



Yamato Sterilizers

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STERILIZER OVERVIEW

STEAM Sterilization
 DRY Sterilization

Compact



SK

Internal Capacity: 18, 24, 30L

- Economical, space saving
- Programmable
- Easy to read 4 digit LED display

Standard without dryer



SN

Internal Capacity: 32, 47L

- Ergonomically designed easy top loading
- Programmable / preset-programs for commonly used sample types
- Cooling fan to shorten cool down time

Large capacity without dryer



SQ

Internal Capacity: 50, 80L



SQL

Internal Capacity: 110L

- Ergonomically designed easy top loading
- Programmable / preset-programs for commonly used sample types
- Cooling fan to shorten cool down time

Standard with dryer



SM

Internal Capacity: 20, 32, 47L

- Programmable
- Pre-installed drying cycle
- Quick drying capability making samples ready to use right after sterilization

Large capacity with dryer



SM

Internal Capacity: 50, 80L

- Programmable with 7" interactive touch screen
- Fully automatic sterilization and drying
- 11L heat resistant stainless steel bottle

Large capacity dry sterilization



SK

Internal Capacity: 99, 162, 300L

- Dry heat sterilization through natural or forced convection
- Programmable: 99 patterns, 99 steps
- Temp. rising time to 260°C: ~60min.

Compact Laboratory Sterilizer



SK102C/112C/201C/211C/301C/311C

Operating temp. range 50°C to 126°C

Max. operational pressure 0.142 MPa

Internal capacity 18L (SK102C/112C) 24L (SK201C/211C) 30L (SK301C/311C)

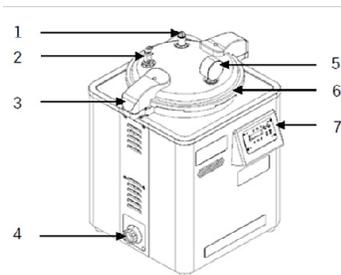
Space-saving, affordable compact sterilizer, ideal for research facilities

Easy to use

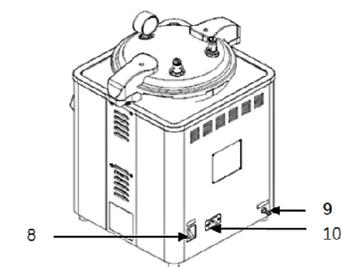
- Space-saving size - 18/24/30L
- Mobile on wheels
- Powerful 2000W pipe heater
- Easy to read 4 digit LED display
- Three Way Drain Valve eliminates air at the bottom of chamber during operation, and drains waste water after operation
- Programmable sterilizing and temperature functions
- Timer Setting Range 0 to 999 min.

Increased Safety Features

- Water level detection sensor with alarm
- Overheat protection sensor
- Lid closure sensor (interlock)
- Pressure lamp indicator



No.	Name
1	Safety valve
2	Vent valve
3	Handle (up/down)
4	Exhaust (drain) valve
5	Pressure gauge
6	Upper cover
7	Operation panel
8	Power switch
9	Exhaust (drain) port
10	Power interface



Specifications

Model	SK102C	SK112C	SK201C	SK211C	SK301C	SK311C
System	Automatic high pressure steam sterilizer					
Temp. setting range	50 to 126°C					
Max. operational pressure	0.142MPa (at 126°C)					
Interior Material	Stainless steel SUS 304					
Heater	2000W stainless steel heating pipe					
Drain valve	Glove valve					
Liquid level sensor	Float switch					
Temp. controller	PID control by microprocessor					
Temp. setting method	Digital setting by ▲/▼ keys					
Temp display method	Digital display by green LED					
Timer	0 min. to 999 min.					
Operation function	Fixed temperature operation procedure					
Safety Device	Water level detection (liquid expansion method), safety valve (0.165MPa), safety interlocking interactive device, spring full lift safety valve					
Internal dimensions	Φ280×H292		Φ280×H390		Φ280×H487	
External dimensions	W380×D380×H629 mm		W400×D410×H815 mm		W400×D410×H815 mm	
Internal capacity	18L		24L		30L	
Power source 50/60Hz no plug, round terminal	AC 115V 17A	AC 220V~230 9A~10A	AC 115V 17A	AC 220V~230 9A~10A	AC 115V 17A	AC 220V~230 9A~10A
Weight	~16.0 kg		~26.5 kg		~31.5 kg	
Included accessory	Rack 1 pc.					

* External dimension excludes protrusions.

Key Features



● Drain valve



● Control panel



● Pressure gauge

Rack



Product code	Dimension	Suitable models
A990201305	277 x 260 mm	SK102C/112C
A990201304	277 x 330 mm	SK201C/211C
A990201303	277 x 420 mm	SK301C/311C

Standard Laboratory Sterilizer



SN300C/310C/500C/510C

Operating temp. range 45°C to 135°C

Max. operating pressure 0.255MPa

Internal capacity 32L (SN300C/310C) / 47L (SN500C/510C)

High-performance, easy operation and ergonomically designed sterilizer featuring easy top loading and handling of samples



- Maximum sterilizing temperature goes up to 135°C suitable for protein modification
- By simple setting and operation, these sterilizers manage ordinary sterilization, sterilization of culture mediums and liquids, and melting of culture mediums
- Custom programs can be saved for repeated use
- Standard equipped with timer start and pre-heating features for efficient use of time and cooling fan to shorten cool down time
- Mobile on wheels

