

SINCE 1889



Water Purifiers

Auto Still® (Deionized water, Distilled water)

WG252/1012/205

Designed with functions for optimum use



● Auto Still is a registered trademark of Yamato Scientific Co., Ltd.

WG252

Yamato Scientific Co., Ltd.



We have packed it with useful functions for everyday use!

Operation and Functions of WG252/1012

Handy water sampling



Patent pending for liquid drop control

Convenient collection of pure water in a small container by holding and operating the dispenser. By combining the semi-automatic water sampling mode and drop sampling, sample can be measured in a container with a scale.

Magnet type dispenser with free mounting position



A magnet is embedded in the back of the dispenser, allowing it to be mounted anywhere on the surface of the water purifier. It can be adjusted to the height of the container, or it can be set at the bottom of the equipment or on a steel laboratory bench when pumping water to a large container on a cart.

Display of trend graph (USB memory extractable)



Ease in monitoring equipment status (quality of distilled water and ion exchange water, notifications of consumables replacement, and information on the occurrence of abnormalities) and retrieval of trend data via USB memory.

Display how to replace consumables



Instructions on how to replace the ion exchange resin and pretreatment filter is shown on the LCD screen, eliminating need to reference the instruction manual every time.

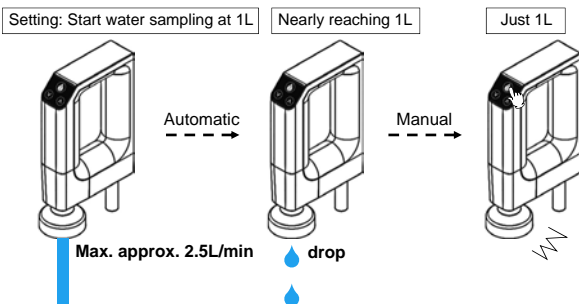
Displays replacement history of consumables

21.01.01 00:00				
イオン交換樹脂カートリッジ CPC 5 前回交換				
	現在	事前通知	交換通知	21.01.01
水質 MQ・cm	18.00	▶ 5.00	▶ 1.00	0.00
通水量 L	0			0

水に含まれる不純物（電解物質）を除去します。

Displays replacement history of consumables, notifications on replacement and scheduled maintenance, and history of abnormalities.

Other useful functions



Semi-automatic water sampling mode

Automatic water sampling until just before the desired capacity, manually stopping at the end point. Convenient for measuring graduated containers, etc.



Water sampling sink with drainage function

(Optional item)



Shower nozzle convenient for pure water rinse

(Optional item)



Foot switch enables the water sampling even when both hands are occupied.

Features of WG252/1012/205

Pure water of the highest level A4 (JIS K 0557)

The distilled water and ion exchange water that can be sampled are both pure water of the highest level, A4, as specified in JIS K 0557. The electric conductivity of distilled water looks bad, but it is due to the absorption of carbon dioxide by the manufacturing method, and it is not caused by impurities such as metal ions.

Example of water quality analysis for WG252/1012/205

[References](#)

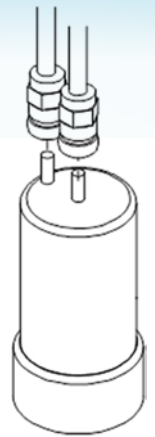
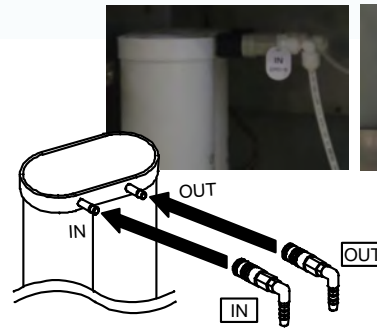
Item	JIS K0557 A4 Standard value	Measured value								
		WG252			WG1012			WG205		
		Ion-exchanged water	Distilled water	JIS K 0557	Ion-exchanged water	Distilled water	JIS K 0557	Ion-exchanged water	Distilled water	JIS K 0557
Electrical conductivity (mS/m)	< 0.1	0.0055	0.079	A4	0.0055	0.065	A4	0.0055	0.079	A4
Total organic carbon (TOC) (µgCL)	< 50	11.4	8.4	A4	12.6	8.4	A4	11.4	8.4	A4
Zinc (µgZn/L)	< 0.1	< 0.1	< 0.1	A4	< 0.1	< 0.1	A4	< 0.1	< 0.1	A4
Silica (µgSiO ₂ /L)	< 2.5	< 0.1	1.8	A4	< 0.1	2.1	A4	< 0.1	1.8	A4
Chloride ion (µgCl ⁻ /L)	< 1	< 0.1	< 0.1	A4	< 0.1	< 0.1	A4	< 0.1	< 0.1	A4
Sulfate ion (µgSO ₄ ²⁻ /L)	< 1	< 0.1	< 0.1	A4	< 0.1	< 0.1	A4	< 0.1	< 0.1	A4
Total water quality level JIS K 0557		A4			A4			A4		

