



HYDROGEN PEROXIDE GAS
STERILIZER-ES series

ES-700
ES-1400



Safety Reminders

- Read the "User's Manual" well before using unit, and use the unit properly.
- Do not place flammable items such as alcohol, gasoline, and gas in the sterilizer as these may explode.
- Always connect the unit to a dedicated 3-phase power supply with at least 200VAC at 20A. Make sure that its ground is connected to a line that has been installed according to type D (type 3) ground line specifications.
- The sterilizer is categorized as a small pressure vessel for the purpose of the Industrial Safety and Health Law. Therefore, make sure to carry out self-initiated inspections on a regular basis.
- Make sure to manage sterilization outcomes. Use the chemical indicator on a daily basis, and the biological indicator on a periodic basis.

●Contact the following for orders and inquiries:

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Canon Lifecare Solutions Inc.

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Manufactured by: **Elquest Corporation** Certified Management Systems
741 Owa, Tomisato-shi, Chiba ISO 13485

Sun-130901

Canon Lifecare Solutions Inc.

There has never been a high-speed low-temperature sterilization system that was easier to deploy.

ES series is the new benchmark.

See what Canon Lifecare Solutions Inc's hydrogen peroxide gas sterilizer is capable of. Thanks to reliable and trusted technologies we have developed over the years, we have been able to take all the prerequisite conditions of sterilizers-performance, operability, and safety to a much higher level.

We were also able to make unprecedented advances in cost performance.

ES series brings high-speed low-temperature sterilization much closer to our customers.

This is the dawn of a new era of sterilization.



Sterilization Performance

Successful gasification technology for sterilization

The H_2O_2 is gasified to the molecular level for sterilization. Using a high level dry pump, ES-1400 reaches a high compression. The H_2O_2 is injected 4 times (4 pulse method) for sterilization. Even odd shaped instruments, lumens and wrapped products can be sterilized.

What is hydrogen peroxide gas sterilization?

It is the method of injecting hydrogen peroxide into the decompressed chamber. By using this method, inside of the lumens can be sterilized. The hydrogen peroxide will decompose to water and oxygen. It is also environmental friendly. The sterilization is safe and stable in short period of time.



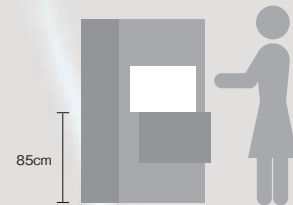
ES-1400

Operation

Rectangular chamber is space-efficient and easy to use

A rectangular chamber was employed to make the most efficient use of space, with enough capacity to take a full-sized container. It also comes standard with racks that are easy to access, allowing users to make the most effective use of space when sterilizing a large number of items.

All racks slide out for easy access to items placed towards the back. Racks can also be removed to accommodate items of various heights.



ES-700



Single-Rack Configuration

Easily accommodates a full-sized container.

ES-1400



Single-Rack Configuration

Easily accommodates a full-sized container.



Triple-Rack Configuration

Sliding racks are height-adjustable. All racks slide out to allow easy access to items placed towards the back.

* It can also be used in a two-rack configuration.



Four-Rack Configuration

Automatic Door with Footswitch

The door swings down automatically by either operating the touch panel or footswitch. Additionally, not only are there fewer protrusions on the front, the door open/close movement is confined within a symmetrical space, which makes it a great choice for the often-limited spaces.



ES series comes with a footswitch so user's can open and close the door without touching the panel. This is not only hygienic but also convenient when both hands are occupied.



The door automatically swings down.

Full English, Chinese, Japanese LCD Display

Touch panel operations are available at a touch of your finger. The LCD display uses large text for good visibility. A red screen and sound alerts the user should any error occur.

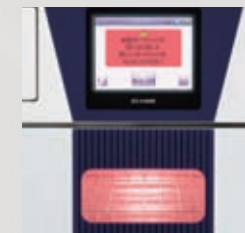


LED lighting and view port makes it easy to check the interior

The interior of the sterilization chamber is lit with white LED lamps, which allows users to check at a glance how the items are laid out and to check for any items that may have been left behind. ES-700 also features a view port for checking the sterilization status while the door is shut.



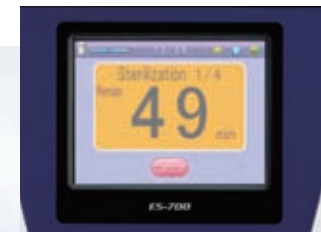
Look into the view port to check the interior during sterilization.



The screen turns red to alert the user to any errors.

