Your Haier Biomedical Partner

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Haier Biomedical
Intelligent Protection of Life Science



Microbiological Culture Solutions



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Incubator Shakers

Mammalian / human cell cultures
It is ideally suited for the cultivation of mammalian and human cell cultures due to its accurate and efficient CO_2 and humidity control. Every machine is factory calibrated (with performance certification) and Haier biomedical guarantees a precise control of the environmental parameters over the complete lifespan of the machine – for reliable and reproducible cultivation processes.
Plant cell cultures
For the cultivation of phototrophic plant cell cultures, the ceiling of the Haier biomedical incubator shaker can be fitted with an illumination unit for photosynthesis (LED modules). The control module allows full programming of night/day cycles and variable light intensity.

For all applications in

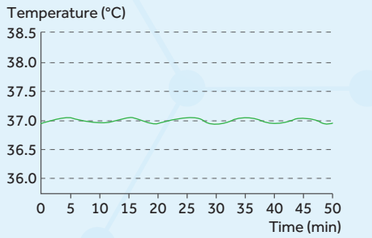
Laboratories | Research centres | Production facilities | Automatization | GMP



HYP-380C/260C

Product Feature

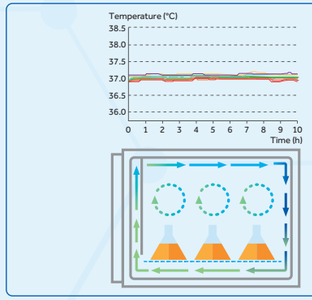
Reliable, Versatile Units for Enhanced Cell Growth



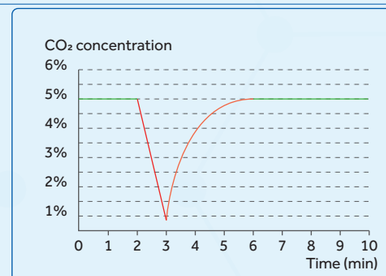
Temperature control fluctuation inside the cabinet ≤ ±0.2°C.

Using ART intelligent sensing and control technology, the temperature accuracy inside the cabinet is ≤±0.2°C.

Cross-flow wind field + unique air duct design, temperature uniformity ≤ ±0.3°C at 37°C.

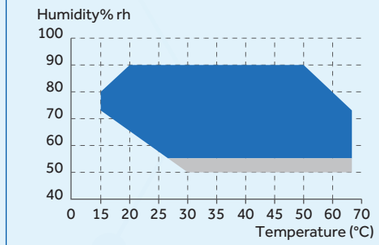


Note : test conditions: RT22±3°C



With the CO_2 concentration stably set at 5%, open the door for 30 seconds and then close it. The CO_2 concentration inside the box can recover to the set value of 5% in the fastest 3 minutes.

Professional humidity sensor, precise humidity control, no condensation during humidification (at37°C,5%CO_2,RT22±3°C).



Note: This area is used to remove excess moisture from inside the chamber; humidity control may fluctuate due to environmental factors.

Convenience, Precision and Programming at Your Fingertips

Ease of Use:
The 10-inch color touchscreen interface is intuitive and user-friendly, allowing for easy control and adjustment of parameters such as temperature, speed, CO_2 and humidity. All parameters can be viewed, set, started and stopped from the main screen.

Real-time Monitoring:
The smart system shares information in real time, allowing users to see both the set value and current value for each parameter. This enables better monitoring and control of the incubation process to help ensure optimal conditions for experimentation and sample growth.



User Access Control:
With this feature, you can assign different levels of access for authorized personnel to enhance security and enable only authorized individuals to make changes to critical parameters.

Data Query and Export:
Users can easily retrieve run data, alarm history and operation logs in PDF or xls format.

Customizable Programming:
From the home screen, you can create and program up to 50 customized protocols, with each protocol containing a maximum of 50 steps.

This flexibility allows for precise control over incubation time, temperature and speed, helping ensure reproducibility and accuracy. You can also operate in Manual mode for continuous or timed operation

Incubator Shakers

Stable and Efficient Operation

Using multi-dimensional eccentric self-balancing drive technology, the whole machine's vibration displacement is <0.01 mm, the speed accuracy is ±0.5 rpm, and long-term operational stability is more reliable, ensuring that cells/microorganisms are subjected to uniform force, higher mixing consistency, and higher cell survival rates.

