The Purest, The Fastest

Super Water Purification System

aquapuri 5

S Water Purification System

The role of water purification system is to remove impurities in the feed water(mainly tap water), prevent additional contamination and bacterial growth, and provide lab grade water that always meets the specified standards.

For a conventional water purification system, purified water produced from tap water is stored in the storage reservoir and the ultrapure water is produced using purified water stored in the reservoir. However, water stored in storage reservoir always has the risk of additional contamination from inside and outside of the system.

The NEW aquapuri 5 produces ultrapure and pure water directly from tap water without reservoir. You can use aquapuri 5 without fear of additional contamination and concern about maintenance of reservoir.

Unique *super* WPS with Innovative technology

- √ High quality ultrapure and pure water direct from tap water without reservoir
- √ Faster production speed than any other (60 L/h)
- √ Water quality meets or exceeds the specifications of ASTM(D1193-91), ISO(3696), CLSI-CLRW, JIS K0557, USP and EP

Best water quality guarantee for any lab application

- √ TOC < 5ppb : Perfect for organic carbon removal*
- √ Endotoxin <0.001 EU/ml : Excellent for removal of microbial contaminants and for life science analysis **
- √ Concentration of heavy metals and other inorganic elements <1ppb : Superior for trace level analysis*

*UV, VF model, **UF, VF model

Simple to use

- √ Convenient water delivery with dispenser named “HANDY”
- √ Full control using LCD touch screen interface
- √ Real-time filter life cycle monitoring and replacement alert

Ergonomic design

- √ Attractive color and shape
- √ Space can be used efficiently because aquapuri 5 is compact size and has no reservoir

YL Instruments Co., Ltd.

aquapuri 5 is ideal for trace level analysis and sample preparation

* Organic and inorganic trace level analysis
* Molecular biology and life science
* Chemical analysis and synthesis
* Others

Start your work with aquapuri 5

Water is the most commonly used reagent in the laboratory and should be applied to the appropriate level of water for each test method and purpose. It is very important to use a higher level of water than specified to increase confidence in the result and reduce the risk of inadequate water quality.

With aquapuri 5, you are free from water quality stress.

We confidently promise reliable and consistent water quality

See aquapuri 5's water quality test result

1. Determination of Inorganic elements in ultrapure water produced by aquapuri 5 using ICP-MS (Inductively Coupled Plasma Mass Spectrometry)

√ **Analysis method** : drinking water analytical method
√ **Instrument** : Agilent ICP-MS 7900s
√ **Analysis sample**
A: Ultrapure water produced by aquapuri 5
B :Ultrapure water produced by other WPS system(M*.Co)
C: The reagent, 'water for inorganic trace analysis', purchased from M**.Co.

√ **Results** : Concentration of heavy metals and other inorganic elements in ultrapure water produced by aquapuri 5 is less than 1 ppb. Especially, the light elements such as B, Ca, K, and Na, which are likely to be affected by water impurities, are detected at much lower concentrations. Compare to expensive reagent, sample C, the water quality of aquapuri 5 is more than equivalent or better

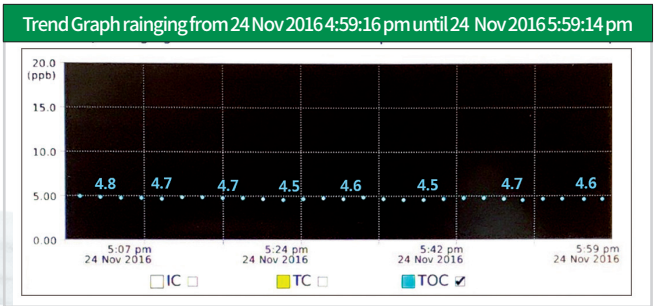
Analysis Result (Conc. [ppb])

