

Sterilizer

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STERILIZER OVERVIEW

STEAM Sterilization
 DRY Sterilization

Benchtop



SK

Internal Capacity: 18L

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

Compact



SK

24, 30L

Standard without dryer



SN

Internal Capacity: 20, 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

- 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

Standard dry sterilization



SI

Internal Capacity: 77, 159L

- Dry heat sterilization through natural convection
- Programmable
- Economical

High precision, large capacity dry sterilization



SK

Internal Capacity: 99, 162, 300L

- Dry heat sterilization through natural or forced convection
- Programmable
- Standard equipped with high precision controller

Benchtop Sterilizer

NEW

SK101C/111C

Operating temp. range 50°C to 126°C

Max. operational Pressure 0.142MPa

Internal capacity 18L

Space-saving, low cost benchtop sterilizer, ideal for research facilities



Sterilizer with an 18 liter chamber for research processes and areas that are limited in space. High pressure steam is the most widely used method for sterilization due to its speed, reliability, and effectiveness. Newly designed small capacity sterilizers provide a safe, reliable high pressure steam sterilizing environment within a self-contained unit that is particularly easy to use. This sterilizer is ideal for a wide range of applications.

Easy to use

- Benchtop size - 18 Liter
- Powerful 1500W pipe heater
- Easy to read 4 digit LED display
- Built in Drain Valve for easy cleaning
- Programmable sterilizing and temperature functions
- Timer Setting Range 0 to 999 min.
- Space-saving

Increased Safety Features

- Water level detection sensor with alarm
- Overheat Protection Sensor
- Lid closure sensor (Inter lock)
- Pressure Lamp Indicator
- Increased chamber wall thickness (2mm)
- New improved silicon lid gasket and easy to replace

Specifications

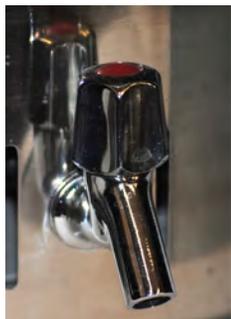
Model	SK101C	SK111C
System	Automatic high pressure steam sterilizer	
Temp. setting range	50 to 126°C	
Max. operational pressure	0.142MPa (at 126°C)	0.2MPa
Interior Material	Stainless steel SUS 304	
Heater	1500 W Stainless Steel Heating Pipe	
Temp. controller	PID control by microprocessor	
Temp. setting method	Digital setting by ▲/▼ keys	
Temp display method	Digital display by green LED	
Timer	0 min. to 999 min.	
Safety Device	Pressure safety valve, Low water sensor, Dual exterior walls, built in Inter-lock sensor	
Internal dimensions	Dia.280 x D275 mm	
External dimensions	Dia.343 x D550 mm	
Internal capacity	18L	
Power source 50/60Hz	AC 115V, 15A	AC 220V, 9A
Weight	~17.5Kg	
Accessories	1 stainless steel mesh basket (254mm x 240mm) and stainless steel bottom plate	

Control Panel



- New 4 digit LED display

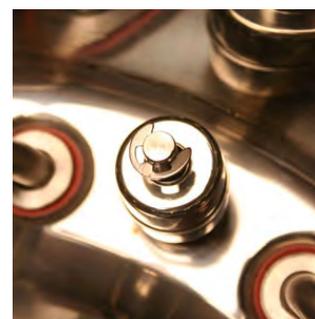
Key Features



- Drain valve for easy clean up



- New lid closure sensor (Inter-Lock)



- Low water sensor prevents damage by sounding an alarm and stopping all operations until water is refilled

Compact Sterilizer

NEW

SK200C/210C/300C/310C

Operating temp. range 50°C to 126°C

Max. operational pressure 0.142 MPa

Internal capacity 24L (SK200C/210C)
30L (SK300C/310C)



SK300C

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

Easy to use

- Space-saving size - 24 / 30 Liter
- Mobile on wheels
- Powerful 1500W 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 (Inter lock)
- Pressure Lamp Indicator
- New improved silicon lid gasket and easy to replace

