Labocon Ultrapure Water Purification Systems

EDI Series (Electro Deionized)

How to select the suitable model from widest range of Labocon Ultra-Pure Water Purification System with EDI (Electro Deionized)

Step 1

First part is determines the required series. The initials of the series would be the first alphabet in the model number. If a touchscreen model is required please add a 'T' after the alphabet used for the series.
e.g.: EDI- stands for Electro Deionized Series (models without touchscreen)
EDIT- stands for Electro Deionized Series (models with touchscreen)

Step 2

The second part is determines the input and output water quality. A three letter combination is used for it. The first to letters stand for the output water quality and the last letter stands for input water quality.
e.g.: DOT series – Here the 'DO' stands for Deionized water output whereas the 'T' stands for Tap water input.
UPT series – here the 'UP' stands for ultrapure water output whereas the 'T' stands for Tap water input.
UPD series – here the 'UP' stands for ultrapure water output whereas the 'D' stands for Distilled water input.

Step 3

The third part determines the Output rate of the model.
e.g.: 15 = 15 litres/hour
30 = 30 litres/hour

Step 4

The fourth part are the suffixes added after the capacity. They mean the following:
P – Elimination of the particles present
B – Elimination of the Bacteria
UV – Removal of TOC (Total organic content)
UF – Elimination of Endotoxins
UVF – Combined features of UV & UF

ULTRAPURE -ELECTRO DEIONIZED SERIES

EDI-DOT Series

Labocon Electro Deionized Series is a superior choice for production of Deionized water for general grade experiments. The single stage RO water's ion rejection rate is more than 96%, the deionized water's resistivity is stable at grade II pure water with resistivity > 5MΩ.cm (25 °C), TOC<30ppb, and the lowest running cost.

It completely meets the requirements of general chemical or biological experiments for pure water, and is up to the standard of ISO 3696(Type II), ASTM D1193 (Resistivity of type II and TOC), and the requirements for pure water of CLSI (NCCLS) clinical laboratory, GB/T6682, America, Europe, Japan's pharmacopeia.

EDI-UPT Series

Labocon Electro Deionized Series is a superior choice for production of Deionized and Ultrapure water for high grade experiments.

The deionized water is stable grade II pure water with resistivity>5 MΩ.cm (25 °C), TOC<30ppb, and the lowest running cost. The ultrapure water's resistivity absolutely reaches to 18.2MΩ.cm.
With LCD controlling system, 3 way water quality sensor, timing and quality dispensing, single stage RO system, 2 pump and Ion pure EDI module.

The Deionized water quality completely meets the requirements of general chemical or biological experiments for pure water, and is up to the standard of ISO 3696(Type II), ASTM D1193 (Resistivity of type II and TOC), and the requirements for pure water of CLSI (NCCLS) clinical laboratory, GB/T6682, America, Europe & Japan's pharmacopeia.

The Ultrapure water resistivity absolutely reaches to 18.2MΩ.cm. It completely meets the highest grade I standard of ASTM, CAP, CLSI, EP and USP.

Advanced Features for EDI-DOT Series & EDI-UPT Series

1. **Construction**

   The whole body is made up of plastic shell with high-strength to avoid rusting and keep it clean to meet the GLP standards**.**

2. **Pre-treatment**

   The optimized pre-treatment including PP fibre, KDF and active carbon cartridge effectively protects the RO membrane.

3. **Integrated EDO Cartridge and system: The** 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.

The (0.45+0.1) μm double layer **PES terminal disinfection filter**, ensures that the terminal pure water is absolutely axenic.

4. **Display**

   The instrument has a LCD display with a resolution of 240×128mm and dimensions of 106×57mm. It is a controlling system which displays the systems current running state and various other parameters.

5. **Sensor**

   The 3 way online water quality sensor, detects the quality of feed water, RO water, deionized water, or ultrapure water respectively. And warns once water quality's standard exceeds the normal range.

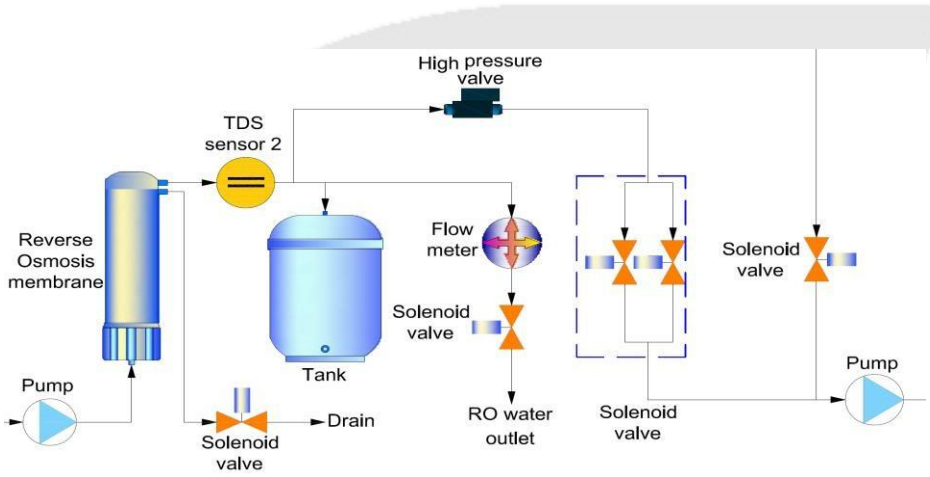
6. Water quality improvement

The Tube and adapter reduces the TOC level and assure ultrapure water's quality.

