RenseWAI GG

RenseWAI GG Ultrapure & EDI Water System produces Type 2 grade water (RO + EDI based) and Type 1 Ultrapure water, directly from potable tap water. It offers desired solutions for research professionals who work with varieties of applications, utilizing Type 1 Ultrapure and Type 2 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 stability, over a wide range of temperature.
- Exceptionally consistent and predictable High purity Type 2 water, from the best in class IonPure EDI (Electro-Deionization) module.
- Fully automated 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 / re-cycled, to increase the water yield, thus it is more environmentally friendly.
- The main system can be installed either on the bench space or can be wall-mounted or under the sink, to save precious lab space.

Achieving effective TOC level

- Built-in 254 nm UV lamp reduces microbial load in the Type 2 flow path
- A UV 185/254 nm dual wavelength lamp in the Type 1 flow path, to reduce TOC level in Type 1 Ultrapure water.
- A Tank Sanitization UV Module also can be equipped, to effectively keep microbial growth at a lower level by UV light. (optional)
- On-line TOC measurement, monitoring & display, based on complete oxidation methods, is a standard feature in this model.

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. EDI module

- Internal best in class Ion-Pure EDI module removes the remaining ions, to further reduce the content of organic compounds.
- Ion exchange resins are continuously regenerated by an electric field. No hazardous chemical regeneration or costly resin replacement is needed.
- EDI module has a high degree of automation and minimal electricity consumption.

2. Cartridge

- Internal P Pack cartridge removes organics, particles and scaling ions, to prevent them from fouling the RO membranes and the EDI module.
- AC Pack contains special activated carbon to remove organic impurities and free chlorines.
- Ultra purification cartridge is filled with LeFilTM and OrganeFilTM media to remove trace ions and organics.

3. Control console

- An 8-inch colour 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 on top of the main system for further flexibility and space saving.
- The console screen and dispenser screens are water-proof. User can operate the console and dispenser with latex gloves on.
- The system has two level password protections, on display menu for safety & security purposes.

4. Dispenser

- The volumetric function can automatically deliver the water volume.
- With the adjusting button on a control console or a dispenser, user can dispense water at the flow rate, upto 2 liters per minute.

5. Final Filter

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

6. 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 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.

EDI Pure Water

- Preparation of chemical bio-reagents
- Preparation of culture media
- Preparation of solution for chemical analysis such as HPLC and ICP
- Feed water to ultrapure water systems
- Feed water to medical device and equipment (clinical analyzers, Aging testers etc.)
- For serum and blood fractionation
- For ophthalmic

Main Specification

Feed Water Requirements

- Feed Water – Potable Tap Water
- Feed water conductivity < 2000 µS/cm or TDS < 1000 ppm
- Feed water pressure – (2-6) bar
- Operating temperature (5 – 35)°C
- Feed water TOC < 2000 ppb

Flow rate

- Type 2 or EDI based production rate – 5, 10 and 15 L/hr.
- Type 2 or EDI based water dispensing rate - Upto 2 L/min
- Type 1 or Ultrapure Water dispensing flow rate - Upto 2 L/min

