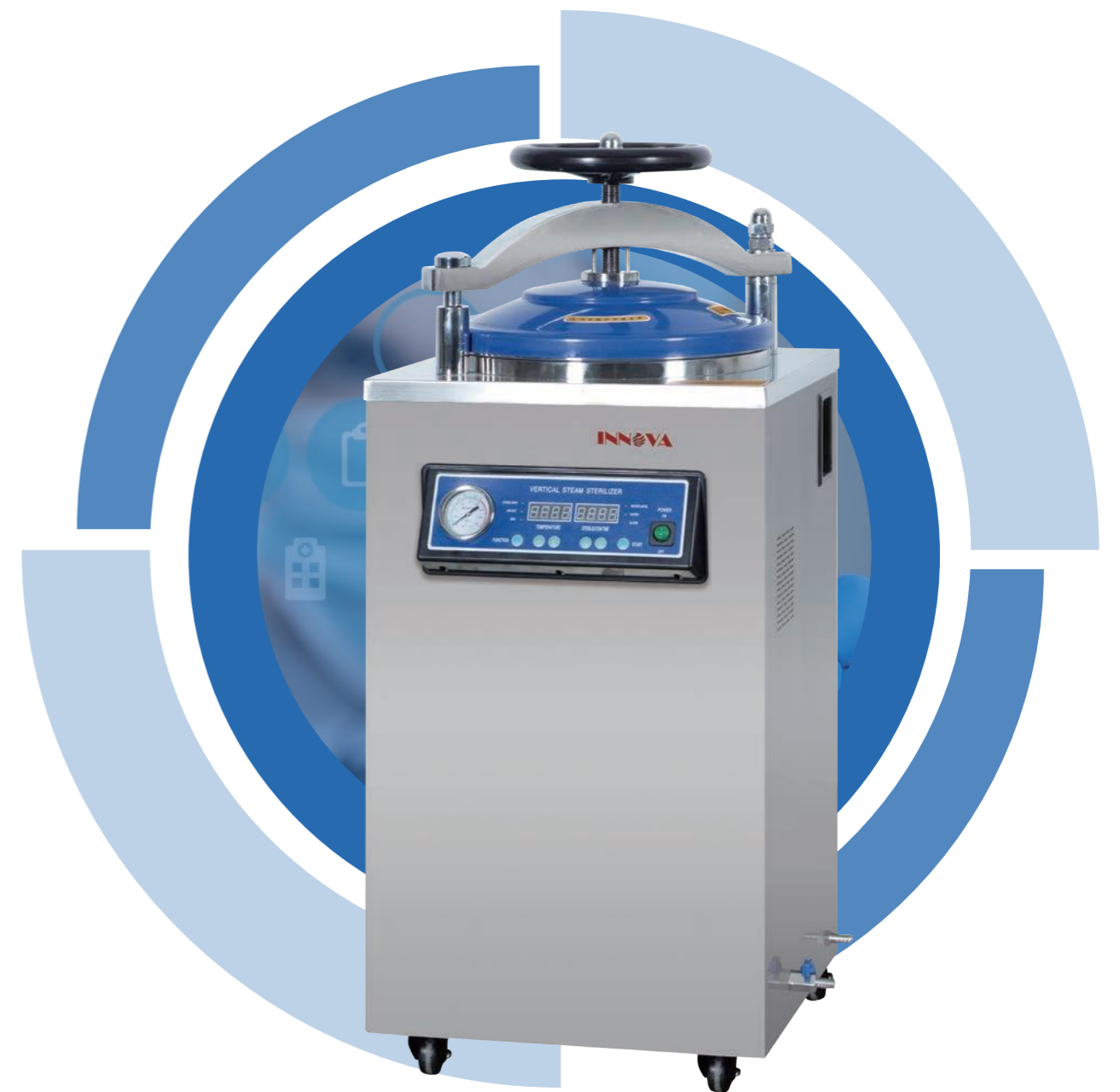


# Autoclave & Sterilizer



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# About us



**Innova Bio-Meditech** is one of the leading global providers of laboratory and medical devices. Firmly committed to our mission of “sharing innovative bio-meditech solutions with the world”, we are dedicated to innovation in the fields of Biology Project, Life Science, Pharmacy Industry and Medical Treatment.

