

ULTRA PURE LAB WATER SYSTEM



LAB WATER SOLUTIONS FOR YOUR LAB NEEDS

VERSATILE USER-FRIENDLY WPS UNIT

RS Ultrapure Water System produces ultrapure water (Type I water) (Type II water) from tap water directly. It offers desired solutions for research professionals who work with varieties of applications utilizing Type I ultrapure and Type II pure water in the lab. Quality of ultrapure water and EDI water meet or exceed ASTM, CLSI, CAP, and ISO Type I water and Type II water standards, respectively. The system is CE/ROHS certified. Watman provides full documents support to meet user's GMP, GSP, GAP, GCP, GLP requirements.



1. Anti-Scaling Inbuilt Pretreatment Cartridge with Bar code scanner.
2. RO Membrane with 90-95% rejection. With product water flow rate 15 L/hr.
3. Alarm and messages on display to monitor feed water quality and pressure.
4. Conductivity Cell with cell constant 0.01 K to determine online water quality after RO and Before End point filter.
5. No Softener required as pre-treatment of DI.
6. Ultra filtration module with sensor and Display message in case of bad DI resin replacement requirement
7. Watman system is lab friendly, can be placed table top or wall mounted.
8. For Type 1 purification using Two stage polishing cartridge with mixed bed ion resin & Activated Carbon.
9. Watman water system has recirculation facility to maintain water quality in case of no uses or in working condition.
10. 5' Touch Screen Display, All operations can be done on the console by touching the screen.
11. Feed Water requirement Ro, DM or upto 2000 micro siemens conductivity.
12. Real time TOC, Conductivity and Resistivity Monitoring.
13. End point filter 0.1 μ filter available along with ultrafiltration cartridge for Molecular Biology study .
14. Pre- Treatment filter with 5 , 1 and 0.5 micron filter with additional active-carbon filter.
15. Dispenser Arm. Type-1 flow rate 2L/min
16. RFID tag for recognized RO membrane, Pre treatment filters and Ultra pure polishing module.
17. Built-in 254 nm UV lamp kills bacteria and a 185/254 nm dual wavelength UV lamp reduces TOC level in ultrapure water.
18. Alarms and alerts information, maintenance data of consumables as well as key parts are logged and traceable from a simple bar code scan at installation.
19. In case of low feed water supply main unit turn to stand by mode.
20. The Chlorine cleaning and pH cleaning functions keep the maintenance easier and ensure optimal water quality.
21. 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. Tank available with different volumes 20/30/50/100 Ltr range.

Assurance of reliability & Consistence

RS Water Purification Systems specialises in the design, development and manufacturer of advanced, high performance laboratory water purification systems. Every system is designed to meet the needs of specific applications. providing high levels of water quality, consistence and reliability using a wide range of advanced technologies. We also offer full technical support, training and aftermarket services, to ensure a maximum return on investment and unrivalled value for our customers

Choose RSolv System For:

Range of Technologies

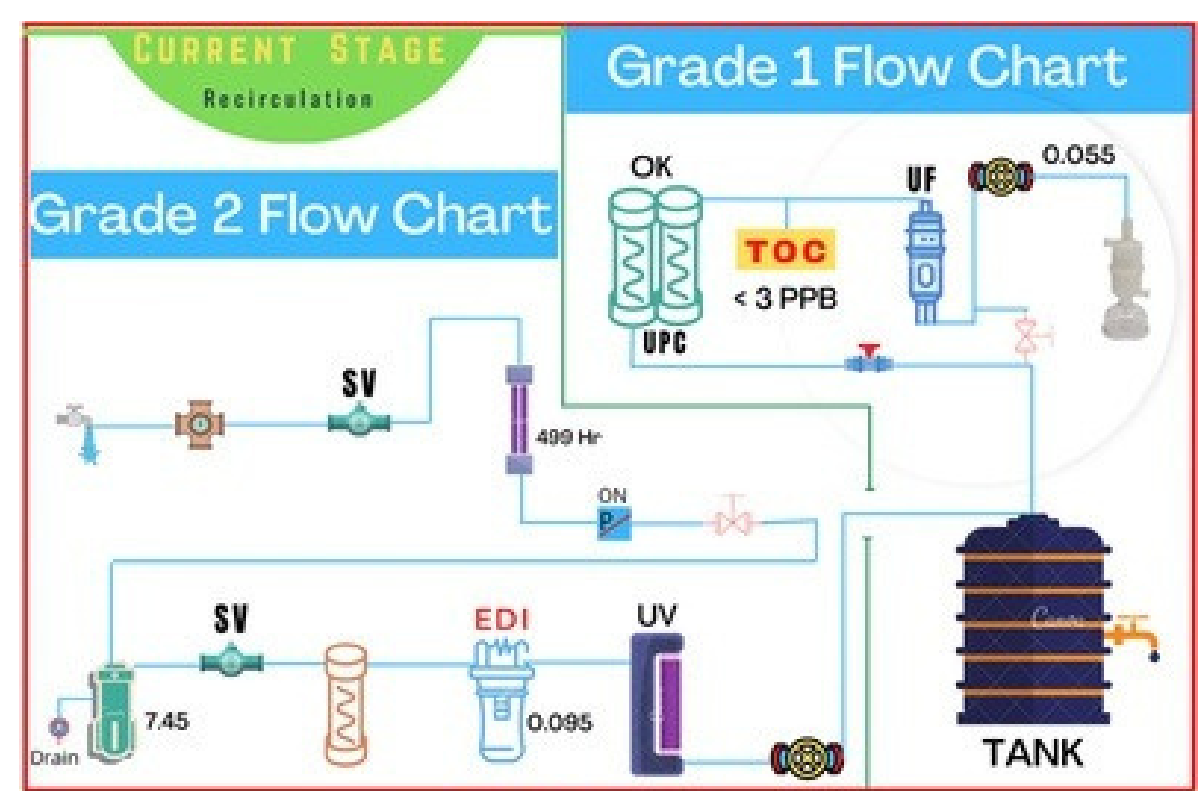
1. Reverse osmosis: A total membrane process with can remove > 98% minerals and >99% bacteria from potable water. With RO pump is temperature independent to work at any ambient temperature condition.
2. Irradiation: applied at 254 & 185nm to destroy micro organisms or to reduce Total Organic Carbon (TOC) levels
3. Filtration: Incorporates a wide range f submicron ratings which can be used to effectively reduce level of bacteria, endotoxin, RNases and DNases from ultrapure water
4. Ion-exhchange: specifically selected nuclear grade resin combined with high activity absorbents to produce an ultra pure water quality (18.2MΩ.cm) with low TOC