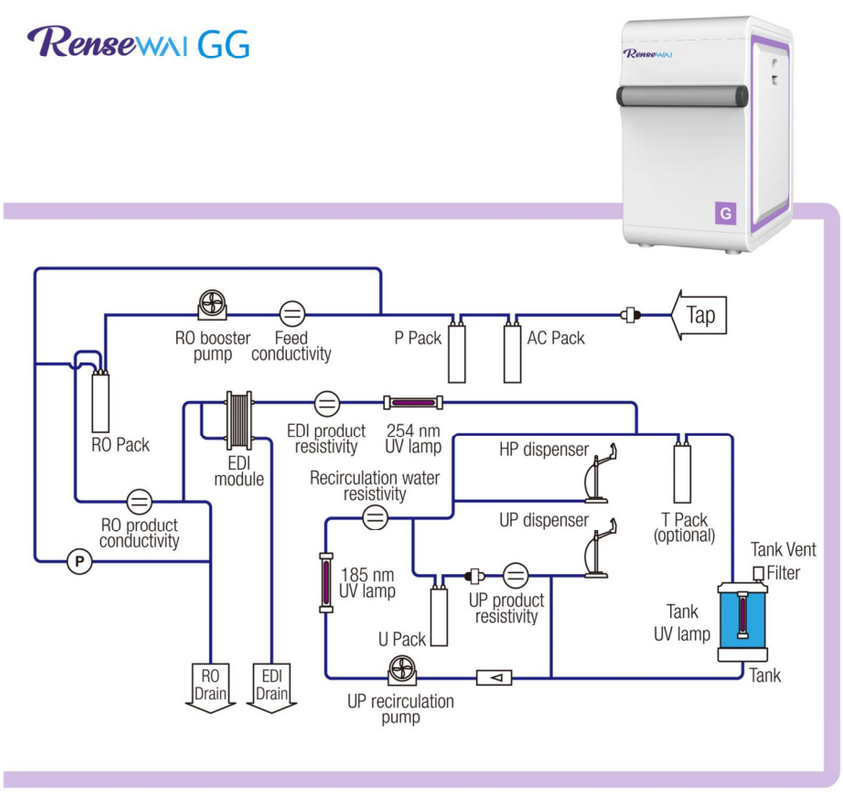
Product Water Quality

- Type 2 or EDI based water resistivity (@25°C) - > 5 MΩ·cm (typically 10 - 16 MΩ·cm)
- Type 2 or EDI based water TOC < 30 ppb
- Type 1 Ultrapure water resistivity (@25°C) – 18.2 MΩ·cm
- Type 1 Ultrapure water TOC < 5 ppb (If feed water TOC < 30 ppb, preferably with (RO + EDI) technology)
- Particles in Ultrapure water of > 0.2 µm - No particles (with a 0.2 µm final filter or Bio filter unit)
- Microorganisms in Ultrapure water - < 0.01 cfu/ml (with a 0.2 µm 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)

Power

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

Flow Chart



Ordering Information

Sl.No.	Description	Catalogue No.
1	RenseWAI GG 5 System SET with TOC	RW0G005T0K
2	RenseWAI GG 10 System SET with TOC	RW0G010T0K
3	RenseWAI GG 15 System SET with TOC	RW0G015T0K

Standard contents of the Set

RenseWAI GG System Set consists of :-

1. Main system with TOC measurement, monitoring & display

2. Control Console

3. One Dispenser for Type 1

4. RO membrane

5. UV (pre9-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 CO2 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)

Photographs (Representative only)

A MAKE IN INDIA INITIATIVE

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

RenseWAI is the registered trademark of M/s. Pramuk Healthcare

RenseWAI

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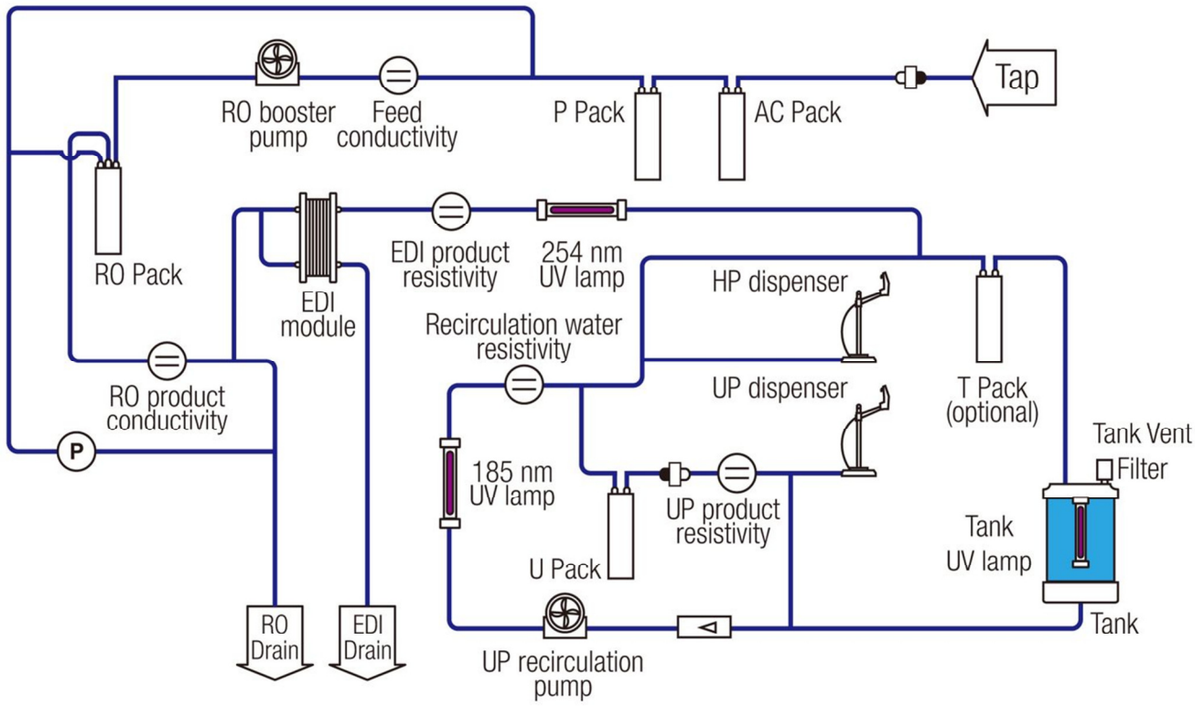

