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# RSOLV PURE LAB WATER SYSTEM

## TYPE- I & II

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# Lab Water Solutions For Your Lab Needs

RSolv pure Water System delivers Type I and Type II pure water directly from tap water, providing tailored solutions for research professionals with diverse laboratory applications. The system consistently produces water that meets or exceeds ASTM, CLSI, CAP, and ISO standards for Type I and Type II water quality


## Key Features:

**Certified Quality:** CE/Ro HS certified, with comprehensive documentation to support GMP, GSP, GAP, GCP, and GLP compliance

**Advanced Pretreatment:** Integrated anti-scaling cartridge with barcode scanner

**Efficient RO Membrane:** Achieves 90-95% rejection rate; product water flow rate of 15 L/hr

**Precise Dispensing:** High-precision volumetric dispensing from 10 ml to 25 L, ensuring best-in-class accuracy with continuous or manual operation

**Real-Time Monitoring:** Alarms and display messages for feed water quality and pressure; on line conductivity measurement after RO and before final filtration

**No Softener Required:** Direct DI pretreatment

**Ultrafiltration Module:** Sensor-driven alerts for DI resin replacement

**Flexible Installation:** Suitable for tabletop or wall mounting

**Two-Stage Polishing:** Mixed-bed ion resin and activated carbon for Type I purification

**Recirculation Facility:** The Recirculation Facility in the RSolv Pure Lab Water System is a feature designed to keep the purified water continuously moving within the system, even when the water is not being used. This helps maintain the highest water quality at all times

**User-Friendly Interface:** 7-inch touchscreen for complete system control

**Flexible Feed Water:** Compatible with RO, DM, or water up to 2000 µS/cm conductivity

**Comprehensive Monitoring:** Real-time TOC, conductivity, and resistivity tracking

**Final Filtration:** 0.1 µm filter and ultrafiltration cartridge for molecular biology applications

**Multi-Stage Pretreatment:** 5, 1, and 0.5 µm filters with additional activated carbon

**Dispenser Arm:** Type I flow rate up to 2 L/min (manual and volumetric modes)

**RFID Tracking:** Recognizes RO membranes, pretreatment filters, and polishing modules

**Dual-Wavelength UV Lamp:** Built-in 185/254 nm UV lamp reduces TOC in ultrapure water

**Maintenance Alerts:** Consumable and key part data are logged and traceable via barcode scan

**Automatic Standby:** System enters standby mode if feed water supply is low

**Data Logging:** USB and RS232 ports with printer connectivity (printer and cable sold separately)

**Secure Access:** Password protection for login, service, and user interface

**Automated Cleaning:** Chlorine and pH cleaning functions simplify maintenance and ensure optimal water quality

**Integrated Tank Management:** Continuous level sensor automates water production based on demand; tanks available in 20/30/50/100L capacities

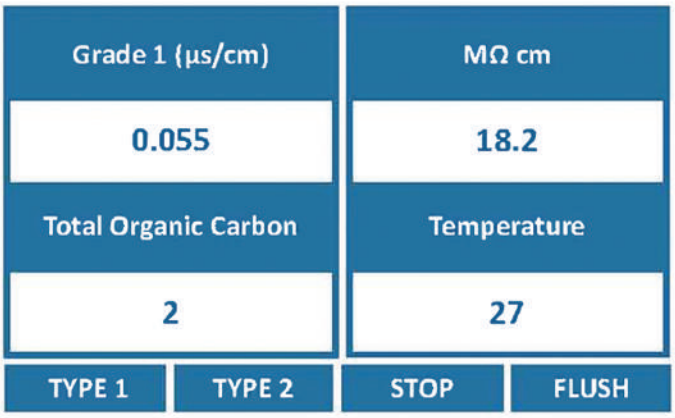
**Website**

info@rsolv-lifesciences.com

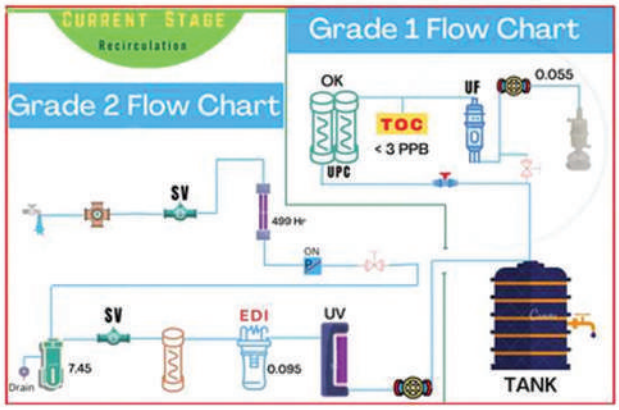
www.rsolv-lifesciences.com

# Assurance of Reliability & Consistence

RSolv Water Purification Systems specialises in the design, development & 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