Specifications

Model	SK200C	SK210C	SK300C	SK310C
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	1500W Stainless Steel Heating Pipe			
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.			
Safety Device	Pressure safety valve, Low water sensor, Dual exterior walls, built in inter-lock sensor			
Internal dimensions	Dia.280 x D360 mm		Dia.280 x D440 mm	
External dimensions	W353 x D386 x H737 mm		W353 x D386 x H827 mm	
Internal capacity	24L		30L	
Power source 50/60Hz	AC 115V, 15A	AC 220V, 9A	AC 115V, 15A	AC 220V, 9A
Weight	~26.5Kg		~31.5Kg	
Accessories	1 stainless steel mesh basket (254mm x 240mm) and stainless steel bottom plate			

Control Panel



- New 4 digit LED display

Key Features



- Three way Drain Valve Handle



- Lid clamp for added safety



- Casters (lockable front)

Standard Laboratory Use Sterilizer

SN200C/210C/300C/310C/500C/510C

Operating temp. range 45°C to 135°C

Max. operating pressure 0.255MPa

Internal capacity 20L (SN200C/210C) / 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

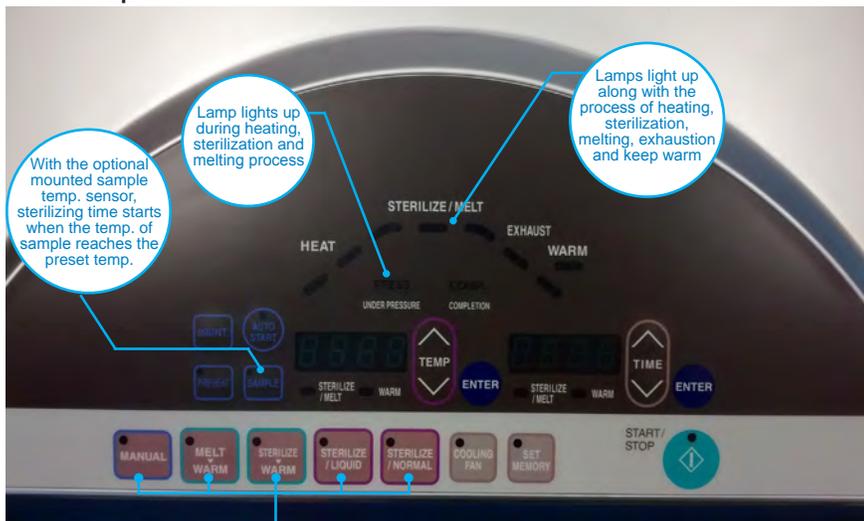
Enhanced safety device

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

Specifications

Model	SN200C	SN210C	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, 600W x 2 units		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 530 x 848		460 x 590 x 848		460 x 590 x 1068	
Internal dimensions of chamber	I.D.240 x D445 mm		I.D.300 x D445 mm		I.,D.300 x D665 mm	
Internal capacity	20L		32L		47L	
Weight	~65kg		~75kg		~85kg	
Power source	AC100~120V(12.5~15A)	AC200~240V(6.5~7.5A)	AC100~120V(12.5~15A)	AC200~240V(8.5~10A)	AC100~120V(19.5~23.5A)	AC200~240V(10~12A)
Accessories	2 pcs. stainless steel mesh basket (Dia.205 x D204mm), OSM-60		2 pcs. stainless steel mesh basket (Dia.262 x D204mm), OSM-70		3 pcs. stainless steel mesh basket (Dia.262 x D204mm), OSM-70	
	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 re-agents 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