* Raw water : Tap water from Kanagawa Prefecture

* Quality of raw water may cause different results.

Easy replacement of consumables

A one-touch coupler to attach and detach the ion exchange resin and pretreatment filter.



Flagship model of the Auto Still Series

These flagship models of the Auto Still Series are designed with an improved color LCD operation panel and a new concept dispenser. The color LCD displays water quality trends, alerts for replacement of consumables, and an illustration of how to replace consumables. The dispenser which can be attached with magnets to various places of the unit has a wide range of flow rate adjustment.

Water purifier, Auto Still

WG252

[Main specifications]

◎External dimensions: W540xD570xH775mm (excluding protrusion)

◎Weight: approx. 63 kg

Water quality level **A4**
(Ion exchange water/Distilled water)

Distilled water Production capacity: 1.5L/h
Tank capacity: 30L

Water purifier, Auto Still

WG1012

[Main specifications]

◎External dimensions: W550xD570xH1715mm (excluding protrusion)

◎Weight: approx. 113 kg

Water quality level **A4**
(Ion exchange water/Distilled water)

Distilled water Production capacity: 5L/h
Tank capacity: 100L



WG1012



WG252



WG1012

Controller (7-inch LCD touch panel)



* Home screen

Ion exchange water icon

Distilled water icon

Distilled water tank level indicator

Water quality display

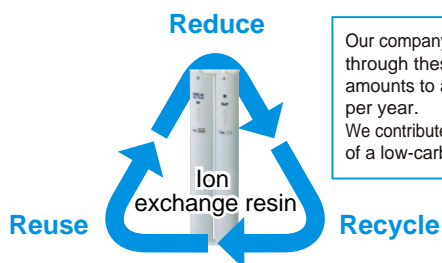
Water sampling volume setting /Indication

Water sampling mode display /Change

When power is turned on, screen moves to this home screen via the initial screen. The status of the equipment is displayed on the screen used during normal use, and you can set the water sampling method for distilled water and ion-exchanged water.

Initiatives to the 3Rs of Ion exchange resin and Pretreatment filters

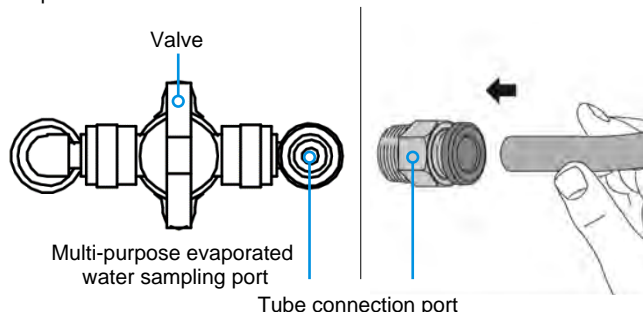
Our company promotes the 3Rs (reduce, reuse, recycle) for ion-exchange resins and pretreatment filters. The filters are collected free of charge, and then the resins, cardboard, and plastic containers are recycled and reused. (Only in Japan)



Our company's CO₂ reduction through these activities amounts to approx. 100 tons per year. We contribute to the realization of a low-carbon society.

Multi-purpose distilled water sampling port (lower right side of the unit)

A water sampling port was installed as a standard to extract distilled water from a distilled water tank. When combined with the PW200 pure water delivery unit, pure water can be delivered to remote use points. Water can also be supplied to cleaning devices and constant temperature chambers.