Displays Remaining Processing Time

During the sterilization process, the display shows the remaining time in large format, which helps to improve work efficiency.



* Sterilization may take longer depending on the type of material or dryness of items to be sterilized.

* The remaining process time on the display is based on the process end time, which is calculated based on the conditions of the initial depressurizing (conditioning).

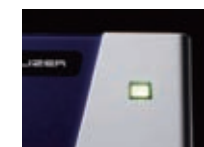


ES-1400

LED lighting makes it easy to check the interior.

Eco-mode switch

This switch is used to reduce standby power consumption. When you press this switch, the screen and chamber lights turn off to reduce power consumption. ES-700 also comes with an auto function that allows you to set eco-mode at your discretion, and hence improve the efficiency of your sterilization operations. Users can also set the standby temperature inside the chamber to their desired value.



Comes with an e-mail function

The unit will notify you by e-mail when sterilization is complete or if an error occurs.

ES-700 registers up to 5 e-mail addresses, and the information to be sent to each recipient can be configured individually.

* Requires a LAN connection.



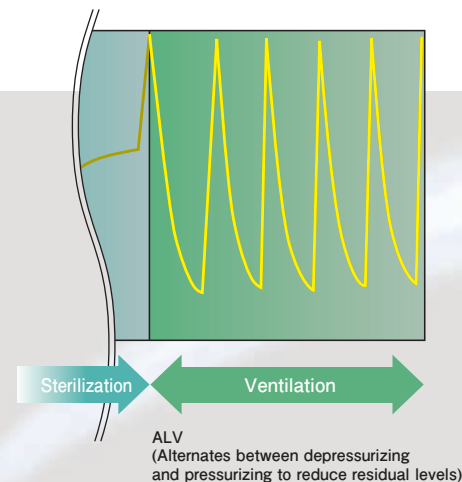
Safety

Improved safety ALV (Alternating Ventilation) system

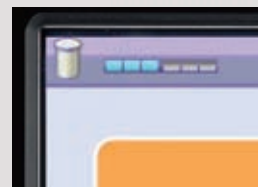
Since the hydrogen peroxide gas that is supplied to the chamber has been gasified to the molecular level-much smaller than particles, there is no concern for residual liquids. In addition, in the final process during sterilization, the unit performs Alternating Ventilation (AV), where depressurization and pressurization are repeated. This process reduces the amount of residual hydrogen peroxide in wrapping material and containers.

Long mode

Ventilation (depressurization and introduction of atmosphere) is performed 5 times in the ventilation process to ensure thorough ventilation. Users can add 5 more ventilation cycles to ensure an even safer working environment.



* Wear gloves when handling the cartridge.



The sterilization cartridge is made of a dual-wall construction that holds up well against impact. The user will be automatically notified of its usage count and expiration.

Record-keeping

Includes a process printer and SD card as standard

The printer automatically prints out a process record for each cycle. This data is also stored on an SD card. Data on the SD card can be easily viewed on your spreadsheet program. It offers users a way to make long-term backups.



