



# Yamato Water Purification Systems

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# Water Purifier - Auto Pure Type 1 Water

For General Lab Work: Ultrapure, Analytical



**Benchtop**                      **WA301B: 120V / WA311B: 220V**  
**Remote Dispense**        **WA301R: 120V / WA311R: 220V**

Water quality	Type 1, 18.2 MΩ	Feed requirement	< 20 uS	Flow	0.67 gpm 2.5 lpm
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Water is purified using a stage purification process which includes high-purity ion exchange resins to remove dissolved minerals and internal recirculation to maintain purity. As water exits the system, a final filter removes particulates and bacteria to reach Type I water specifications.



### WA Series Configuration

- Conditioning cartridge
- Polishing cartridge
- 0.2 micron filter

### Features

- 2.5 LPM\* of 18 MΩ Type 1 reagent water on demand
- Intuitive, user-friendly touch screen interface
- Real time quality monitoring with leak detection
- **Compact design with remote dispense option**
- **Quick change, no tools cartridge design**
- Large capacity, low cost consumable cartridges
- Premium quality ion exchange resin
- **Low ownership cost**

\* Reported flow rate is typical but can vary depending on supply pressure and system options

### Applications

- General Chemistry
- Buffer Solutions
- Academia

### Specifications

Model	WA301B/WA311B	WA301R/WA311R
Type	Benchtop	Remote dispense
Resistivity*	18.2 MΩ-cm	
Bacteria*	< 1 cfu/ml	
Particulates*	< 0.2 µm filtration	
TOC*	< 15 ppb	
Temperature	100°F / 30°C	
Pressure	90 PSIG Max. / 20 PSIG Min.	
Flow rate (typical)	0.67 Gallons Per Minute / 2.5 Liters Per Minute < 2.0 LPM	
Inlet connection	3/8" O.D. Tubing / 9.53 mm O.D. Tubing	
Dimensions (H x W x D)	21.6 in. x 14.7 in. x 14.4 in. (54.8 cm x 37 cm x 36.5 cm)	
Weight	42 lbs. dry / 47 lbs. operating (22.7 kg dry / 25 kg operating)	
Power requirements	120V, 60 Hz @ 1.0 amp / 220V, 50 Hz @ 0.5 amp	

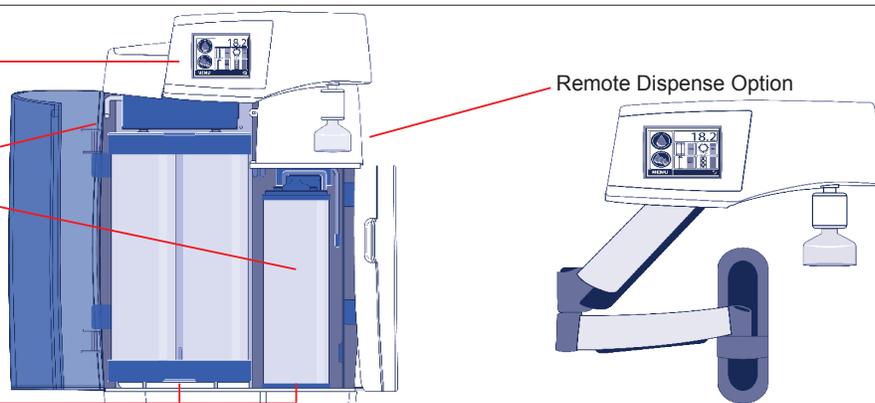
\* Performance based upon RO / DI or Distillation Feed (< 20 uS/cm, < 50 ppb of TOC, 0.2 micron filtration)

### System Highlights

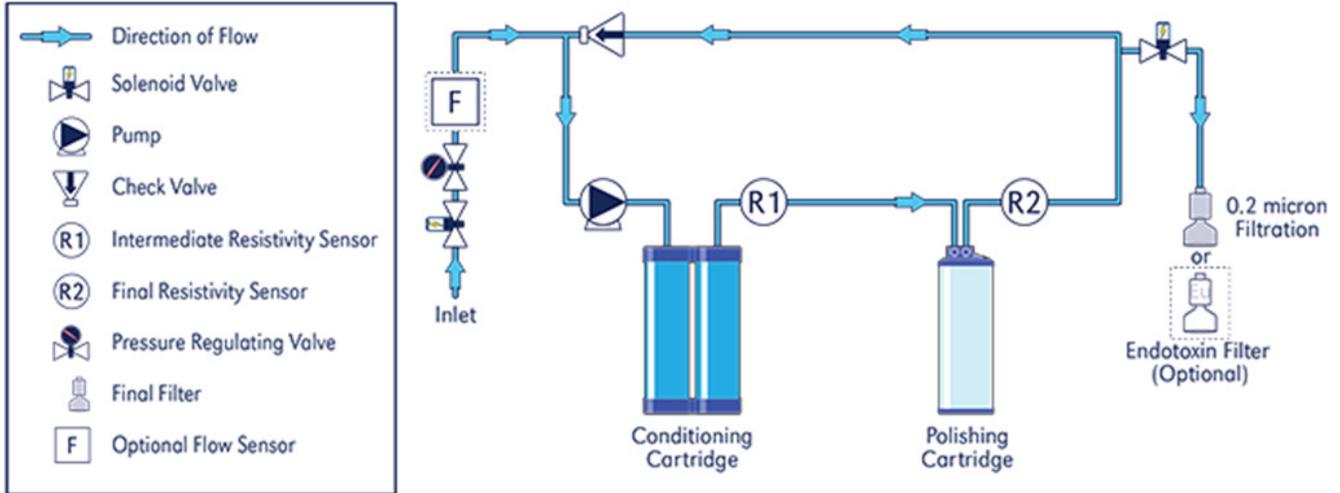
Intuitive Touch Screen Controls  
 Programmable Volume Dispense  
 Real-time Quality Monitoring & Alerts

Quick Change Cartridge Design

Large Capacity Cartridges filled with Premium ResinTech Media



## Flow Diagram



### Additional System Components

Product code	Description
<b>Installed Options and Accessories*</b>	
ARI-PHADF	Direct Feed Port
ARI-PHADG	Recirculating Dispensing Gun
ARI-PHAWB	Wall Mount Bracket
<b>Cartridges and Filters**</b>	
ARI-PX135001	Dual Conditioning Cartridge (RO Feed)
ARI-PX135002	Dual Conditioning Cartridge (SDI / TAP Feed)
ARI-PX115103	Polishing Ultrapure Cartridge
ARI-PX115104	Polishing Ultrapure Low Organics Cartridge
ARI-PF006402	0.2 Micron Capsule Final Filter - 1/4" MNPT x 1/4" hose barb
ARI-PF007101	0.2 Micron Capsule Final Endotoxin Filter - 1/4" MNPT x 1/4" hose barb
<b>Consumables</b>	
ARI-HPA017	Sanitization Kit (includes cartridges, test strips, and gloves)

\* Must be pre-ordered for factory installation

\*\* Not included in a system and ordered separately

### Best Value in Replacement Consumables



### Model Configuration (aside from Benchtop)

#### Remote configuration



#### Wall mount with dispensing gun



Wall mount bracket and dispensing gun are options, sold separately

# Water Purifier - Auto Pure **Type 1 Water**

For Organic and Analytical Chemistry: **Ultrapure, Analytical, Low TOC**



**Benchtop** WC301UVB: 120V / WC311UVB: 220V  
**Remote Dispense** WC301UVR: 120V / WC311UVR: 220V

Water quality Type 1, 18.2 MΩ

Feed requirement < 20 uS

Flow 0.67 gpm / 2.5 lpm

Water is purified using a staged purification process which includes high-purity ion exchange resins to remove dissolved minerals, and ultraviolet light for bacteria sterilization and TOC reduction. As water exits the system, a final filter removes particulates and bacteria to reach Type I water specifications.



