

RENO Plasma Sterilizer

EXPERT IN INFECTION CONTROL

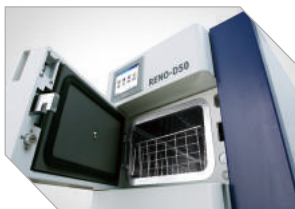


RENOSEM
Expert in Infection Control

RENOSEM provides state-of-the-art “LOW TEMPERATURE PLASMA STERILIZER” as a market leader with specialized sterilization process technology. With many years of experience in developing and producing full range of PLASMA STERILIZER, we services to its customers in healthcare, pharmaceutical and laboratory sectors.

RENOSEM focuses on offering innovative solutions for the CSSD we increase better patient care, safety, and environment.

Business



Sterilizer



Consumables



Validation Service

State-of-the-art Plasma Technology

Plasma sterilization includes exposing an article to be sterilized to mixed gas generated from a plasma generator and hydrogen peroxide solution. The exposure of the article to the plasma gas is carried out at pressure ranged from vacuum to over atmosphere for a time period sufficient to effect sterilization.

Sterilization Plasma

Using DBD (Dielectric Barrier Discharge) Plasma technology
Maximizing H_2O_2 radical effect and sterilization efficacy
Durable & effective plasma (radical) generating system

Abatement Plasma

AC Plasma discharge
Break down H_2O_2 gas into Water vapor (H_2O) and Oxygen (O_2)
Durable & Reliable Finishing System



RENO Series at a glance

RENO Plasma Sterilizer is to sterilize highly sophisticated, heat-sensitive surgical instrument.

Committed to combining the most effective plasma technologies, innovative designs, and rapid sterilizing time to create user friendly and cost effective solutions that enhance productivity, competitiveness and fulfill client's optimum safety and economical satisfaction.

Continuous research and development, quality, safety and comprehensive services as well as user-friendly design are important aspects of RENO Plasma Sterilizer.



Easy-to-use Sterilization Agent Cassette

- Easy-to-load and reliable constant dose injection system
- Leak proof single use cassette type for user's convenience and safety.
- No required additional consumables for wasting sterilization agent.

Spacious Chamber

- Spacious rectangular chamber
- Removable two-tiered shelf.
- Durable, acid-proof, and easy-to-clean chamber material-stainless steel
- Freely contactable chamber wall-Error free

User Friendly interface - Touch screen controls

- Easy-to-use and color-coded touch screen.
- Easy monitoring sterilization cycle information: cycle time, Temperature, Pressure, and much more.



Built-in Thermal Printer

- Print cycle reports and other information
- No required ink ribbon.

Easy to Install

- Built-in locking mobile wheels
- Easy to relocate where user's desired location
- No required additional facilities (water plumbing, aeration systems)

Data Storage System

- Automatic data backup system using memory card / USB.
- Compatible with PC (MS Excel, Text Format)

Sophisticated exterior



RENO Series Low Temperature Plasma Sterilizer

RENOSEM provides full range of model for your maximum productivity.
From Speedy and compact model RENO-S20 to RENO-S130D designed for large-scale hospital

RENO-S20
RENO-S30
RENO-D50
RENO-S90
RENO-S130
RENO-S130D

*RENO Plasma Sterilizer is the Best Solution
for Infection Control.*



Proven Strong Penetrability is ability to sterilize single-channel flexible endoscopes and rigid endoscopes, and much more. Long narrow closed lumen (2 \emptyset × 1,500mm) sterilization is guaranteed without adopter and booster.

Fast sterilization cycle enable to increasing instrument turnaround even reducing costly instrument inventory

Gentle sterilization is ideal for delicate instrument : heat-sensitive and humidity-sensitive

Non Toxic Residue : water vapor(H₂O) and oxygen(O₂) ensure safety for user, patient, and environment. Also complied with all International Environment Laws and Regulations.