Double wavelength (185 & 254nm) ultraviolet lamp module restrains the bacterial growth and reduce TOC value.

The MWCO 5000D ultrafiltration  module effectively eliminates endotoxin, and is suitable for precise cell cultivating and IVF.

RO module with DOW's membrane, ensures long life, stable operation and high desalinization rate.



7. System sanitization

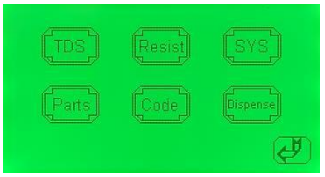
The sanitization procedure helps achieve the disinfection of ultrapure water's tube and valve.

8. System circulation

This function helps in the ultrapure water's circulation to keep top quality of ultrapure water.

9. Cartridge replacement

It has an Alarm function, based on time and water quality, showing cartridges' used and residual life. The 3 doors and easy-to-replace cartridge design are convenient to maintain and replace.



10. Multiple alarm function

The Alarm facility available indicates if there is no feed water, full water, water quality standards exceeding normal and cartridge life ending.

11. Auto self-flushing of RO membrane function plays an important role in extending the life of the RO membrane.

12. Level II password, protect all the parameters setting, and prohibit any unauthorized setting change.

13. Water dispensing function

The water can be dispensed based on the timing and quality (time range: 1-99min, water quality range: 0.1-18.2MΩ.cm).

14. External water tanks

It is optionally available to meet different needs of customers and assure ample water-supply.

15. Data Storage

The Auto running data storing function is optionally available through RS232/USB communication port to computer for 1 year.

**** Please note all the available models can be upgraded to Touch Screen Systems.**

TECHNICAL SPECIFICATIONS -ELECTRO DEIONIZED SERIES

Feature	DOT Series	UPT Series
Water quality sensor	3	3
Flow sensor	2	2
RO system	Single Stage	Single Stage
Pump	1	2

Series	**Electro Deionized-DOT**	**Electro Deionized-UPT**
Output (litres/hour)	10 L/ Hr	10 L/ Hr
RO process	1	1
Source water	Tap	Tap
Water quality	Deionised	Ultrapure
Water quality sensor	3	3
Flow sensor	2	2
Touch screen	Yes	Yes
EDI module	Yes	Yes
Internal tank	Yes	No
Installation method	Desktop	Desktop

TECHNICAL SPECIFICATIONS - ELECTRO DEIONIZED DOT SERIES

Model No.	EDI-DOT-10	EDI-DOT-10-PB
Output(25°C)*	10 litres/hour	
Pure water outlet	2: reverse osmosis water, deionized water	
EDI water quality		
Resistivity	>5MΩ.cm	
TOC*	<30ppb	
Silicone rejection rate	>99.9%	
Bacteria	NA	<0.1cfu/ml
Particle(>0.1μm)	NA	<1/ml
RO water quality		
Ion rejection rate	96%-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°C,pressure:1.0-4.0Kgf/cm2	
Dimension	500×360×540mm	
Weight	20Kg	
Electrical requirements	AC110-240V, 50/60Hz	
Power	120W	
Standard configuration	Main body (Including 1 set of cartridge)+20 litres pressure tank	

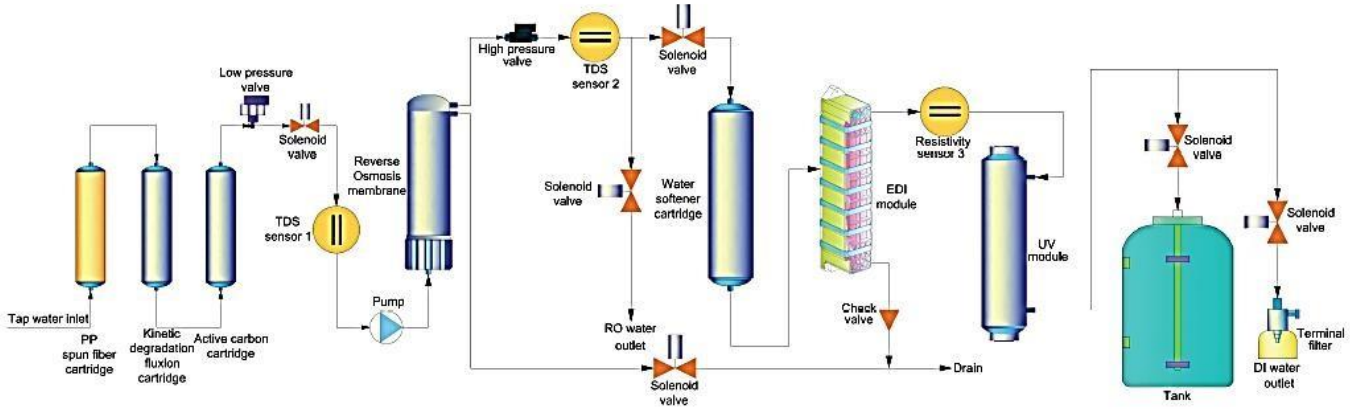
*The value will be influenced by temperature and feed water's quality.

