



***RADIO FREQUENCY IDENTIFICATION  
WATER PURIFICATION SYSTEM  
LRFW-C10***

# Radio Frequency Identification Water Purification System LRFW-C10

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Radio Frequency Identification Water Purification System LRFW-C10 a desktop type, microcomputer controlled, water purification device consist of pre-treatment system, RO system, ultrapure water system conveying unit, control system ,and a RFID Radio Frequency Identification Chip to check on the quality of water in real time. The user-friendly touch screen feature to display date, conductivity, resistivity, filter lifespan etc. information.

It offers water purification rate of  $\geq 10$  L/ h, with Ultrapure Water Flow Rate 2 L/ min. The pre-treatment process filters out impurities in the raw water, such as tiny particles, suspended solids and colloid and reduce inlet water turbidity, prevents fouling of RO membrane. RO membrane, effectively removes all kinds of salt ions, organics, bacteria and virus in water.

Membrane pure water pump to achieve intake ultrapure water speed up to 1 to 1.5 L/ min. Ultra-purification system consist of ion exchange resin and special flow design, effectively remove the trace ions in water; guarantee the stability of water quality. The 0.22  $\mu\text{m}$  membrane or hollowed fiber membrane filter, filter out pollutants larger than 0.22  $\mu\text{m}$ , making the particles content  $<1/\text{ml}$ . The 254 nm UV lamp removes the bacteria in the system, and 185nm UV lamp used to segment or ionize long chain, in preparation for the subsequent deionization and organic absorption.

## FEATURES

- Touch screen feature to display date, conductivity, resistivity, filter lifespan etc. information
- Water Purification System is unique and easy-to-install pre-filtration pack system
- Built-in manual water auto-cycling program, to keep the water quality of ultrapure water
- Automatic Water Purification System: automatically stops the system, cut off power and water when tank is full
- High capacity Molecular Ultra Purification Polishing Resin Cartridge
- On-line resistivity, conductivity, temperature monitoring
- Built-in RO membrane, automatic flush procedures
- Manual RO membrane cleaning button
- Incorporated with both 185 nm and 254 nm UV sterilizers
- 30 L sterile pure water tank ensures the quality of pure water
- It complies international standards like CE, and ISO quality system

## APPLICATIONS

Radio Frequency Water Purification System is used in Molecular biology and life sciences, Animal cells and plant cell culture, Tissue culture, IVF, Electrophoresis, gel analysis, etc. for sample preparation, medium preparation, molecule analysis etc.

## WATER PURIFICATION SCHEMATIC FLOW

Tap water- 1<sup>st</sup> stage PP filter - 2<sup>nd</sup> activated carbon filter- 3<sup>rd</sup> resin softener- 4<sup>th</sup> stage PP filter - Stage I booster pump- Stage I reverse osmosis membrane- Stage II booster pump- Stage II reverse osmosis membrane- Pure water tank- pure water dispensing pump- Grade III pure water outlet- UV lamp- Ultra-purification package- Ultra filtration membrane- Final micro-filtration- Grade I ultrapure water outlet

## SPECIFICATION

Model no.	LRFW-C10
Feed Water	Tap Water , TDS ≤ 400 ppm, Water Temperature: 5 to 40°C
Water Production Rate	≥ 10 L/ h, Ultrapure Water Flow Rate 2 L/ min
Water Quality (Two Stage)	Ultrapure water: Resistivity:18.25MΩ.cm at 25°C conforms to ASTM CAP NCCLS
Free Chlorine	< 3 ppm
TOC	< 5 ppb
Microorganisms	< 1 cfu/ ml
Pyrogens	< 0.025 EU/ ml
Particles	< 1/ ml (> 0.22 μm)
Absorbance	< 0.001 (254 nm, 1 cm optical distance)
Reactive Silica	< 0.01 ppm
Heavy Metal	< 0.01 ppm
Ambient Temperature	5 to 40°C
Relative Humidity	10 to 80 %
Display	5 inch Touch screen display to view test parameters
Power Consumption	150 W
Power Supply	220 V, 60 Hz
Dimension	345 × 537 × 540 mm Main Body
Weight	36 kg

## STANDARD ACCESSORIES

- PP Filter
- Activated Carbon Filter
- Water Softener Filter
- Stage PP filter