Optional recorder and high performance pressure gauge

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	Model	Description	Corresponding models
241087	OSM-60	Mesh basket	SN200C/210C
241088	OSM-70		SN300C/310C/500C/510C
241089	OSM-80		SN500C/510C
241093	OSQ-30	Mesh basket with stacking fittings	SN200C/210C, with two fittings
241092	OSQ-40		SN300C/310C, with two fittings
241091	OSQ-50		SN500C/510C, with three fittings
241096	OSQ-60	Mesh basket with adjustable stainless steel perforated plate	SN200C/210C, with 1 plate
241095	OSQ-70		SN300C/310C, with 1 plate
241094	OSQ-80		SN500C/510C, with 2 plates
241083	OSR-10	Stainless solid basket	SN200C/210C
241084	OSR-20	Stainless bucket	SN300C/310/500C/510C
241150	OSN10		SN200C/210C
241151	OSN12		SN300C/310/500C/510C
241153	OSR-70*	Chamber temp. sensor	Type T thermocouple, 3 pcs./set
241154	OSN16 *	Sample temp. sensor	Type T thermocouple, 1 pc.
241155	OSN18 *	Pressure gauge	External installation
241157	OSN20 *	External alarm output terminal	
241158	OSN22 *	Temp. output terminal	4 - 20 mA
241159	OSN24 *	Time-up output terminal	Relay, contact output

* Please specify when ordering main unit.

Large Capacity Laboratory Use 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	100V, 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 features	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 (20.5~24.5A)	AC200~240V (10.5~12.5A)	AC200~240V(10.5~12.5A)
Accessories	2 pcs. stainless steel mesh basket (Dia.332 x D195.5mm), OSQ-90		3 pcs. stainless steel mesh basket (Dia.332 x D195.5mm), OSQ-90
	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



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

Stainless buckets

Product code	Model	Description
241099	OSQ-90	Mesh basket
241090	OSR-40	Mesh basket with 2 stacking fittings
241097	OSR-50	Mesh basket with 1 adjustable stainless steel perforated plate
241098	OSR-60	Stainless solid basket
241152	OSN14	Stainless bucket
241153	OSR-70*	Chamber temperature sensor
241154	OSN16 *	Sample temperature sensor
241155	OSN18 *	Pressure gauge
241157	OSN20 *	External alarm output terminal
241158	OSN22 *	Temperature output terminal
241159	OSN24 *	Time-up output terminal

*Please specify when ordering main unit.

Standard Laboratory Use Sterilizer With Dryer

SM201/210/301/311/501/511

Operating temp. range	105–123°C (SM201/210)	Max. operation pressure	0.18MPa (SM201/210)	Internal capacity	20L (SM201/210)	32L (SM301/311)	47L (SM501/511)
	105–128°C (SM301/311/501/511)		0.2MPa (SM301/311/501/511)				

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

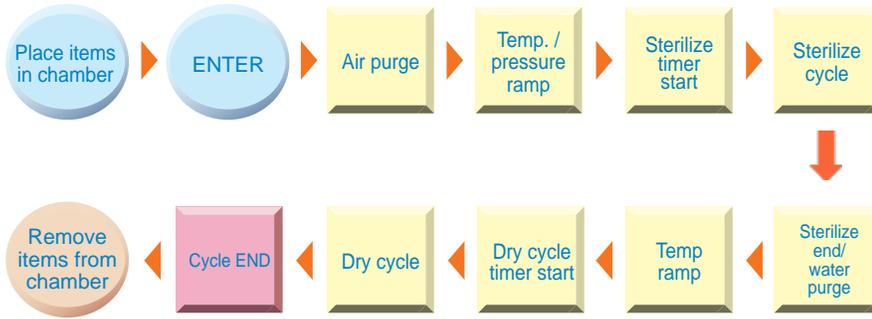
Specifications

Model	SM201	SM210	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	AC220V, 7A	AC115V, 15A	AC220V, 9.5A	AC115V, 15A	AC220V, 9.5A
Weight	~65kg		~80kg		~85kg	
Accessories	2 pcs. stainless steel mesh basket (Dia.205 x D204mm), OSM-60		2 pcs. stainless steel mesh basket (Dia.262 x D204mm), OSM-70		2 pcs. stainless steel mesh basket (Dia.262 x D315mm), OSM-80	
	Drain board x 1, chemical indicator strips (30 strips) x 1, drain bottle x 1, condensation collection container with magnetic bracket x 1					

