Autoclaves (vertical type)

Microprocessor control with reliable safety functions guarantees optimum sterilization temperature.

Top loading, vertical chamber design maximizes efficient space application. Microprocessor control with enhanced program functions enables precise and convenient operations.

Lab Companion
Best Products for Reliable Results

Autoclaves (vertical type)

Convenient Operation Modes

Standard Modes

Modes	Temp. (°C)	Time (min)
Decontamination	121	35
Solids Sterilization	121	20
Liquids Sterilization	121	15
Melting	100	30

Program Modes

Modes	Temp. (°C)	Time (min)
Sterilization 1	110 to 123	1 to 999
Sterilization 2	110 to 123	1 to 999
Liquid Sterilization	110 to 123	1 to 999
Melting	60 to 100	1 to 999

Operational Features

Microprocessor controller and temperature calibration function allows for high precision temperature control.

- Sterilization temperature at 110 to 123°C

- Melting* temperature at 60 to 100°C

* liquefaction of coagulated agar media.

Automatic sterilization system for unattended operation. Sterilization process runs automatically in sequence as listed below.

- Heating ❯ Check Safe ❯ Sterilization ❯ Sterilization Safe ❯ Exhausting ❯ End

Convenient operation modes for various uses.

- Standard modes and program modes are listed in detail as above tables.

Conveniently monitored by an independent control display, sterilization process display, and pressure gauge.

- VFD for visualization of temp, pressure (optional), timer, warning alert checks.
- LED lamps for sterilization process check.
- Easy pressure check with the standard gauge attached to the front.

Temperature calibration function.

Safety Features

Mechanical Safety Devices

- Over current protection:
  Two separate fuses for protection against overcurrent.

- Over temperature protection:
  If the temperature of inner chamber exceeds the temperature limit, over temperature protection device inactivates the heater.

- Over Pressure Protection:
  If the pressure of inner chamber exceeds the pressure limit, the automatic safety valve will release the pressure out from the chamber. In other emergency situations, the pressure can be controlled manually by opening the manual safety valve.

Safety Warning Systems

- Over Temperature Warning:
  If the temperature exceeds 125°C for more than 10 seconds, the unit will stop with visual and audible alarms.

- Low Temperature Warning:
  If the temperature stays below set temperature value for more than 5 seconds, visual and audible alarms will warn for caution.

- Low Heat Warning:
  If the temperature does not reach the sterilization or melting temperature during a certain periods, the unit will stop with visual and audible alarms.

- Sterilization Fail Warning:
  If the operation is unexpectedly stopped during sterilization process, visual and audible alarms will warn for noticing   incompletion.

- Low Water Level Warning:
  If the water level goes down below a certain point during sterilization or melting process, the unit will stop with visual and audible alarms.

Features & Specifications

ST-50G   ST-65G   ST-85G

Included Accessories
Baskets(2ea), Heater Cover, Exhaust Tank, Drain Bucket

Optional Accessories
Pressure Sensor, Recorder

Constructional Features

Vertical type autoclaves which allow for top loading are suitable for high volume sterilization.

- Baskets are stackable two high or even more levels, which secure inside the chamber space requirements.
* Refer to the back cover for the information of basket and flask capacity

Slide opening door with plastic cover of low thermal conductivity prevents burns from the contact.

Low-maintenance

- The chamber is constructed of stainless steel which is superiorly resistant to corrosion.
- Easy to replace silicone gasket.

Convenient documentation with the optional data recorder.

- Dot type recorder(6 point) allows for precisedocumentation.

Specifications & Ordering Information

Model		ST-50G	ST-65G	ST-85G
Control		Microprocessor PID Control		
Chamber Volume (L / cu ft)		50 / 1.8	65 / 2.3	85 / 3.0
Temperature [1]	Sterilization Temp. (℃ / ℉)	110 to 123 / 198 to 221.4		
	Melting Temp. (℃ / ℉)	60 to 100 / 108 to 180		
Safety		Over Temperature Protector / Pressure Safety Valve / Over Current Protector		
		Warning Alert (Over Temp. / Low Temp. / Low Heat / Sterilization Fail / Low Water Level)		
Timer		0 to 999 min		
Programs		Standard modes (Decontamination, Solids Sterilization, Liquids Sterilization, Melting)		
		Program modes (Sterilization 1, Sterilization 2, Liquid Sterilization, Melting)		
Dimension	Interior (WxH) (mm / inch)	400x458 / 15.7x18.0	400x558 / 15.7x21.9	400x758 / 15.7x29.8
	Exterior [2] (W×D×H) (mm / inch)	624x672x870 / 24.6x26.5x34.2	624x672x971 / 24.6x26.5x38.2	624x672x1083 / 24.6x26.5x42.6
	Net Weight (Kg / lbs)	94.5 / 208.3	99.5 / 219.4	104 / 229.3
Electrical Requirements (230V, 50 / 60 Hz)		14.3A	14.3A	14.3A
Cat. No.		AAHL1015K	AAHL1025K	AAHL1035K
Electrical Requirements (120V, 60 Hz)		27.4A	27.4A	27.4A
Cat. No.		AAHL1013U	AAHL1023U	AAHL1033U

1) Technical data according to EN 554 / BS EN 285:1997.
2) Exterior size is measured without the size of exhaust tank.
* Permissible environmental conditions: temperature (5-40℃) and relative humidity (10-80%).
* Above specifications can be changed without prior notice.

Accessories & Options

Thermal Line Recorder

Pressure Sensor

Exhaust Tank

Basket

Accessories

Cat. No.	Description	
AAAL1501	Recorder Set	Dot type, 6 points
AAAL1511	Pressure Sensor	0~3.5 bar
AAAL1521	Exhaust Tank	5L, 114x387x281mm

Included and Maximum Basket Quantity

Baskets are stackable two high or even more levels, which secure inside the chamber space requirements as listed below.

Cat. No.	Description	ST-50G (458mm)		ST-65G (558mm)		ST-85G (758mm)	
		Included	Maximum	Included	Maximum	Included	Maximum
ATC0002	Basket (Stainless steel, Ø380x180mm)	2	2	-	-	-	-
ATC0003	Basket (Stainless steel, Ø380x230mm)	-	-	2	2	-	-
ATC0004	Basket (Stainless steel, Ø380x330mm)	-	-	-	-	2	2

* Max. loading capacity for one basket is 10kg.

Flask Loading Capacity

At Max. loading capacity, partially without baskets.

Description	Capacity	ST-50G (ea x floor)	ST-65G (ea x floor)	ST-85G (ea x floor)
Erlenmeyer Flasks (O.D.xH, mm)	250 mL (82 x 132)	14x3	14x4	14x5
	500 mL (101 x 176)	8x2	8x3	8x4
	1000 mL (129 x 216)	5x2	5x2	5x3
	2000 mL (160 x 268)	3x1	3x2	3x2
Media Bottles (O.D.xH, mm)	250 mL (70 x 143)	20x3	20x3	20x5
	500 mL (86 x 181)	14x2	14x3	14x4
	1000 mL (101 x 230)	8x1	8x2	8x3
	2000 mL (136 x 265)	5x1	5x1	5x2