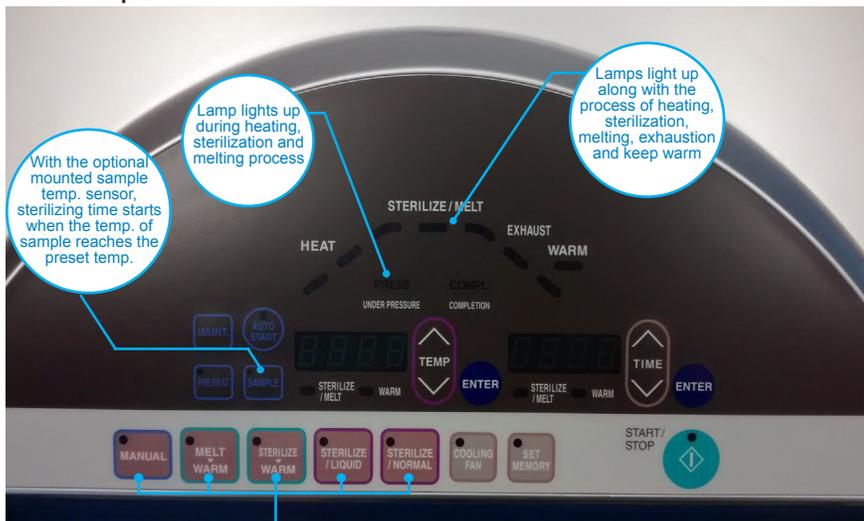
Enhanced safety device

- Lid interlock mechanism
- Drain bottle unset alarm
- Memory malfunction
- Automatic shutdown when malfunction
- Self-diagnostic functions

Specifications

Model	SN300C	SN310C	SN500C	SN510C
System	Automatic high-pressure steam sterilization			
Operating temperature range	45~135°C			
Max. working pressure	0.255MPa			
Ambient temperature	5~35°C			
Lid	Manual upward opening with an interlock for safety			
Heater	100V, 800W x 2 units		100V, 950W x 2 units	
Exhaust valve	One exhaust valve and one slow release valve			
Connection ports for optional accessories	Total 3 ports. Female thread for sample temp. sensor (1/4"), Female thread for chamber temp. sensor (1/4"), Female thread pressure sensor (branching from the solenoid valve tubing)			
Cooling fan	Axial fan motor			
Temp. controller	PID control by microprocessor			
Temp. display / setting	Digital display / digital setting by ▲/▼ keys			
Timer / Timer resolution	0 or 1 min. to 99 hrs 59 min. / 1 min.			
Operation mode	Instrument sterilization course, liquid sterilization course, sterilization and keep warm course, melting and keep warm course, customer-programmed course			
Other function	Key locking, presetting, saving, preheating, forced cooling, sample temperature sensor (option), pattern locking, up to 20 error log saving, display of accumulated working time / present time, ON-OFF beeping setting			
Safety device	Sensor failure detection, SSR short-circuit, broken heater wire, prevention of idle heating (liquid expansion type), alarm against the absence of a drain bottle, failure in locking the lid, memory error detection, pressure relief valve (0.255 MPa)			
External dimensions (WxDxHmm)	400 x 590 x 848		460 x 590 x 1058	
Internal dimensions of chamber	Φ300 x D445 mm		Φ300 x D665 mm	
Internal capacity	32L		47L	
Weight	~75kg		~85kg	
Power source	AC100~120V (15~12.5A) <i>no plug, round terminal</i>	AC200~240V (10~8.5A) <i>no plug, round terminal</i>	AC100~120V (23.5~19.5A) <i>no plug, round terminal</i>	AC200~240V (12~10A) <i>no plug, round terminal</i>
Accessories	2 pcs. stainless steel mesh basket (Φ274 x D200mm)		3 pcs. stainless steel mesh basket (Φ274 x D200mm)	
	Vapor cup x 1, Drain bottle x 1, Drain board x 1, Chemical indicator 1 set (30 pieces), Filter x 1			

Control panel



Choose a sterilization program

Sterilize/Normal Course	Sterilization of equipment such as flask, beaker, test tube, scissors
Sterilize/Liquid Course	Sterilization of culture and reagents and keep warm
Sterilize Warm Course	Dissolve and keep warm of the agar medium
Melt Warm Course	Sterilization of liquid, purified water and dilution water
Manual Course	Customized temperature and time settings

Standard Equipped with Cooling Fan & Slow Release Valve

- For decompression and prevention of liquid samples from bumping
- Cooling fan cool to a safe temperature after sterilization completes
- Shortens time before samples are taken out
- Natural cooling by OFF setting

Features

Support GLP / GMP Inspection



Standard equipped with 2 sensor ports on the main unit

Easy to drain out sterilizing water



Easier maintenance with larger diameter drain pipe

Sterilization starts automatically by sample temperature sensor



With the optional mounted sample temperature sensor, desired sample temperature can be precisely maintained to ensure thorough sterilization

Front Loading Drain Bottle



The drain bottle is located in front for easy access and drain water level can be monitored without opening the cabinet door

Optional items

Baskets with adjustable stainless steel perforated plate

Mesh baskets

Stainless solid baskets

Baskets with stacking fittings

- Stainless baskets

- Stainless buckets



Product code	Description	Corresponding models
H060101047	Mesh basket (Φ274 x D200mm)	SN300C/310C/500C/510C
241092	Mesh basket with stacking fittings	SN300C/310C, with two fittings
241091		SN500C/510C, with three fittings
241095	Mesh basket with adjustable stainless steel perforated plate	SN300C/310C, with 1 plate
241094		SN500C/510C, with 2 plates
241084	Stainless solid basket	SN300C/310C/500C/510C
241151	Stainless bucket	SN300C/310C/500C/510C
H060101110*	Chamber temp. sensor	Type T thermocouple, 3 pcs./set
H060101100*	Sample temp. sensor	Type T thermocouple, 1 pc.
Q110604013*	External output terminal	Temp. output, time-up output, alarm output