## WC Series Configuration

- Conditioning cartridge
- Polishing cartridge
- UV oxidation
- 0.2 micron filter

## Features

- 2.5 LPM\* of 18 MΩ Type 1 reagent water on demand
- Intuitive, user-friendly touch screen interface
- Real time quality monitoring with leak detection
- **Compact design with remote dispense option**
- **Quick change, no tools cartridge design**
- Large capacity, low cost consumable cartridges
- Premium quality ion exchange resin
- **Low ownership cost**

\* Reported flow rate is typical but can vary depending on supply pressure and system options

## Applications

- High Performance Liquid Chromatography (HPLC)
- Gas Chromatography Mass Spectrometry (GC/MS)
- Inductively Coupled Plasma Mass Spectrometry (ICP-MS)
- Analytical Chemistry / Trace Organics

## Specifications

Model	WC301UVB/WC311UVB (Benchtop) WC301UVR/WC311UVR (Remote Dispense)
Resistivity*	18.2 MΩ-cm
Bacteria*	< 1 cfu/ml
Particulates*	< 0.2 μm filtration
TOC*	< 5 ppb
Temperature	100°F / 30°C
Pressure	90 PSIG Max. / 20 PSIG Min.
Flow rate (typical)	0.67 Gallons Per Minute / 2.5 Liters Per Minute < 2.0 LPM
Inlet connection	3/8" O.D. Tubing / 9.53 mm O.D. Tubing
Dimensions (H x W x D)	21.6 in. x 14.7 in. x 14.4 in. (54.8 cm x 37 cm x 36.5 cm)
Weight	42 lbs. dry / 47 lbs. operating (22.7 kg dry / 25 kg operating)
Power requirements	120V, 60 Hz @ 1.0 amp / 220V, 50 Hz @ 0.5 amp

## Other WC Series Configuration (includes TOC Monitor)

Product code and Description
<b>WC301UVTB</b> <b>Benchtop</b> - with UV Oxidation Lamp and TOC Monitor 120V/60Hz
<b>WC311UVTB</b> <b>Benchtop</b> - with UV Oxidation Lamp and TOC Monitor 220V/50Hz
<b>WC301UVR</b> <b>Remote Dispense</b> - with UV Oxidation Lamp and TOC Monitor 120V/60Hz
<b>WC311UVR</b> <b>Remote Dispense</b> - with UV Oxidation Lamp and TOC Monitor 220V/50Hz

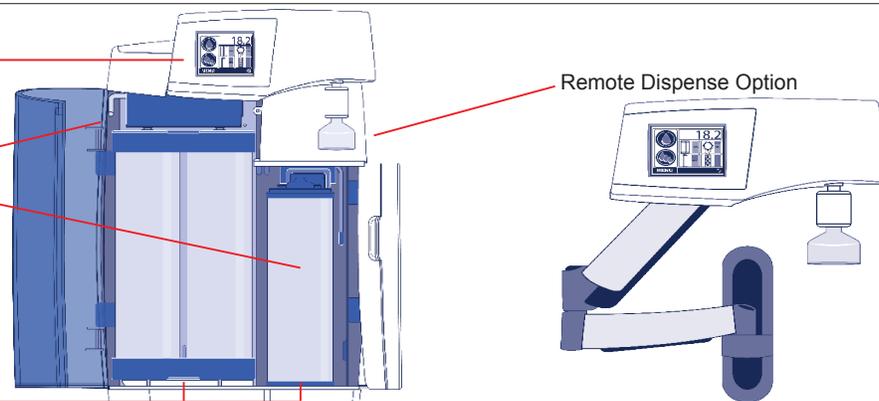
\* Performance based upon RO / DI or Distillation Feed (< 20 uS/cm, < 50 ppb of TOC, 0.2 micron filtration)

## System Highlights

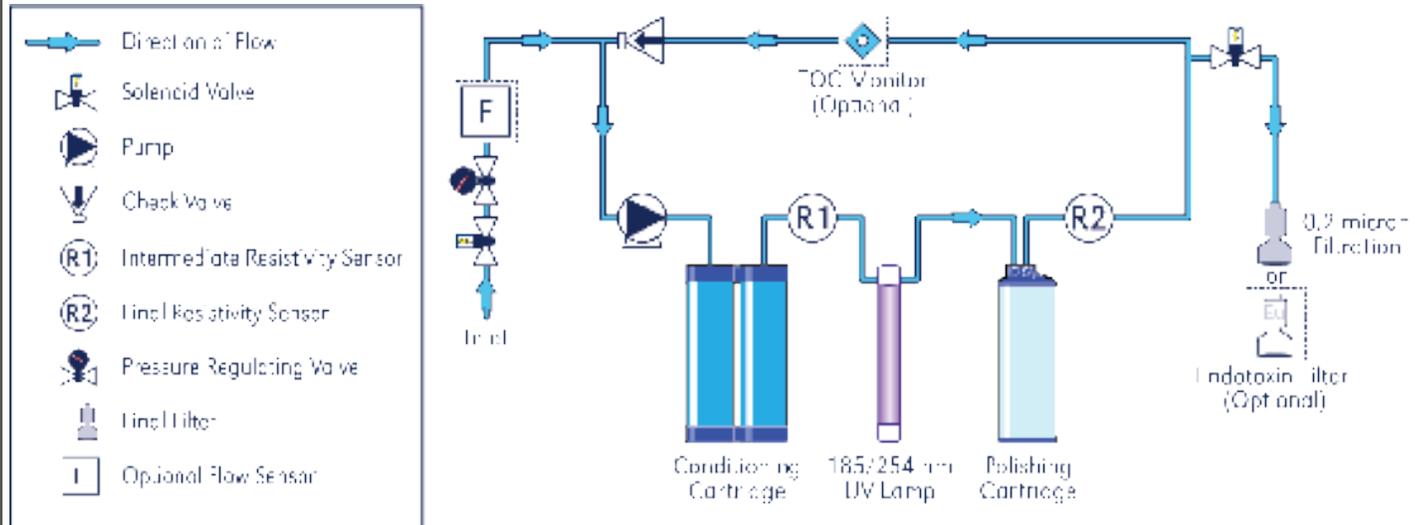
Intuitive Touch Screen Controls  
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 Real-time Quality Monitoring & Alerts

Quick Change Cartridge Design

Large Capacity Cartridges filled with Premium ResinTech Media



## Flow Diagram



### Additional System Components

Product code	Description
<b>Installed Options and Accessories*</b>	
ARI-PHADF	Direct Feed Port
ARI-PHADG	Recirculating Dispensing Gun
ARI-PHAWB	Wall Mount Bracket
<b>Cartridges and Filters**</b>	
ARI-PX135001	Dual Conditioning Cartridge (RO Feed)
ARI-PX135002	Dual Conditioning Cartridge (SDI / TAP Feed)
ARI-PX115103	Polishing Ultrapure Cartridge
ARI-PX115104	Polishing Ultrapure Low Organics Cartridge
ARI-PF006402	0.2 Micron Capsule Final Filter - 1/4" MNPT x 1/4" hose barb
ARI-PF007101	0.2 Micron Capsule Final Endotoxin Filter - 1/4" MNPT x 1/4" hose barb
<b>Consumables</b>	
ARI-HPA016	UV Bulb 254/185nm
ARI-HPA017	Sanitization Kit (includes cartridges, test strips, and gloves)

\* Must be pre-ordered for factory installation

\*\* Not included in a system and ordered separately

### Model Configuration (aside from Benchtop)

#### Remote configuration



#### Wall mount with dispensing gun



Wall mount bracket and dispensing gun are options, sold separately

### Best Value in Replacement Consumables



# Water Purifier - Auto Pure Type 1 Water

For most Life Sciences: Ultrapure, Biological



**Benchtop**      **WB301UFB: 120V / WB311UFB: 220V**  
**Remote Dispense**   **WB301UFR: 120V / WB311UFR: 220V**

Water quality Type 1, 18.2 MΩ

Feed requirement < 20 uS

Flow 0.67 gpm  
2.5 lpm

Water is purified using a staged purification process which includes high-purity ion exchange resins to remove dissolved minerals and pyrogen removal ultrafiltration. As water exits the system, a final filter removes particulates and bacteria to reach Type I water specifications.