**Innova Bio-Meditech** possesses a sound distribution and service network with business partners in North and Latin America, Europe, Africa and Asia-Pacific etc. We have built up a well established R&D, manufacture network with 3 centers in Beijing, Qingdao, and Shanghai. Inspired by the needs of our customers, we adopt advanced technologies and transform them into accessible innovation. This means constant effort and research, in order to more fully understand the developments of the market, produce constantly upgraded product ranges by adding new products year after year.

*The passion for science*

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## Basic principle

Steam sterilizer is a high pressure vessel aim to sterilize liquids or devices by high pressure to increase the boiling point of water to more than 100 °C.

## Application

Steam sterilizer is an instrument using pressure saturated steam for rapid and reliable disinfection and sterilization. Ideal for medical and health institutions, scientific research, agriculture fields for disinfection and sterilization of medical devices, dressings, glassware, solution culture medium etc.

### Sterilizer for laboratory



INOL-X



INOLS-M

### Sterilizer for production



INOPS-200D(S)(M)



INOY-150D(S)(M)

## Horizontal steam sterilizer



Pulsating vacuum sterilizer is strictly designed and manufactured in accord with GMP technical Standard. It has passed ISO9001 quality management qualification standard and ISO13485:2003 Certificate of Quality Management System for Medical Devices.

The relevant data can be saved and printed automatically. Horizontal steam sterilizer is suitable for hospital, scientific research institute and other units to sterilize aseptic clothes, tools, culture medium, etc.

# INOPS series

## Features

- Horizontal square inner chamber + jacket structure, safety, heat preservation, and drying function.
- Disc type embedded gear + Electric lock door structure, safety and reliable.
- Door seals are pneumatic or self-expanding.
- Equipped with standard equipment verification interface.
- Pipeline system for the optimal design, SUS304 pipeline, clamp structure, quick assembly.
- FO value and temperature time double guarantee sterilization effect, with perfect sterilization records.
- With program selection, parameter setting, equipment operation, report processing and traceability functions.
- Three levels of authority management.
- Multiple safety protection (over-temperature, over-pressure protect).
- Sterilization process: fabric, equipment, liquid, BD, pressure testing, custom defined multiple procedures.



## Technical parameters

Modle	INOPS-150D (S)(M)	INOPS-200D (S)(M)	INOPS-300D (S)(M)	INOPS-400D (S)(M)	INOPS-600D (S)(M)	INOPS-800D (S)(M)	INOPS-1000D (S)(M)	INOPS-1200D (S)(M)	INOPS-1500D (S)(M)
Volume	150L	200L	250L	360L	600L	800L	1000L	1200L	1500L
Power (kW)	2+18	2+18	2+24	2+24	3+36	3.5+45	3.5	4.5	4.5
Voltage	Three-phase five-wire AC 380V, 50Hz								
Design pressure	-0.1~0.3Mpa								
Design temperature	144 C								
Rated working pressure	0.245Mpa								
Working temperature	105-138 C								
Vacuum	-0.086Mpa								
Temperature equilibrium	<+2.0 C								
Water pressure	0.1-0.2Mpa								
Compressed air pressure	0.4~0.7Mpa								
Steam pressure	0.3-0.7Mpa								
Cycle time per batch	About 40-70 minutes								
Overall dimensions (LxWxH)(mm)	950x1120 x1760	1175x1120 x1760	1030x1300 x1900	1250x1300 x1900	1440x1310 x1900	1700x1310 x1900	1500x1440 x1950	1700x1440 x1950	2100x1440 x1950
Chamber size (LxWxH)(mm)	700x450 x480	450x480 x925	600x600 x780	600x600 x1000	610x910 x1190	610x910 x1450	680x1180 x1250	680x1180 x1450	680x1180 x1850
Steam consumption (kg)	≤14	≤16	≤18	≤25	≤30	≤35	≤42	≤50	≤60
Water consumption (kg)	≤190	≤190	≤200	≤200	≤210	≤220	≤200	≤200	≤200
Net weigh single/Double door (kg)	700/750	830/880	980/1050	1080/1150	1150/1250	1200/1300	380/1500	1530/1650	1680/1800

### Note:

1. For examples 2 + 18 the first 2 is the power of the system, and the 18 is the power of the built-in steam generator. But the steam generator is optional.
2. Model "D" means single door, "S" means double, "M" means pulsation vacuum.