* Specify when ordering main unit

Large Capacity Laboratory Sterilizer



SQ500C/510C/810C

Operating temp. range 45°C to 135°C

Max. operating pressure 0.255MPa

Internal capacity 50L (SQ500C/510C) / 80L (SQ810C)

High-performance, easy operation and ergonomically designed sterilizer featuring easy top loading and handling of samples



50L
SQ510C

80L
SQ810C

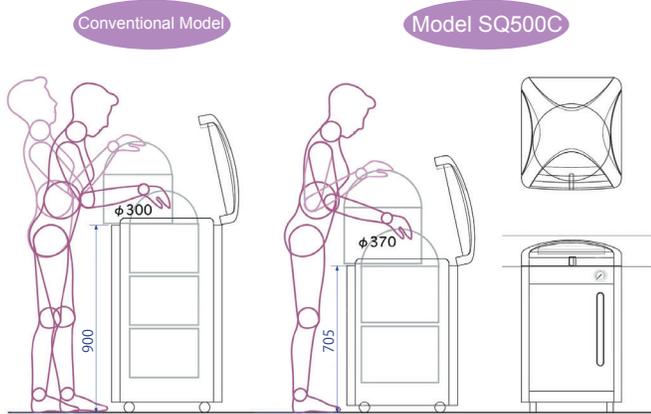
- Maximum sterilizing temperature goes up to 135°C suitable for protein modification
- By simple setting and operation, these sterilizers manage ordinary sterilization, sterilization of culture mediums and liquids, and melting of culture mediums
- Custom programs can be saved for repeated use
- Standard equipped with timer start and pre-heating features for efficient use of time and cooling fan to shorten cool down time
- Mobile on wheels
- Enhanced safety device
 - Lid interlock mechanism
 - Drain bottle unset alarm
 - Memory malfunction
 - Automatic shutdown when malfunction
 - Self-diagnostic functions

Specifications

Model	SQ500C	SQ510C	SQ810C
System	Automatic high-pressure steam sterilization		
Operating temperature range	45~135°C		
Max. working pressure	0.255MPa		
Ambient temperature	5~35°C		
Lid	Manual upward opening with an interlock for safety		
Heater	1000W x 2 units		
Exhaust valve	One exhaust valve and one slow release valve		
Connection ports for optional accessories	Total 3 ports. Female thread for sample temp. sensor (1/4"), Female thread for chamber temp. sensor (1/4"), Female thread pressure sensor (branching from the solenoid valve tubing)		
Cooling fan	Axial fan motor		
Temp. controller	PID control by microprocessor		
Temp. display / setting	Digital display / digital setting by ▲/▼ keys		
Timer / Timer resolution	0 or 1 min. to 99 hrs 59 min. / 1 minute		
Operation mode	Instrument sterilization course, liquid sterilization course, sterilization and keep warm course, melting and keep warm course, customer-programmed course		
Other functions	Key locking, presetting, saving, preheating, forced cooling, sample temperature sensor (option), pattern locking, up to 20 error log saving, display of accumulated working time / present time, ON-OFF beeping setting		
Safety device	Sensor failure detection, SSR short-circuit, broken heater wire, prevention of idle heating (liquid expansion type), alarm against the absence of a drain bottle, failure in locking the lid, memory error detection, pressure relief valve (0.255 MPa)		
External dimensions (WxDxHmm)	520 x 660 x 881		520 x 660 x 1161
Internal dimensions of chamber	I.D.370 x D470 mm		I.D.370 x D750 mm
Internal capacity	50L		80L
Weight	~95kg		~105kg
Power source	AC100~120V (24.5~20.5A) <i>no plug, round terminal</i>	AC200~240V (12.5~10.5A) <i>no plug, round terminal</i>	AC200~240V (12.5~10.5A) <i>no plug, round terminal</i>
Accessories	2 pcs. stainless steel mesh basket (Φ344 x D200mm)		2 pcs. stainless steel mesh basket (Φ344 x D300mm)
	Vapor cup x 1, Drain bottle x 1, Drain board x 1, Chemical indicator 1 set (30 pieces), Filter x 1		

Low Height Sterilizers

SQ500C(low height type)



Control panel



With the optional mounted sample temp. sensor, sterilizing time starts when the temp. of sample reaches the preset temp.

Sterilize/Normal Course	Sterilization of equipment such as flask, beaker, test tube, scissors
Sterilize/Liquid Course	Sterilization of culture and reagents and keep warm
Sterilize Warm Course	Dissolve and keep warm of the agar medium
Melt Warm Course	Sterilization of liquid, purified water and dilution water
Manual Course	Customized temperature and time settings

Optional items

Stainless baskets

Mesh baskets



H060101048



H060103033

Baskets with stacking fittings



241090

Stainless buckets



Product code	Description
H060101048	Mesh basket for SQ500C/510C (Φ344 x D200mm)
H060103033	Mesh basket for SQ810C (Φ344 x D300mm)
241090	Mesh basket with 2 stacking fittings
241097	Mesh basket with 1 adjustable stainless steel perforated plate
241152	Stainless bucket
H060101110*	Chamber temp. sensor (Type T thermocouple, 3 pcs./set)
H060101100*	Sample temp. sensor (Type T thermocouple, 1 pc.)
Q110604013*	External output terminal (Temp. output, time-up output, alarm output)

