

Laboratory Autoclave

SN210/310/510,SQ510/810



SN210

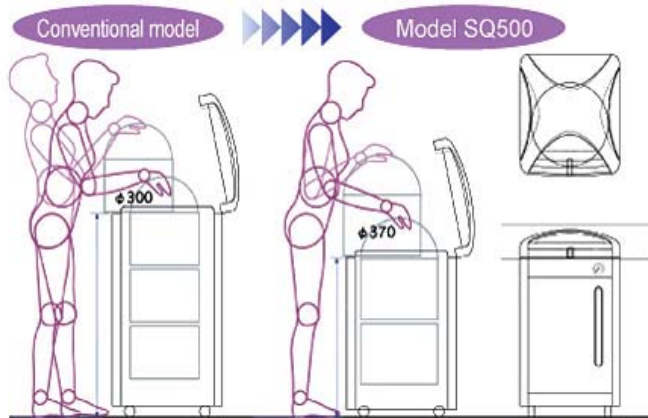
SN310

SN510

Effective Capacity : 20L Effective Capacity : 32L Effective Capacity : 47L

SN210/310/510,SQ510/810
The highest temperature
of 135deg.C
Upwards opening lid

SQ500(low height type)



•With this low height, you can easily manage the samples for sterilization.



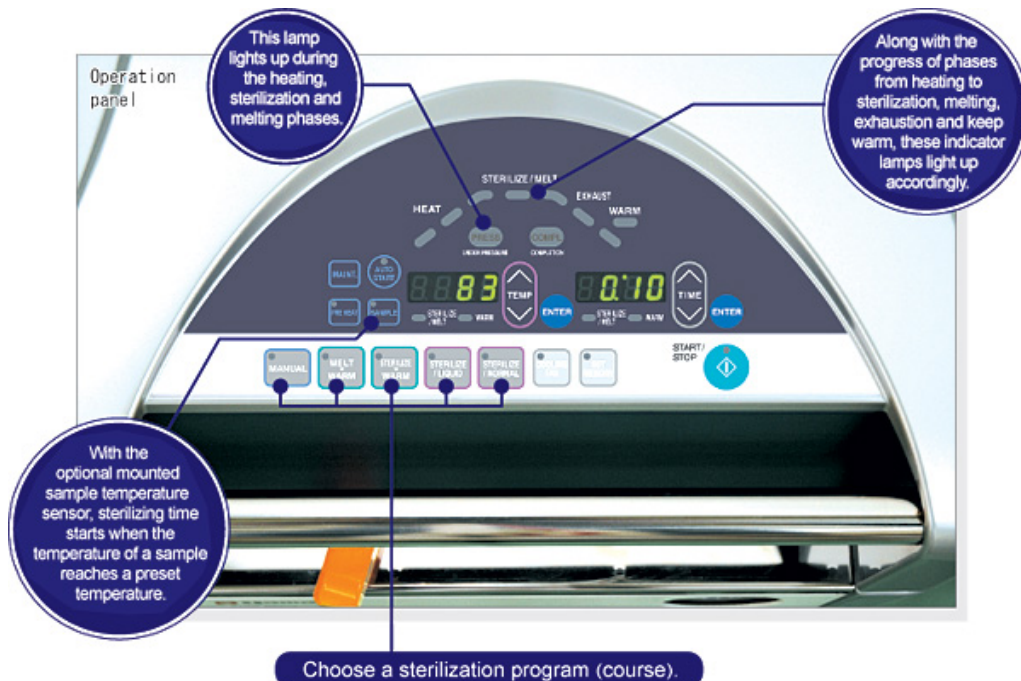
SQ510

SQ810

Effective capacity: 47.5L Effective Capacity : 80L

Features

1. Featured by high performance and easy operation



- By simple setting and operation, the autoclave manages ordinary sterilization, sterilization of culture mediums and liquids, and melting of culture mediums
- In addition to default sterilization programs, custom-programmed ones can be saved for repeated use.

2. Cooling fan as standard equipment

- To minimize cooling time, a cooling fan is provided for all models as standard equipment.

3. Prepared for GLP/GMP inspections



- Two sensor ports are provided as standard on the chamber.



- Recorders and high-performance pressure gauges are available as optional accessories.

4. An optional sample temperature sensor can start sterilization automatically.



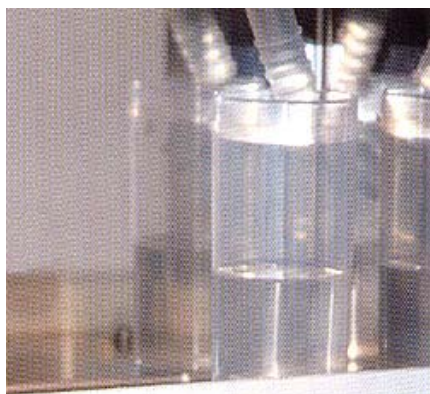
- With the optional mounted sample temperature sensor, you can precisely maintain a desired temperature for the samples to ensure thorough sterilization.

5. Front loading drain bottle



- The drain bottle holder is provided behind the front panel for easy to check the drain water level.

6. Basic safety measures



- Steam cup
- Lid's interlock mechanism
- Self-diagnosis
- Alarm against the absence of a drain bottle
- Leakage breaker
- During any malfunction, the autoclave will automatically shutdown with the alarm buzzer sounding and an error message being displayed.

7. Easy to discharge sterilizing water



- A large-diameter drainpipe is provided for easier maintenance.

8. Voltage-sensing power unit

- With a voltage-sensing power unit mounted as standard equipment, the autoclave can be chosen from any power supplies of 100-120V AC or 200-240V AC (single phase). You no longer have to worry about overseas voltage settings.