## Configuration list

Application	Asepsis clothes, tools, culture medium	
Main process	Bowie dick cycle	
	Chamber leak test cycle	
	Sterilizing program for textiles and tools: (Loading → Preheating → Chamber vacuumize → Heating → Sterilizing → Drying → End)	
	Sterilizing program for liquid medium: (Loading → Preheating → Heating → Sterilizing → Slowly discharge and cooling → End)	
Main process	China standard GB150 pressure vessel	
Chamber	Material	SS304
	Inner surface finish	0.4μm
	Door	Double door automatic
	Seal	High quality silicone seal ring, temperature resistant 250 C, airtight seal
Jacket	Material	SS304
	Heat insulation materials and thickness	Aluminum silicate, T=30mm
	Wrapper materials	Aluminum sheets
Piping system	Vacuum pump	Water ring, low noise, high vacuum, easy maintenance
	Air filter	≤ um 0.22 Aseptic level filtration
	Pump	Low flow, high lift
	Pressure gauges	Class 1.6, stainless steel dial
	Solenoid valve	Reliable action, long life
Control system	Touch screen	Human-machine interactive program selection, parameter setting, easy operation
	Printers	Output of sterilization report
	Temperature sensor	High precision temperature conversion
	Pressure sensor	High precision temperature conversion
Others	Sterilization rack	SUS304 stainless steel, beautiful and durable
	Steam generator	Self-produced saturated steam, built-in steam generator
	Outer panel	Carbon steel spray, beautiful and generous

# INOY series



## Features

- Horizontal circular inner chamber + jacket structure, safety, heat preservation, and drying function.
- Disc type embedded gear + Electric lock door structure, safety and reliable.
- Door seals are pneumatic or self-expanding.
- Equipped with standard equipment verification interface.
- Pipeline system for the optimal design, SUS304 pipeline, clamp structure, quick assembly.
- Control system: HMI man-machine interface, touch screen + microcomputer.
- FO value and temperature time double guarantee sterilization effect, with perfect sterilization records.
- With program selection, parameter setting, equipment operation, report processing and traceability functions.
- Multiple safety protection (over-temperature, over-pressure protect).
- Sterilization process: fabric, equipment, liquid, BD, pressure testing, custom defined multiple procedures.

## Technical parameters (With Pulse Vacuum)

Application	INOY-100D(S)(M)	INOY-150D(S)(M)	INOY-200D(S)(M)	INOY-300D(S)(M)	INOY-400D(S)(M)
Volume	100L	150L	200L	300L	400L
Power (kW)	2+12	2+15	2+15	2+18	2+18
Voltage	Three-phase five-wire AC 380V, 50Hz				
Design pressure	-0.1~0.3Mpa				
Design temperature	144 °C				
Rated working pressure	0.245Mpa				
Working temperature	105-138 °C				
Vacuum	-0.086Mpa				
Temperature equilibrium	<+2.0 °C				
Water pressure	0.1-0.2Mpa				
Compressed air pressure	0.4~0.7Mpa				
Steam pressure	0.3-0.7Mpa				
Cycle time per batch	About 40-70 minutes				
Overall dimensions (LxWxH)(mm)	1160x650x1680	1290x690x1680	1560x690x1680	1430x850x1760	1755x850x1760
Chamber size (LxWxH)(mm)	Ø420x750	Ø472x880	Ø472x1150	Ø620x995	Ø620x1320
Steam consumption (kg)	≤11	≤13	≤15	≤20	≤25
Water consumption (kg)	≤190	≤190	≤190	≤200	≤200
Net weigh single/Double door (kg)	280/310	370/410	400/440	480/530	540/590

## Technical parameters (Without Pulse Vacuum)

Model	INOY-100D(S)	INOY-150D(S)	INOY-200D(S)	INOY-300D(S)	INOY-400D(S)
Volume	100L	150L	200L	300L	400L
Power (kW)	2+9	2+12	2+12	2+15	2+15
Voltage	Three-phase five-wire AC 380V, 50Hz				
Design pressure	-0.1~0.3Mpa				
Design temperature	144 °C				
Rated working pressure	0.245Mpa				
Working temperature	105-138 °C				
Vacuum	-0.086Mpa				
Temperature equilibrium	<+2.0 °C				
Water pressure	0.1-0.2Mpa				
Compressed air pressure	0.4~0.7Mpa				
Steam pressure	0.3-0.7Mpa				
Cycle time per batch	About 40-70 minutes				
Overall dimensions (LxWxH)(mm)	1160x650x1680	1290x690x1680	1560x690x1680	1430x850x1760	1755x850x1760
Chamber size (LxWxH)(mm)	Ø420x750	Ø472x880	Ø472x1150	Ø620x995	Ø620x1320
Steam consumption (kg)	≤10	≤12	≤13	≤18	≤22
Water consumption (kg)	≤30	≤30	≤30	≤40	≤40
Net weigh (kg)	250	350	370	450	510