* Specify when ordering main unit

Large Capacity Laboratory Sterilizer



SQL1010C

Operating temp. range 45°C to 135°C

Max. operating pressure 0.26 MPa

Internal capacity 110L

High-performance, easy operation and ergonomically designed sterilizer featuring easy top loading and handling of samples



110L

- Maximum sterilizing temperature goes up to 135°C suitable for protein modification
- By simple setting and operation, these sterilizers manage ordinary sterilization, sterilization of culture mediums and liquids, and melting of culture mediums
- Custom programs can be saved for repeated use
- Standard equipped with timer start and preheating features for efficient use of time and cooling fan to shorten cool down time
- Mobile on wheels
- Enhanced safety device
 - Lid interlock mechanism
 - Drain bottle unset alarm
 - Memory malfunction
 - Automatic shutdown when malfunction
 - Self-diagnostic functions

Specifications

Model	SQL1010C
System	Automatic high-pressure steam sterilization
Operating temperature range	45 ~135°C 45 ~80°C (pre-heating) / 45 ~ 60°C (heat retention) / 65 ~100°C (melting) / 105 ~135°C (sterilization)
Max. working pressure	0.255 MPa
Lid (cover mechanism)	Manual upward opening with an interlock for safety
Heater	2000W x 2 pcs.
Exhaust valve	One exhaust valve and one slow release valve
Option port	For sample sensor (1/4), recorder (1/4) and connection to pressure gauge (branched from the electromagnetic exhaust duct)
Cooling fan	Axial fan motor
Temp. controller	PID control by microprocessor
Temp. display / setting	Digital display / digital setting by ▲/▼ keys
Timer / Timer resolution	0 or 1 min. to 99 hrs 59 min. / 1 minute
Operation mode	Instrument sterilization course, liquid sterilization course, sterilization and keep warm course, melting and keep warm course, customer-programmed course
Other functions	Key locking, presetting, saving, preheating, forced cooling, sample temperature sensor (option), pattern locking, up to 20 error log saving, display of accumulated working time / present time, ON-OFF beeping setting
Safety device	Sensor failure detection, SSR short-circuit, broken heater wire, prevention of idle heating (liquid expansion type), alarm against the absence of a drain bottle, failure in locking the lid, memory error detection, pressure relief valve (0.255 MPa)
External dimensions (WxDxH)*	680 x 760 x 1154 mm
Internal dimensions of chamber	I.D.450 x 692 mm
Internal capacity	110L
Weight	~170kg
Power source	AC220V 19A no plug, round terminal
Included accessories	2 pcs. stainless steel mesh basket (Φ424 x H300 mm) Vapor cup x 1, Drain bottle x 1, Drain board x 1, Filter x 1

* External dimensions exclude protrusions

Control panel



Sterilize/Normal Course	Sterilization of equipment such as flask, beaker, test tube, scissors
Sterilize/Liquid Course	Sterilization of culture and reagents and keep warm
Sterilize Warm Course	Dissolve and keep warm of the agar medium
Melt Warm Course	Sterilization of liquid, purified water and dilution water
Manual Course	Customized temperature and time settings

Optional item

Mesh basket



Product code	Description
H060602006	Mesh basket $\Phi 424 \times H300$

Standard Laboratory Sterilizer with Dryer



SM201/211/301/311/501/511

Operating temp. range	105~123°C (SM201/211) 105~128°C (SM301/311/501/511)	Max. operation pressure	0.18MPa (SM201/211) 0.2MPa (SM301/311/501/511)	Internal capacity	20L (SM201/211)	32L (SM301/311)	47L (SM501/511)
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High performance, fully automatic sterilization from start to finish with high pressure steam sterilization and drying steps



- Automatic operations from sterilization to drying carried out with an interactive key input system
- Quick sample drying capability makes samples ready to use right after sterilization
- Drying temperature can be set according to sample material, quantity, etc.
- Timer range from 1~999 hours
- Drain bottle water level can be quickly confirmed on the front panel level indicator
- Drain valve located in front for easy access
- Absence of protrusions in sterilization chamber makes insertion & removal of baskets, and other items quick and easy
- Self-diagnostic functions make operation safer and error recovery quicker
- Condensation collector neutralizes high temperature exhaust steam safely