Plug not included. 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

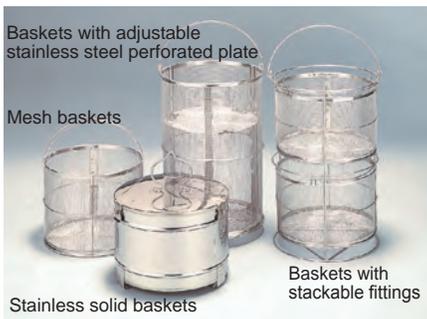


Mesh baskets



Condensation collector

Optional Items



Output terminal



Product code	Model	Description	Dimension	Corresponding models
241087	OSM-60	Mesh basket	205x204mm	SM201 / 210
241088	OSM-70	Pitch 8.5mm	262x204mm	SM301 / 311
241089	OSM-80		262x315mm	SM501 / 511
241085	OSQ-10	Mesh basket	189x161mm	SM201 / 210
241086	OSQ-20	Pitch 2.5mm	249x203mm*	SM301 / 311 / 501 / 511
241093	OSQ-30	Mesh basket with stacking fittings	168x162mm with 2 fittings	SM201 / 210
241092	OSQ-40		246x162mm with 2 fittings	SM301 / 311
241091	OSQ-50		246x162mm with 3 fittings	SM501 / 511
241096	OSQ-60	Mesh basket with adjustable stainless steel perforated plate	200x390 with 1 plate	SM201 / 210
241095	OSQ-70		260x391 with 1 plate	SM301 / 311
241094	OSQ-80		200x590 with 2 plates	SM501 / 511
241083	OSR-10	Stainless solid basket	210x200	SM201 / 210
241084	OSR-20		270x200	SM301 / 311 / 501 / 511
241073	OSM-40	Temperature output terminal	Customized. Must be specified at time of order	
241074	OSM-30	Time-up output terminal		
241075	OSM-20	External alarm output terminal		
241076	OSM-50	Interior temp. gauging sensor		

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

Large Capacity Laboratory Use 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 x2			
	Drying Pipe	110V/295Wx2, 110V/455Wx2	110V/295Wx2, 110V/455Wx2	110V/275W x2, 110V/625W x2	110V/275W x2, 110V/625W x2
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 (0.25MPa)			
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	AC200-240V	AC100-120V	AC200-240V
	Sterilize current	21-25A	10.5-12.5A	21-25A	10.5-12.5A
	Dry current	13.5A	8.0A	15.0A	9.0A
Weight		~113kg		~137kg	
Included items		2 pcs. stainless steel mesh basket (Dia.332 x D195.5mm) OSQ-90		3 pcs. stainless steel mesh basket (Dia.332 x D195.5mm) OSQ-90	
		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

Operation Mode

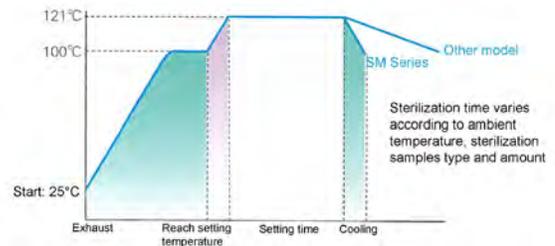
Mode	Name	Course
1	Instrument sterilize	Heat → sterilize → air purge
2	Fluid sterilize	Heat → sterilize → air purge
3	Sterilize & Retain temp.	Heat → sterilize → air purge → retain temp.
4	Liquefy & Retain temp.	Heat → liquefy → retain temp.
5	Instrument dry	Heat → air purge → cool
6	Sterilize & Dry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

Optional items



Baskets and buckets

Product code	Model	Description
241099	OSQ-90	Mesh basket
241090	OSR-40	Mesh basket with 2 stacking fittings
241097	OSR-50	Mesh basket with 1 adjustable stainless steel perforated plate
241098	OSR-60	Stainless solid basket
241152	OSN14	Stainless bucket
241153	OSR-70*	Chamber temperature sensor
241154	OSN16 *	Sample temperature sensor
241155	OSN18 *	Pressure gauge
241157	OSN20 *	External alarm output terminal
241158	OSN22 *	Temperature output terminal
241159	OSN24 *	Time-up output terminal

*Please specify when ordering main unit.