### ■ WB Series Configuration

- Conditioning cartridge
- Polishing cartridge
- Ultrafiltration
- 0.2 micron filter

### ■ Features

- 2.5 LPM\* of 18 MΩ Type 1 reagent water on demand
- Intuitive, user-friendly touch screen interface
- Real time quality monitoring with leak detection
- **Compact design with remote dispense option**
- **Quick change, no tools cartridge design**
- Large capacity, low cost consumable cartridges
- Premium quality ion exchange resin
- **Low ownership cost**

*\* Reported flow rate is typical but can vary depending on supply pressure and system options*

### ■ Applications

- Life Science
- Cell Culture
- Microbiology

### ■ Specifications

Model	WB301UFB/WB311UFB	WB301UFR/WB311UFR
Type	Benchtop	Remote dispense
Resistivity*	18.2 MΩ-cm	
Bacteria*	< 1 cfu/ml	
Endotoxin**	< 0.005 EU/m	
Particulates*	< 0.05 µm filtration	
TOC*	< 15 ppb	
RNase*	< 0.01 ng/ml	
Dnase*	< 4 pg/µl	
Temperature	100°F / 30°C	
Pressure	90 PSIG Max. / 20 PSIG Min.	
Flow rate (typical)	0.67 Gallons Per Minute / 2.5 Liters Per Minute < 2.0 LPM with Ultrafilter	
Inlet connection	3/8" O.D. Tubing / 9.53 mm O.D. Tubing	
Dimensions (H x W x D)	21.6 in. x 14.7 in. x 14.4 in. (54.8 cm x 37 cm x 36.5 cm)	
Weight	42 lbs. dry / 47 lbs. operating (22.7 kg dry / 25 kg operating)	
Power requirements	120V, 60 Hz @ 1.0 amp / 220V, 50 Hz @ 0.5 amp	

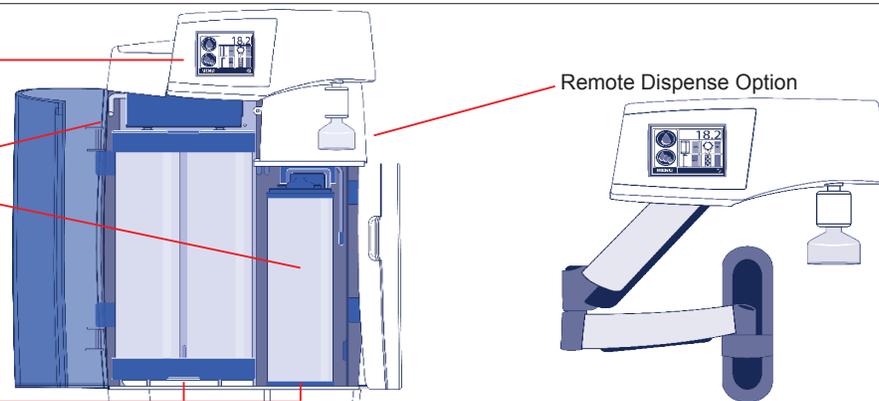
*\* Performance based upon RO / DI or Distillation Feed (< 20 uS/cm, < 50 ppb of TOC, 0.2 micron filtration) \*\* Includes Endotoxin Removal Capsule Filter*

### System Highlights

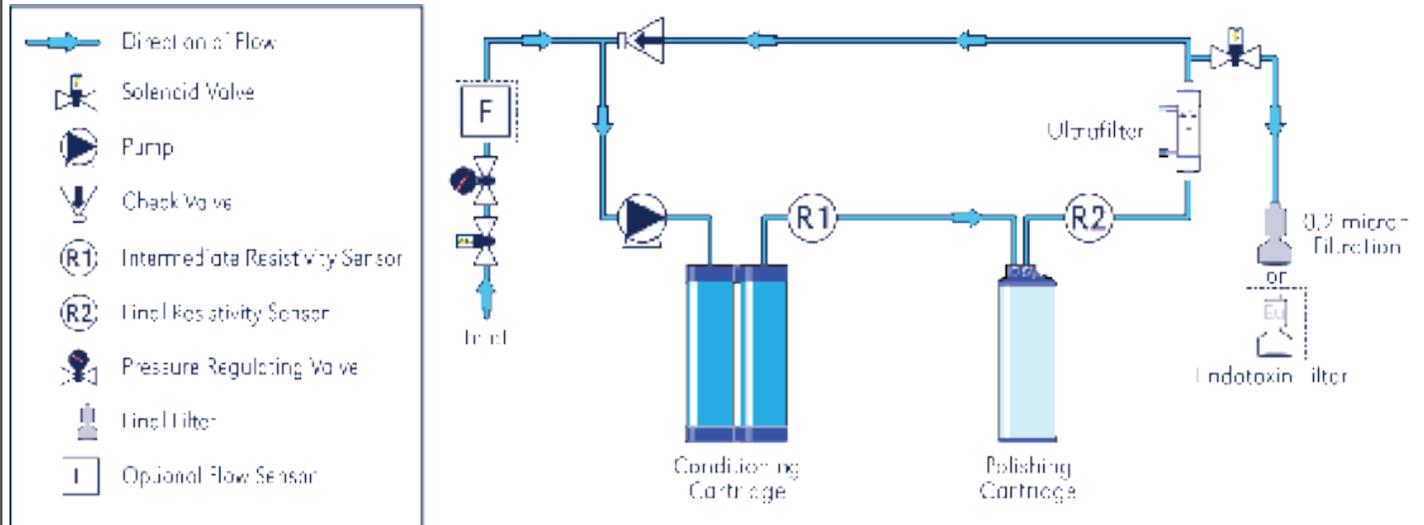
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Quick Change Cartridge Design

Large Capacity Cartridges filled with Premium ResinTech Media



## Flow Diagram



### Additional System Components

Product code	Description
<b>Installed Options and Accessories*</b>	
ARI-PHADP	Direct Feed Port
ARI-PHADG	Recirculating Dispensing Gun
ARI-PHAWB	Wall Mount Bracket
<b>Cartridges and Filters**</b>	
ARI-PX135001	Dual Conditioning Cartridge (RO Feed)
ARI-PX135002	Dual Conditioning Cartridge (SDI / TAP Feed)
ARI-PX115103	Polishing Ultrapure Cartridge
ARI-PX115104	Polishing Ultrapure Low Organics Cartridge
ARI-PF006402	0.2 Micron Capsule Final Filter - 1/4" MNPT x 1/4" hose barb
ARI-PF007101	0.2 Micron Capsule Final Endotoxin Filter - 1/4" MNPT x 1/4" hose barb
<b>Consumables</b>	
ARI-PF007105	Ultrafilter - 3/8" Quick Disconnect Fitting
ARI-HPA017	Sanitization Kit (includes cartridges, test strips, and gloves)

\* Must be pre-ordered for factory installation

\*\* Not included in a system and ordered separately

### Model Configuration (aside from Benchtop)

#### Remote configuration



### Best Value in Replacement Consumables



#### Wall mount with dispensing gun



Wall mount bracket and dispensing gun are options, sold separately

# Water Purifier - Auto Pure **Type 1 Water**

For Genetics Testing and more: **Ultrapure, Biological, Low TOC**



**Benchtop** WG301UVUFB: 120V / WG311UVUFB: 220V  
**Remote Dispense** WG301UVUFR: 120V / WG311UVUFR: 220V

Water quality Type 1, 18.2 MΩ

Feed Requirement < 20 uS

Flow 0.67 gpm / 2.5 lpm

Water is purified using a staged purification process which includes high-purity ion exchange resins to remove dissolved minerals, ultraviolet light for bacteria sterilization and TOC reduction, and ultrafiltration for pyrogen removal and nuclease free water. As water exits the system, a final filter removes particulates and bacteria to reach Type I water specifications.