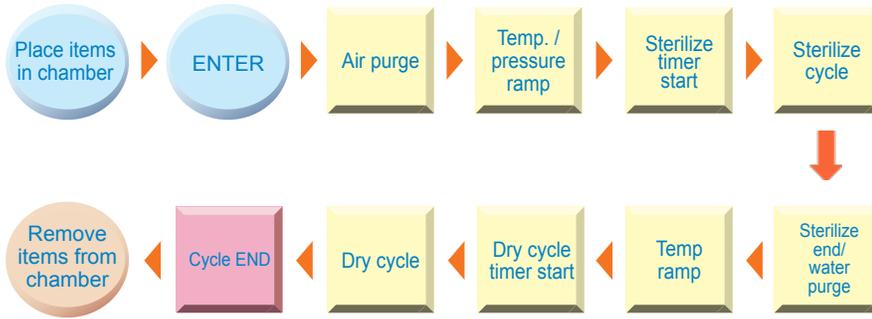
Specifications

Model	SM201	SM211	SM301	SM311	SM501	SM511
System	Automatic high pressure steam sterilization					
Operating temperature	Sterilization	105 to 123°C		105 to 128°C		
	Drying	150 to 180°C				
Maximum pressure capacity	0.18MPa			0.2MPa		
Interior	Stainless steel					
Heater	Sterilization	1.3kW		1.7kW		2.0kW
	Drying	1.0kW				
Temp. controller	PID control by microprocessor					
Temp. display	Digital display by green LED and setting via ▲/▼ keys					
Timer / Timer resolution	1 min. ~ 99 hrs. and 59 min. 100~ 999 hrs. / 1 min. or 1 hr.					
Safety Device	Self-diagnostic functions (detection sensor error, SSR short circuit, heater disconnect, faulty main relay, dry operation), safety valve, electric leakage breaker, drain bottle set-fail switch					
Internal dimensions (Dia x Depth)	240 x 445 mm			300 x 445 mm		300 x 665 mm
External dimensions (WxDxH)	410 x 470 x 957 mm			440 x 530 x 968 mm		440 x 530 x 1088 mm
Internal capacity	20L			32L		47L
Power source (50/60Hz single phase)	AC115V, 13A with plug	AC220V, 7A no plug, round terminal	AC115V, 15A no plug, round terminal	AC220V, 9.5A no plug, round terminal	AC115V, 15A no plug, round terminal	AC220V, 9.5A no plug, round terminal
Weight	~65kg		~80kg		~85kg	
Accessories	2 pcs. stainless steel mesh basket (Φ209 x D204mm)		2 pcs. stainless steel mesh basket (Φ266 x D204mm)		2 pcs. stainless steel mesh basket (Φ266 x D315mm)	
	Drain board x 1, drain bottle x 1, condensation collection container with magnetic bracket x 1					

Power cable is 3 meters.

Performance based on 23±5°C room temp, 65%RH±20% damper fully closed and no load. Overall dimensions do not include protrusions.

Sterilization & Drying Process



Control Panel



Front Door



- Drain bottle placed in front for easy level monitoring and access
- Drain valve also located in front for quick access and operation

Included Items

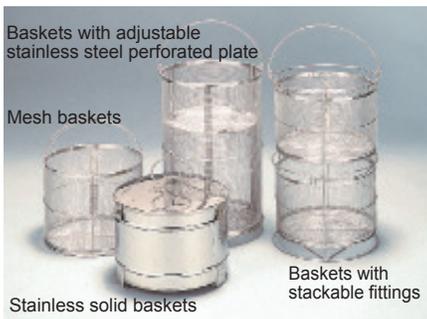


Mesh baskets



Condensation collector

Optional Items



Output terminal



Product code	Description	Dimension	Corresponding models
241087	Mesh basket	209x204mm	SM201 / 211
241088	Pitch 8.5mm	266x204mm	SM301 / 311
241089		266x315mm	SM501 / 511
241085	Mesh basket	190x159mm	SM201 / 211
241086	Pitch 10mm	250x201mm*	SM301 / 311 / 501 / 511
241093	Mesh basket with stacking fittings	168x162mm with 2 fittings	SM201 / 211
241092		246x162mm with 2 fittings	SM301 / 311
241091		246x162mm with 3 fittings	SM501 / 511
241096	Mesh basket with adjustable stainless steel perforated plate	200x390 with 1 plate	SM201 / 211
241095		260x390 with 1 plate	SM301 / 311
241094		200x590 with 2 plates	SM501 / 511
241083	Stainless solid basket	205x150	SM201 / 211
241084		265x180	SM301 / 311 / 501 / 511
241073	Temperature output terminal	Customized. Must be specified at time of order	
241074	Time-up output terminal		
241075	External alarm output terminal		
241076	Interior temp. gauging sensor		

*SM301/311 units accommodate 2 baskets. SM501/511 units accommodate up to 3 baskets.

Large Capacity Laboratory Sterilizer with Dryer



SM520/530/820/830

Operating temp. range 105~135°C

Max. operational pressure 0.255 MPa

Internal capacity 50L (SM520/530) 80L (SM820/830)

Large Capacity, High Performance, Fully automatic sterilization from start to finish with high pressure steam sterilization and drying steps

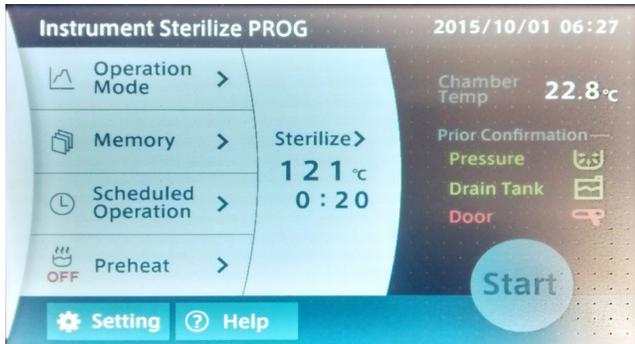


- Interactive keypad input (touch panel) allows committing sterilization settings (time & temperature) to memory
- 7" interactive touch screen
- Suitable for protein modification at the maximum operating temperature of 135°C
- Easy settings and operation modes for a multitude of sterilization process
- Increased safety and function list including forced cooling and memory functions
- Equipped with multiple safety locking mechanism for the lid
- Comes with large capacity (11L) heat resistant stainless steel container
- Alarm buzzer sounds when high or low pressure error occurs

