# Dura

# Integrated water purification system



### Models:

Dura 12 / 24

Dura 12 / 24F

Jura 12 / 24V

Dura 12 / 24FV

Dura

Dura F

Dura V

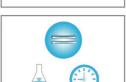
Dura F\

**Dura** series, integrating LCD controlling system, 3 way water quality sensor, built-in 2 water tanks, 3 pump, and 2 stage R0 system, its output ranges from 12 to 24 liters/hour with tap water inlet. And with distilled water inlet, its output is up to 2 liters/minute.

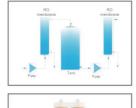
With tap water inlet, it can produce 2nd stage R0 water and ultrapure water. And with distilled water inlet, it can produce deionized water and ultrapure water.

The 2nd stage RO water's conductivity can stay 1-5 $\mu$ s/cm. The deionized water's resistivity is above 16M $\Omega$ .cm, and the ultrapure water's resistivity absolutely reaches to 18.2M $\Omega$ .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 sensor, detect the quality of feed water, 2nd stage RO water / deionized water, and ultrapure water respectively. And warn once water quality's standard exceeding.

### **Built-in 2 water tanks and 3 pumps**

- Built-in 5.8 liters PE tank and 10 liters airtight plastic pressure water tank, save more lab space.
- . Built-in 1st stage, 2nd stage RO pump and circulating sanitizing pump.

### Double stage reverse osmosis technology

 With 2 pumps, 2 R0 membranes and buffer tank, system assures 2nd stage R0 water quality's stability from different source water, and achieves little drain and low running cost.

### Easy-to-replacing cartridge

- Integrated design of pretreatment and subsequent purification unit.
- New card hawk type fast inserted interface, easy to replace.

### 4 door design and easy-to-maintaining

Convenient to maintain system and replace cartridges.

### **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.
- 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.
- Water dispensing function- timing and quality (time range: 1-99min, water quality range: 0.1-18.2MΩ.cm).
- External water tanks is optional to meet different need and assure ample water-supply.
- Whole plastic shell with high-strength, avoid rusting and keep clean, to meet GLP standard.
- 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.
- Ultrapure 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.

# **Dura 12/24** series

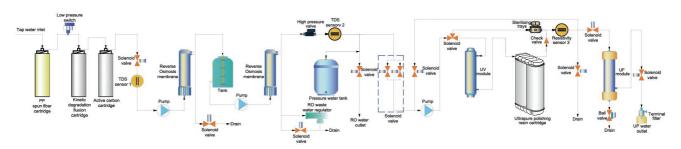
# Ultrapure water system (tap water inlet)

With LCD controlling system, 3 way water quality sensor, built-in 2 water tanks, 3 pump, and 2 stage RO system, Dura 12/24 series is sub-top choice of ultrapure water for high grade experiments.

With tap water inlet, its output ranges from 12 to 24 liters/hour. It can produce 2nd stage R0 water and ultrapure water. The 2nd stage R0 water's conductivity can stay 1-5 $\mu$ s/cm, and the ultrapure water's resistivity absolutely reaches to 18.2M $\Omega$ .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		
	Dura 12	Dura 12F	Dura 12V	Dura 12FV		
	Dura 24	Dura 24F	Dura 24V	Dura 24FV		
Output -2 <sup>nd</sup> stage RO water*	12 or 24 liters/hour					
Output -ultrapure water	Up to 2 liters/minute (when tank is full)					
Ultrapure water quality						
Resistivity(25°C)	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		
R0 water quality						
Conductivity - 1st stage RO water	Feed water conductivity×5%*					
Conductivity - 2 <sup>nd</sup> stage RO water	1-5µs/cm*					
Feed water requirements	Tap water, temperature:5-45°C,pressure:1.0-4.0Kgf/cm <sup>2</sup>					
Dimension and weight	Length×Width×Height:545×470×610mm / Weight: 25Kg					
Electrical requirements	AC200-240V, 50/60Hz					
Power	240W					
Standard configuration	Main body (Including 1 set of cartridge)+built-in 12 liters pressure tank					

#### Remarks:

<sup>\*</sup>The value will be influenced by temperature and feed water's quality.

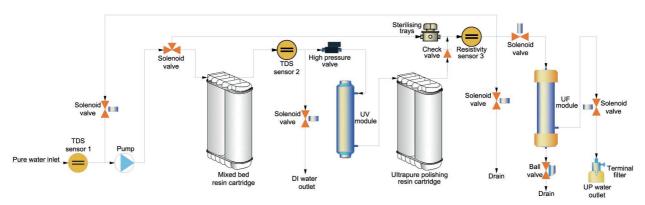
# Dura series Ultrapure water system (distilled water inlet)

With LCD controlling system, 3 way water quality sensor, Dura series is sub-top 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  $16M\Omega$ .cm, and the ultrapure water's resistivity absolutely reaches to  $18.2M\Omega$ .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		
	Dura	Dura F	Dura V	Dura FV		
Output -ultrapure water	Up to 2 liters/minute (less output with UF cartridge)					
Ultrapure water quality						
Resistivity(25°C)	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°C)	>16MΩ.cm					
Feed water requirements	RO water, distilled water, deionized water, 5-45°C,1atm*					
Dimension and weight	Length×Width×Height:545×470×610mm / Weight: 20Kg					
Electrical requirements	AC110-240V, 50/60Hz					
Power	240W					
Standard configuration	Main body (Including 1 set of cartridge)					

#### Remarks

<sup>\*</sup>The value will be influenced by temperature and feed water's quality.