

Autoclaves (vertical type)

Aside from reliable safety functions, the microprocessor control guarantees optimum sterilization temperature.

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



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Convenient Program Modes

Memory NO.	Program	Temp. (°C)	Time (min)
1	Sterilization 1	121	25
2	Sterilization 2	121	30
3	Melting	100	30
4, 5, 6	User-programs*	121	1 to 999

* Memories 4 to 6 are for the user's most commonly used temperature settings.

Required Sterilization Time by Materials

Loading Material		Sterilization Temp. (°C)	Sterilization Time (min)
Solid	Glass	121	15
	Rubber	121	20
	Metal	121	25
	Plastic, Fabric	121	30
Liquid, Agar Media		121	15

Operational Features

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

- Sterilization temperature at 121°C
- Melting* temperature at 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

Program modes for quicker operation.

- Total of six programs: Three pre set programs and three user configurable programs.

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.
- Pressure gauge for vacuum status check.

Safety Features

Mechanical Safety Devices

- Over current protection:
Two separate fuses for protection against overcurrent.
- Over temperature protection:
If the temp. of inner chamber exceeds limit temperature, over temperature protection inactivates the heater.
- Over Pressure Protection:
In case of high pressure, 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 temp. exceeds 123°C for more than 10 seconds, the unit will stop with visual and audible alarms.
- Low Temperature Warning:
If the temp. stays below 121°C for more than 5 seconds, visual and audible alarms will warn for caution.
- Low Heat Warning:
If the temp. does not reach the sterilization or melting temperature during the 40 minute periods, the unit will stop with visual and audible alarms.

Features & Specifications



- Included Accessories**
Baskets(2ea), Heater Cover, Exhaust Tank
- Optional Accessories**
Pressure Sensor, Recorder



ST-50G

ST-65G

ST-85G

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)

Low heat transfer plastic door with side opening lid prevents burns from contact during the process and the emitted excess steam. Also, the door is impossible to be opened when the unit is under pressure.
(Strong seal prevents from leakage)

Low-maintenance

- The chamber is constructed of type 304 grade stainless steel which is superiorly resistant to corrosion.
- Easy to replace silicone gasket.

Convenient documentation when using the optional data recorder.

- Thermal line type recorder(2 channels) allows for precise documentation.

Specifications & Ordering Information

Model		ST-50G	ST-65G	ST-85G
Control		PID Control Microprocessor		
Chamber Volume (L / cu ft)		50 / 1.8	65 / 2.3	85 / 3.0
Temperature ¹⁾	Sterilization Temp. (°C / °F)	121 / 217.8		
	Melting Temp. (°C / °F)	100 / 180.0		
Safety		Over Temperature Protector / Pressure Safety Valve / Over Current Protector		
		Warning Alert (Over Temp. / Low Temp. / Low Heat)		
Timer		0 to 999 min		
Programs		3 Pre-set programs (2 Sterilizations, 1 Melting)		
		3 User configurable programs		
Dimension (WxDxH)	Interior (WxH) (mm / inch)	400x458 / 15.7x18.0	400x558 / 15.7x21.9	400x758 / 15.7x29.8
	Exterior ²⁾ (mm / inch)	624x660x871 / 24.6x25.9x34.3	624x660x972 / 24.6x25.9x38.3	624x660x1094 / 24.6x25.9x43.1
	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 DIN 5891-2 / BS EN 285:1997.

²⁾ Exterior size is measured without the size of exhaust tank.

* Permissible environmental conditions: temperature (5-40 °C) and relative humidity (10-80%).

* Above specifications can be changed without prior notice.

Accessories & Options



Exhaust Tank



Pressure Sensor



Thermal Line Recorder



Basket

Accessories

Cat. No.	Description	
AAAL1521	Exhaust Tank	HDPE/PP/Silicone (5L, 114x387x281mm)
AAAL1511	Pressure Sensor	0~3.5 bar
AAAL1502	Recorder (thermal line type)	Digital mode, 2 channels

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	-	3	-	4
ATC0003	Basket (Stainless steel, Ø380x230mm)	-	1	2	2	-	3
ATC0004	Basket (Stainless steel, Ø380x330mm)	-	1	-	1	2	2

* All models have the same 'width', however the heights differ between models, satisfying and allowing customized basket's arrangements.

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

Flask Loading Capacity

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

* At Max. loading capacity, partially without baskets.