User-friendly Interface : touch screen, built-in printer, storage system – maximize user's convenience

Low running cost is feasible using RENO-series : No required additional facilities (water plumbing, aeration systems, and consumables for wasting sterilization cassettes). Single-use cassette type can reduce the sterilization agent expenses.

RENO Plasma Sterilizer

More Fast



RENO-S20

Ideal for Dental and Eye clinic with its fast turnaround time and compact size

Table top model

RENO-S20

More Fast Sterilization

>> Specification

TOTAL CYCLE TIME

Eco Cycle	About 21min.
Advanced Cycle	About 38min.

PROCESSING TEMPERATURE

Below 55°C

DIMENSIONS & WEIGHT

Dimensions	470(H)×655(W)×640(D)mm
Weight	116Kg

STERILIZATION CHAMBER

Configuration	Rectangular
Total Volume	18L, 170(H)×260(W)×410(D)mm
Shelf	Two-tiered shelf (Option)
Material	Stainless Steel

DOOR

Door Type	Single Door
Door Control	Manual

STERILANT

Liquid Chemical Agent	Hydrogen Peroxide
Concentration & Usage	3.6ml (50%), 1 Cycle/Cassette

CONNECTION

Electricity	230V~, Single Phase, 50/60Hz or 200V Single Phase, 50/60Hz
Power Consumption	1.5 KVA

PROGRAM

Control	Micro Processor
Self-Test Mode	Automatic
Printer Outputs	Built-in Thermal Printer
Data Storage	Memory Card

DISPLAY

Screen	Color-coded Touch Screen
Alarm	Audible & Visible Alarm

MOBILITY

Mobile wheels or Cart	Cart-mounted with 4 locking wheels (Option)
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AIR INLET BACTERIA RETENTION FILTER

HEFA Filter	99.97% Efficiency at 0.3 micron(0.3×10 ⁻⁶)
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REGULATORY APPROVALS

CE / ISO 13485 / ISO 9001

OPERATIONAL ENVIRONMENT

Temperature	15~40°C
Humidity	5°C~30°C / below 80%, 31°C~40°C / below 50%

Easy-to-use Sterilization Agent

- Easy-to-use, single-use cassette type
- No required additional consumables for waste system.

User Friendly interface

- Easy-to-use, color-coded touch screen.

Spacious chamber design

- Removable two-tiered shelf
- Free contactable chamber wall-Error free

Cart with locking wheels (option)

Universal data acquisition system

RENO Plasma Sterilizer

More Reliable



RENO-S30

Ensure greater efficiency with the proven sterilization performance plus added its compact size.

RENO-S30

More Reliable Sterilization

>> Specification

TOTAL CYCLE TIME

Eco Cycle	About 27min.
Advanced Cycle	About 45min.

PROCESSING TEMPERATURE

Below 55°C

DIMENSIONS & WEIGHT

Dimensions	1,010(H)×570(W)×830(D)mm
Weight	190Kg

STERILIZATION CHAMBER

Configuration	Rectangular
Total Volume	34L, 185(H)×300(W)×610(D)mm
Material	Stainless Steel

DOOR

Door Type	Single Door
Door Control	Manual

STERILANT

Liquid Chemical Agent	Hydrogen Peroxide
Concentration & Usage	4ml (50%), 1 Cycle/Cassette

CONNECTION

Electricity	230V~, Single Phase, 50/60Hz or 200V Single Phase, 50/60Hz
Power Consumption	2.5 KVA

PROGRAM

Control	Micro Processor
Self-Test Mode	Automatic
Printer Outputs	Built-in Thermal Printer
Data Storage	Memory Card

DISPLAY

Screen	Color-coded Touch Screen
Alarm	Audible & Visible Alarm

MOBILITY

Mobile wheels or Cart	Built-in 4 locking wheels
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AIR INLET BACTERIA RETENTION FILTER

HEFA Filter	99.97% Efficiency at 0.3 micron(0.3×10 ⁻⁶)
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REGULATORY APPROVALS

CE / ISO 13485 / ISO 9001

OPERATIONAL ENVIRONMENT

Temperature	15~40°C
Humidity	5°C~30°C/ below 80%, 31°C~40°C/ below 50%



RENO Plasma Sterilizer

More Economic



RENO-D50

Maximize efficiency with two selectable chambers as sterilization needs.