9. Automatic saving of error history

- Up to 20 errors can be saved to memory.

Specifications

Product code		241054	241055	241056	241057/ 999999
Model*1		SN210	SN310	SN510	SQ510/SQ810
System		Automatic high-pressure steam sterilization system for laboratory use *2			
Performance	Range of working temperatures	45-135deg.C: 45-60deg.C for preheating, 40-60deg.C for keep worm, 65-100deg.C for melting, 105-135deg.C for sterilization			
	Max. working pressure	0.255MPa			
	Ambient temperature	5 - 35deg.C			
Lid		Manual upward opening with an interlock for safety			
Main unit	Heater	100V, 1.2kW (600W 2 units)	100V, 1.6kW (800W 2 units)	100V, 1.9kW (950W 2 units)	100V, 2kW (1000W 2 units)
	Exhaust valve	An exhaust valve and a slow release valve			
	Connection ports for optional accessories	1/4" female thread for, sample temp. sensor, chamber temp. sensor, and pressure sensor (branching from the solenoid valve tubing) Total: 3 ports			
	Cooling fan	Axial fan motor			
Controller	Temperature setting, control and display	PID control by microprocessor, digital setting (by UP/DOWN keys) and display			
	Timer and its resolution	0 or 1 minute to 99 hours 59 minutes in increments/decrements of 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), memory locking, saving the history of up to 20 errors, indication of accumulated working hours, indication of present time, on-off beeping setting			
Safety measures		Sensor malfunctioning, 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 cover, memory malfunctioning, pressure relief valve (0.255 MPa)			
Classification of pressure vessel		Small pressure vessel (installation report to authorities is not required)			
Specifications	External dimensions (mm)	400(W)× 530(D)× 848(H)	460(W)× 590(D)× 848(H)	460(W)× 590(D)× 1,058(H)	520(W)× 660(D)× 876(H)
	Effective internal dimensions (mm)	240I.D.×445D	300I.D.×445D	300I.D.×665D	370I.D.×410D (SQ510), 370I.D.×690D (SQ810)
	Effective Capacity	20L	32L	47L	47.5L(SQ510)/80L (SQ810)
	Weight	Approx. 65 kg	Approx. 75 kg	Approx. 85 kg	Approx. 95 kg (SQ510) Approx. 105 kg (SQ810)
	Power supply	AC200-240V, 6.5A- 7.5A	AC200-240V, 8.5A- 10A	AC200-240V, 10A- 12A	AC200-240V, 10.5A-12.5A (SQ510, SQ810)
Accessories		Stainless Basket (mesh type) OSM-60 (205mm dia. × 204mmD) × 2 for SN200/210, OSM-70 (262mm dia. × 204mmD) × 2 for SN300/310, OSM-70(262mm dia. × 204mmD) × 3 for SN500/510 OSQ-90(332mm dia. × 195.5mmD) × 2 for SQ500/510, OSQ-90 (332mm dia. × 195.5mmD) × 3 for SQ810			
		Steam cup × 1, drain bottle × 1, Drain board × 1, Chemical indicator × 1 set (30 pieces)			

■ Power plug is not provided.

*1 Abbreviation (J) is Operation panel board in Japanese and (E) is in English.

*2 The autoclaves are not for medical use.

*3 External dimensions exclude protrusions.

Optional accessories



■ In addition to absorbent gauzes, laboratory garments and culturing instruments, a wide selection of basket and containers for laboratory waste are available.



■ Stainless bucket

Product code	Description	Model	Corresponding models	
241087	Basket (mesh type)	OSM-60	For SM/SN/SP210	
241088		OSM-70	For SM/SN310/510/SP310	*1
241089		OSM-80	For SM/SN/SP510	*1
241099		OSQ-90	For SQ500 and SQ810	
241093	Basket (mesh type) with stacking fitting	OSQ-30	For SM/SN/SP210, with two fittings/set	*1
241092		OSQ-40	For SM/SN/SP310, with two fittings/set	*1
241091		OSQ-50	For SM/SN/SP510, with three fittings/set	*1
241090		OSR-40	For SQ510 and SQ810 with two fittings/set	
241096	Basket (mesh type) with a mesh shelf	OSQ-60	For SM/SN/SP210, with 1 mesh shelf	*1
241095		OSQ-70	For SM/SN/SP310, with 1 mesh shelf	*1
241094		OSQ-80	For SM/SN/SP510, with 2 mesh shelves	*1
241097		OSR-50	For SQ510, with 1 mesh shelf	
241083	Stainless solid basket	OSR-10	For SM/SN/SP210	*1
241084		OSR-20	For SM/SN/SP310/510	*1
241098		OSR-60	For SQ510 and SQ810	
241150	Stainless bucket	OSN10	For SM/SN/SP210	
241151		OSN12	For SM/SN/SP310/510	
241152		OSN14	For SQ510 and SQ810	
241153	Chamber temperature sensor	OSR-70	For SN/SQ, Type T thermocouple, 3 pieces/set	
241154	Sample temperature sensor	OSN16	For SN/SQ, Type T thermocouple, 1 piece	
241155	Pressure gauge	OSN18	For SN/SQ, external installation	
241156	Recorder	RM10C	6-point type, temp. and pressure recording external installation	
241157	External alarm output terminal	OSN20	For SN/SQ	
241158	Temperature output terminal	OSN22	For SN/SQ, 4 - 20 mA	
241159	Time-up output terminal	OSN24	For SN/SQ, relay, contact output	

*1: Can be also used with conventional models SM200/300/500/510 and SP200/300/500/510.