RenseWAI

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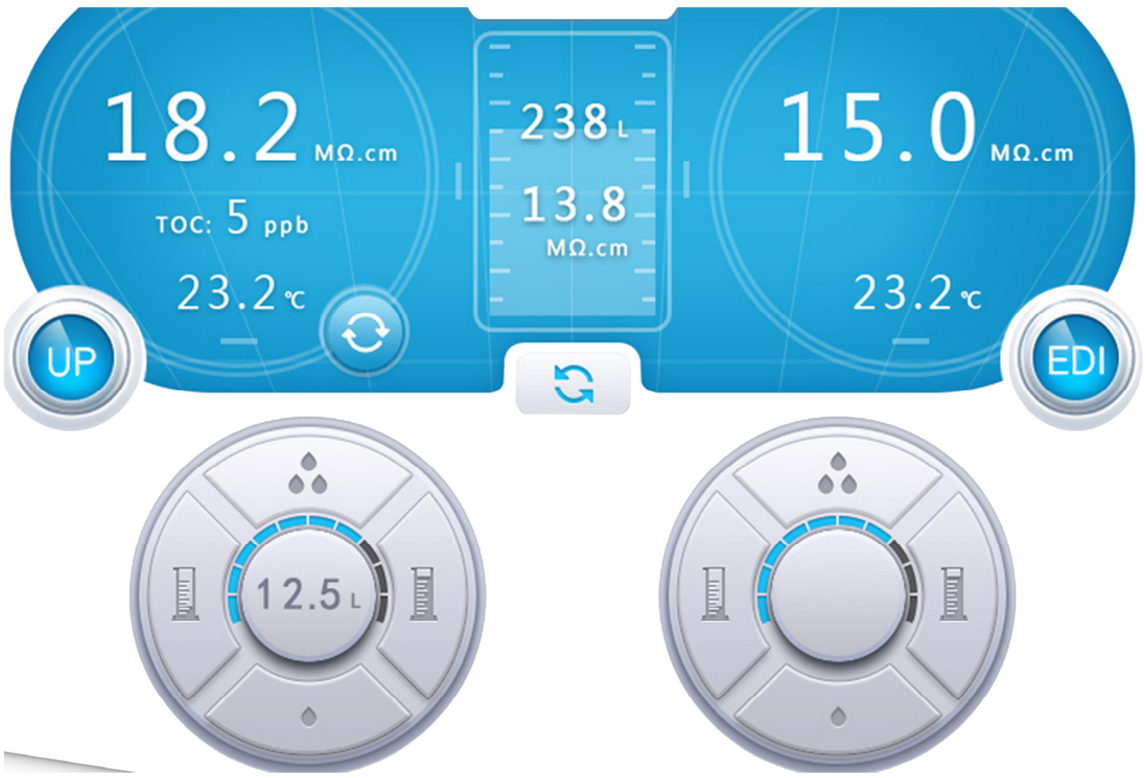
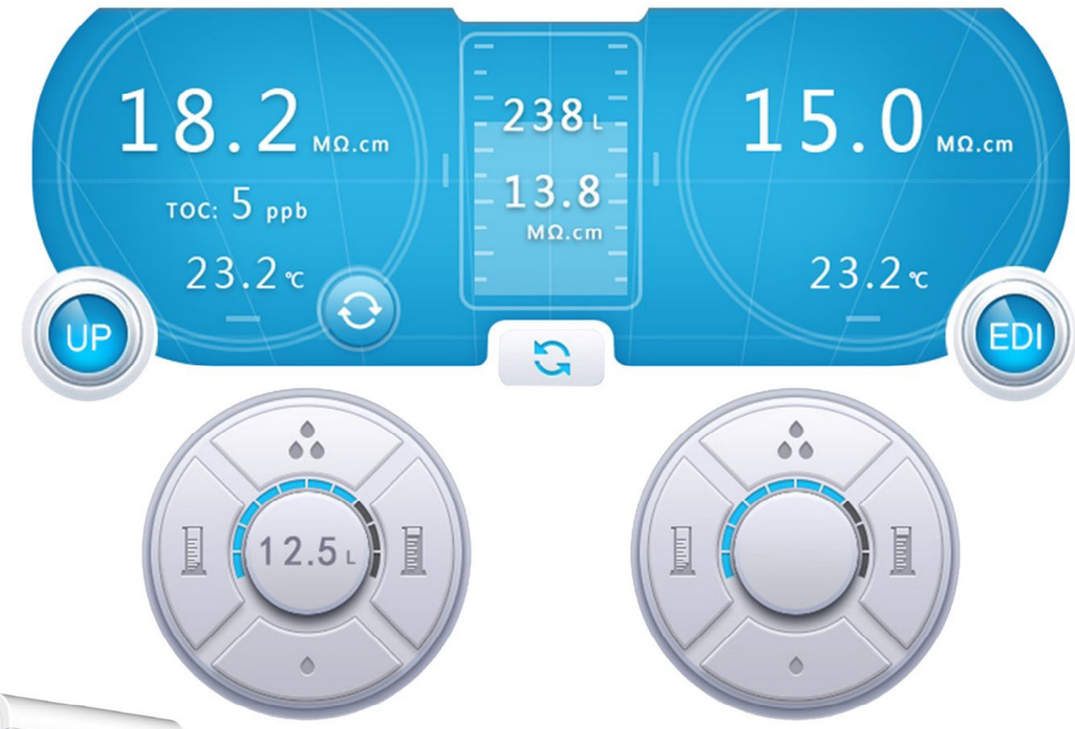

18.2 MΩ.cm
TOC: 5 ppb
23.2℃
238 L
13.8
MΩ.cm
15.0 MΩ.cm
23.2℃
UP
EDI
12.5 L


RenseWAI

RenseWAI

RenseWAI GG Control Console Display



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