Configuration list

<b>Application</b>		Asepsis clothes, tools, culture medium
<b>Main process</b>		Bowie Dick cycle
		Chamber leak test cycle
		Sterilizing program for textiles and tools : (Loading→Preheating→Chamber vacuumize→Heating→Sterilizing→Drying →End)
		Sterilizing program for liquid medium : (Loading→Preheating→Heating→Sterilizing→Slowly discharge and cooling→End)
<b>Main process</b>		China standard GB150 pressure vessel
<b>Chamber</b>	Material	SS304
	Inner surface finish	0.4μm
	Door	Single door automatic
	Seal	High quality silicone seal ring, temperature resistant 250 C, airtight seal
<b>Jacket</b>	Material	Thickness:5mm, Q235B
	Heat insulation materials and thickness	Aluminum silicate, T=30mm
	Wrapper materials	Aluminum sheets
<b>Piping system</b>	Vacuum pump	Water ring, low noise, high vacuum, easy maintenance
	Air filter	≤ um 0.22 Aseptic level filtration
	Pump	Low flow, high lift
	Pressure gauges	Class 1.6, stainless steel dial
	Solenoid valve	Reliable action, long life
<b>Control system</b>	Touch screen	Human-machine interactive program selection, parameter setting, easy operation
	Printers	Output of sterilization report
	Temperature sensor	High precision temperature conversion
	Pressure sensor	High precision temperature conversion
<b>Others</b>	Sterilization rack	SUS304 stainless steel, beautiful and durable
	Steam generator	Self-produced saturated steam, built-in steam generator
	Outer panel	Carbon steel spray, beautiful and generous

# Vertical steam sterilizer

## Application

Vertical pressure steam sterilizer equipped with heating system, microcomputer controlled system, over heat and over pressure protection system, which are reliable for the sterilizing effects, convenient of operation and energy conservation. Ideal for clinics, scientific research institutes and other organizations to sterilizer surgical instruments, fabrics, glasses, culture medium etc.

# INOL-M

## Touch screen display (Three times pre-vacuum)

### Features

- Hand wheel translation and quick opening structure.
- Three times pre-vacuum and LED touch screen display.
- High quality stainless steel material, SS304 (SS316 extra charge).
- Microcomputer automatic control, arbitrary setting sterilization parameters.
- Safety interlocking device, standard test interface and self-expanding seal.
- With drying function.
- With automatic protection function: over temperature protection; over pressure self discharge protection; low water level protection.
- With stainless steel bucket or basket.
- External steam generator.
- Buzzer reminder after sterilization, automatic stop.
- Automatic discharge of cold air, automatic steam exhaust after sterilization.
- With internal printer.



### Technical parameters (With Pulse Vacuum)

Model	INOL-35M	INOL-50M	INOL-75M	INOL-100M
Volume	35L	50L	75L	100L
Power	3.5kW	3.5kW	4.5kW	4.5kW
Voltage	AC 220V, 50Hz			
Design pressure	0.25Mpa			
Design temperature	139 C			
Rated working pressure	0.22Mpa			
Rated working temperature	134 C			
Sterilization temperature	116 C ~134 C			
Sterilization time setting range	4~120min			
Drying time setting range	0~240min			
Chamber volume	Ø350×400	Ø400×505	Ø400×655	Ø450×650
Bucket dimension	Ø330×320	Ø380×430	Ø380×560	Ø420×540
Basket dimension (optional)	Ø320×350	Ø360×280×1	Ø360×280×2	Ø410×300×2
Outer dimension	698×498×940	630×500×1180	725×525×1170	760×560×1260
Packing size (L× W× H)(mm)	790×610×1130	800×600×1230	840×610×1310	870×650×1380
Gross/net weight (kg)	130/115	138/118	150/124	159/132

# INOL-X

## Multi-function automatic internal cycle drying

### Features

- Hand wheel translation and quick opening structure.
- Internal steam cycle.
- High quality stainless steel material, SS304 (SS316 extra charge).
- With drying function.
- Microcomputer automatic control, arbitrary setting sterilization parameters.
- Safety interlocking device.
- Digital display and Touch buttons.
- Standard test interface.
- Self-expanding seal.
- With automatic protection function: over temperature protection; over pressure self discharge protection; low water level protection; anti dry burning.
- With stainless steel bucket or basket.
- Buzzer reminder after sterilization, automatic stop.
- Automatic discharge of cold air, automatic steam exhaust after sterilization.
- \* Optional external printer \* Optional automatic water