Printout example

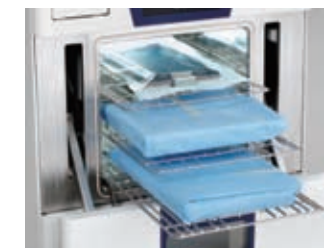
History Table

ES-700

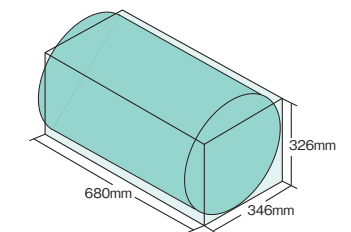


76 Liter Chamber

Standard 76 Liter Chamber



Triple-Rack Configuration

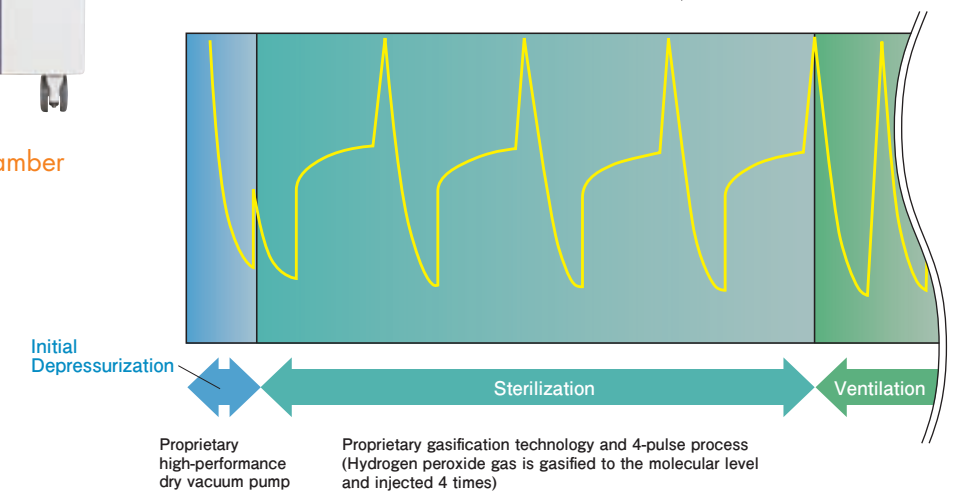


Its capacity rivals that of 100L and larger cylindrical chambers.

Standard and Soft Modes

The unit is designed to run on either standard or soft mode. Users can choose the most effective sterilization process to take into account the effects, if any, that hydrogen peroxide may have on their equipment and depending on the shape of items to be sterilized.

* Make sure to choose the appropriate mode based on instructions provided by the manufacturer of the item to be sterilized. Use standard mode unless specified.



Three choices of color

Three unit color choices are available: Royal Blue, Sicilian Orange, and Premium Black. Choose a color that most suits the color theme of your clinic or hospital.



Royal Blue



Sicilian Orange



Premium Black

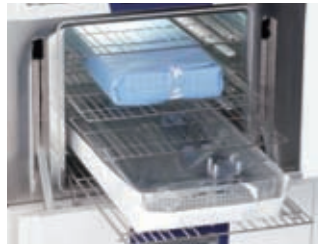
ES-1400

Newly designed 142 Liter chamber

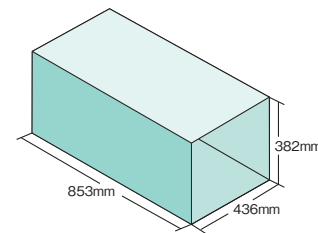


142 Liter Chamber

The 142 liter square shape chamber can maximize the loading of instruments; it can fit a full size container and a large size trays. It comes with 4 sliding racks which enables the users to maximize the available chamber space in one cycle. All the sliding racks helps the users to remove the instruments easily. The height can be adjusted according to the instruments too.



Four-Rack Configuration



Normal and short cycle

Normal cycle : There is standard mode and soft mode. The cycle mode can be selected depending upon the effect on the instruments from the hydrogen peroxide.

Short cycle : Simple instruments without any inner tubes can be sterilized using this cycle within 28 minutes.

Cycle	Mode	H ₂ O ₂	Time
Normal	Standard	concentrated	approx 50 min
	Soft	non-concentrated	
Short	Soft	non-concentrated	shortest 28 min

* Please contact the manufacturer of the instruments for further instructions.



front

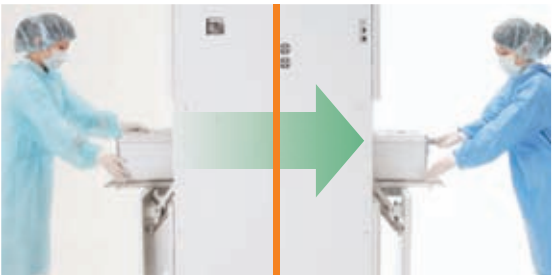


back

Double Door model

With the ES-1400, you can choose double or single door configurations. With the ES-1400 double door configuration, the instruments can be passed thru to another area of the CSSD for a better work flow.

Pass Through capability



front

back

The front door and the back door will not open at the same time for safety issues. The LED on the back door will show the current status of the sterilization cycle.

Five choices of color



Royal Blue



Sicilian Orange



Premium Black



Cosmos Pink



Sprout Green

Primary specifications

ES-700

External dimensions (mm)	1630(H)x750(D)x640(W)
Capacity	76L
Weight	Approx. 310kg
Power Requirement	3-phase 208V/380V/400V/415V 50/60Hz / 2kW
Door	Automatic swing-down door
Hydrogen peroxide supply	Sterilization Cartridge
Sterilization temperature	50°C
Process time (cycle)	Approx. 60 minutes
Recording function	Line thermal printer SD card
Display	LCD touch panel
Medical device category*	Controlled medical device (CLASSII)
Approval number*	22300BZX00074A01
Product name	Hydrogen peroxide gas sterilizer ES-700
Made in Japan	

* Japan Pharmaceutical Affairs Act
Please note that the product shown is subject to modifications or changes to its specifications without notice. Please also note that product colors shown may vary slightly from actual product colors due to irregularities in the printing process.