### WG Series Configuration

- Conditioning cartridge
- Polishing cartridge
- UV oxidation
- Ultrafiltration
- 0.2 micron filter

### Features

- 2.5 LPM\* of 18 MΩ Type 1 reagent water on demand
- Intuitive, user-friendly touch screen interface
- Real time quality monitoring with leak detection
- **Compact design with remote dispense option**
- **Quick change, no tools cartridge design**
- Large capacity, low cost consumable cartridges
- Premium quality ion exchange resin
- **Low ownership cost**

\* Reported flow rate is typical but can vary depending on supply pressure and system options

### Applications

- Genetics
- DNE Sequencing
- Polymerase Chain Reaction (PCR)

### Specifications

Model	WG301UVUFB / WG311UVUFB (Benchtop) WG301UVUFR / WG311UVUFR (Remote Dispense)
Resistivity*	18.2 MΩ-cm
Bacteria*	< 1 cfu/ml
Endotoxin**	<0.005 EU/m
Particulates*	< 0.05 μm filtration
TOC*	< 5 ppb
RNase*	< 0.01 ng/ml
Dnase*	< 4 pg/μl
Temperature	100°F / 30°C
Pressure	90 PSIG Max. / 20 PSIG Min.
Flow rate (typical)	0.67 Gallons Per Minute / 2.5 Liters Per Minute , < 2.0 LPM with Ultrafilter
Inlet connection	3/8" O.D. Tubing / 9.53 mm O.D. Tubing
Dimensions (H x W x D)	21.6 in. x 14.7 in. x 14.4 in. (54.8 cm x 37 cm x 36.5 cm)
Weight	42 lbs. dry / 47 lbs. operating (22.7 kg dry / 25 kg operating)
Power requirements	120V, 60 Hz @ 1.0 amp / 220V, 50 Hz @ 0.5 amp

\* Performance based upon RO / DI or Distillation Feed (< 20 uS/cm, < 50 ppb of TOC, 0.2 micron filtration) \*\* Includes Endotoxin Removal Capsule Filter

### Other WG Series Configuration (includes TOC Monitor)

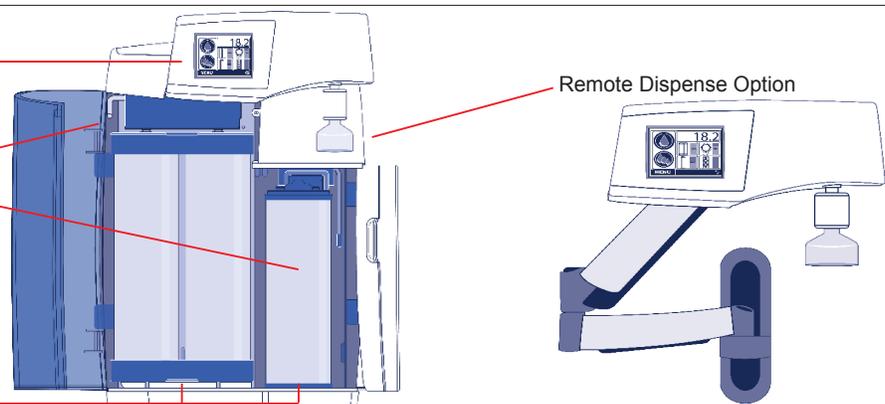
Product code and Description
<b>WG301UVUFTB</b> <b>Benchtop</b> - with UV, UF and TOC Monitor installed, 120V/60Hz
<b>WG311UVUFTB</b> <b>Benchtop</b> - with UV, UF and TOC Monitor installed, 220V/50Hz
<b>WG301UVUFR</b> <b>Remote Dispense</b> - with UV, UF and TOC Monitor installed, 120V/60Hz
<b>WG311UVUFR</b> <b>Remote Dispense</b> - with UV, UF and TOC Monitor installed, 220V/50Hz

### System Highlights

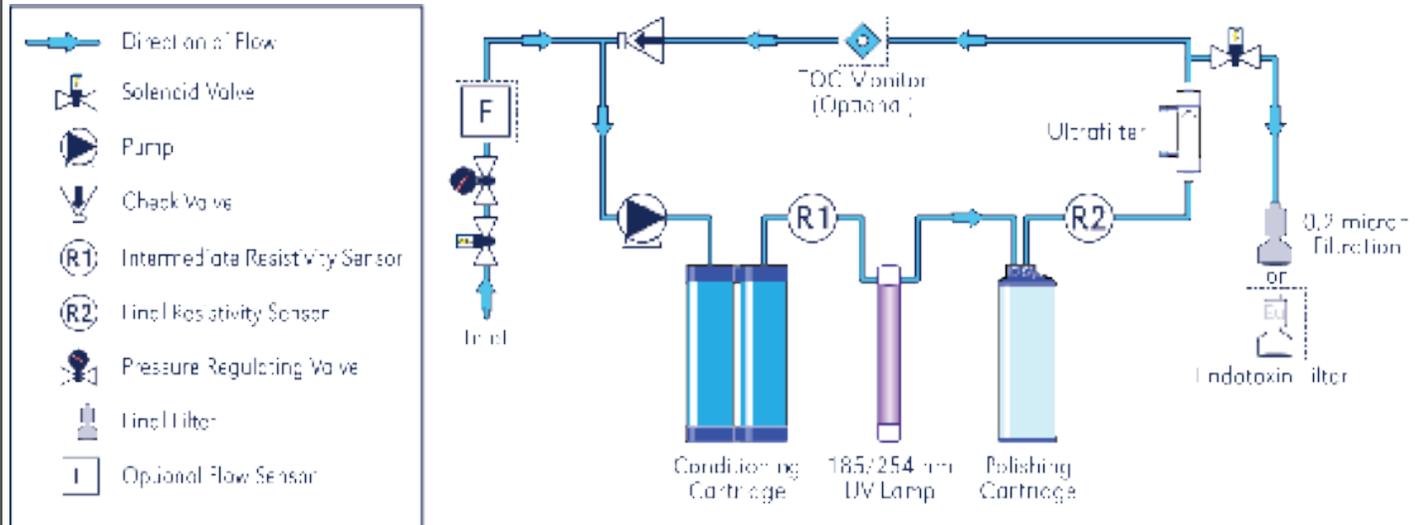
Intuitive Touch Screen Controls  
 Programmable Volume Dispense  
 Real-time Quality Monitoring & Alerts

