

# Water Purifier (Ion-exchange+Distillation, Large Capacity)

WA511/711/731

Production capacity 5 / 10 L/h

Treatment process Distillation → Ionexchange → Filtration

Purified Water Ion-exchanged water / Distilled water

Water quality A4 Ion-exchanged water A1 Distilled water

## High-capacity type to supply highly pure water with a single motion.

**Ion-exchanged water and Distilled water supplying to the storage tank are automatically controlled.**

- Large amounts of Distilled water and Ion-exchanged water can be obtained.
- Distillation to Ion-exchange is low running cost method. Selecting Ion-exchange resin cartridge Model: CPC-N (option, A3 water level) can be much lower running cost.
- Operation status are digitally displayed and the language can be chosen either Japanese or English.
- Easy to replace the Ion-exchange resin cartridge.
- Safety function: Power leakage breaker, Water leakage sensor, Water pressure reduction valve are equipped.
- Water softener cartridge, UV lamp for sterilization is available as the optional.



## Specifications

Production code	253114	253115	253116
Model	WA511	WA711	WA731
Water purification method	Pretreatment → Distillation → Ion-exchange → Filtration		
Purified water / Quality level	Distilled water / A1*1 (JIS K0557), Ion-exchanged water / A4 (JIS K0557)		
Production of distilled water*2	Approx. 5 L/h	Approx. 10 L/h	
Collection of distilled water	Approx. 1. 4 L/min.		
Collection of Ion exchange water	Approx. 1. 4 L/min.		
Range of collection capacity	0.1 to 85 L / Continuous water sampling*3		
Waste water discharging	Drain water connecting on both / back sides for the drain hose		
Boiler	Stainless steel		
Condenser	Stainless steel		
Heater	Pipe heater, 1.9kW×2 pcs.	Pipe heater, 2.55kW×3 pcs.	
Pre-treatment cartridge	Activated carbon + Hollow fiber membrane, 0.1μm (PWF-1)		
Membrane filter	Hollow fiber membrane, 0.1μm (MFRL730)		
High purity cartridge	One-touch connecting type cartridge (Model: CPC-H, 3L)		
Distilled water storage tank	Polyethylene made, 100L (Full water setting 30/55/85L)*3		
Water sampling table	Large stainless steel sink (With a splashing preventive mechanism)		
Feeding pump	Electromagnetic pump		
Raw water pressure range	0.15MPa~0.50MPa*4		
Safety function	Power leakage breaker, Water leakage sensor, Water pressure reduction valve, Water quality error alarm		
Power source (50/60Hz)	AC220V Single phase		AC220V / AC380V Three phase with step-down transformer
External dimensions*5	W800×D685×H1,510mm	W870×D685×H1,510mm	
Weight	Approx. 130 kg	Approx. 140 kg	
Water quality monitor	Digital indication (Conductivity or Resistivity)		
Distilled water tank level display	Display on LED in 5 steps		
Other indications	Replacement consumable parts (Pretreatment cartridge, High purity cartridge, Membrane filter), Error message, History of error messages, History of consumable part replacements (up to 20 times for each consumable part), Default Language in Japanese or English, Requirement of maintenance		
Accessories	Water supply hose×1pc, Ion-exchange resin Cartridge (CPC-H)×1pc, Pre-treatment Cartridge×1pc, Membrane Filter×2pcs, Seal tape×1pc, Hose band×1pc, Connection hose assy×1pc, Drain hose (3m)assy×1pc		

\*1 The measured value is the value immediately after distillation.

\*2 Distilled water production volume is based on power supply 200V AC, room temp. 23°C±5°C, humidity 65%RH±20%, raw water pressure 0.2 to 0.5MPa (2 to 5kgf/cm<sup>2</sup>) and water temp. 20°C.

The operating environment temperature range of this unit is 5°C to 35°C. The temp. range of raw water is 5°C to 30°C.

\*3 The amount of water that can be sampled continuously is up to the amount selected in the tank full setting.