*Real time conductivity, resistivity, TOC & temp*




*Real time flow diagram with filter life hours*

## Why Choose RSolv?

### Technologies Used:

**Reverse Osmosis:** Removes >98 % minerals and >99% bacteria, effective at any ambient temperature
**UV Irradiation:** 254 & 185 nm wave lengths destroy microorganisms and reduce TOC
**Advanced Filtration:** Submicron ratings reduce bacteria, endotoxins, RNases, and DNases
**Ion Exchange:** Nuclear-grade resin and high-activity absorbents achieve 18.2 MΩcm water with low TOC

### Maintenance and Support:

Intuitive menu simplifies operation and parameter identification
Long-life cartridge packs and consumables are easy to replace
Semi-automated cleaning routines minimize operator intervention
Display messages and alarms for critical conditions and consumable changes
Comprehensive technical support, training, and aftermarket services available

### End Pointer Filter and UV Info:

End point filter 0.1 µ available along with ultrafiltration cartridge to maintain end result. Treatment of water with Duel UV-C 185/254 nm light is used to photooxidise organic impurities and/or inactive microganisms. Photo oxidation of oragnic impurities results in polar or changed species that can subsequently be removed by ion-exchanged processes. Water the Total Organic Carbon (TOC) of <2ppb and bacteria at <lCFU/ml can be achieved at RiKi Global products that use this approach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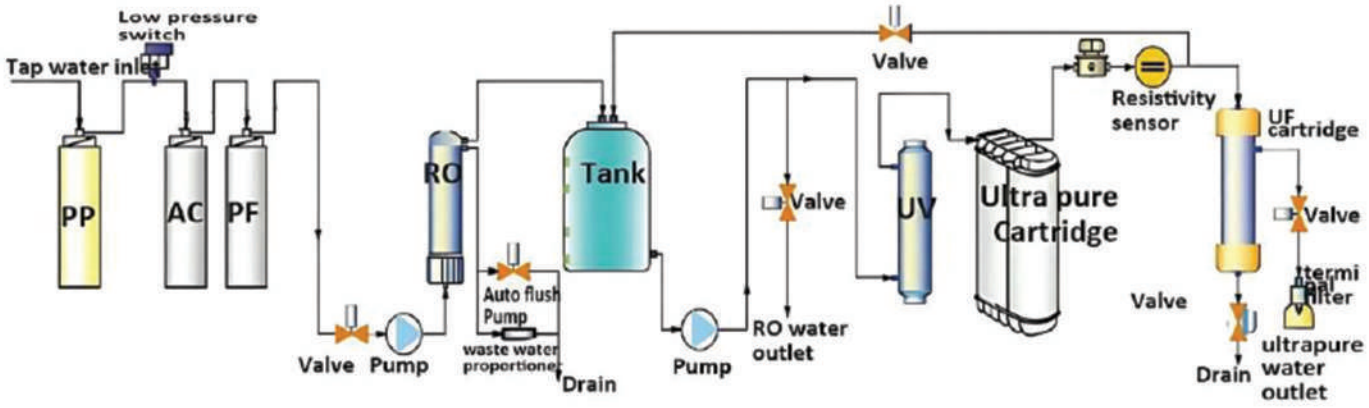
# Ultra-pure Water Purification System Process Flow Diagram




## RSolv TYPE I & II

### Technical Appendix : RSolv 20

### Feed Water Requirement

| | |
|---|---|
| Source Water | Tap Water / RO |
| Pressure | 1 Bar - 6Bar |
| Silt Density Index (SDI) | 0 to 55 Water |
| Conductivity at 25°C | 10-<2000 µS/cm |
| pH: | 4to 10 |
| Hardness | <450ppm as CaCO3 |
| Fouling index | 10-20 |
| Pressure | 0.05-0.5 MPa |
| Free Chlorine | Less than 5 ppm |
| Temparature | 5-40°C |
| TDS | Up to 2000 PPM |

### Ultra purification Water (TYPE I)

| | |
|---|---|
| Resisitivity at 25°C | 18.2 Ω.cm |
| Conductivity at 25°C | 0.055 µS/cm |
| TOC Level | 1-2 ppb |
| Endotoxin ( Pyrogen) | <0.00lEU/ml |
| Particulate (≥0.02 µm) | ≥0.01 µm |
| Bacteria | <0.01 cfu/ml |
| Pyrogens | <0.001Eu/ml |
| RNases | <1 pg/ml |
| DNases | <5 pg/ml |
| Flow Rate | 2 L/min |

### Type II Specifications

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

Website