Quick Change Cartridge Design

Large Capacity Cartridges filled with Premium ResinTech Media



## Flow Diagram



### Additional System Components

Product code	Description
<b>Installed Options and Accessories*</b>	
ARI-PHADF	Direct Feed Port
ARI-PHADG	Recirculating Dispensing Gun
ARI-PHAWB	Wall Mount Bracket
<b>Cartridges and Filters**</b>	
ARI-PX135001	Dual Conditioning Cartridge (RO Feed)
ARI-PX135002	Dual Conditioning Cartridge (SDI / TAP Feed)
ARI-PX115103	Polishing Ultrapure Cartridge
ARI-PX115104	Polishing Ultrapure Low Organics Cartridge
ARI-PF006402	0.2 Micron Capsule Final Filter - 1/4" MNPT x 1/4" hose barb
ARI-PF007101	0.2 Micron Capsule Final Endotoxin Filter - 1/4" MNPT x 1/4" hose barb
<b>Consumables</b>	
ARI-PF007105	Ultrafilter - 3/8" Quick Disconnect Fitting
ARI-HPA016	UV Bulb 254/185nm
ARI-HPA017	Sanitization Kit (includes cartridges, test strips, and gloves)

\* Must be pre-ordered for factory installation

\*\* Not included in a system and ordered separately

### Best Value in Replacement Consumables



### Model Configuration (aside from Benchtop)

#### Remote configuration



#### Wall mount with dispensing gun



Wall mount bracket and dispensing gun are options, sold separately

# Water Purifier - Auto Pure Type 1 Water

For cost control: **Ultrapur**, **Economical**



## WA401/WA401UV/WA201UF/WA201UVUF

Water quality Type 1 18.2 MΩ

Purity < 20 uS/cm

Flow 1.1 gpm  
4.0 lpm

This system provides 4L per minute of 18.2 megohm water. A quiet recirculation pump ensures constant water purity. Water quality meets or exceeds ASTM Type I water specifications.



### WA Series Configuration

- Built-in pressure regulator
- 0.2 micron filter

### Features

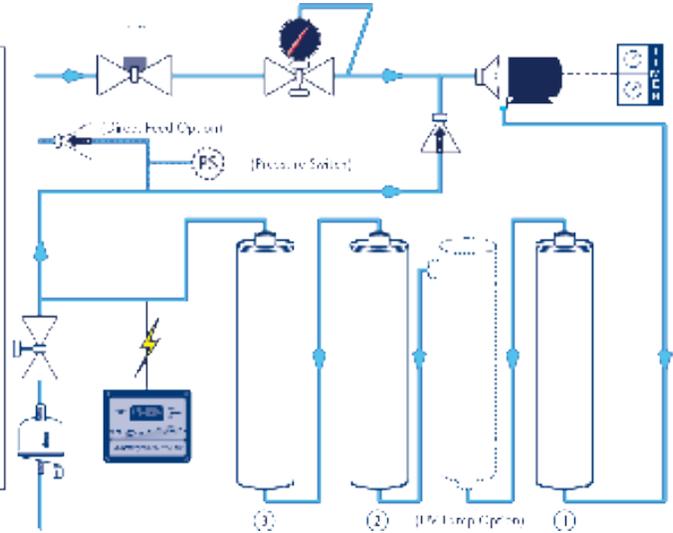
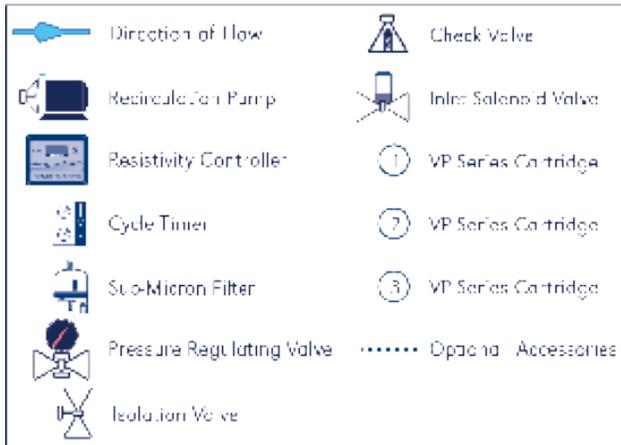
- 4.0 LPM\* of 18 MΩ water
- Intuitive, touch screen for programmable water dispensing
- Fully recirculating flow of water ensures quality water upon dispensing
- **Compact design, can be wall mounted or free standing**
- **Easy cartridge replacement, no tools needed**
- **Low ownership cost**
- Variety of options available

\* Reported flow rate is typical but can vary depending on supply pressure and system options

### Specifications

Model	<b>WA401</b> Water system with 0.2 micron capsule filter <b>WA401UV</b> Water system with 0.2 micron capsule filter and combination UV for bacteria and TOC distract <b>WA201UF</b> Water system with 0.05 micron capsule ultrafilter <b>WA201UVUF</b> Water system with 0.05 micron capsule ultrafilter and combination UV for bacteria and TOC distract
<b>Influent Quality</b>	
Source	Reverse Osmosis, DI or Distillation
Purity	< 20 uS/cm
Filtration	0.2 micron
Free Chlorine	< 0.05 ppm
Silica	< 2 ppm
TOC	< 50 ppb
<b>Effluent Quality (Standard System)</b>	
Purity	> 18 Megohm-cm
Microorganisms	< 10 CFU / mL
Chlorides	< 1 ppb
Sodium	< 1 ppb
With 0.05 micron UF Endotoxin	< 0.03 EU
<b>Technical Data</b>	
Pressure	90 PSIG Maximum 20 PSIG Minimum
Temperature	100°F / 30°C
Flow Rate	4.0 lpm (1.1 GPM) 2.0 lpm (0.53 GPM) with capsule filter
Connections	Inlet 3/8" Tube Outlet 1/4" FNPT
Dimensions (H x W x D)	25 in. x 23 in. x 8.5 in. (64 cm x 59 cm x 22 cm)
Weight	32 lbs dry / 38 lbs operating (14.5 kg dry / 17.3 kg operating)
Outer shell	Powder coated steel
Power requirements	120V, 60 Hz @ 1.0 amp
Options	Remote dispensing gun, 0.05 micron hollow fiber UF filter, combination high-purity/sub-micron cartridge, Reverse osmosis, direct feed option for auxiliary equipment

## Flow Diagram



### Optional items

Product code	Description
ARI-ARADG	Dispensing Gun with Final Filter – Factory Installed option. Recirculating gun mounted on the side of the unit with approximately 5 feet of span. User manually dispenses water.
ARI-ARAUV	UV Combination for Bacteria and TOC
ARI-ARADF	Direct Feed port (outlet) – Factory installed option. Secondary Port on the side of the system. Used to feed ancillary equipment such as analyzers and scientific equipment. Internal pressure switch automatically keeps the system operating during a water draw condition. Minimum flow of 0.1 lpm required. Note: there is no final filter on this port. A downstream final filter may be considered.
ARI-ARAWB	Wall Mounting Bracket – Factory Installed option. Wall mounting bracket supplied with additional support base plate to the main system.
ARI-VPK3805	Tap Water Feed / Service DI – (1) Organics Pretreatment & (2) Mixed Bed Cartridges
ARI-VPK4010	RO Feed Start Up Cartridges – (3) High Purity Series Mixed Bed Cartridges
ARI-PF006402	0.2 micron capsule filter
ARI-PF006505HN	0.05 micron hollow fiber UF filter
ARI-HPA008	220 VAC External Power Converter
ARI-HPA010	Sanitization Kit
ARI-HPLRO	Reverse Osmosis Pretreatment

\* VP Series cartridge sold separately

# Water Purifier - Auto Pure Type 2 and Type 3 Water

For media preparation



## WH201P/WH501P/WH201C/WH501C

Media fill High purity High capacity

Flow rate 0.5 gpm (1.9 lpm) / 1.25 gpm (4.7 lpm)

A pre-assembled cartridge system that provides deionized water using a staged filtration process. Water purification is provided using a 3-stage process.