RENO-D50

More Economic Sterilization

>> Specification

TOTAL CYCLE TIME

Eco Cycle	About 27min.(Single Mode)
Advanced Cycle	About 45min.

PROCESSING TEMPERATURE

Below 55°C

DIMENSIONS & WEIGHT

Dimensions	1,280(H)×570(W)×830(D)mm
Weight	290Kg

STERILIZATION CHAMBER

Configuration	Rectangular (Double Chamber)
Total Volume	30L, 185(H)×300(W)×548(D)mm 30L, 185(H)×300(W)×548(D)mm
Material	Stainless Steel

DOOR

Door Type	Two Door
Door Control	Manual

STERILANT

Liquid Chemical Agent	Hydrogen Peroxide
Concentration & Usage	4ml (50%)×2 chambers 1 Cycle / 2 Cassettes (Double Chamber)

CONNECTION

Electricity	230V~, Single Phase, 50/60Hz
Power Consumption	2.5 KVA

PROGRAM

Control	Micro Processor
Self-Test Mode	Automatic
Printer Outputs	Built-in Thermal Printer
Data Storage	Memory Card

DISPLAY

Screen	Color-coded Touch Screen
Alarm	Audible & Visible Alarm

MOBILITY

Mobile wheels or Cart	Built-in 4 locking wheels
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AIR INLET BACTERIA RETENTION FILTER

HEFA Filter	99.97% Efficiency at 0.3 micron(0.3×10 ⁻⁶)
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REGULATORY APPROVALS

CE / ISO 13485 / ISO 9001

OPERATIONAL ENVIRONMENT

Temperature	15 ~ 40°C
Humidity	5°C~30°C/ below 80%, 31°C~40°C/ below 50%



RENO Plasma Sterilizer

More Great



RENO-S90

Enhanced sterilization technology deliver safe and reliable results with its versatility.

RENO-S90

More Great Sterilization

>> Specification

TOTAL CYCLE TIME	
Non-Lumen Cycle	About 28min.
Eco Cycle	About 37min.
Advanced Cycle	About 53min.

PROCESSING TEMPERATURE	
	Below 55°C

DIMENSIONS & WEIGHT	
Dimensions	1,537(H)x700(W)x986(D)mm
Weight	395Kg

STERILIZATION CHAMBER	
Configuration	Rectangular
Total Volume	90.4L, 340(H)x380(W)x700(D)mm
Shelf	Removable Two-tiered Shelf
Material	Stainless Steel

DOOR	
Door Type	Single Door
Door Control	Manual

STERILANT	
Liquid Chemical Agent	Hydrogen Peroxide
Concentration & Usage	8ml (50%), 1 Cycle / Cassette

CONNECTION	
Electricity	230V~, Single Phase, 50/60Hz or 200V Single Phase, 50/60Hz
Power Consumption	3 KVA

PROGRAM	
Control	PLC (Network)
Self-Test Mode	Automatic
Printer Outputs	Built-in Thermal Printer
Data Storage	SD Memory Card / LAN / USB