### Technical parameters

Model	INOL-35X	INOL-50X	INOL-75X	INOL-100X
Volume	35L	50L	75L	100L
Power	3.5kW	3.5kW	4.5kW	4.5kW
Voltage	AC 220V, 50Hz			
Design pressure	0.25Mpa			
Design temperature	139 C			
Rated working pressure	0.22Mpa			
Rated working temperature	134 C			
Sterilization temperature	116 C ~134 C			
Sterilization time setting range	4~120min			
Drying time setting range	0~240min			
Chamber volume	Ø350×400	Ø350×525	Ø400×655	Ø450×650
Bucket dimension	Ø330×320	Ø330×460	Ø380×560	Ø420×540
Basket dimension (optional)	Ø320×350	Ø320×240×2	Ø360×280×2	Ø410×300×2
Outer dimension	698×498×940	630×500×1180	725×525×1170	788×588×1255
Packing size (L× W× H)(mm)	790×610×1130	800×600×1230	840×610×1310	870×650×1380
Gross/net weight (kg)	125/110	130/112	145/114	156/129

# INOL-G

## Multifunctional automatic with drying

### Features

- Hand wheel translation and quick opening structure.
- High quality stainless steel material, SS304 (SS316 extra charge).
- Microcomputer automatic control, arbitrary setting sterilization parameters.
- Safety interlocking device.
- Digital display and touch buttons.
- Standard test interface.
- Self-expanding seal.
- With drying function.
- With automatic protection function: over temperature protection.
- Over pressure protection; low water level protection; anti dry burning.
- With stainless steel bucket or basket.
- Buzzer reminder after sterilization, automatic stop.
- Automatic discharge of cold air automatic steam exhaust after sterilization.

\*Optional external printer



### Technical parameters

Modle	INOL-35G	INOL-50G	INOL-75G	INOL-100G
Volume	35L	50L	75L	100L
Power	3.5kW	3.5kW	4.5kW	4.5kW
Voltage	AC 220V, 50Hz			
Design pressure	0.25Mpa			
Design temperature	139 °C			
Rated working pressure	0.22Mpa			
Rated working temperature	134 °C			
Sterilization temperature	116 °C~134 °C			
Sterilization time setting range	4~120min			
Drying time setting range	0~240min			
Chamber volume	Ø350×400	Ø350×525	Ø400×655	Ø450×650
Bucket dimension	Ø330×320	Ø330×460	Ø380×560	Ø420×540
Basket dimension (optional)	Ø320×350	Ø320×240×2	Ø360×280×2	Ø410×300×2
Outer dimension	698×498×940	630×500×1180	725×525×1170	788×588×1255
Packing size (L×W×H)(mm)	790×610×1130	800×600×1230	840×610×1310	870×650×1380
Gross/net weight (kg)	125/110	130/112	145/114	156/129

# INOL-B

## Digital display automatic type

### Features

- Hand wheel translation and quick opening structure.
- High quality stainless steel material, SS304 (SS316 extra charge).
- Microcomputer automatic control, arbitrary setting sterilization parameters.
- Safety interlocking device.
- Digital display and Touch buttons.
- Standard test interface.
- Self-expanding seal.
- With automatic protection function:over temperature protection; over pressure self discharge protection; low water level protection; anti dry burning.
- With stainless steel bucket or basket.
- Buzzer reminder after sterilization, automatic stop.
- Automatic discharge of cold air,automatic steam exhaust after sterilization.

\*Optional external printer



### Technical parameters

Modle	INOL-35B	INOL-50B	INOL-75B	INOL-100B
Volume	35L	50L	75L	100L
Power	3.5kW	3.5kW	4.5kW	4.5kW
Voltage	AC 220V, 50Hz			
Design pressure	0.25Mpa			
Design temperature	139 °C			
Rated working pressure	0.22Mpa			
Rated working temperature	134 °C			
Sterilization temperature	116 °C~134 °C			
Sterilization time setting range	4~120min			
Chamber volume	Ø350×400	Ø350×525	Ø400×655	Ø450×650
Bucket dimension	Ø330×320	Ø330×460	Ø380×560	Ø420×540
Basket dimension (optional)	Ø320×350	Ø320×240×2	Ø360×280×2	Ø410×300×2
Outer dimension	480×480×1000	480×480×1120	525×525×1190	550×550×1250
Packing size (L×W×H)(mm)	580×630×1130	580×630×1230	630×680×1290	690×650×1410
Gross/net weight (kg)	79/58	106/80	120/90	133/106



