

Lab Autoclaves | Automatic Sterilization, Drying Function

SM510C/810C/530/830

Operating temp. range Sterilization: 105~135°C Drying: 135~150°C

Max. working pressure 0.255MPa

Internal capacity 50L 80L

High-performance sterilizer with fully automatic operation for sterilization and drying.



Features

- 7-inch large touchscreen, easy operation with options for Chinese, Japanese, and English languages, along with a three-level authorization management system.
- 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 dissolution of culture mediums.
- Custom programs can be saved for repeated use.
- Standard equipped with cooling fan to shorten cool down time.
- Equipped with multiple pressure lid opening protection locks and comprehensive safety measures. Display power consumption, accumulated power usage, CO₂ emissions, total power-on time, accumulated operating time, and accumulated times of operations.
- SM530/830 has obtained medical device registration and disinfection certificates.

Specifications

Model		SM510C	SM810C	SM530	SM830
System		Automatic high-pressure steam sterilization+drying			
Medical device registration certificate		None		Yes	
Performance	Operating temp. range	45~135℃: 45~80℃ (preheat temp.)/45~60℃ (retain temp.)/60~110℃ (dissolution)/105~135℃ (sterilizing)/135~150℃ (drying)			
	Temp. unit	0.1℃			
	Max. working pressure	0.255MPa			
Lid structure		Manual upward opening and downward closing with an interlock for safety			
Chamber	Material	3mm thick corrosion-resistant stainless steel, featuring a mirror finish surface			
	Design operational life	20 years			
	Design pressure	0.42MPa			
	Design temp.	151℃			
	Sterilization heater	110V, 1210W×2			
	Dry heat heater	110V, 295W×2+455W×2	110V, 275W×2+625W×2	110V, 295W×2+455W×2	110V, 275W×2+625W×2
	Drain valve	1 solenoid valve, 1 hand alve			
	Exhaust valve	1 fast exhaust valve, 1 auxiliary exhaust valve, 1 slow exhaust valve			
	Options	Sample sensor interface (1/4), data logger sensor interface (1/4), pressure gauge interface (on the auxiliary exhaust solenoid valve piping)			
	Cooling fan blade	Axial fan motor			
Controllers	Temp. control method	PID control by microprocessor			
	Temp. control setting/display method	7-inch color LCD touchscreen for display and settings			
	Timer	1 min~99 h 59 min, resolution: 1 min or 100 h~999 h, resolution: 1 h			
	Operation functions	Instrument sterilization course, Liquid sterilization course, sterilization and retain temp. course, dissolution and retain temp. course, sterilization drying course, drying course			
	Additional functions	Power consumption, accumulated power usage, CO ₂ emissions, accumulated power-on time, accumulated operating time, and accumulated times of operations			
	Other functions	Key locking, presetting, saving, preheating, forced cooling, sample temperature sensor (option), pattern locking, alarm log saving (20 pcs), display of present time, ON-OFF beeping setting, language switch function (Chinese/Japanese/English) and three-level authorization management system			
Safety device		Sensor failure detection, SSR short-circuit, broken heater wire, prevention of idle heating (liquid expansion type thermoetat), alarm against the absence of drain bottle, failure in locking the lid, memory error detection, pressure relief valve (0.255 MPa),overpressure alarm			
Pressure vessel specification		Class I pressure vessel			
Specification	External dimensions (W×D×H mm)	520×660×881	520×660×1161	520×660×881	520×660×1161
	Effective dimensions of chamber (diameter×height mm)	370×470	370×750	370×470	370×750
	Internal effective capacity of chamber	50L	80L	50L	80L
	Weight	Approx. 113kg	Approx. 137kg	Approx. 113kg	Approx. 137kg
	Power supply/rated current	AC220V 13A			
Accessories		Basket OSQ-90 (diameter 344 x height 200mm), 2 PCS	Basket OSQ-90H (diameter 344 x height 300mm), 2 PCS	Basket OSQ-90 (diameter 344 x height 200mm), 2 PCS	Basket OSQ-90H (diameter 344 x height 300mm), 2 PCS
		1 drain bottle, 1 heater baffle, 1 set of sterilization test cards (30 cards), 1 filter plug, 1m drainage pipe, 1 hose clamp, long-arm clamp (SM810C/SM830 model only)			
Options		Biosafety filtration system, sample temperature sensor, internal chamber temperature measurement sensor, miniprinter, data logger, temperature output terminal (4~20mA), external alarm output terminal, time-up outout terminal, standard basket, extended height basket.			