<4pg/µl
Water Quality Monitor			-	











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

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## **SPECIFICATIONS**

Model	BDPS-205	BDPS-206	BDPS-207	BDPS-208	
Feed Water Requirements*					
Water Inlet	Tap water	: TDS<200 ppm (Extra pretre	atment filter is recommended	, if TDS>200 ppm)	
Temperature		5-45℃			
Pressure	1.0-4.0 Kgf/cm²				
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	
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			
Output(25°C)****	30 L/hr			
Pure water outlet		RO water a	nd Ultrapure water	
DimensionLxWxH		500x3	360x540 mm	
Weight			25 kg	
Standard configuration	M	ain body (Including 1 set of ca	rtridges)+15 liters tank+ ad	cessory 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.			
Ultrapure Water Quality				
Resistivity(25°C)	18.2 MΩ.cm			
Heavy Metal Ion	<0.1 ppb			
T0C***	<10 ppb <3 ppb			
Particle (>0.2µm)	<1/ml			
Flow rate	2.0 L/min (with pressure tank)			
Endotoxin	- <0.001 EU/ml - <0.001 EU/		<0.001 EU/ml	
Rnases	-	<0.01 ng/ml	-	<0.01 ng/ml
Dnases	-	<4pg/µl	-	<4pg/µl
Water Quality Monitor			-	











## Biolab Scientific Ltd.