# INOLS-B

## Digital display automatic type

### Features

- Bolt structure.
- High quality stainless steel material, SS304 (SS316 extra charge).
- Microcomputer automatic control, arbitrary set of sterilization parameters.
- Safety interlocking device.
- Digital display and touch buttons.
- Standard test interface.
- Self-expanding seal.
- The container with automatic protection function: over temperature protection; over pressure protection self discharge; low water level protection, anti dry burning.
- With stainless steel bucket or basket.
- Buzzer reminder after sterilization, automatic stop.
- Automatic cooling air, sterilization end automatic exhaust steam.

\*Optional external printer



### Technical parameters

Model	INOLS-35B	INOLS-50B	INOLS-75B	INOLS-100B	INOLS-120B	INOLS-150B
Volume	35L	50L	75L	100L	120L	150L
Power	3.5kW	3.5kW	4.5kW	4.5kW	4.5kW	6.0kW
Voltage	AC 220V, 50Hz					
Design pressure	0.25Mpa					
Design temperature	139 C					
Rated working pressure	0.22Mpa					
Rated working temperature	134 C					
Sterilization temperature	116 C~134 C					
Sterilization time setting range	4~120 min					
Drying time setting range	0~240min					
Chamber volume	Ø300×500	Ø350×525	Ø400×625	Ø450×650	Ø450×760	Ø500×780
Bucket dimension	Ø280×400	Ø330×480	Ø380×560	Ø420×540	Ø420×660	Ø470×720
Basket dimension (optional)	Not optional	Ø320×240×2	Ø360×280×2	Ø410×300×2	Ø410×350×2	Ø460×350×2
Outer dimension	400×400×860	480×480×960	525×525×1060	555×555×1080	555×599×1200	605×649×1210
Packing size (L×W×H)(mm)	550×500×1030	580×630×1100	630×680×1190	690×650×1230	690×650×1330	750×700×1370
Gross/net weight (kg)	58/41	75/53	82/61	103/78	108/82	116/90

# Portable pressure steam sterilizer

## Application

Portable pressure steam sterilizer uses pressurized saturated steam to sterilize such as medical devices, dressings, liquid medicine, glassware, etc. The utility model has good performance, simple operation, safety and reliability, easy to carry. Especially suitable for small medical treatment and laboratory.

# INOS-R

## Electric heating type (Regular)

### Features

- High quality stainless steel material, SS304 (SS316 extra charge).
- Simple operation, safe and reliable.
- Electric heating mode.
- Auto release when over pressure; low water level protection; Preventing dry burning.
- Double scale indication pressure gauge.



# INOS-GE

## Electric heating and coal gas heating type

### Features

- High quality stainless steel material, SS304 (SS316 extra charge).
- Microcomputer control, digital display, sterilization temperature and time can be adjusted.
- Auto release when over pressure.
- Double scale indication pressure gauge, clear to read.
- Self-inflating type seal, safe and reliable.
- Simple operation, safe and reliable.



# INOS-D

## Digital electric heating type

### Features

- High quality stainless steel material, SS304 (SS316 extra charge).
- Simple operation, safe and reliable.
- Electric and gas heating both use.
- Auto release when over pressure.
- Double scale indication pressure gauge.



### Technical parameters

Model	INOS-18R	INOS-24R	INOS-18D	INOS-24D	INOS-18GE	INOS-24GE
Volume	18L	24L	18L	24L	18L	24L
Power	2.0kW	2.0kW	2.0kW	2.0kW	2.0kW	2.0kW
Voltage	110V/220V, 60Hz/50Hz				AC220V, 50Hz	
Rated working pressure	0.142Mpa					
Rated working temperature	126 °C					
Chamber volume	Ø280×295	Ø280×390	Ø280×295	Ø280×390	Ø280×295	Ø280×390
Packing size (LxWxH)(mm)	410×410×560	410×410×680	410×410×560	410×410×680	410×410×430	410×410×540
Gross/net weight (kg)	17/16	19/17.5	18/17	19/17.5	15.5/14.5	17.5/15.8