### ■ Stage 1

Removes particles greater than 5 micron, chlorine, and organics

### ■ Stages 2 & 3

Deionizers designed to remove dissolved minerals

### ■ Features

- Turn-key system for low cost - on demand service
- Resistivity light included for visual indication of cartridge replacement
- Available in high purity and high capacity configurations
- Available in 2-1/2" and 4-1/2" diameter configurations
- Outlet isolation valve, spanner wrench and associated tubing provided
- **Economically produces DI water**

### ■ Applications

- High purity models: WH201P and WH501P: use low odor mixed bed cartridges for applications requiring better than 10 MΩ water quality  
**General deionization, battery water filling, humidification, hydrogen generator, glassware rinse, glassware washer, sterilizers**

- High capacity models WH201C and WH501C: provide water quality better than 50 KΩ, for less corrosive applications, ideal for scale reduction and non-stainless steel piping systems

**Environmental chambers, sterilizers, ultrasonic cleaners, chiller loops**

### ■ Specifications

Model	WH201P	WH501P	WH201C	WH501C
Distilled water capacity in gallons				
<b>FEEDWATER</b>	<b>High Purity DI Water</b>		<b>High Capacity DI Water</b>	
<b>Total Dissolved Solids (TDS as CaCO<sub>3</sub>)</b>	<b>Better than 10 Megohm</b>		<b>Better than 50 Kohm</b>	
10 ppm*	2650	6800	3000	8000
100 ppm	265	680	300	800
300 ppm	90	225	100	265
500 ppm	50	135	60	160
Filter technology	(1) 10" Carbon Block (2) 20" High Purity	(1) 10" Carbon GAC (2) 20" High Purity	(1) 10" Carbon Block (2) 20" High Capacity	(1) 10" Carbon GAC (2) 20" High Capacity
Bowl diameter	2.5"	4.5"	2.5"	4.5"
Resistivity light	200 KΩ	200 KΩ	20 KΩ	20 KΩ
Flow rate	0.5 gpm / 1.9 lpm	1.25 gpm / 4.7 lpm	0.5 gpm / 1.9 lpm	1.25 gpm / 4.7 lpm
Total capacity grains as CaCO <sub>3</sub>	1800	4760	2160	5710
Typical effluent	10 MΩ-cm	10 MΩ-cm	50 KΩ-cm	50 KΩ-cm
Connection	Inlet - 3/8" O.D. tubing Outlet - 1/2" hose barb			
Pressure	10 PSIG minimum 100 PSIG maximum			
Temperature (max)	100°F			
Filter housing	Polypropylene			
Bracket	Painted steel			
Dimensions (H x W x D)	24"x 20"x 6	26"x 36"x 9	24"x 20"x 6	26"x 36"x 9
Shipping weight	24 lbs.	55 lbs.	24 lbs.	55 lbs.
Voltage	120V			

\* Typical water quality with reverse osmosis pre-treatment



WH501P

**■ Cartridge Replacement Kits**

Product code	Description	Contents	Suitable Model
ARI-HYK001	High Purity Cartridge Replacement Kit	(1) 2.5" x 10" Carbon Block (2) 2.5" x 20" Mixed Bed	WH201P
ARI-HYK002	High Purity Cartridge Replacement Kit	(1) 4.5" x 10" Carbon GAC (2) 4.5" x 20" Mixed Bed	WH501P
ARI-HYK009	High Capacity Cartridge Replacement Kit	(1) 2.5" x 10" Carbon Block (2) 2.5" x 20" High Capacity	WH201C
ARI-HYK010	High Capacity Cartridge Replacement Kit	(1) 4.5" x 10" Carbon GAC (2) 4.5" x 20" High Capacity	WH501C



2.5" Cartridge Replacement Kit



4.5" Cartridge Replacement Kit

**■ Replacement Resistivity Lights**

Product code	Description
ARI-CL20K50	20 Kohm Resistivity Light
ARI-CL200K50	200 Kohm Resistivity Light
ARI-CL2MG50	2 Megohm Resistivity Light

# Reverse Osmosis Pre-treatment

Perfect addition to any lab water system!



## HPL-RO

System output 100g/day

Rejection rate >93 % total dissolved solids

HPL-RO system uses feed water pressure to purify the water through a reverse osmosis membrane. The 4-stage filtration process reduces dissolved salts and organics from the water. The permeate water is conveniently stored in storage tank while the concentrated salts are sent to drain.

The HPL-RO system can increase the DI cartridge capacity by 10 times. For low Total Organic Carbon (TOC) applications, reverse osmosis can significantly reduce levels to allow the polishing system to remove the final trace amounts.



### ■ Features

- Wall mounted design
- Four stage filtration
- Fourteen (14) gallon bladder tank
- Easy filter changes
- Variety of option including booster pump and high capacity membranes
- **Low ownership cost**

### ■ Specifications

Model	HPL
System output	100 gallons / day
Rejection rate	>93 % total dissolved solids
Sediment filter	5.0 micron
Carbon filter	GAC media
Post filter	1.0 micron
R.O. System dimensions	18" x 16" x 5"
Bladder tank dimensions	26.5" x 16" (14 gallon)
Overall weight	38 lbs. (17.3 kg)

### ■ Options

Product code	Description
ARI-HPLRO	75 Gallon Per Day Reverse Osmosis Pretreatment with 14-Gallon Bladder Tank
ARI-HPLRO200	200 Gallon Per Day Reverse Osmosis Pretreatment
ARI-HPLRO300	300 Gallon Per Day Reverse Osmosis Pretreatment
ARI-ROBladder40	40-Gallon Bladder Storage Tank
ARI-ROBladder80	80-Gallon Bladder Storage Tank
ARI-AFK005	HPL-RO Pretreatment Kit for 75, 200, and 300 GPD Systems
ARI-AM127010	HPL-RO Membrane, 100 GPD, TFC
ARI-AM147020	HPL-RO Membrane, 200 GPD, TFC
ARI-AM217030	HPL-RO Membrane, 300 GPD, TFC



# New! Water Purifier - Auto Still®

MADE  
IN  
JP

## WG253-115V WG253-220V / WG1013

Distilled water production	1.5L/h (WG252)	5L/h (WG1012)	Treatment process	Ion exchange→Distillation→Filtration	Purified water	Deionized water Distilled water	Water quality	Type1 / A4 Deionized water	Type2 / A4 Distilled water
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WG253



WG1013

### Features

- Two independent dispensers for water sampling  
*Handy dispenser for easy collection of water. Dispenser is divided into 2 parts: deionized water and distilled water.*
  - 7-inch LCD touch panel system  
*Improved visibility and operability*
  - Consumable management functions  
*Displays replacement history of consumables such as ion resin, and the replacement method with figures and explanations. In addition, it provides a consumables advance notice (replace soon) and replacement notice (replace).*
  - Trend graph  
*Displays trend graph of water quality and temperature. Can also graph consumable replacement notifications and error occurrence information.*
  - Easy replacement of ion-exchange resin  
*Easy replacement through a one-touch joint. Possible to add 2 cartridges to reduce frequency of cartridge replacement.*
  - Large water tank  
*Large distilled water tank with capacity of 30L (WG253) and 100L (WG1013)*
  - Improved design  
*More compact width and depth. Unit can be easily installed in small spaces.*
- Easy to use slide out type water sampling tray with drainage eliminating concerns about overflowing water discharge*

