

# **GI Series Vertical Autoclave**

# **Advanced**

#### 1. Colorful LCD screen

LCD screen with English and Chinese choice, using text, data, and graphical methods to dynamically display various statuses, the sterilization process is clear at a glance.

#### 2. 6 level of exhaust speed control(TW,TR,TP only)

After sterilization, you can choose different exhaust speed, and you can adjust it freely at any time of exhausting.

#### **3.** Condenser(Option)

Equipped with a professional condenser, the steam generated during the sterilization process is conve-rted into water through the condenser, achieving zero discharge of water vapor/mist.

#### 4. FO value caculation

FO value is automatic caculated, can print out by micro-printer.

#### 5. Drying(TR only)

Fully automatic diving: Equipped with an air pump and a 0.2um air fiter, it automatically starts drying after sterilization.

After sterilization, clean air will be put in to replace the wet air inside, so as to improve drying efficiency. (Fully automatic drying is an option for TR only)

#### **6.** Vacuum pump(TP only)

Original imported vacuum pump from Germany, with good vacuum effect.

#### 7. Biosafety function (TWS,TRS only)

Use a 0.2 pm PTFE filter packed in a housing to ensure that no biohazard aerosols, microorganisms and viruses are passing out through the filter during exhausting, so as to make sure the biology safety of the lab.

#### 8. Vacuum drying(TP only)

Set drying temperature and time, and start vacuum drying after sterilization.

#### 9. 5 level access permission

The operation permissions for instruments are divided into five levels, with each level of user

having an independent password and multiple IDs that can be assigned. Each level of user has limited access to certain usage permissions.

## 10. Fast cooling fan

To shorten cooling process after sterilization.

#### 11. Auto water fill(Option)

Offer pipe and pump to connect to the direct water supply to achieve automatic water feeding, must be added while production.

#### 12. Dedorization(TX only)

A unique odor treatment system that can absorb odors and remove smell generated during the sterilization process, ensuring fresh laboratory air.

## 13. Air inlet filter(TX,TP as standard,TR as option)

Filtration is higher than 99.99% in particle with diameter of 0.2 pm.

#### 14. Monitor of exhaust filter(TWS,TRS only)

Exhaust filter is put inside a pressure resistant housing (stainless steel material) with an extra PT100 temperature sensor to monitor the temperature, so as to make sure the filter and housing are also being sterilized thoroughly, and will not lead to secondary biohazard pollution.

#### 15. Fully automatic drying(TR only)

Equipped with an air pump and a 0.2um air filter, it automatically starts drying after sterilization. After sterilization, clean air will be put in to replace the wet air inside, so as to improve drying efficiency.



#### Intelligent

#### Calibration port

Offer temp.and pressure interface, together with the 3Q adapter joints, can insert max 15 sensors one time to do the calibration work.

Program memory storage system

User can set their own program, and saved in system.

Saturated steam monitoring

The system automatically monitors the purge out of cold air to ensure the pure steam environment.

Special software for drug packaging materials(option)

The product meets the 2020 Chinese Pharmacopoeia or EP10.2 standards.

# Hommization

#### Just right depth

Conforming to ergonomics, the chamber depths of 29/54/80/100L chamber are 378/725/670/780 (mm),making it easy to take and place samples and maintain the instrument

Front water tank

Front water tank, easy to plug in and out.(TW/TX only)

## **Safety Features**

- Nice look: The lid and bench corners are covered with insulation to avoid getting scald
- **Inter lock:** Only when the temperature and pressure are safe inside, can the door be opened. If the door is not closed in place, it cannot start working.
- **Double protection for over pressure:** Mechanical pressure gauge and electric sensing system, once pressure is abnormal, system will cut power, release the pressure and send out alarm.
- Safety test function: Regular testing of system security and safety protection measures is possible.
- **Electrical production:** Prevention for over current, short ciucuit and electricity leakage.
- Lid closing check: Machine can not start if lid is not locking well by checking mechanically and electrically.
- **Triple protection for water shortage:** The bottom of the sterilization chamber is equipped with three different dry burning protection devices: liquid expansion type, copper temperature sensing type, and electric ion type(water level sensor), to avoid misjud-gment caused by a single method.
- Auto trouble shooting: System will monitor the working status, and will cut the power, send out alarm, and report the error information once any abnormal situation detected.
- **Temperature monitor:** Power cut and alaraming sent, if there is temperature is too high or temperature Using is abnormal.
- Saturated steam monitoring: The system automatically monitors the purge out of cold air to ensure the pure steam environment.