Real Time Conductivity, Resistivity, TOC And Temp

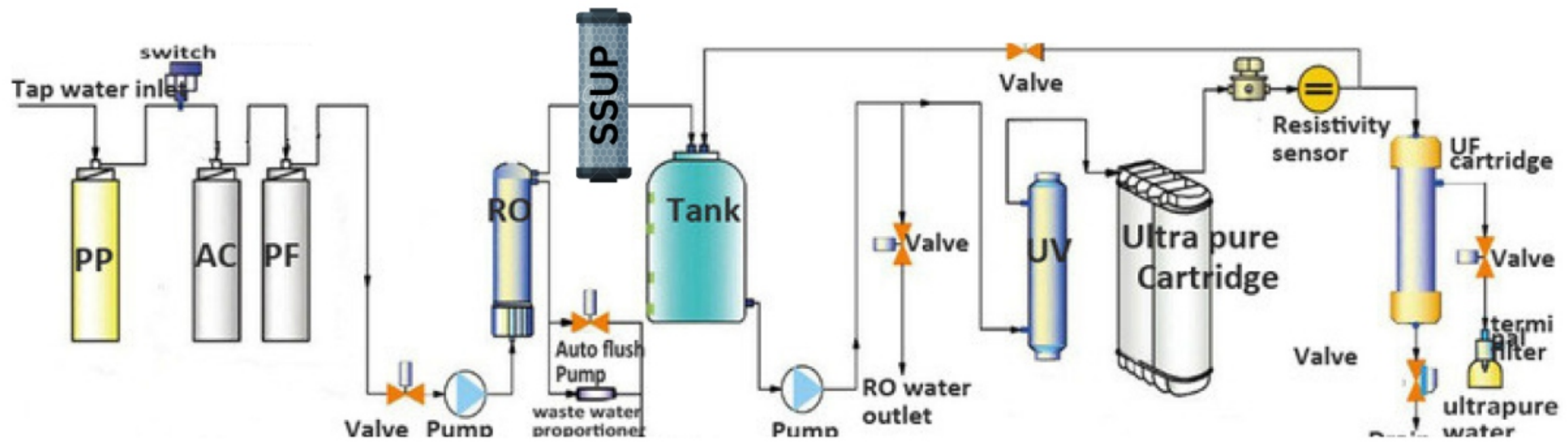
Grade 1 (µs/cm)		MΩ cm	
0.055		18.2	
Total Organic carbon		Temperature	
4		27	
TYPE 1	TYPE 2	STOP	FLUSH

Simple maintenance and servicing

- A range of menu features simplify operation and identification of key parameters.
- Our range of long life cartridge packs and consumables are easy to change. Semi-automated cleaning and sanitising routines minimise operator intervention.
- Display message for critical system condition or routine operations and Cartridges/consumables Changing Alarm.
- Service engineers are available as part of our maintenance care programmes, which can be tailored to meet your exact requirements.



RS ULTRA-PURE WATER PURIFICATION SYSTEM PROCESS FLOW DIAGRAM



ULTRA-Q TYPE - I & II

TECHNICAL APPENDIX : ULTRA-Q 20

Feed Water Requirement

Source Water	Tap water / RO
Silt Density Index (SDI)	0 to 55 Water
Conductivity* _{@25°C}	10-<2000us/cm
pH:	4 to 10
Hardness**	<450ppm as CaCO ₃
Fouling index	10-20
Pressure	0.05-0.5MPa
Free Chlorine	Less than 5 ppm
Temperature	5-40 C
TDS	Up to 2000 PPM

TYPE II SPECIFICATIONS

Resistivity at 25 °C	10-15 MΩ·cm
Conductivity at 25 °C	0.1- 0.2 μS/cm
TOC	≤30 ppb
(Online TOC Monitoring)	
Production flow rate	20 L/h Heavy
Metals	<30 ppb

Purification Water(TYPE III)

Ionic Rejection	>95% Bacteria
Rejection	>99%
Conductivity	1-20us/cm
Productivity Rate	15L/h

Ultra purification Water(TYPE I)

Resistivity	At 25 ' -> 18.2M Ω.cm
Conductivity	At 25 'C -> 0.055us/cm
TOC Level***	1-5ppb
Endotoxin(Pyrogen)***	<0.001EU/ml
Particulate(≥0.02um)	≥0.01um
Bacteria***	<0.01 cfu/ml
Pyrogens	<0.001Eu/ml
RNases	<1 pg/ml
DNases	<5 pg/ml
Flow Rate	2L/min