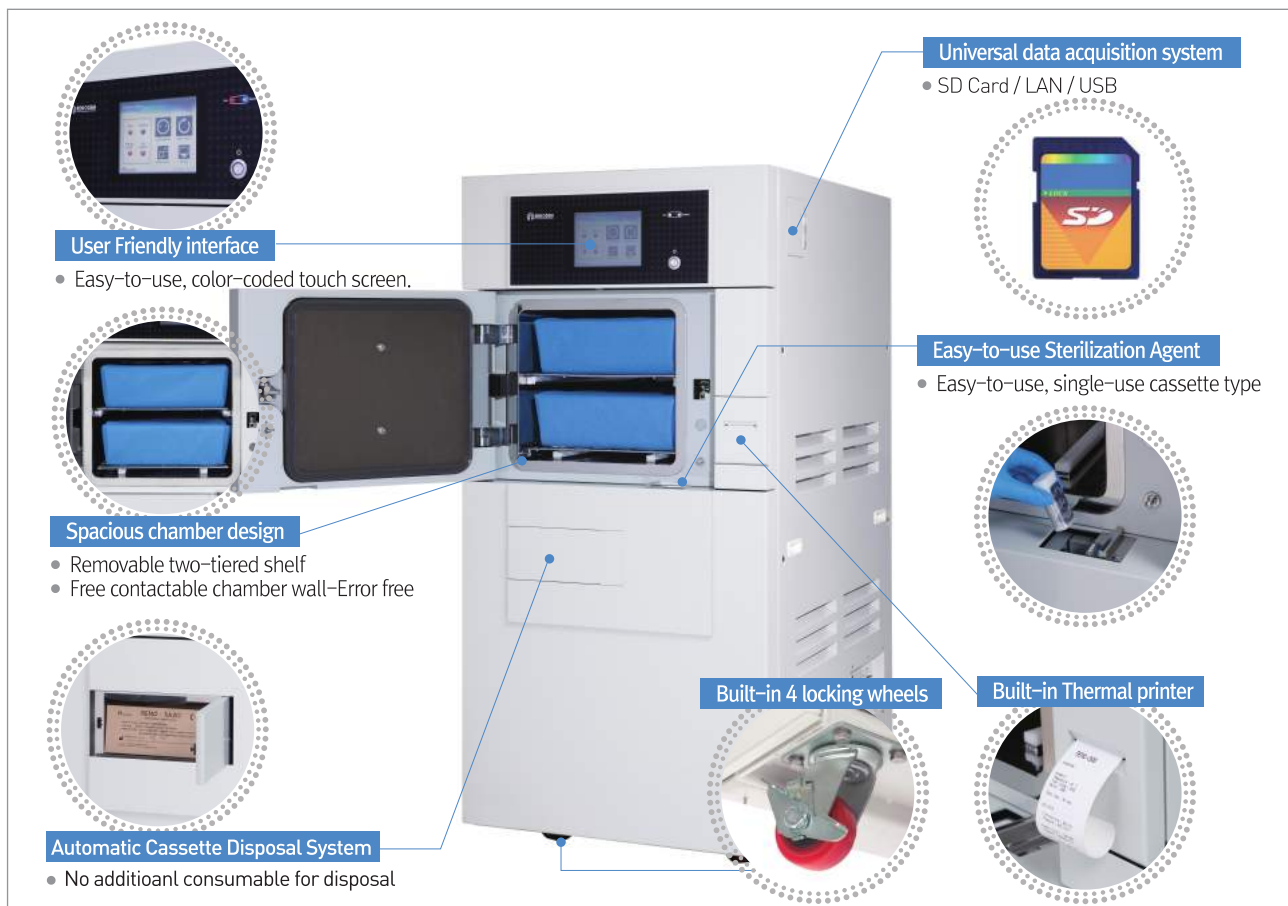
DISPLAY	
Screen	Wide Touch Screen
Alarm	Audible & Visible Alarm

MOBILITY	
Mobile wheels or Cart	Built-in 4 locking wheels

AIR INLET BACTERIA RETENTION FILTER	
HEFA Filter	99.97% Efficiency at 0.3 micron(0.3×10 ⁻⁶)

REGULATORY APPROVALS	
	CE / ISO 13485 / ISO 9001

OPERATIONAL ENVIRONMENT	
Temperature	15 ~ 40°C
Humidity	5°C~30°C/ below 80%, 3 ℃~40°C/ below 50%



RENO Plasma Sterilizer

More Effective



RENO-S130

Ideal for Large-sized hospital needed optimal efficiency with its large chamber volume.