Specifications

Model		SM520	SM530	SM820	SM830
System		Automatic high pressure steam sterilization			
Operating temperature	Sterilize	105 to 135°C			
	Liquefy	60 to 110°C			
	Retain Temp.	45 to 60°C			
	Preheat temp.	45 to 80°C			
	Dry	135 to 150°C			
Operating Ambient Temp.		5 to 35°C			
Maximum pressure capacity		0.255MPa			
Heating	Sterilize Pipe	1000W ×2			
	Drying Pipe	110V/295W×2, 110V/455W×2	110V/295W×2, 110V/455W×2	110V/275W ×2, 110V/625W ×2	110V/275W ×2, 110V/625W ×2
Temp. controller		PID controlled by microprocessor			
Temp. setting / display		Touch panel			
Timer / Timer resolution		Range: 0 or 1min to 99h59min / 1 min.			
Safety Device		Sterilize sensor error, sterilize SSR short circuit, dry sensor error, dry SSR short circuit, sterilize heater disconnection, dry heater disconnection, water level detection (liquid expansion method), independent chamber overheat protection, cover unlock error, chamber over pressure protection, under pressure protection, warning about setting error in cooling water container, memory error, pressure switch (0.25MPa), pressure safety valve (0.255MPa)			
Internal dimensions (ID.xD)		370 x 470mm		370 x 750mm	
External dimensions (WxDxH)		520 x 660 x 881mm		520 x 660 x 1161mm	
Internal capacity		50L		80L	
Power source (50/60Hz)	Voltage	AC100~120V <i>no plug, round terminal</i>	AC200~240V <i>no plug, round terminal</i>	AC100~120V <i>no plug, round terminal</i>	AC200~240V <i>no plug, round terminal</i>
	Sterilize current	25~21A	12.5~10.5A	25~21A	12.5~10.5A
	Dry current	13.5A	8.0A	15.0A	9.0A
Weight		~113kg		~137kg	
Included items		2 pcs. stainless steel mesh basket (Φ344 x D200mm)		2 pcs. stainless steel mesh basket (Φ344 x D300mm)	
Drain board x 1, drain bottle x 1, chemical indicator 1 set, filter x 1, droplet tray x 1					

Control Panel



Instrument Sterilize Program



Instrument Sterilize operation

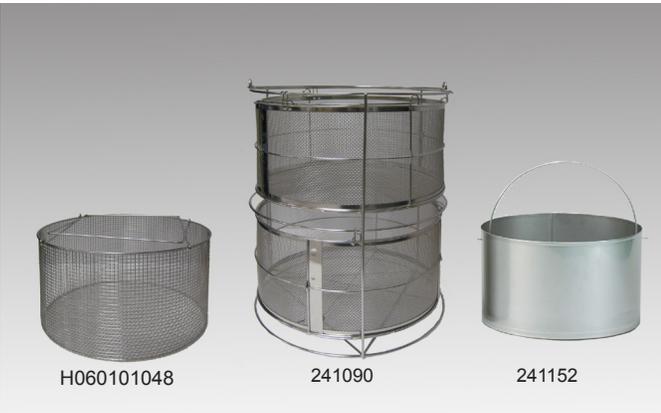


Sterilize & Dry Program



Sterilize & Dry operation

Optional items



Baskets and buckets

Product code	Description
H060101048	Mesh basket for SM520/530 (Φ344 x D200mm)
H060103033	Mesh basket for SM820/830 (Φ344 x D300mm)
241090	Mesh basket with 2 stacking fittings
241097	Mesh basket with 1 adjustable stainless steel perforated plate
241152	Stainless bucket
H060101110*	Chamber temp. sensor (Type T thermocouple, 3 pcs./set)
H060101100*	Sample temp. sensor (Type T thermocouple, 1 pc.)
Q110604013*	External output terminal (Temp. output, time-up output, alarm output)

* Specify when ordering main unit

Operation Mode

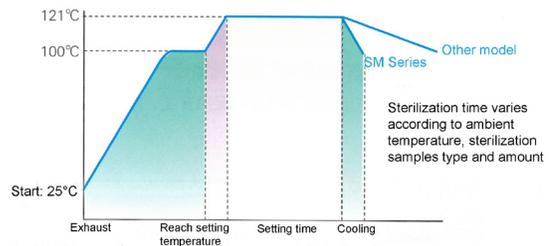
Mode	Name	Course
1	Instrument sterilize	Heat → sterilize → air purge
2	Fluid sterilize	Heat → sterilize → air purge
3	Sterilize & Retain temp.	Heat → sterilize → air purge → retain temp.
4	Liquefy & Retain temp.	Heat → liquefy → retain temp.
5	Instrument dry	Heat → air purge → cool
6	Sterilize & Dry	Heat → sterilize → air purge → drain → dry → cool

Low Height Sterilizer

Easy to lift samples up.



Standard Equipped with Cooling Fan



- Cooling fan starts after sterilization operation
- Cool down to safe temperature
- Time saving
- Optional between forced cooling and natural cooling

Front Door



- Front loading drain container
- Stainless steel drain container placed in front for easy access and drain water level can be monitored without opening door
- Drain valve located in front for quick access and operation

Laboratory Dry Sterilizer

MADE
IN
JP

Natural convection (SK401/601) / Forced air convection (SK801/811)

SK401-115V SK401-220V / SK601-115V SK601-220V / SK801 / SK811

Operating temp. range	Room temp. +5~260°C (SK401/601)	Room temp. +10~210°C (SK801/811)	Temp. control accuracy	±1°C (at 260°C) (SK401/601)	±1°C (at 210°C) (SK801/811)	Internal capacity	99L (SK401)	162L (SK601)	300L (SK801/811)
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Dry heat sterilization with independent overheat prevention device