Standard model of the Auto Still Series

An economical water purifier with pure water quality equivalent to WG252/1012 at A4 level for both distilled water and ion exchange water. Although not equipped with LCD touch panel or dispenser, this standard model is designed with a full range of safety functions, such as alarm to replace consumables, water leakage, water cut-off, and abnormal heating. WG205 can be operated with minimal consumables while maintaining water quality.

Water purifier, Auto Still

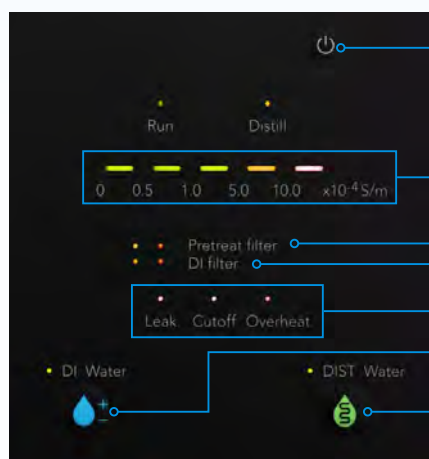
WG205

【Main specifications】
 ◎External dimensions: W540×D575×H775mm (excluding protrusion)
 ◎Weight: approx. 55 kg

Water quality level	A4 (Ion exchange water/Distilled water)
Distilled water	Production capacity: 1.5L/h Tank capacity: 20L

Water level gauge

Controller



Power switch

5-step water quality display

Two-step display of pre-treatment filter replacement time Caution/Alarm
 Two-step display of when to replace the ion exchange resin Caution/Alarm

Alarm lamp Leakage/ Water cutoff/ Abnormal heating

Ion exchange water sampling key

Distilled water sampling key


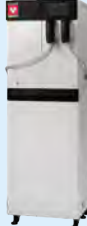

*The indicator lamps are all lit in the test mode.



WG205

Daily operation is as simple as pressing the power switch and operating the ion-exchanged water and distilled water sampling buttons, and A4 pure water can be sampled at any time.

Specifications

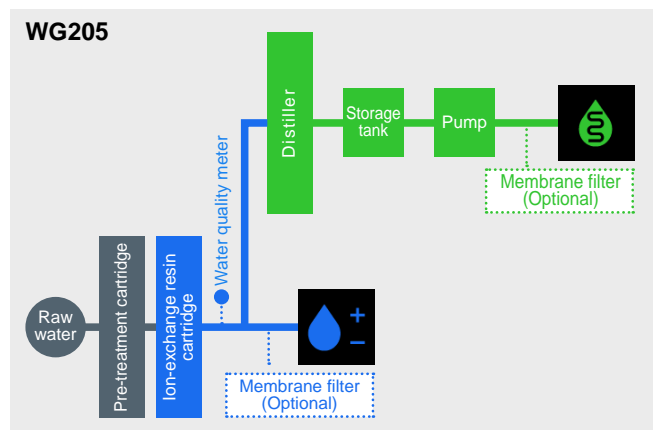
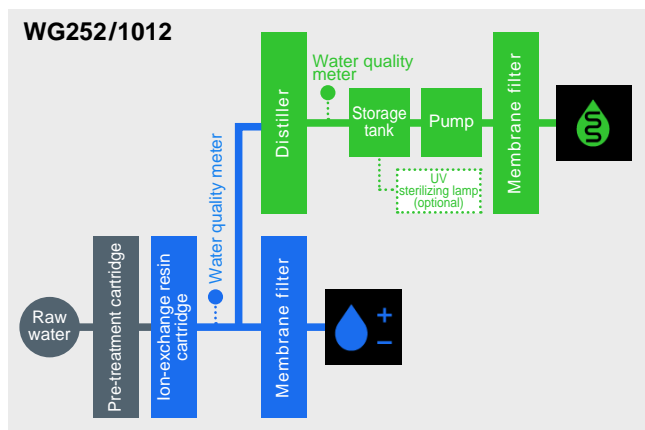
Model	WG252		WG1012	WG205
Product Code	253165		253168	253164
				