RENO-S130

More Effective Sterilization

>> Specification

TOTAL CYCLE TIME	
Non-Lumen Cycle	About 28min.
Eco Cycle	About 45min.
Advanced Cycle	About 62min.

PROCESSING TEMPERATURE	
	Below 55°C

DIMENSIONS & WEIGHT	
Dimensions	1,547(H)×778(W)×1,120(D)mm
Weight	440Kg

STERILIZATION CHAMBER	
Configuration	Rectangular
Total Volume	131.4L, 400(H)×450(W)×730(D)mm
Shelf	Removable Two-tiered Shelf
Material	Stainless Steel

DOOR	
Door Type	Single Door
Door Control	Manual

STERILANT	
Liquid Chemical Agent	Hydrogen Peroxide
Concentration & Usage	10ml (50%), 1 Cycle / Cassette

CONNECTION	
Electricity	230V~, Single Phase, 50/60Hz or 200V Single Phase, 50/60Hz
Power Consumption	3 KVA

PROGRAM	
Control	Micro Processor
Self-Test Mode	Automatic
Printer Outputs	Built-in Thermal Printer
Data Storage	Memory Card

DISPLAY	
Screen	Wide Touch Screen
Alarm	Audible & Visible Alarm

MOBILITY	
Mobile wheels or Cart	Built-in 4 locking wheels

AIR INLET BACTERIA RETENTION FILTER	
HEFA Filter	99.97% Efficiency at 0.3 micron(0.3×10 ⁻⁶)

REGULATORY APPROVALS	
	CE / ISO 13485 / ISO 9001

OPERATIONAL ENVIRONMENT	
Temperature	15 ~ 40°C
Humidity	5°C~30°C/ below 80%, 31°C~40°C/ below 50%



RENO Plasma Sterilizer

More Advanced



RENO-S130D

Advanced plasma technology and versatility to meet your growing sterilization needs.

Double Door System

RENO-S130D

More Advanced Sterilization

>> Specification

TOTAL CYCLE TIME	
Non-Lumen Cycle	About 28min.
Eco Cycle	About 45min.
Advanced Cycle	About 62min.

PROCESSING TEMPERATURE	
	Below 55°C

DIMENSIONS & WEIGHT	
Dimensions	1,760(H) × 1,040(W) × 1,060(D)mm
Weight	640Kg

STERILIZATION CHAMBER	
Configuration	Rectangular
Total Volume	131.4L, 400(H) × 450(W) × 730(D)mm
Shelf	Removable Two-tiered Shelf
Material	Stainless Steel

DOOR	
Door Type	Double Door (Pass-through, Vertical Sliding Door)
Door Control	by Foot sensor switch & Touch screen.

STERILANT	
Liquid Chemical Agent	Hydrogen Peroxide
Concentration & Usage	10ml (50%), 1 Cycle / Cassette

CONNECTION	
Electricity	400V, 3 Phase, 50Hz or 200V, 3 Phase, 50/60Hz
Power Consumption	4 KVA

PROGRAM	
Control	PLC
Self-Test Mode	Automatic
Printer Outputs	Built-in Thermal Printer
Data Storage	Memory Card / Network

DISPLAY	
Screen	8.4" Wide Touch Screen, 2EA (Both sides)
Alarm	Audible & Visible Alarm

MOBILITY	
Mobile wheels or Cart	Built-in 4 locking wheels

AIR INLET BACTERIA RETENTION FILTER	
HEFA Filter	99.97% Efficiency at 0.3 micron(0.3 × 10 ⁻⁶)

REGULATORY APPROVALS	
	CE / ISO 13485 / ISO 9001

OPERATIONAL ENVIRONMENT	
Temperature	15 ~ 40°C
Humidity	5°C~30°C/ below 80%, 31°C~40°C/ below 50%

User Friendly interface

- Easy-to-use, color-coded touch screen (Both sides)

Spacious chamber design

- Removable two-tiered shelf
- Free contactable chamber wall—Error free

Built-in Thermal printer

Vertical Sliding Door System

Foot sensor switch

Easy-to-use Sterilization Agent

- Easy-to-use, single-use cassette type
- No required additional consumables for waste system.

