

# RenseWAI



## **RenseWAI GU**

RenseWAI GU Lab Water Purification system is a Type 3 RO based plus Type 1 Ultrapure system, in a single integrated combo model, directly from potable tap water.

It offers desired solutions for research professionals, who work with varieties of applications utilizing Type I ultrapure and Type 3 RO based pure water in the lab.

### **Features**

#### **Design & Functions**

- The system can be linked to multiple dispensers via CAN cable or wireless. "1+N" Mode.
- Automatic temperature compensation allows RO production rate stable over a wide range of temperature.
- Fully automated control system has cleaning, rising, flush and many other functions.
- System automatically rinses a new RO membrane.
- A bypath automatically sends the RO water to the drain, if it does not meet a preset quality standard. The RO drain water is reused / recycled to increase the water yield, thus it is more environmentally friendly.
- The main system can be either wall-mounted or set on the shelf or under the sink, to save precious lab space.
- The Chlorine cleaning and pH cleaning functions keep the maintenance easier and ensure optimal water quality.





### **Achieving effective TOC level**

- Built-in 185/254 nm dual wavelength lamp reduces TOC level in ultrapure water.
- A tank Sanitization Module can be equipped to effectively keep microbial growth at a lower level by UV light. (optional)
- On-line TOC monitor based on complete oxidation methods (optional) (only for TOC models)

### **Easy Operation and Maintenance**

- Performance history, alarms and alerts information, maintenance data of consumables as well as key parts are logged and traceable from a simple RFID scan at installation.
- RFID tags ensure perfect placement of consumables and trace their performance.
- Water quality, operation parameters, the status of the system, dispensers, components, and peripheral devices are stored and displayed on the large color touch screen monitor.
- Signature verification for maintenance and service.

### **Cartridges and Parts**

#### **1. Cartridge**

- Pre-filtration pack removes most large particles, chlorine, calcium or organic compounds to protect RO membrane to extend their usable life.
- AC Pack contains special activated carbon to remove organic impurities and free chlorines.
- Ultra purification cartridge is filled with LeFiITM and OrganeFiITM media to remove trace ions and organics.

#### **2. Control console**

- 8-inch console controls system and peripheral devices. All operations can be done on the console by touching the screen.
- The control console can be placed on the bench or inside a drawer for further flexibility and space saving.
- The console screen and dispenser screens are water-proof. You can operate the console and dispenser with latex gloves on.
- The system has two level password protection on display menu for safety purposes.

#### **3. Dispenser**

- The volumetric function can automatically deliver the water volume you need once it is set up.
- With the adjusting button on a control console or a dispenser, you can dispense water at the flow rate you need up to 2 liters per minute.
- A dispenser handle can be set on the dispenser stand, on the main system, or even hanging onto other places to free up maximum bench space.

#### **4. Final Filter**

- A wide range of final filters (optional) is applicable to ensure ultrapure water without particles, bacteria or pyrogen.





## 5. Level sensor

- The tank integrated continuous level sensor measures water level within the tank and manages the system to start or stop producing water automatically based on requirements.
- Water level and quality inside the tank can be viewed from the control console.

## Main Applications

### Ultrapure Water

- HPLC mobile phase preparation
- Preparation of reagent blank solution
- As sample diluents for GC, HPLC, AA, ICP-MS and other analytical techniques
- Preparation of buffer and culture media for mammalian cell culture
- Preparation of molecular biology reagents, etc.

### RO Pure Water

- Glassware cleaning
- Washing machine for glassware
- Water bath water
- Autoclave
- Feed water to laboratory animals

## Main Specification

### **Feed Water Requirements**

- Feed Water – Potable Tap Water
- Feed water conductivity < 2000  $\mu\text{S}/\text{cm}$  or TDS < 1000 ppm
- Feed water pressure – (2-6) bar
- Operating temperature (5 – 35) $^{\circ}\text{C}$
- Feed water TOC < 1000 ppb

### **Flow rate**

- Type 3 or RO based production rate – 12, 24 and 32 L/hr.
- Type 3 or RO based water dispensing rate - Upto 2 L/min
- Type 1 or Ultrapure Water dispensing flow rate - Upto 2 L/min