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

Natural convection

SI401/601

Operating temp. range

Room temp. +5~260°C

Temp. distribution accuracy

20°C(at 260°C)

Internal capacity

77L (SI401)

159L (SI601)

Low cost and programmable

■ Operation and function

- Improved temperature controller with better operability
- Digital setting by main menu and ▲/▼ keys for fixed temperature, program, quick auto stop, auto stop and auto start operations
- Standard equipped with calibration off-set, lock function, power failure recovery mode
- Programmable with maximum 30 steps, 6 patterns, repeat operation

■ Safety features

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



(Stand optional)

■ Specifications

Model	SI401	SI601
Circulation method	Natural convection	
Operating temp. range*	Room temp. +5~260°C	
Temp. adjustment accuracy	2°C (at 260°C)	
Temp. distribution accuracy	20°C (at 260°C)	
Max. temp. reaching time	~70min.	
Interior / Exterior	Stainless steel / Chrome free electrogalvanized carbon steel sheet coated with chemical-proof baked-on finish	
Heater	Iron chromium wire heater 1.2kW	1.36kW
Sensor	K type Thermocouple	
Exhaust port	I.D.30mm x 2 (top)	
Temp. controller	PID control	
Temp. display	Measured temp. display: green 4 digit LED digital display Setting temp. display: red 4 digit LED digital display	
Timer	1 min~99hr 59 min and 100~999 hrs 30 min. (with timer wait function)	
Operation function	Fixed temperature, quick auto stop, auto stop, auto start, program (6 pattern: 30 steps x 1, 15 steps x 2, 10 steps x 3, pattern repeat function)	
Additional function	Lock function, auto recovery after power failure, calibration off-set	
Safety device	Self diagnostic functions (temp. sensor failure, heater disconnection, SSR short circuit, memory error, internal communication error, measurement temperature error, automatic overheat prevention), overheat prevention device, earth leakage breaker	
Internal dimensions (WxDxH)	450 x 430 x 400mm	600 x 530 x 500mm
External dimensions (WxDxH)	550 x 540 x 777mm	700 x 640 x 877mm
Internal capacity	77L	159L
Shelf plate with standard load	~15 kg/pc.	
Shelf rest step number / pitch	10 steps / 30mm	13 steps / 30mm
Power source (50/60Hz)	AC115V 10.6A	AC115V 11.8A
Weight	~42 kg	~59 kg
Shelf plate material	Stainless punching metal	
Shelf plate / bracket	2pcs./4pcs. (bottom one is screwed)	

* Conditions: temperature 23°C±5°C, humidity 65%rh±20% (no load)



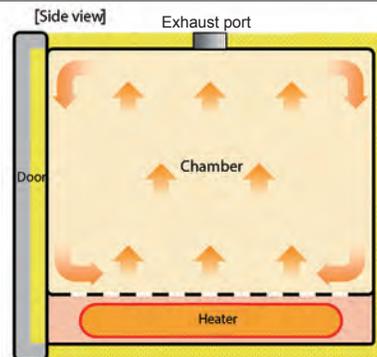
159L
SI601

(Stand optional)

Control Panel



Method



Interior



Optional items

Description	Product code
Stand ONS60	212802
Stacking clamp ODK82 (for SI401)	212804
Stacking clamp ODK84 (for SI601)	212805
Shelf and bracket set for SI401	212095
Shelf and bracket set for SI601	212266
Seismic mat	296902
External communication function*	281240
External communication adapter*	281241
Temperature output terminal*	281242
External alarm terminal*	281243
Time-up output terminal*	281244
Independent overheat prevention device*	281245

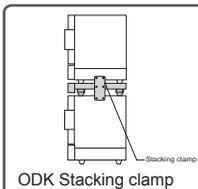
* Please specify when ordering main unit.



Shelf and bracket set



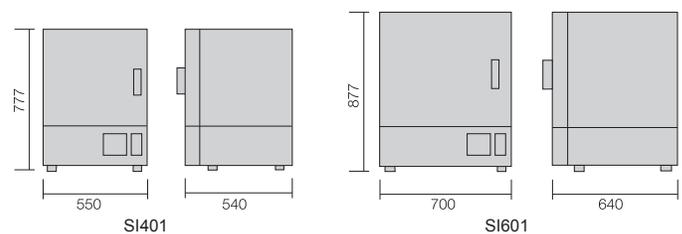
Seismic mat



ODK Stacking clamp



Dimensions (mm)



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

● Caution: High temperature components.