### Specifications

Model	WG253-115V WG253-220V	WG1013
Water purifying method	Ion exchange→Distillation→Filtration	
Purified water	Deionized water and distilled water	
Distilled water production*1	~1.5L/h	~5L/h
Distilled water delivery rate*1	~2.5L/min (with variable flow rate function)	
Deionized water delivery rate*2	~1.0L/min (with variable flow rate function)	
Range of production*3	0.1~30L / continuous water collection	0.1~100L / continuous water collection
Condenser	Hard glass	
Heater	Ceramic heater 1.2kW	Ceramic heater 1.9kW x 2
Pre-treatment cartridge	0.1µm hollow fiber membrane + activated carbon (PWF-1)	
Ion-exchange resin cartridge <i>(must be purchased separately)</i>	CPC-S 4L x 1 pc. (activated carbon high-purity cartridge)	CPC-S 4L x 2 pcs. (activated carbon high-purity cartridge)
Final filtration	0.1µm membrane filter x 2	
Leakage detection	Water leakage detector forcefully shuts off feed water solenoid valve when water leakage detected	
Distilled water tank capacity	30L polyethylene tank	100L polyethylene tank
Distilled water UV sterilization	Optional	
Water sampling tray	Slide out type, load-bearing capacity 10kg, for 5L beaker	
Multipurpose distilled water outlet	For connecting Φ8 hard tube (right side of main body)	
Standard raw water requirement	~2.0L/min	~2.6L/min
Raw water pressure range	0.05-0.5 MPa	0.1-0.5 MPa
Distilled water tank full water setting	2, 10, 20, 30L	10, 30, 60, 90L
Power source (50/60 Hz)	AC115V 11A / AC220V 6A with external transformer	AC220V 18A with external transformer
External dimension*4	W540 x D570 x H775 mm	W550 x D570 x 1715 mm
Weight	~63kg	~113kg
Water level display	LED display	
Water quality display	Digital (conductivity or resistivity)	
Other displays	Notification: Consumables replacement / Periodic maintenance, Alarm: Water outage / Trend data recording impossible / Power failure / Distilled water quality deterioration, Abnormality: Controller / Water leakage / Heater overheating / disconnection / Tank water level gauge / Boiler water level, Water level gauge / Boiler drainage route / Cooling water / Water quality meter / Water sampling pump, / Ion exchange water flow reduction / Water sampling route	
Included accessories	1 water supply hose (2m), 1 water supply hose filter, 1 connection hose assembly, 1 can stone cleaner, 1 pretreatment cartridge, 1 air vent filter, 2 membrane filters, 2 filter covers, 2 magnet hooks, adjuster fixing bracket (WG1013 only)	
Operational accessory	Ion exchange resin cartridge <b>(must be purchased separately)</b>	

\*1 Performance data above is based on 23°C ±5°C room temperature, and 65% RH ±20% humidity.

\*2 The guaranteed performance range is raw water pressure 0.2 -0.5 MPa.

Operating ambient temperature range for this unit is between 5°C and 35°C. Keep temperature range of raw water between 5°C-30°C. When raw water temperature is high, the drainage temperature may also be high. If temperature exceeds 60°C, a drain pipe is required.

Water dispensing volume varies depending on water temperature.

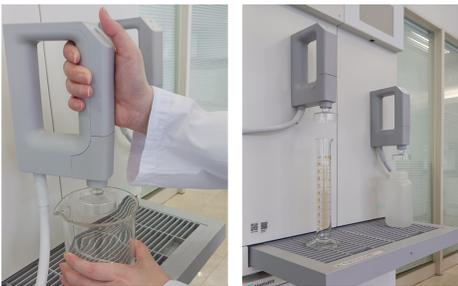
\*3 Accuracy of quantitative water sampling is approximately 10%..

\*4 Dimensions excludes protrusions.

## Control Panel



## Independent Dispensers



**WG253**

Two independent dispensers for water sampling



**WG1013**

## Water sampling tray



with drainage function

## WG253 step



## Optional items

Product code	Product name
281333	Stand (W540 x D660 x H800mm). Caster with adjuster. <b>For WG253</b>
281334*	Sterilization light for WG253. Cannot be installed after delivery.
281335*	Sterilization light for WG1013. Cannot be installed after delivery.
281337	Water supply joint
281339	Tap water pressure reducing valve
281340*	Drain trap
281344	Water outlet cover

\* Please specify when ordering main unit.

For complete list of optional items, please refer to WG253/1013 Instruction Manual.



Stand



Tap water pressure reducing valve



Water outlet cover

## Consumable parts

Product code	Description	
253099	Pre-treatment cartridge	PWF-1
253080	Ion-exchange resin cartridge	CPC-S
9020010004	Membrane filter (2 pcs. / set)	MFRL727
LT00040430	Air vent filter for tank	YAVF-1
253773	Replacement sterilization light for WG253/1013	OWG28



Pre-process cartridge



Membrane filter



Ion-exchange resin cartridge



Air vent filter for tank

### ⚠ Attention

- Handle drain hose carefully.
- Attach water supply hose to a faucet with a sink.
- When the sink is remote from the faucet, use optional water supply port unit.

- Keep original water pressure within the specified pressure range.
- Never use in flammable or explosive gas atmosphere.

# Small Capacity Water Purifier - Auto Still®



## WG205-115V WG205-220V

Production capacity 1.5L/h

Treatment process Ion-exchange→Distillation

Purified water Deionized water Distilled water

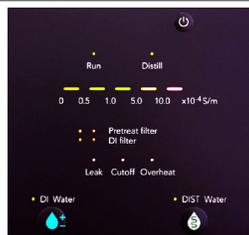
Water quality Type 1 / A4 level Deionized water Type 2 / A4 level Distilled water

### Low cost high purity water purifier



- Pre-treatment cartridge removes bacteria, trihalomethane, residual chlorine, organic and dust
- Easy replacement of ion exchange resin
- Optional membrane filter at water sampling port
- Displays replacement of consumables
- Equipped with automatic boiler drainage function
- Compact. Can be installed in areas with limited space.

### Control Panel



### Specifications

Model	WG205-115V / WG205-220V
Water purifying method	Ion-exchange→Distillation
Purified water	Deionized water and distilled water
Distilled water production *1	~1.5L/h
Distilled water delivery rate *1	~1.5L/min
Deionized water delivery rate*2	~1.0L/min
Range of production *1	Continuous production
Condenser	Hard glass
Heater	Ceramic heater 1.2kW
Pre-treatment cartridge	0.1µm diameter hollow fiber membrane + activated carbon (PWF-1)
Ion-exchange resin cartridge <i>(must be purchased separately)</i>	CPC-S 4L x 1 pc. (activated carbon high-purity cartridge)
Final filtration	Optional membrane filter
Leakage indication	Water supply solenoid valve forcibly shuts off when water leakage detected
Distilled water tank capacity	20L polyethylene tank
Multi-purpose distilled water sampling port	For Φ8 rigid tube connection (right side of main unit)
Water level sensor	Float switch 2-stage detection
Raw water pressure range	0.5~5 MPa
Standard raw water requirement	~2.0L/min
Water level display	Communication pipe water level indication
Water quality display	5 stage conductivity LED indication
Other display	Consumable replacement time indication (ion-exchange resin cartridge)
Power source (50/60 Hz)	AC115V 11A / AC220V 6A with external transformer
External dimension*3	W540 x D575 x H775mm
Weight	~55kg
Included accessories	1 water supply hose (2m) 1 water supply hose filter 1 connection hose assembly 1 can scale cleaner 1 pretreatment cartridge
Operational accessory	1 ion exchange resin cartridge <i>(must be purchased separately)</i>

\*1 Performance data above is based on 23°C ±5°C room temperature, and 65% RH ±20% humidity. Operating ambient temperature range for this unit is between 5°C and 35°C. Keep temperature range of raw water between 5°C-30°C. When raw water temperature is high, the drainage temperature may also be high.