ES-1400

External dimension (mm)	1710(H) x 925(D) x 750(W)	
Capacity	142L	
Weight	Approx. 410kg	
Power Requirement	3-phase 208V/380V/400V/415V 50/60Hz / 3kW	
Door	Automatic swing-down door	
Hydrogen Peroxide supply	Sterilization Cartridge	
Sterilization temperature	55°C	
Process time (cycle)	normal cycle	Approx. 50minutes
	short cycle	Approx. 28minutes
Recording function	Line thermal printer SD card	
Display	LCD touch panel	
Medical device category*	Controlled medical device (CLASSII)	
Approval number*	225ADBZX00013000	
Product name	Hydrogen peroxide gas sterilizer ES-1400	
Made in Japan		

* Japan Pharmaceutical Affairs Act
Please note that the product shown is subject to modifications or changes to its specifications without notice. Please also note that product colors shown may vary slightly from actual product colors due to irregularities in the printing process.

Accessories / Consumables

We prepared all the necessary accessories and consumables for the ES-700 and ES-1400

Sterilization cartridge

e-SC305

ES-700 for 5 uses
ES-1400 for 3 uses

e-SC610

ES-700 for 10 uses
ES-1400 for 6 uses

e-SC3

ES-700 for 3 uses

The inner cartridge is double layered structure along with absorbent material to provide better safety. The ID chip helps to track the expiry date and remaining hydrogen peroxide.



Thermal recording paper

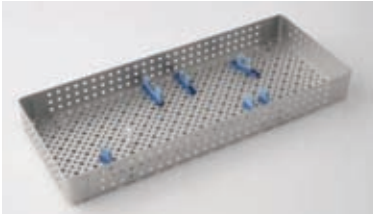
e-RP

58mm x 25m



Sterilizing trays

e-ST2563S



Outer dimensions	250mm(W) × 625mm(D) × 70mm(H)
Inner dimensions	245mm(W) × 621mm(D) × 63mm(H)

*aluminum alumite, without lid, Teflon parts
*positioning blocks are sold separately

Sterilizing cases

e-SC2663N



Outer dimensions	255mm(W) × 630mm(D) × 105mm(H)
Inner dimensions	245mm(W) × 621mm(D) × 91mm(H)

*aluminum alumite, with lid, Teflon parts for placing the cases on top of each other

Sterilizing bags

e-SR series



The e-SR series is designed to be used for hydrogen peroxide sterilizers. The material is superbly balanced for permeation and transparency.

Model name and size	
e-SR 90	90mm×150m
e-SR 135	135mm×150m
e-SR 180	180mm×150m
e-SR 225	225mm×100m

Model name and size	
e-SR 270	270mm×100m
e-SR 315	315mm×100m
e-SR 360	360mm×100m

e-TR series



The material on this sterilizing bags are made from Dupont™ Tyvek®. Due to the strength of the material, it can hold heavy materials.

Model name and size	
e-TR 100	100mm×150m
e-TR 150	150mm×150m
e-TR 200	200mm×150m

Model name and size	
e-TR 250	250mm×100m
e-TR 300	300mm×100m
e-TR 350	350mm×100m

Chemical Indicators

e-CARD



The discoloration in this indicator will respond according to the concentration and the exposure time of the hydrogen peroxide. This chemical indicator is mainly a tool to indicate the hydrogen peroxide exposure for operation safety.

250 indicators / box

e-CARDone



The e-CARD one reacts simultaneously to hydrogen peroxide. The discoloration will be from red to yellow only and without any other colors in the middle. The discoloration is minimized from any environmental effects.

*The definition of "one" depicts single view.
250 indicators / box

Sterilizing baskets

e-SB3020S



Outer dimensions	300mm(W) × 200mm(D) × 79mm(H)
Inner dimensions	282mm(W) × 180mm(D) × 65mm(H)

*Stainless steel, with lid

e-SB3030S



Outer dimensions	300mm(W) × 300mm(D) × 79mm(H)
Inner dimensions	282mm(W) × 280mm(D) × 65mm(H)

*Stainless steel, with lid

e-SB3030N



Outer dimensions	300mm(W) × 300mm(D) × 124mm(H)
Inner dimensions	282mm(W) × 280mm(D) × 110mm(H)

*Stainless steel, with lid

e-SB3160NA



Outer dimensions	314mm(W) × 600mm(D) × 109mm(H)
Inner dimensions	308mm(W) × 579mm(D) × 97.5mm(H)

*Stainless steel, without lid