Laboratory Dry Sterilizer

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

SK401/601/801/811

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

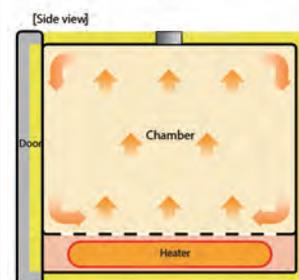
Model	SK401	SK601	SK801	SK811
Circulation method	Natural convection		Forced convection	
Temp. setting range	Room temp. +5~260°C		Room temp. +10~210°C	
Temp. control accuracy	±1°C (at 260°C)		±1°C (at 210°C)	
Temp. fluctuation	±1.5°C (at 260°C)		±1°C (at 210°C)	
Temp. distribution accuracy	±5°C (at 260°C)		±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 function	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		29 steps / 30mm	
Power source	115V 11.5A	115V 12.5A	115V 22A	Single phase 220V 11A
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

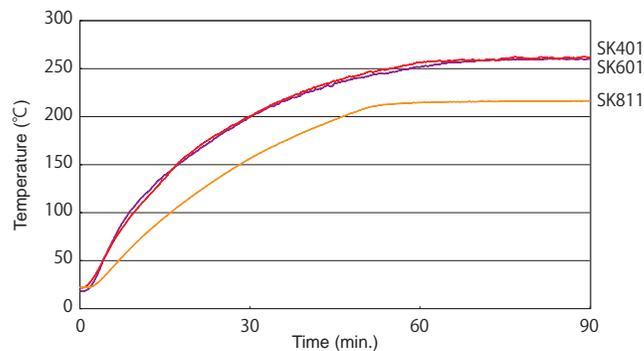


Optional items

Description	Product code
Stand	
For SK401/601	ON61
For SK401	OT42
For SK601	OT62
Stacking kit	
For SK401	OD40
For SK601	OD60
Shelf and bracket set	
For SK401	ODN20
For SK601/801/811	ODN22
*Cable port	
Ø25mm	ODK32
Ø50mm	ODK34
Seismic mat	296902
External communication adapter set	OIN90
*External communication terminal	ODS16
*Temperature output terminal	ODS18
*External alarm output terminal	ODS22
*Timeout output terminal	ODS24
*Operation signal output terminal	ODS26
*Event output terminal	ODS28

* Please specify when ordering main unit.

Temperature Rising Curve

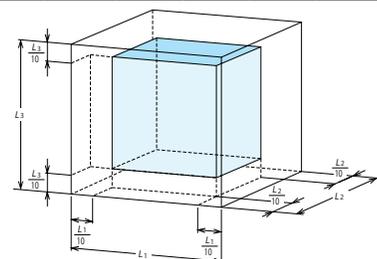


9 Points of Distribution Reference Data (SK811, no load, setting temp. 180°C)

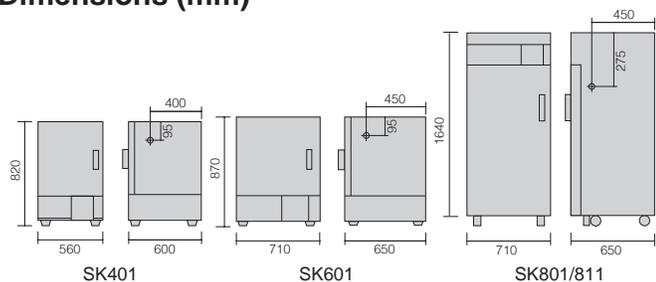
	Top right back	Top left back	Top right front	Top left front	Bottom right back	Bottom left back	Bottom right front	Bottom left front	Center
SK811	186.6	189.2	186.2	188.8	184.9	186.3	183.0	183.5	186.9

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 shelf



Dimensions (mm)



Attention

- Never use in flammable or explosive gas atmosphere.
- Never use explosive or flammable material.

● Caution: High temperature components.