\*2 The guaranteed performance range is raw water pressure 0.2 -0.5 MPa. Water dispensing volume varies depending on water temperature.

\*3 Dimensions excludes protrusions.

### Optional items

Product code	Product name
281333	Stand (W540 x D660 x H800mm). Caster with adjuster.
281336	Water dispensing hose unit. Length 2m.
281337	Water supply joint
281339	Tap water pressure reducing valve
281340*	Drain trap
281344	Water outlet cover

\* Please specify when ordering main unit.

For complete list of optional items, please refer to WG205 Instruction Manual.



Stand



Tap water pressure reducing valve



Water outlet cover

### Consumable parts

Product code	Product name
253099	Pre-treatment cartridge PWF-1
253080	Ion-exchange resin cartridge CPC-S
9020010004	Membrane filter (2 pcs. / set) MFRL727
9020020001	Tank air vent filter AVF-1 (4210)



Pre-treatment cartridge



Ion-exchange cartridge



Membrane filter



Tank air vent filter



### Attention

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



# Benchtop Water Purifier - Pure Line®



**WE200**

Treatment process

Ion-exchange

Purified water

Deionized water

Water quality

Type 1 / A4



## Type 1 (ASTM D 1193) / A4 (JIS K 0057) level purity benchtop water purifier

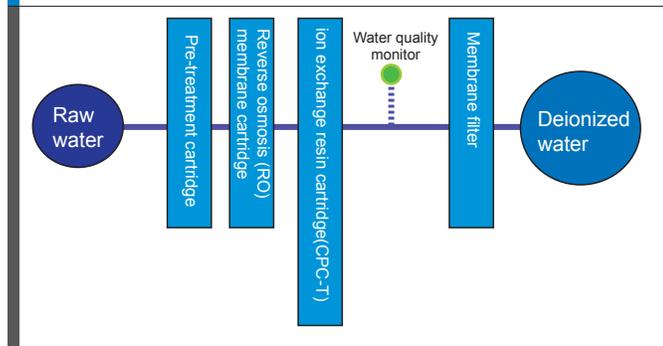
- Suitable for high sensitivity trace analysis
- Lower running cost
- By adopting reverse osmosis (RO) membrane cartridge set, life span of consumables has been expanded significantly
- Benchtop type, space saving
- Easy water sampling by attaching to water faucet
- Easy to operate digital display
- Displays replacement of consumables and its exchange history
- Standard equipped with membrane filter to protect pure water production from contamination
- Electromagnetic valve equipped at sampling water port for leakage prevention
- Universal power supply: works with 100-240VAC

### Specifications

Model	WE200
Purified water	Deionized water: compliant with ASTM D 1193 Type1 / JIS K0557 A4
Water purifying method	RO membrane→ion exchange→filtration
Pure water delivery rate	0.5~1.0L/min continuous production
Raw water filter	Pre-treatment cartridge (activated charcoal + 0.1µm hollow fiber membrane)
Filtration	Reverse osmosis membrane RO
Ion-exchange resin cartridge	2L ion exchange resin containing activated charcoal (CPC-T)
Final filtration	0.1µm membrane filter
Leakage detection	Water supply solenoid valve forcibly shut off when leak is detected
Raw water press range	0.13~0.5MPa (1.3~5.0kgf/cm <sup>2</sup> )
Raw water temperature range	10~30°C
Water sampling port	250mm above floor, RC1/4 (connected with membrane filter)
Drainage port	ø10 rigid tube
Drainage rate	Maximum 2L/min.
Safety device	Water cut-off error, water quality sensor error, controller error, pressure limit error, leak error, flow alarm/error, earth leakage
Power source (50/60Hz)	Single phase AC100~240V 1.3A or less
External dimensions (mm)	W350 x D430 x H 470
Weight	~30kg
Water quality display	7-segment LED display (conductivity / resistivity / water temperature)
Other display	Consumables replacement display (ion exchange resin, pre-treatment cartridge, reverse osmosis (RO) membrane, membrane filter), warning / error display
Included accessories	Supply / drain water hoses, pre-treatment cartridge, reverse osmosis (RO) membrane cartridge set, membrane filter, power cord, seal tape
Operational accessory	Ion-exchange cartridge CPC-T ( <i>must be purchased separately</i> )

\*This unit must be connected to drainage facility.

### Treatment Process



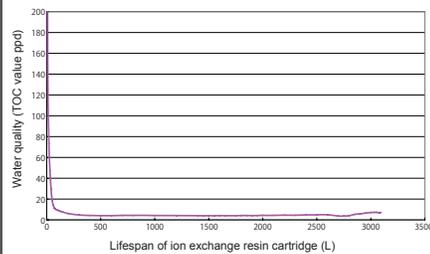
## Water Quality Analysis

Item	ASTM D 1193 Standard Type 1	JIS K 0057 Standard A4	Measured value	ASTM D 1193 level	JIS K 0057 level
Electrical conductivity ( $\mu\text{S}/\text{cm}$ )	<0.056	<1	0.055	Type 1	A4
Organic carbon ( $\mu\text{g}/\text{l}$ )	<50	<50	5	Type 1	A4
Zinc ( $\mu\text{g Zn}/\text{l}$ )	-	<0.1	<0.1	-	A4
Silica ( $\mu\text{g SiO}_2/\text{l}$ )	<3	<2.5	0.5	Type 1	A4
Chloride ion ( $\mu\text{Cl}^-/\text{l}$ )	<1	<1	<0.5	Type 1	A4
Sulfate ion ( $\mu\text{SO}_4^{2-}/\text{l}$ )	-	<1	<1.0	-	A4
<b>Total level</b>				<b>Type 1</b>	<b>A4</b>

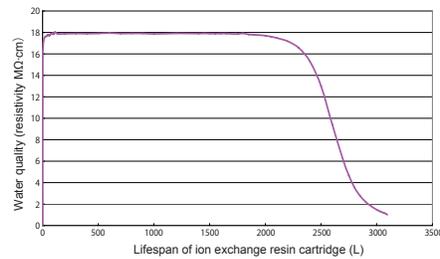
\*Quality of raw water may cause different results.

\*For water quality comparison JIS K 0057 ↔ ASTM D 1193 refer to page 115 of the general catalog.

### ■ Ion exchange resin lifespan test (TOC value)



### ■ Ion exchange resin lifespan test (resistivity value)



### ■ Optional items



Water sampling stand



Foot switch

Product code	Product name
253266	Water sampling stand (supplied in connection kit) OWL40
253278	External alarm output terminal OWE10
253279	Remote water sampling terminal OWE12
253280	Foot switch OWE14
253686	Water supply port unit OWH10

### ■ Consumable parts



Pre-treatment cartridge



Reverse osmosis (RO) membrane cartridge set



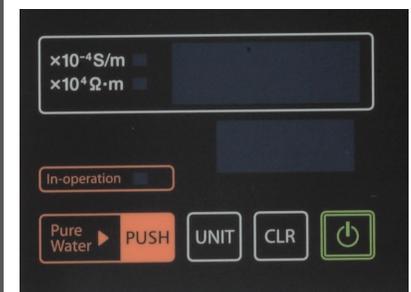
Ion-exchange resin cartridge CPC-T



Membrane filter

Product code	Product name
253099	Pre-treatment cartridge
253257	Reverse osmosis (RO) membrane cartridge set
253256	Ion-exchange resin cartridge CPC-T
9020010004	Membrane filter

## Control Panel



## Supply / Drain Port (Back of main unit)