Operation and function

- Programmable
- High precision controller with improved display visibility and operability
- Standard equipped with calibration offset, lock function, power recovery mode, power on and operation time accumulation, calendar time, accumulation power consumption monitoring, total CO₂ emission, and heat output, save and access operator setting information
- Maximum 99 steps, 99 patterns, repeat operation
- Easy sample data collection with cable port

Safety features

- Standard equipped with self diagnostic functions, independent overheat prevention device and earth leakage breaker



(Stand optional)

Specifications

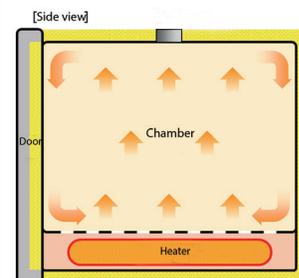
Model	SK401-115V	SK401-220V	SK601-115V	SK601-220V	SK801	SK811
Circulation method	Natural convection				Forced convection	
Temp. setting range	Room temp. +5~260°C				Room temp. +10~210°C	
Temp. control accuracy	±1°C (at 260°C)				±1°C (at 210°C)	
Temp. fluctuation	±1.5°C (at 260°C)				±1°C (at 210°C)	
Temp. distribution accuracy	±5°C (at 260°C)				±3.5°C (at 210°C)	
Temp. rising time	~60min.					
Interior / Exterior material	Stainless Steel / Chrome free electrogalvanized carbon steel sheet coated with chemical-proof baked-on finish					
Insulation Material	Glass wool					
Heater	SUS 1.2kW		SUS 1.36kW		SUS 2.4kW	
Sensor	K type Thermocouple					
Fan type / Fan motor	-				Sirocco Fan / Condenser type motor 30W	
Cable port	I.D. 33mm (right side)					
Exhaust port	I.D. 33mm x 2 (on top)				I.D. 33mm x 2 (back)	
Temperature control	PID control by microprocessor					
Temperature display	Temp. display: Green 4-digit LED Digital Display (increment: 1°C) Setting temp. display: Orange 5-digit LED Digital Display (increment: 1°C)					
Timer	0 min~99 hrs 59 min (increment: 1 min. or 1 hr.)					
Heater control	Triac with Zero-cross control					
Operation function	Fixed temperature, Auto start, Auto stop, Quick auto stop, Program (99 steps, 99 patterns, repeat operation function)					
Additional functions	Power on and operation time accumulation function (up to 65535 hours), Calendar time (24 hours), Calibration offset, Accumulated power consumption monitoring, Total CO ₂ emission and heater output, Power recovery mode, Save and access operator setting information, key lock					
Safety device	Self-diagnostic functions (Sensor failure, SSR short circuit, Heater failure, Main relay contact failure, Automatic overheat prevention), earth leakage breaker, Independent overheat prevention device					
Internal dimensions (WxDxH)	450 x 490 x 450mm		600 x 540 x 500mm		600 x 500 x 1000mm	
External dimensions (WxDxH)	560 x 600 x 820mm		710 x 650 x 870mm		710 x 650 x 1640mm	
Internal capacity	99L		162L		300L	
Shelf plate with standard load	~15kg/pc					
Shelf rest step number / pitch	11 steps / 30mm		13 steps / 30mm		29 steps / 30mm	
Power source	115V 11A with plug	220V 6A no plug, round terminal	115V 12.5A with plug	220V 6.5A no plug, round terminal	115V 21.5A no plug, round terminal	220V 11.5A no plug, round terminal
Weight	~50kg		~62kg		~108kg	
Shelf plate / bracket	Stainless steel punched metal					
	2 pcs. / 4 pcs.				4 pcs. / 8 pcs.	



Control Panel



Method



Cable Port



Shelf and Bracket Set

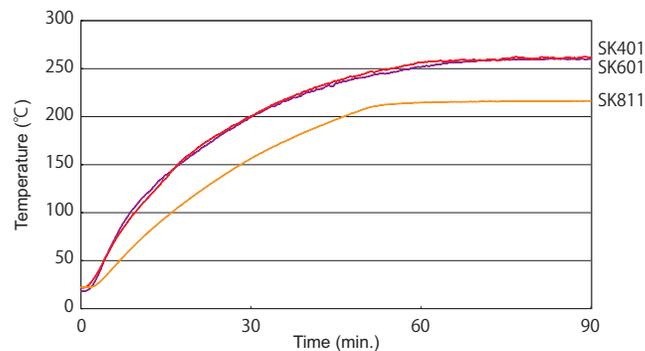


Optional items

Description		Product code
Stand		
For SK401/601	ON61	211856
For SK401	OT42	212348
For SK601	OT62	212349
Stacking kit		
For SK401	OD40	212822
For SK601	OD60	212823
Shelf and bracket set		
For SK401	ODN20	212246
For SK601/801/811	ODN22	212266
*Cable port		
Ø25mm	ODK32	281121
Ø50mm	ODK34	281122
Seismic mat		296902
External communication adapter set	OIN90	211880
*External communication terminal	ODS16	212981
*Temperature output terminal	ODS18	212982
*External alarm output terminal	ODS22	212983
*Timeout output terminal	ODS24	212984
*Operation signal output terminal	ODS26	212985
*Event output terminal	ODS28	212986

* Please specify when ordering main unit.