sample	A	B	C	sample	A	B	C
Li (Lithium)	< 1.0	< 1.0	< 1.0	Ga (Gallium)	< 1.0	< 1.0	< 1.0
Na (Sodium)	< 1.0	< 1.0	< 1.0	Ge (Germanium)	< 1.0	< 1.0	< 1.0
Mg (Magnesium)	< 1.0	< 1.0	< 1.0	As (Arsenic)	< 1.0	< 1.0	< 1.0
Al (Aluminium)	< 1.0	< 1.0	< 1.0	Se (Selenium)	< 1.0	< 1.0	< 1.0
K (Potassium)	< 1.0	< 1.0	< 1.0	Rb (Rubidium)	< 1.0	< 1.0	< 1.0
Ca (Calcium)	< 1.0	< 1.0	< 1.0	Sr (Strontium)	< 1.0	< 1.0	< 1.0
Cr (Chromium)	< 1.0	< 1.0	< 1.0	Zr (Zirconium)	< 1.0	< 1.0	< 1.0
Mn (Manganese)	< 1.0	< 1.0	< 1.0	Mo (Molybdenum)	< 1.0	< 1.0	< 1.0
Co (Cobalt)	< 1.0	< 1.0	< 1.0	Ag (Silver)	< 1.0	< 1.0	< 1.0
Ni (Nickel)	< 1.0	< 1.0	< 1.0	In (Indium)	< 1.0	< 1.0	< 1.0
Cu (Copper)	< 1.0	< 1.0	< 1.0	Sn (Tin)	< 1.0	< 1.0	< 1.0
Be (Barium)	< 1.0	< 1.0	< 1.0	Sb (Antimony)	< 1.0	< 1.0	< 1.0
B (Boron)	< 1.0	< 1.0	< 1.0	Ba (Barium)	< 1.0	< 1.0	< 1.0
Sc (Scandium)	< 1.0	< 1.0	< 1.0	Au (Gold)	< 1.0	< 1.0	< 1.0
Ti (Titanium)	< 1.0	< 1.0	< 1.0	Hg (Mercury)	< 1.0	< 1.0	< 1.0
V (Vanadium)	< 1.0	< 1.0	< 1.0	Tl (Thallium)	< 1.0	< 1.0	< 1.0
Fe (Iron)	< 1.0	< 1.0	< 1.0	Pb (Lead)	< 1.0	< 1.0	< 1.0
Zn (Zinc)	< 1.0	< 1.0	< 1.0	U (Uranium)	< 1.0	< 1.0	< 1.0

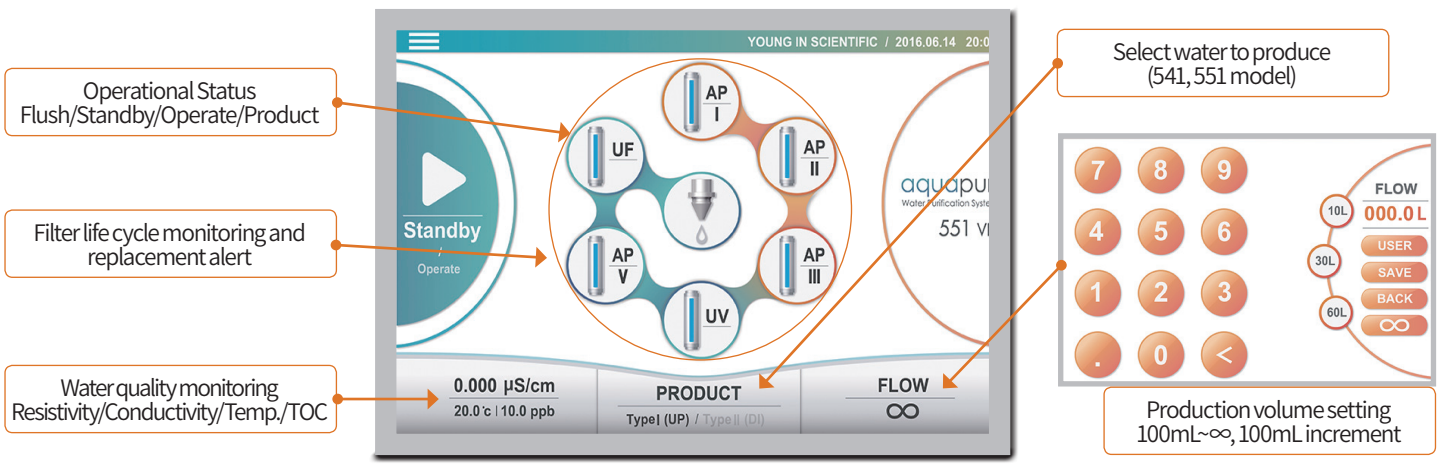
2. Monitoring of TOC in ultrapure water produced by aquapuri 5 using TOC analyzer

√ **Instrument** : Sievers M9 TOC analyzer
√ **Measurement range** : 0~20 ppb
√ **Temperature range** : 5~40°C
√ **Result** : Monitoring TOC level for one hour, TOC level is below 5 ppb the whole time