\*4 If the water pressure is 0.10 to 0.15MPa, the drainage temp. may exceed 60°C, so an optional drainage trap (OWI) is recommended.

\*5 External dimensions do not include projections.

The length of the power cord is about 2m outside the unit.

## Structure



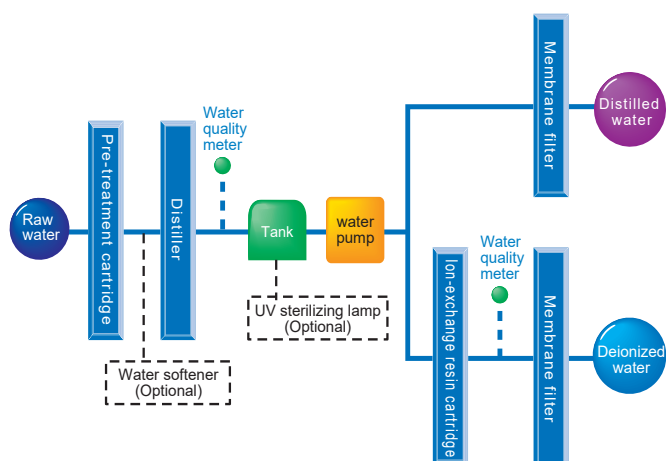
**Water sampling tray**  
Large stainless steel sink with a  
splashing preventive mechanism

Range of collection capacity:  
0.1 ~ 85 L (Continuous sampling)

## Control Panel



## Treatment Process



### ■ Japan Industrial standard JIS K0557 (at water temp. : 20°C)

Item	Ion-exchanged water		Distilled water	
	Measured value	Water level	Measured value	Water level
Electric conductivity(mS/m)	0.0055	A4	0.149	A1
Organic carbon (TOC) (µgC/L)	42	A4	64	A3
Zinc (µgZn/L)	<0.021	A4	0.013	A4
Silica (µgSiO <sub>2</sub> /L)	<0.1	A4	0.7	A4
Chloride Ion (µgCL <sup>-</sup> /L)	<0.1	A4	<0.1	A4
Sulfuric acid Ion (µgSO <sub>4</sub> <sup>-</sup> /L)	<0.1	A4	1	A4
Water Level	A4		A1	

Above measurements vary, depending on the quality of raw water.

### ■ Optional items

No.	Description	Model No.	Main Unit Model No.	Product Code
①	Sampling hose connection unit	OWF10	WA series	253208
②	Water supply unit	OWH10	WA series	253686
③	Raw water pressure reduction valve	OWG48	WA series	253772
④	Raw water pressure gauge	OWA48	WA series	253209
⑤	*Connection unit G (WL100+WA Series)		WA series	253668
⑥	*Drain water trap	OWI21	WA511	253222
⑦	*Drain water trap	OWI41	WA711	253223
⑧	*Drain water trap	OWI51	WA731	253224
⑨	*External alarm terminal	OWA52	WA series	253219
⑩	*UV sterilizing lamp	OWG66	WA series	253226
⑪	*Water softener cartridge unit (with OWA30)	OWA50	WA series	253210
⑫	Ion exchange resin cartridge (A3 water level)	CPC-N	WA series	CPCN30010

\* Please specify when ordering main unit.

### ■ Consumable items

No.	Description	Model No.	Main Unit Model No.	Product Code
①	Pretreatment cartridge	PWF-1	WA series	253099
②	Membrane filter (1 pc.)	MFRL730	WA series	9020010006
③	High purity cartridge	CPC-H	WA series	CPCNS30011
④	Water softener cartridge for OWA50	OWA30	OWA50	OWA30
⑤	UV lamp for OWG66	OWG28	OWG66	253773



Water Supply Unit (OWH10)



Ion exchange resin cartridge (CPC-N)



Pretreatment cartridge (PWF-1)



High Purity Cartridge (CPC-H)