# Specification

Model	Function	GITW	GITR		GITX	GITP
6 level exhaust speed control		Standard	Standard			Standard
Auto water fill		Option	Option		Option	Standard
Condensor		Option	Option		Standard	Standard
Dedorization		_	Standard		Standard	_
Drying		_	Standard(Semi-automatic drying) Option(fully automatic drying)		_	Vacuum drying
Cooling fan		Standard	Standard		Standard 2 pcs	Standard 2 pcs
Access permission		5 level	5 level		5 level	5 level
USB port		Standard	Standard		Standard	Standard
Sterilization record		Standard	Standard		Standard	Standard
Printing set		Option	Option		Option	Just need printe
Micro-printer		Option	Option		Option	Option
Display system		LCD	LCD		LCD	LCD
Load thermomete(floating PT100 sensor)		Option	Option		Option	Option
Auto drainage		Option	Option		Option	Option
Steam collecting way		Internal	Internal		Internal	Internal
Prevacuum		_	_		_	Standard
Auto cleaning		Option	Option		Option	Option
Digital pressure sensor		Option	Option		Option	Standard
Inlet air filter		_	Option		Standard	Standard
Air pump		_	1		Standard	Standard
S Biosafety function		GI-TWS only	GI-TRS only		_	_
•				1		4
Model	Standard	Standard GI29TW	GI54TW	GI80T	W	GI100TW
	Drying		GI54TR	GI80T	R	GI100TR
	Dedorization		GI54TX	GI80T	X	GI100TX
	Vacuum		GI54TP	GI80T	P	GI100TP
Difference			utomatic with cooling fan +semi automatic drying, if n	eed fully	automatic drying	need to add 530USD
Capacity(L)		29	54	80		100
	SW		460x542x1105	620x74	5 <sub>v</sub> 1000	
Dimension	~~~		400A344A11U3	UZUA/T	SAIUJU	620x745x1200
(LxWxH)	SR	460 542 056	460x542x1105		6x1090	620x745x1200 620x730x1200
`	SR	460x542x976		620x72		
(LxWxH) (mm)		460x542x976	460x542x1105	620x72 620x74	6x1090	620x730x1200
(mm)	SX SP		460x542x1105 460x660x1105	620x72 620x74	6x1090 5x1090 0x1090	620x730x1200 620x745x1200
(mm)  Chamber dime	SX SP ension (Dia*H)(mm)	Ф 320х378	460x542x1105 460x660x1105 460x785x1105	620x72 620x74 620x90 Φ400x'	6x1090 5x1090 0x1090	620x730x1200 620x745x1200 620x900x1200
(mm)  Chamber dime Rated power(V	SX SP ension (Dia*H)(mm) W)	Φ 320x378 2300	460x542x1105 460x660x1105 460x785x1105 Φ 320x725 2600	620x72 620x74 620x90 Φ400x' 4600(2	6x1090 5x1090 0x1090 700	620x730x1200 620x745x1200 620x900x1200 Φ400x800
(mm)  Chamber dime Rated power(V Sus304 basket	SX SP ension (Dia*H)(mm) W) size(pcs)	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ 320x725 2600 (Φ 298x195)x3	620x72 620x74 620x90 Φ400x' 4600(2	6x1090 5x1090 0x1090 700 900 as option) x275)x2	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3
(mm)  Chamber dime Rated power(V Sus304 basket Power require	SX SP ension (Dia*H)(mm) W) size(pcs) ement	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ 320x725 2600 (Φ 298x195)x3 16A 50HZ/60HZ	620x72 620x74 620x90 Φ400x 4600(29 (Φ360x	6x1090 5x1090 0x1090 700 900 as option) x275)x2	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600
(mm)  Chamber dime Rated power(V Sus304 basket Power require Temperature of	SX SP ension (Dia*H)(mm) W) size(pcs) ement display accuracy	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ 320x725 2600 (Φ 298x195)x3 16A 50HZ/60HZ	620x72 620x74 620x90 Φ400x' 4600(29 (Φ360x	6x1090 5x1090 0x1090 700 900 as option) x275)x2 220V±10% 3	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3
(mm)  Chamber dime Rated power(V Sus304 basket Power require	SX SP ension (Dia*H)(mm) W) size(pcs) ement display accuracy ronment	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ 320x725 2600 (Φ 298x195)x3 16A 50HZ/60HZ 0.1 5°C~40°C Relative	620x72 620x74 620x90 Φ400x 4600(2) (Φ360x	6x1090 5x1090 0x1090 700 900 as option) x275)x2 220V±10% 3 ity ≤85%	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3