Temperature Rising Curve

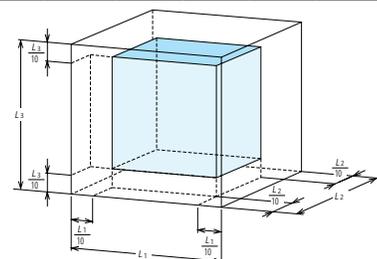


9 Points of Distribution Reference Data (SK811, no load, setting temp. 180°C)

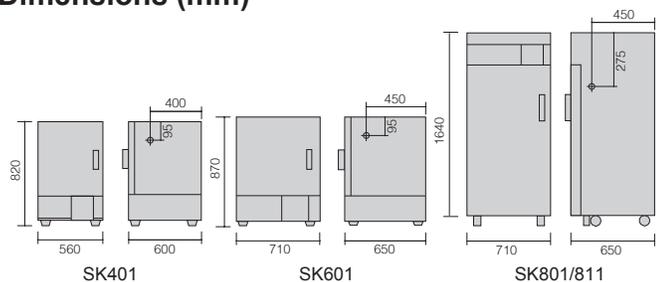
	Top right back	Top left back	Top right front	Top left front	Bottom right back	Bottom left back	Bottom right front	Bottom left front	Center
SK811	186.6	189.2	186.2	188.8	184.9	186.3	183.0	183.5	186.9

Conditions

- 9 measurement points are taken from the effective internal capacity down-scale by 10% (as the image on the right) and the center
- Room Temp. 23°C, AC115V, 50Hz, stable temperature when temp. setting at 180°C
- No load, with 2 pcs of shelves



Dimensions (mm)



Attention ● Never use in flammable or explosive gas atmosphere.
● Never use explosive or flammable material.

● Caution: High temperature components.

Containers

Product code	Description	Dimensions	Suitable models
A990201305	Stainless rack	ø277 x H260mm	SK102C/112C
A990201304	Stainless rack	ø277 x H330mm	SK201C/211C
A990201303	Stainless rack	ø277 x H420mm	SK301C/311C
H060101047	Mesh basket	ø274 x H200mm	SN300C/310C/500C/510C
H060101048	Mesh basket	ø344 x H200mm	SQ500C/510C, SM520/530
H060103033	Mesh basket	ø344 x H300mm	SQ810C, SM820/830
H060601028	Mesh basket	ø424 x H200mm	SQL810C
H060602006	Mesh basket	ø424 x H300mm	SQL1010C
241085	Mesh basket (pitch 10 mm)	ø190 x H159mm	SM201/211
241086	Mesh basket (pitch 10 mm)	ø250 x H201mm	SM301/311/501/511
241087	Mesh basket (pitch 8.5 mm)	ø209 x H204mm	SM201/211, SN200C/210C
241088	Mesh basket (pitch 8.5 mm)	ø266 x H204mm	SM301/311/501/511
241089	Mesh basket (pitch 8.5 mm)	ø266 x H315mm	SM501/511
241090	Mesh basket with 2 stacking fittings	ø320 x H162mm	SQ500C/510C/810C, SM520/530/820/830
241091	Mesh basket with 3 stacking fittings	ø246 x H162mm	SM501/511, SN500C/510C
241092	Mesh basket with 2 stacking fittings	ø246 x H162mm	SM301/311, SN300C/310C
241093	Mesh basket with 2 stacking fittings	ø168 x H162mm	SN200C/210C, SM201/211
241094	Mesh basket with 2 perforated plates	ø270 x H590mm	SM501/511, SN500C/510C
241095	Mesh basket with 1 perforated plate	ø260 x H390mm	SM301/311, SN300C/310C
241096	Mesh basket with 1 perforated plate	ø200 x H390mm	SM201/211, SN200C/210C
241097	Mesh basket with 1 perforated plate	ø330 x H380mm	SQ500C/510C/810C, SM520/530/820/830
241083	Stainless solid basket	ø205 x H150mm	SM201/211, SN200C/210C
241084	Stainless solid basket	ø265 x H180mm	SM301/311/501/511, SN300C/310C/500C/510C
241150	Stainless bucket	ø208 x H203mm	SM201/211, SN200C/210C
241151	Stainless bucket	ø268x H203mm	SM301/311/501/511, SN300C/310C/500C/510C
241152	Stainless bucket	ø338 x H203mm	SQ500C/510C/810C, SM520/530/820/830

Mesh basket



Stainless bucket



Stainless rack



Stainless solid basket

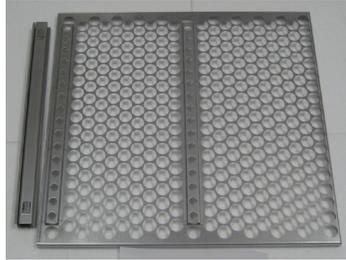


Shelves

Product code	Punching shape	Suitable sterilizer models
212095	Round punch shelf & bracket set	SI401/402
212246	Round punch shelf & bracket set	SK401
212266	Round punch shelf & bracket set	SI601/602, SK601/801/811



212095



212246



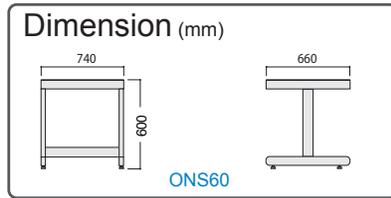
212266

Stands

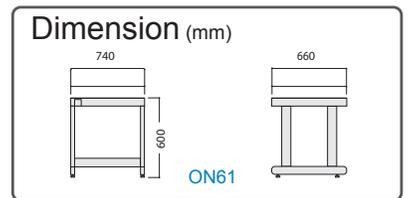
Product code	Stand models	Suitable sterilizer models
212802	ONS60	SI401/402/601/602
211856	ON61	SK401/601
212348	OT42	SK401
212349	OT62	SK601



ONS60



ON61



OT42/62

