# **Large Capacity Water Purifier - Auto Still**

## WA511/711/731



Treatment Distillation→Ion exchange→Filtration

Deionized water / Distilled water

Purified

#### Water quality Type1 / A4 Type 4 / A1 Deionized water Distilled water

## Large capacity water purifier



- Large volume of distilled and deionized water can be obtained
- Equipped with high performance pre-treatment cartridge (activated charcoal + 0.1µm hollow fiber membrane) for high quality water
- Standard equipped with 0.1µm hollow fiber membrane filter at water sampling ports which protects pure water delivery from contamination
- Low cost method from distillation to ionexchange by selecting optional CPC-N ionexchange resin cartridge (A3 / Type 3 water level)
- Digitally displayed operation status
- Easy to replace ion-exchange resin cartridge
- Safety device includes power leakage breaker, water leakage sensor, water pressure reduction valve
- Optional water softener cartridge and UV lamp for sterilization available

#### Specifications

Specifi	cations							
	Model	WA511	WA711	WA731				
Water purifying method		$Pre-treatment \rightarrow Distillation \rightarrow Ion-exchange \rightarrow Filtration$						
Purified water		Distilled water (Type 4 / A1), Deionized water (Type 1 / A4)						
Distilled water production		~5L/h	~10L/h					
Pure water delivery rate		Distilled water: ~1.4 L/min.						
		Deionized water: ~1.4 L/min.						
Range of collection capacity		0.1 to 85L						
Waste water discharge		Drain water connected on both / back sides for the drain hose						
	Boiler	Stainless steel (SUS304)						
Distiller	Condenser	Stainless steel (SUS304)						
	Pipe heater	1.9kW x 2						
Raw water	filter	Pre-treatment cartridge (activated carbon + 0.1µm hollow fiber membrane)						
Pure water	r filter	Membrane filter (MFRL730) (0.1µm hollow fiber membrane)						
High purity	cartridge	One-touch fitting cartridge (CPC-H) (Mixed bed, resin 3L)						
Distilled water storage tank		100L polyethylene made						
Water sampling table		Large stainless steel sink with splashing preventive mechanism						
Water feeding pump		Electromagnetic pump						
Raw water pressure range		15 to 5x100kPa (15 to 5kg/cm <sup>2</sup> )						
Safety function		Power leakage breaker, water leakage sensor, water pressure reduction valve, water quality error alarm						
Distilled water level indication		5 levels by LED display						
Water quality monitor		Digital indication (conductivity or resistivity)						
Power source (50/60Hz)		Single phase AC220V		Three phase AC220V / AC380V, with step down transformer				
External dimensions*		W800 x D685 x H1510mm		W870 x 685 x 1510				
Weight		~130kg	~140kg					
Other indications		Replacement consumable parts (pre-treatment cartridge, high purity cartridge, membrane filter), Error message, History of error messages, History of consumable part replacements (up to 20x for each consumable part), default language in English or Japanese, Maintenance requirement						
Accessorie	25	Water supply hose 2m x 1 pc. (with connecting unit), drain hose 3m x 1 pc. (with hose clamp), pre-treatment cartridge, high purity cartridge (CPC-H), membrane filter x 2 pcs.						

\* Protrusions not included.

### **Structure**

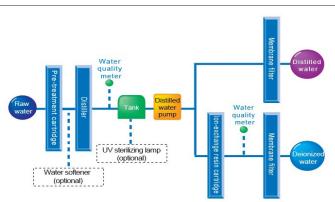
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Water sampling tray Large stainless steel sink with splashing preventive mechanism

Range of collection capacity 0.1 to 85L (continuous sampling)

## **Treatment Process**



## **Control Panel**



Digital water quality monitor displays quality of deionized water and distilled water

## Water Quality Analysis

	ASTM D1193			Deionized water					Distilled water							
Item					Measured	Level		Measured	Level		Measured	Level		Measured	Level	
	T1	Т2	Т3	T4	value WA511	ASTM D1193	JISK 0557	Value WA731	ASTM D1193	JISK 0557	value WA511	ASTM D1193	JISK 0557	value WA731	ASTM D1193	JISK 0557
Electrical conductivity(µS/cm)	<0.056	<1.0	<0.25	<5.0	0.06	T1	A4	0.06	T1	A4	2	T4	A1	2	T4	A1
Organic carbon (µg /l)	<50	<50	<200	no limit	14	T1	A4	15	T1	A4	90	Т3	A3	66	Т3	A3
Zinc (µg Zn/l)	-	-	-	-	<0.1	-	A4	<1.0	-	A4	<0.1	-	A4	<0.1	-	A4
Silica (µg SiO <sub>2</sub> /I)	<3	<3	<500	no limit	<0.1	T1	A4	<0.1	T1	A4	0.8	T1	A4	<0.1	T1	A4
Chloride ion (µ Cl <sup>-</sup> /l)	<1	<5	<10	<50	<0.5	T1	A4	<0.5	T1	A4	0.5	T1	A4	<0.5	T1	A4
Sulfate ion (µg SO <sup>4−</sup> /I)	-	-	-	-	<1.0	-	A4	<1.0	-	A4	<1.0	-	A4	<1.0	-	A4
Total level						T1	A4		T1	A4		T4	A1		T4	A1

\*Quality of raw water may cause different results. \*For water quality comparison JIS K 0057  $\leftrightarrow$  ASTM D 1193 refer to page 115 of the General Catalog.

#### Optional items

Product code	Product name	Model no.	Unit Model
253208	Sampling hose connection unit	OWF10	WA Series
253686	Water supply unit	OWH10	WA Series
253769	Raw water pressure reduction valve	OWG42	WA Series
253668*	Connection unit G (WL100 + WA Series)	G	WA Series
253222*	Water trap	OWI21	WA511
253223*	Drain water trap	OWI41	WA711
253224*	Drain warer trap	OWI51	WA731
253203*	UV sterilizing lamp	OWG22	WA Series
253281	Water supply L shape socket	OWE18	WA Series
253209	Raw water pressure meter	OWA48	WA Series
253219*	External alarm output terminal	OWG52	WA Series

#### Consumable parts

Product code	Product name	Model no.	Unit Model
253099	Pre-treatment cartridge	PWF-1	WA Series
CPCNS30011	High purity cartridge	CPC-H	WA Series
9020010006	Membrane filter	MFRL730	WA Series
253210*	Water softener cartridge (with OWA30)	OWA50	WA Series
CPCN30010	Ion-exhange resin cartridge (A3 water level)	CPC-N	WA Series

#### Attention

- Avoid tangling the drain hose
- Attach water supply hoses to the faucet with sink
- When sink is separate from the faucet, use optional water supply port unit
- Raw water pressure should be within specified pressure range
  Avoid flammable or explosive gas atmosphere



Water supply unit (OWH10)



Water supply L shape socket (OWE 18)





Pre-treatment cartridge (PWF-1)



High purity cartridge CPC-H



Ion-exchange resin cartridge CPC-N