Function	Quality	Ion exchange water A4		A4
	Distilled water	A4		
	Distilled water production	~1.5L/h	~5L/h	~1.5L/h
	Distilled water tank capacity	30L	100L	20L
	Dispenser	●	●	—
Method / Performance*1	7-inch LCD screen	●	●	—
	Water sampling method	Ion exchange → Distillation → Filtration		Ion exchange → Distillation
	Pure water sampling	Ion exchange water / distilled water		
	Distilled water production	~1.5L/h	~5L/h	~1.5L/h
	Distilled water delivery rate*2	Drip~2.5L/min (with variable flow rate function)		~1.5L/min
Configuration	Ion exchange water delivery rate*2	~1.0L/min (without variable flow rate function)		~1.0L/min
	Setting range of production*3	0.01~tank storage volume L / Continuous water sampling		Continuous water sampling
	Condenser	Hard glass		
	Heater	Ceramic heater 1.2kW	Ceramic heater 1.9kWx2pcs.	Ceramic heater 1.2kW
	Pretreatment cartridge	0.1 μm hollow fiber membrane with activated carbon (PWF-1)		
Standards	Ion exchange resin cartridge	CPC-S 4L type, 1 pc. (Activated carbon cartridge)	CPC-S 4L type, 2 pcs. (Activated carbon cartridge)	CPC-S 4L type, 1 pc. (Activated carbon cartridge)
	Final filtration of distilled & ionized water	0.1μm × 2 (membrane filter)		Membrane filter (optional)
	Leak detection	Forced shutoff of water solenoid valve by leak detection sensor in case of water leakage		
	Distilled water storage tank	Polyethylene tank, 30L	Polyethylene tank, 100L	Polyethylene tank, 20L
	Distilled water UV sterilization	Optional		—
Display / Setting	Water sampling tray	Push-open type, Load capacity: 10kg, for 5L hand-held beaker		—
	Multi-purpose distilled water sampling port	For connection of 8mm diameter hard tube (right side of main unit)		
	Water level detection	Float switch, 5-step detection		Float switch, 2-step detection
	Raw water pressure range	0.05~0.5MPa	0.1~0.5MPa	0.05~0.5MPa
	Amount of raw water required	~2.0 L/min	~2.6 L/min	~2.0L/min
Accessories	Ambient temperature range	5~35°C		
	Power supply (50/60Hz)	AC115V / AC220V Single-phase		AC115V / AC220V Single-phase
	External dimensions*4	W540xD570xH775mm	W550xD570xH1715mm	W540xD575xH775mm
	Weight	Approx. 63kg	Approx. 113kg	Approx. 55kg
	Water level display	Digital (7-inch LCD panel)		Communicating tube water level indication
Other Displays	Water quality display	Conductivity / Resistivity (Switching)		Conductivity 5-step LED display (ion exchanged water)
	Other Displays	Notifications: Replacement of consumables/Routine maintenance Warning: Water cut off/No record of trend data/Power failure/Low distilled water quality Abnormality: Controller/Leakage/Heater overheat/Disconnection/Tank water level gauge/ Boiler water level, water level gauge/Boiler drainage path/Cooling water/ Water quality meter/Water sampling pump/Ion exchange water flow rate reduction/Water sampling path		Indication of consumables replacement (Ion exchange resin cartridge)
		Water supply hose (2m) × 1, Water supply hose filter × 1, Connection hose assembly × 1 (2 for WG1012), Pre-treatment cartridge × 1, Ion exchange resin cartridge × 1 (2 for WG1012), Air vent filter × 1, Membrane filter × 2, Filter cover × 2, Magnetic hook × 2, Adjuster fixing bracket (WG1012 only) × 4		Water supply hose (2m) × 1, Water supply hose filter × 1, Connection hose assembly × 1, Pre-treatment cartridge × 1, Ion exchange resin cartridge × 1

*1 Performance values are for WG252 at 100VAC, room temp. 23°C±5°C, and humidity 65%RH ±20%. WG1012 at 200VAC, room temp. 23°C±5°C, and humidity 65%RH ±20%. WG205 at 100VAC, room temp. 23°C±5°C, and humidity 65%RH ±20%. The ambient temp. range of this product is 5 to 35°C. Also, the temp. range of raw water should be 5 to 30°C. If the raw water temperature is high, the drainage temperature may be high. If the temperature exceeds 60°C, a drainage trap is required.

*2 The guaranteed performance range is 0.2 to 0.5MPa of raw water pressure. The amount of water sampled varies depending on changes in the raw water pressure.

*3 The accuracy of the quantitative water sampling is about 10%. *4 Protrusions are not included.