Free standing or wall installation options

Universal data acquisition system

- Memory Card (CF, SD), USB, Ethernet

Consumables

Simple Convenience

RENO Sterilization Agent



RENO Sterilization Agent is designed for user's convenience & safety – Easy-to-use load and single-use cassette type.

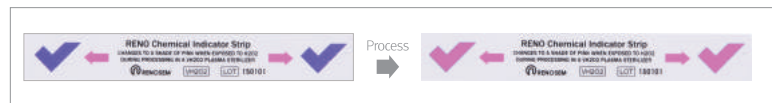
- **CHEMICAL** Hydrogen Peroxide (50%)
- **USAGE** 1 Cycle / Cassette
- **SHELF LIFE** 12 months
- **STORAGE** 5~30°C
- **PACKAGING** RENO-S20/S30/D50 - 20 cassettes / Box
RENO-S90/S130/S130D - 15 cassettes / Box

Chemical indicator Strip



Place inside the instrument package to monitor that the instrument has been exposed appropriately by hydrogen peroxide gas. The chemical indicator turn from BLUE(PURPLE) to PINK after exposure to vapor hydrogen peroxide.

- **SHELF LIFE** by 2 years after date of manufacture
- **STORAGE** Room Temperature (15~30°C) under dry condition. Keep away from high temperature, high humidity, sterilizing agents and direct sunlight.
- **PACKAGING** 250ea/Pack



Chemical indicator Tape



External chemical indicator tape that gives the sterilizer operator assurance that each pack or item has been exposed to the sterilization process. The chemical indicator changes from BLUE to PINK when exposed to vapor hydrogen peroxide.

- **SHELF LIFE** by 2 years after date of manufacture
- **STORAGE** Room Temperature (15~30°C) under dry condition. Keep away from high temperature, high humidity, sterilizing agents and direct sunlight.
- **PACKAGING** 55m/Roll ; 5Rolls/Pack



RENO accessories

RENOSEM offers a full line of necessary accessories for the sterilization to run RENO Series at maximum productivity.

Biological Indicator



RENO SCBI (Self Contained Biological Indicator) is evidence for proper sterilization condition are achieved.

- **BACTERIAL SPORES** Geobacillus Stearothermophilus
- **SPORE POPULATION** 10⁸ Spores / Unit
- **24 hours incubation time for results**
- **SHELF LIFE** by 18 months from date of manufacture
- **STORAGE** Room Temperature (15–30°C) under dry condition. Keep away from freezing, sterilization agents, direct sunlight and UV lights. Do not refrigerate.
- **PACKAGING** 30EA/Box

Tyvek Pouch



A wide variety of Tyvek Pouch Roll with Chemical Indicator can meet every instruments need as well as maximum value and quality.

- **SEALING TEMPERATURE** 115°C ~ 130°C.
- **MATERIALS**
 - Front : Polyethylene + Polyester
 - Rear : Tyvek
- **SIZE**
 - Width – 75mm, 100mm, 150mm, 200mm, 250mm, 300mm, 400mm
 - Length – 70m

B/I Incubator



Designed to incubate biological indicator.

- **INCUBATING TEMPERATURE** 56°C ~ 58°C.
- **INCUBATING TIME** 24 hours
- **ELECTRICITY** 110~220V, 50~60Hz

Instrument Tray



Trays offer the ultimate in protection for your valuable instruments with durable materials.

Printer Paper



Used for printing sterilization information in Reno-series sterilizer. Not required the additional ink.

- **STORAGE** Room Temperature (15–30°C) under dry condition. Keep away from direct sunlight and UV lights.
- **PACKAGING** 5Rolls/Pack



www.renosem.com

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