(mm)  Chamber dime Rated power(V Sus304 basket Power require Temperature o Working envir	SX SP ension (Dia*H)(mm) W) size(pcs) ement display accuracy ronment erial	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ320x725 2600 (Φ298x195)x3 16A 50HZ/60HZ 0.1 5°C~40°C Relative SUS304 stainless st	620x72 620x74 620x90 Φ 400x 4600(2) (Φ 360x Ce humid	6x1090 5x1090 0x1090 700 900 as option) x275)x2 220V±10% 3 ity ≤85%	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3
(mm)  Chamber dime Rated power(V Sus304 basket Power require Temperature of Working envir	SX SP ension (Dia*H)(mm) W) size(pcs) ement display accuracy ronment erial emp.range	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ320x725 2600 (Φ298x195)x3 16A 50HZ/60HZ 0.1 5°C~40°C Relative SUS304 stainless stainless stainless stainless	620x72 620x74 620x90 Φ 400x 4600(2) (Φ 360x 1°C ve humid eel (316I ~135°C	6x1090 5x1090 0x1090 700 900 as option) x275)x2 220V±10% 3 ity ≤85%	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3
Chamber dime Rated power(V Sus304 basket Power require Temperature o Working envir Chamber mate Sterilization te	SX SP ension (Dia*H)(mm) W) size(pcs) ement display accuracy ronment erial emp.range me range	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ320x725 2600 (Φ298x195)x3 16A 50HZ/60HZ 0.1 5°C~40°C Relative SUS304 stainless stainle	620x72 620x74 620x90 Φ 400x 4600(2) (Φ 360x 1°C 7e humid eel (316I ~135°C	6x1090 5x1090 0x1090 700 900 as option) x275)x2 220V±10% 3 ity ≤85%	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3
Chamber dime Rated power(V Sus304 basket Power require Temperature of Working envir Chamber mate Sterilization te Sterilization ti Melting temp.	SX SP ension (Dia*H)(mm) W) size(pcs) ement display accuracy ronment erial emp.range me range	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ320x725 2600 (Φ298x195)x3 16A 50HZ/60HZ 0.1 5°C~40°C Relative SUS304 stainless stainle	620x72 620x74 620x90 Φ 400x 4600(29 (Φ 360x 1°C 7e humid eel (316I ~135°C 00 min 4115°C	6x1090 5x1090 0x1090 700 900 as option) x275)x2 220V±10% 3 ity ≤85%	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3
Chamber dime Rated power(V Sus304 basket Power require Temperature o Working envir Chamber mate Sterilization te	SX SP ension (Dia*H)(mm) W) size(pcs) ement display accuracy ronment erial emp.range me range range	Φ 320x378 2300 (Φ 298x260)x1	460x542x1105 460x660x1105 460x785x1105 Φ 320x725 2600 (Φ 298x195)x3 16A 50HZ/60HZ 0.1 5°C~40°C Relative SUS304 stainless stain	620x72 620x74 620x90 Φ 400x 4600(2) (Φ 360x 1°C 7e humid eel (316I ~135°C	6x1090 5x1090 0x1090 700 900 as option) x275)x2 220V±10% 3 ity ≤85%	620x730x1200 620x745x1200 620x900x1200 Φ400x800 4600 (Φ360x215)x3



<b>Memory function</b>	60 program saved in system,999 cycles saved by USB		
Appointment timer range	Auto start up appointment)0~15 days		
Exhaust speed control	Fully automatic internal discharging with 6 levels choice		
Sterilization mode	Liquid, liquid with warming, solid, wrapped instrument, fabric, rubber, fast, waste, agar, self-defined Drying(TR, TP only), Vacuum leak test(TP only), BD test(TP only)		
Drying(TR, TPonly)	Drying time: 1~300min Drying temp.:80~160°C		
Controller	"SMART III" smart microcomputer controller		
Cooling way	Fast cooling fan		
Pressure gauge range	-0.1~0.5MPa		
Pressure valve set pressure	0.29Mpa		
Vacuum pump	Pulse times: 1~9 times Vacuum degree:≤-80kpa Vacuum leakage rate (per min)<0.13kpa		
Safety device	Lid closing checking,dry scorch protection,,safety valve,water level sensor, over temperature/pressure protection,temperature/pressure monitor, electricity safety(over current/short circuit/leakage),cooling lock,anti-scald lid and bench corner,automatic troubleshooting		

Note:Baskets can also be customized, as well as melting and warming temperature range.

# **Spare part option**