### **Product Water Quality**

- Type 3 or RO based water quality (@25 $^{\circ}\text{C}$ ) > 90% Ionic rejection, when compared to the feed water conductivity
- Type 1 Ultrapure water resistivity (@25 $^{\circ}\text{C}$ ) – 18.2  $\text{M}\Omega\cdot\text{cm}$
- Type 1 Ultrapure water TOC < 10 ppb (If feed water TOC < 30 ppb)
- Particles in Ultrapure water of > 0.2  $\mu\text{m}$  - No particles (with a 0.2  $\mu\text{m}$  final filter or Bio filter unit)
- Microorganisms in Ultrapure water - < 0.01 cfu/ml (with a 0.2  $\mu\text{m}$  final filter or Bio filter)
- Pyrogens (Endotoxins) in ultrapure water < 0.001 EU/ml (with a Bio filter)
- RNase in ultrapure water < 0.5 pg/ml (with a Bio filter)
- DNase in ultrapure water < 10 pg/ml (with a Bio filter)

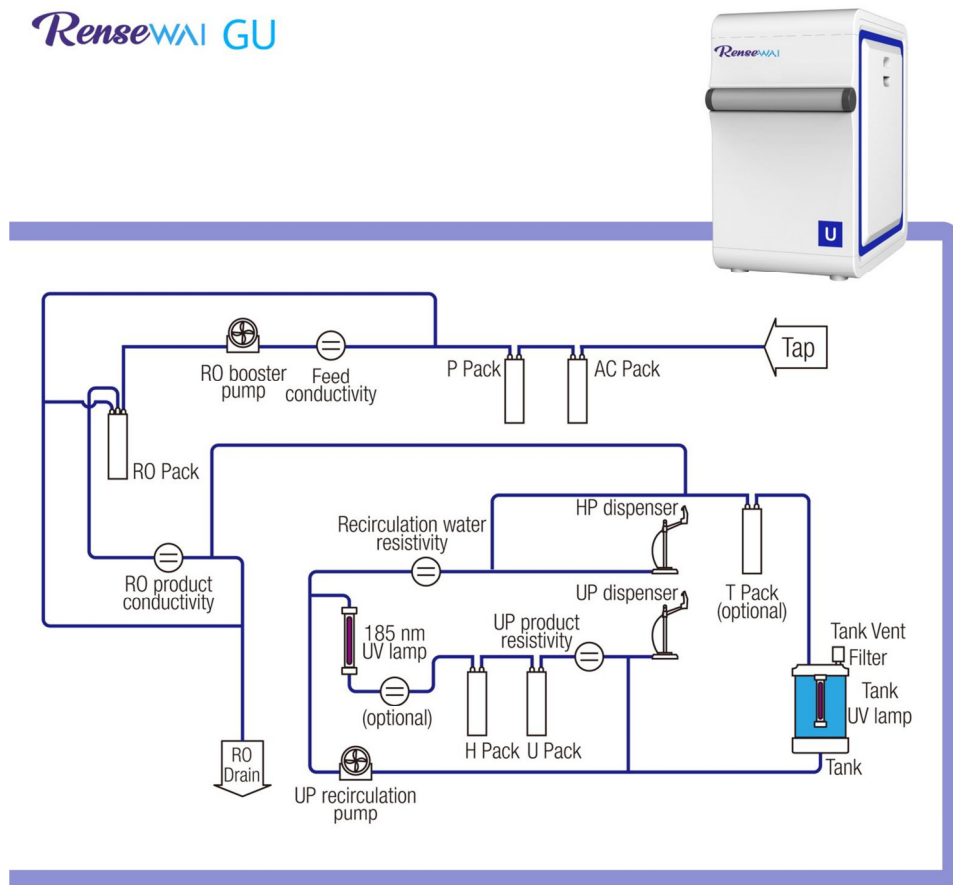


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## Power

- Input Voltage - 110 - 240 VAC
- Operating Voltage - 24 VDC
- Wattage < 200 W

## Flow Chart



## Ordering Information

SI.No.	Description	Catalogue No.
1	RenseWAI GU 12 System SET	RW0U01000K
2	RenseWAI GU 12 System SET with TOC	RW0U010T0K
3	RenseWAI GU 24 System SET	RW0U02000K
4	RenseWAI GU 24 System SET with TOC	RW0U020T0K
5	RenseWAI GU 32 System SET	RW0U03000K
6	RenseWAI GU 32 System SET with TOC	RW0U030T0K