Containers

Product code	Basket model	Description	Dimensions	Suitable models
H060303020	-	Mesh basket	ø254 x H240mm	SK101C/111C
H060303038	-	Mesh basket	ø254 x H331mm	SK200C/210C
H060303037	-	Mesh basket	ø254 x H409mm	SK300C/310C
241087	OSM-60	Mesh basket	ø205 x H204mm	SM201/210, SN200C/210C
241088	OSM-70	Mesh basket	ø262 x H204mm	SM301/311/501/511, SN300C/310C/500C/510C
241089	OSM-80	Mesh basket	ø262 x H315mm	SM501/511, SN500C/510C
241090	OSR-40	Mesh basket with 2 stacking fittings	ø326 x H165mm	SQ500C/510C
241091	OSQ-50	Mesh basket with 3 stacking fittings	ø246 x H162mm	SM501/511, SN500C/510C
241092	OSQ-40	Mesh basket with 2 stacking fittings	ø246 x H162mm	SM301/311, SN300C/310C
241094	OSQ-80	Mesh basket with 2 perforated plates	ø200 x H590mm	SM501/511, SN500C/510C
241095	OSQ-70	Mesh basket with 1 perforated plate	ø260 x H390mm	SM301/311, SN300C/310C
241096	OSQ-60	Mesh basket with 1 perforated plate	ø200 x H390mm	SM201/210, SN200C/210C
241099	OSQ-90	Mesh basket	ø332 x H196mm	SQ500C/510C/810C, SM520/530/820/830
241083	OSR-10	Stainless solid basket	ø210 x H200mm	SM201/210, SN200C/210C
241084	OSR-20	Stainless solid basket	ø270 x H200mm	SM301/311/501/511, SN300C/310C/500C/510C
241098	OSR-60	Stainless solid basket	ø330 x H235mm	SQ500C/510C/810C
241150	OSN-10	Stainless bucket	ø210 x H210mm	SM201/210, SN200C/210C
241151	OSN-12	Stainless bucket	ø270 x H210mm	SM301/311/501/511, SN300C/310C/500C/510C
241152	OSN-14	Stainless bucket	ø340 x H210mm	SQ500C/510C/810C

■ Mesh basket



H060303020

H060303037

241087

241088

241089

241090

241091



241092

241094

241095

241095

241096

241099

■ Stainless solid basket



241083 / 241084 / 241098

■ Stainless bucket



241150

241151

241152

Plates and Inserts

Product code	Description	Suitable models
Q110603004	Stackable plate	SK200C/210C
Q110603005	Stackable plate	SK300C/310C
Q110603008	Stackable insert	SK200C/210C
Q110603009	Stackable insert	SK300C/310C



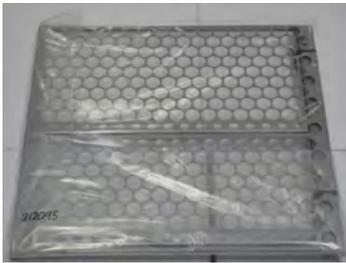
Stackable plate



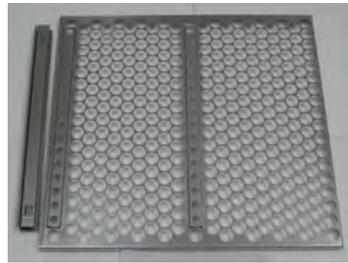
Stackable insert

Shelves

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



212095



212246



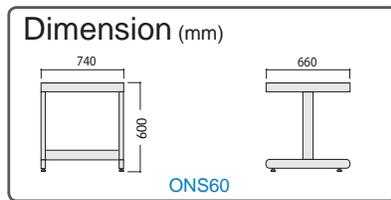
212266

Stands

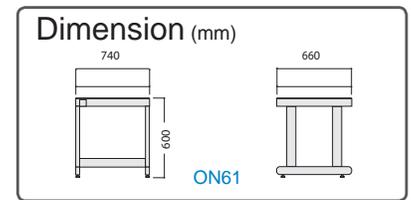
Product code	Stand models	Suitable sterilizer models
212802	ONS60	SI401/601
211856	ON61	SK401/601
212348	OT42	SK401
212349	OT62	SK601



ONS60



ON61



OT42/62