Trend Graph rainging from 24 Nov 2016 4:59:16 pm until 24 Nov 2016 5:59:14 pm



Full control using LCD touch screen interface



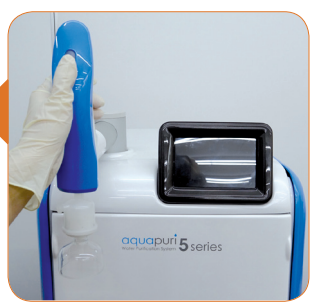
Simple and easy maintenance with magnetic door

3 sides are magnetic doors

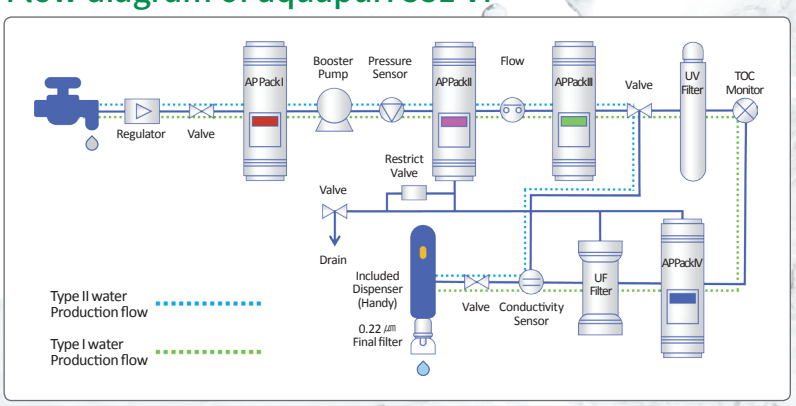
No need any tools when filter replacement

Just press Handy when you need water

Handy delivers ultrapure water and pure water



Flow diagram of aquapuri 551 VF



History of aquapuri 5

Since 1987, Young In Scientific has been providing water purification solutions to our customer for more than 3 decades. We will lead the next new 30 years with trust and best performance

Applications of water type

Water Type	Application
Type III	Autoclave, Humidification, Glassware washing
Type II	Buffer Prep, Media Prep and pH solutions, Feed water to water purification system
Type I	- STD: (General laboratory)Reagent for chemical analysis & synthesis, Preparation of chemical and biochemical reagents, etc. -UV: (Organic and inorganic analytical instrument) Pharmacology, AA, ICP, ICP-MS, LC-MS, LC, IC, GC-MS, particle counter, TOC analysis, etc. -UF: (Molecular biology and life sciences)Recombinant DNA, Production of Monoclonal Antibodies & Blots, Endotoxin analysis, Immunocytochemistry, Nutrient media for cell culture, etc. -VF(UV+UF): 2D Electrophoresis, PCR, etc.

Product Selection Guide

Product water type	Model	Delivery flow rate	Feed water	Operating pressure
Type I, Type II	551*	60 L/h, ±10%	Tap water	3~7 bar
Type I, Type III	541*	60 L/h, ±10%	Tap water	3~7 bar
Type I	532*	120 L/h, ±10%	Type II	1~7bar
Type II	521	60 L/h, ±10%	Tap water	3~7 bar
Type III	511	60 L/h, ±10%	Tap water	3~7 bar

* provides STD, UV, UF and VF models

511/521 series

532 series

541 series

551 series

Specification

Product Water Quality

Water Type	Type I
Resistivity(25 °C)	18.2 MΩ·cm
TOC	< 10 ppb, < 5 ppb*
Endotoxin	< 0.001 EU/mL**
Bacteria	< 0.01 cfu/mL
Particles	< 1 particles/mL

* UV, VF model
**UF, VF model

Water Type	Type II	Type III
Resistivity(25 °C)	10~15 MΩ·cm	-
TOC	< 50 ppb	
Ion rejection	> 95~99%	
Particle rejection	> 99%	
Organic rejection	> 99%	
Bacteria rejection	> 99.9%	
Endotoxin rejection	> 99%	

Feed water requirements(tap water)

pH	4~10
Conductivity	< 800 µS/cm
TOC	< 1.5 mg/L
Temperature	4~35 °C
Pressure	3~5 bar
Turbidity	1.0 NTU

System specifications

Size(mm)	370(W)×470(D)× 470(H)
Weight(kg)	29~30
Input voltage	110/220 V, 50/60 Hz

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