Block Diagrams



Optional items

Item Name	Model	Product code	WG252	WG1012	WG205	Remarks
① Stand	OA097	281333	●	-	●	W540xD660xH800mm with casters and adjusters
② Sterilizing lamp	OA098	281334	●	-	-	Distilled water tank assembly set (to be installed when ordered)
③ Sterilizing lamp	OA099	281335	-	●	-	Distilled water tank assembly set (to be installed when ordered)
④ Water sampling hose unit	OA100	281336	-	-	●	Membrane filter, silicon hose 2m, with magnetic hook
⑤ Faucet plug for water supply hose	OA101	281337	●	●	●	Raw water side: G1/2 male or whitworth screw W26 thread 20
⑥ Water tap	OA102	281338	●	●	●	Raw water side: Connect to G1/2 male or Rc1/2 female
⑦ Water tap (with pressure reducing valve)	OA103	281339	●	●	●	【Connection】 Same as above
⑧ Drainage trap	OA104	281340	●	●	●	Used when drainage temperature is high
⑨ Water supply extension hose (1m)	OA105	281341	●	●	●	Extends the standard 2m water hose by 1m
⑩ Drainage hose (3m)	OA106	281342	●	●	●	Remove and replace the standard 2m hose
⑪ Foot switch	OA107	281343	●	●	-	Cord length 5m
⑫ Water sampling port cover	OA108	281344	※	※	●	-
⑬ Shower nozzle	OA109	281345	●	●	-	-
⑭ Hose for adding ion exchange resin	OA110	281346	●	※	●	Hose for adding CPC-S
⑮ Pure water delivery unit	PW200	253135	●	●	●	Water feed pump for distilled water
⑯ Pure line	WL100H	253669	●	●	●	WL100 + WG205/252/1012 connection parts
⑰ Filter housing	OA111	281347	●	●	●	For filters to be installed in the previous stage of WL100
⑱ Filter stand	OA112	281348	●	●	●	Self-standing stand, Up to 2 housings can be mounted
⑲ External alarm output	OA113	281351	●	-	-	Output signal when notification, alarm, or abnormality occurs
⑳ External alarm output	OA114	281352	-	●	-	(to be installed when ordered)

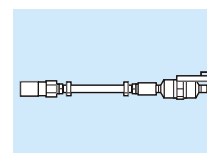
※ Standard equipment

Consumables

Item Name	Model	Product code	WG252	WG1012	WG205
① Membrane filter (set of 2)	MFRL727	9020010004	●	●	●
② Pretreatment cartridge	PAF-1	253099	●	●	●
③ Ion exchange resin cartridge	CPC-S	253080	●	●	●
④ Air filter	AVF-1(4210)	9020020001	-	-	●
⑤ Air vent filter	YAVF-1	LT00040430	●	●	-
⑥ Boiler scale cleaner(1 kg)	-	8190010001	●	●	●
⑦ Pre-filter (wound cartridge)	SWPP-010-1	9020036001	●	●	●
⑧ Activated carbon filter	YAC-250	9020026002	●	●	●
⑨ UV lamp for germicidal lamp (replacement)	OWG28	253773	●	●	-



① Stand



④ Water sampling hose unit



⑦ Water tap (with pressure reducing valve)



⑫ Water sampling port cover



⑮ Pure water delivery unit



⑯ Pure line



⑰⑱ Filter housing/ Stand



⑳ Membrane filter



㉑ Pretreatment cartridge



㉒ Ion exchange resin cartridge

Q&A

Q

The amount of distilled water produced by the previous was 1.8 L/h, but the amount of distilled water produced by this model is only 1.5 L/h. Why is that?

In the previous model, a 1.4kw heater was used to prioritize the production of distilled water, but a current of 15A or more sometimes flowed when the voltage on the primary side rose.

We put top priority on safety and security, and made design changes to improve the structure so that no more than 15A of current can flow even when the voltage rises, resulting in a smaller production volume.

● Auto Still is a registered trademark of Yamato Scientific Co., Ltd.

Caution

The specifications and performance figures of the products listed in this catalog are presented as a user guide under general operating conditions. When using the product, please understand the contents of the instruction manual and use the product correctly. Please note that we cannot be held responsible for any damage to persons or property caused by using the product outside the conditions of use described in the instruction manual.

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For the development of scientific technologies

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