## Standard contents of the Set

### **RenseWAI GU System Set consists of :-**

1. Main system
2. Control Console
3. One Dispenser for Type 1
4. RO membrane
5. UV (pre-installed)
6. AC Pack
7. P Pack
8. H Pack
9. U Pack
10. Final Filter 0.22 micron unit
11. Reservoir 30 litre capacity, with tank level sensor
12. Tank vent filter (with Soda lime in granular form, which removes carbon dioxide CO<sub>2</sub> and Granular activated carbon or GAC, which removes organic matter from the air and 0.22 hydrophobic membrane, which removes air-borne bacteria)
13. Three stage prefiltration kit (PF Kit)  
(1 micron + 10 micron + Carbon Cartridge of 3 micron pore size, included inside PF Kit.  
Quantity – 1 no. each, all 10" long)
14. External feed booster pump, with high & low pressure auto cutoff switch included.  
(Included / needed only in-case, if potable feed water pressure is less than 2 bar)



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## Photographs (Representative only)



(Disclaimer – Please note photographs are for representation purpose only & can vary from the actual system)

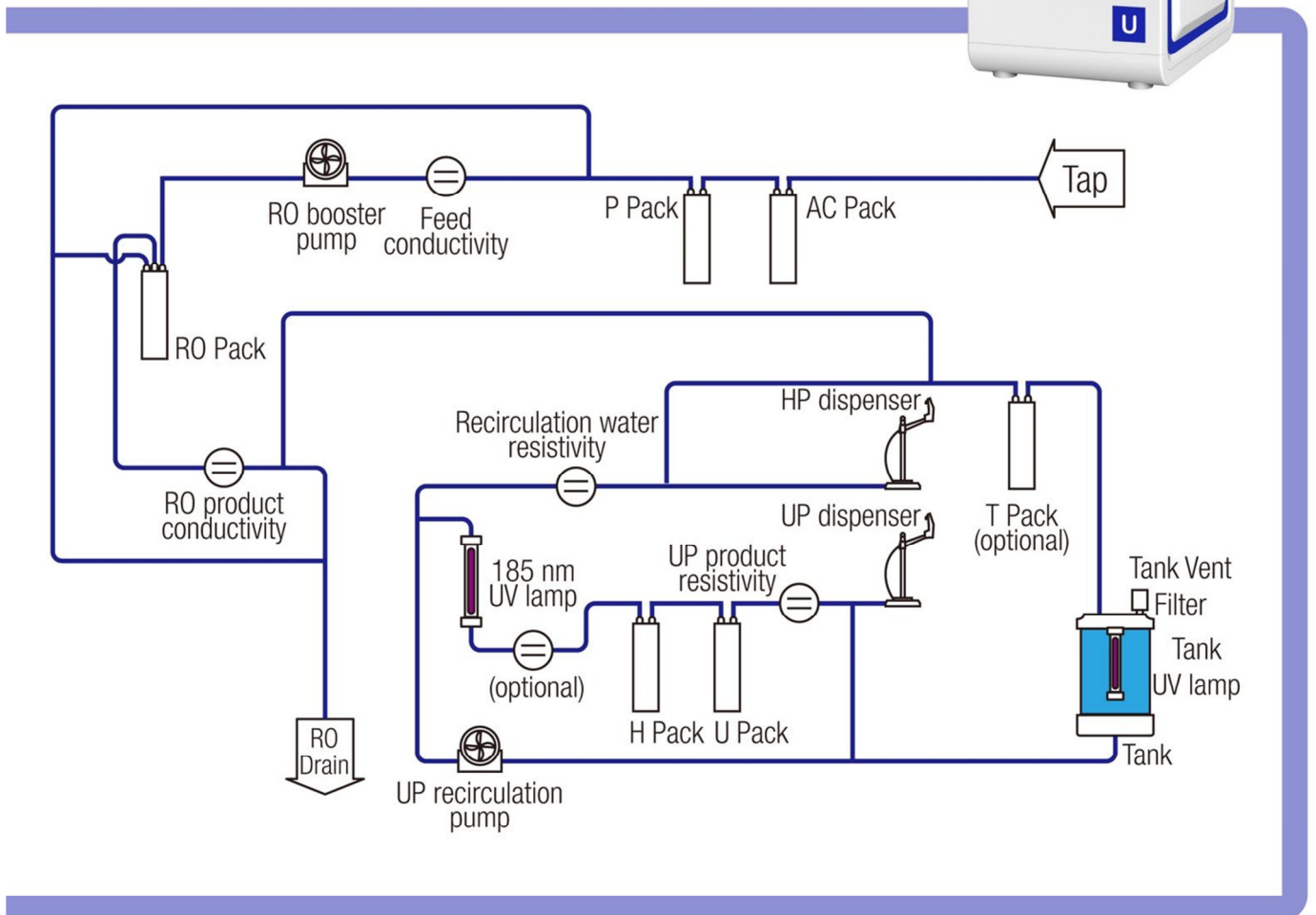


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