TECHNICAL SPECIFICATIONS - ELECTRO DEIONIZED UPT SERIES

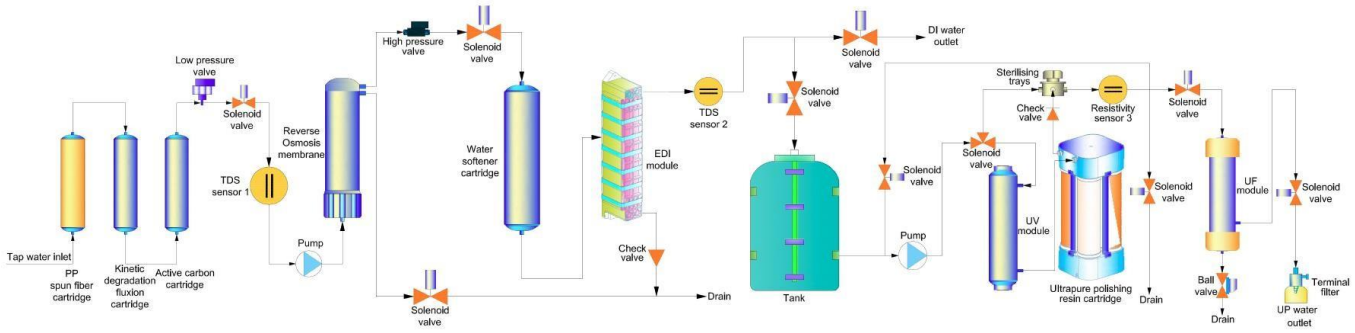
Model No.	Standard	Endotoxin	Low TOC	Synthesizing
	EDI-UPT-10	**EDI-UPT-10-UF**	**EDI-UPT-10-UV**	**EDI-UPT-10-UVF**
Output(25°C)*	10 litres/hour Other models are available with 24 litres/hour (**EDI-UPT-24-UVF)** and 45 litres/hour (Model **EDI-UPT-45-UVF).** **Others specs will be remain same as per the brochure.**			
Pure water outlet	2: Deionized Water water, ultrapure water			
Type I Ultrapure water quality				
Resistivity	18.2MΩ.cm			
Flow Rate	Up to 2 liters/minute			
TOC*	<10ppb		<3ppb	
Bacteria	<0.1cfu/ml			
Particle(>0.1μm)	<1/ml			
Endotoxin	NA	<0.001Eu/ml	NA	<0.001Eu/ml
RNases	NA	<0.01ng/ml	NA	<0.01ng/ml
DNases	NA	<4pg/μl	NA	<4pg/μl
Inbuilt Storage	15 liters pressure tank			
DO water quality/ Type II Ultrapure water quality				
Resistivity	>5MΩ.cm			
TOC*	<30ppb			
Silicone rejection rate	>99.9%			
Tap or Portable Water Feed Quality	Tap water, RO water, distilled water, deionized water, temperature:5-45°C,pressure:1.0-4.0Kgf/cm2, Conductivity: <2000us Chlorine- 3ppm, CO2 <30ppm Hardness: <300 ppm, SDI <8			
Dimension	500×360×540mm			
Weight	20Kg			
Electrical requirements	AC110-240V, 50/60Hz			
Power	120W			
Standard configuration	Main body (Including 1 set of cartridge)			

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

Flow Schematic for Electro Deionized DOT Series



Flow Schematic for Electro Deionized UPT Series



STANDARD ACCESSORIES - ELECTRO DEIONIZED SERIES

Item	Commodity	Service life
PC-M-PP	5μm spun fibre cartridge	About 2-6 months
PC-M-KDF	KDF+ granular active carbon mixed cartridge	About 12 months
PC-M-AC-G	Granular active carbon cartridge	About 6 months
RO-100GPD	100 GPD reverse osmosis membrane	About 12-24 months
RO-150GPD	150 GPD reverse osmosis membrane	About 12-24 months
RO-200GPD	200 GPD reverse osmosis membrane	About 12-24 months
PTC-MBR-M	Mixed bed resin cartridge	About 1000 litres pure water/set
PTC-UPPR-M	Ultrapure polishing resin cartridge	About 1000 litres pure water/set
TF-(0.45+0.1)μm-S	(0.45+0.1)μm terminal filter	
UF-5000D	MWCO5000D UF cartridge	
LAMP-(185nm&254nm)-10W-M	Double wavelength(185&254)nm UV lamp	About 9000 hours
LAMP-254-10W-M	254 nm wavelength UV lamp	About 9000 hours
PTC-SF	Water softener cartridge	
PTC-EDI10-IP	EDI module	About 1-3 years

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