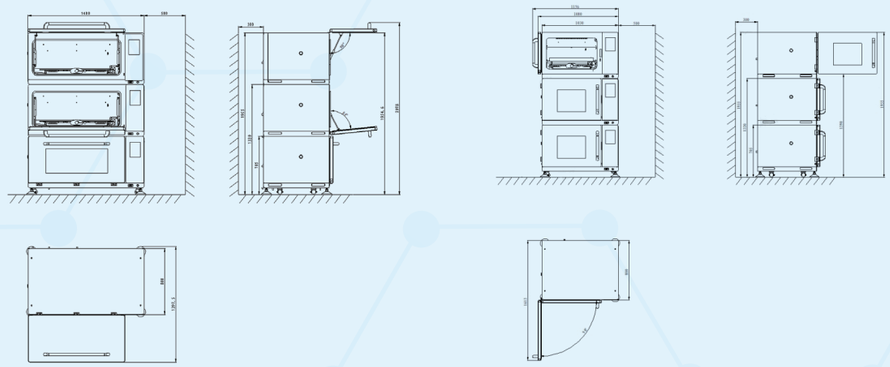
Gentle shaking ramp up and ramp down helps minimize cell damage. An insulated chamber design with hydrocarbon refrigeration enables improved energy efficiency and quiet operation.

A steam generator and carboy kit (sold separately) let you control humidity, while a calibration system, thermal protection switches and parameter alarms provide reliable sample protection. You may also store, retrieve and analyze run data through the touchscreen interface and control user access for enhanced security

Protect Your Hard Work:
- Parameter alarms: Speed, temperature,%RH, CO_2, communication, no gas
- Parameter calibration: Temp, %RH, CO_2
- Thermal protection switches: Protect from high power input
- Overheating shutdown: Prevents runaway heating element
- Door monitoring: Shaking stops automatically when the door is open

Product Dimensions

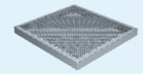
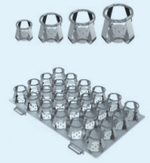
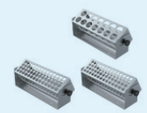
unit :mm



HYP-380C

HYP-260C

Accessories

Universal spring clamps	HYP-260C	HYP-380C	Picture
590 x 550mm	√	-	
890 x 550mm	-	√	
Adhesive silicone pad (recommended speed <200rpm)	HYP-260C	HYP-380C	Picture
140 x 140mm	Max. Qty 16	Max. Qty 24	
Stainless steel conical flask clamps	HYP-260C	HYP-380C	Picture
250ml	x 42	x 60	
300ml	x 38	x 60	
500ml	x 25	x 40	
1L	x 16	x 28	
2L	x 9	x 15	
3L	x 8	x 11	
5L(Thomson)	x 4	x 8	
Other specifications of flask clamps can be customized as needed (50mL-200mL)			
Adjustable-angle stainless steel test tube/centrifuge tube rack	HYP-260C	HYP-380C	Picture
W *D *H (mm)=305*82*100	Optional specifications, configure a maximum of 5	Optional specifications, configure a maximum of 7	
5ml tube (φ14mm×56)			
10ml tube/15ml centrifuge tube(φ16mm×40)			
15ml tube (φ18mm×36)			
15ml tube (φ22mm×30)			
50ml tube/50ml centrifuge tube(φ30mm×14)			
15ml centrifuge tube (φ18mm×33)			
15ml centrifuge tube (φ18.5mm×36)			
10, 15 ml centrifuge tube (φ15.5mm×40)			
20ml tube (φ21.5mm×30)			
Stainless Steel Hole Clamp	HYP-260C	HYP-380C	Picture
Universal Standard Deep Hole Plate	Optional according to user's demand	Optional according to user's demand	
W *D *H (mm)=130*100*65			
Universal Standard Microplate			
W *D *H (mm)=135*93*15			
Support stand	HYP-260C	HYP-380C	
W*D*H(mm)	990*800*400 (casters not included)	1360*800*400 (casters not included)	



Incubator Shakers

Specifications

		HYP-380C	HYP-260C
	unit		
Voltage/Frequency		220v/50/60hz	220v/50/60hz
Temperature Control			
Cooling	yes/no	yes	yes
Temp. minimum	°C	4(RT-20)	4(RT-20)
Temp. maximum	°C	65	65
Setting, digital	°C	0.1	0.1
Temperature uniformity @ 37° (RT22±3 °C)	°C	±0.3	±0.3
Power of heating (electric)	W	800	650
Power of cooling (electric)	W	137	137
Humidification (standard)			
Humidity max. at 37 °C	% r. H.	≥85	≥85
Humidity Control (optional, ≥15°C)			
Humidity max. at 37°C	% r. H.	90	90
Humidity min. at 37 °C	% r. H.	50	50
Setting, digital	r. H.	0.1	0.1
Accuracy absolute	±% r. H.	3	3
Power of waterbath heater	W	200	200
Power of door and frame heater	W	160	122
Water refill		automatic	automatic
Principle of hum. Sensor	type	capacitive	capacitive
Principle of hum. Control	type	evaporation	evaporation
CO_2 Control*			
CO_2 max.	%	20	20
CO_2 min.	%	0	0
Setting, digital	%	0.1	0.1
Accuracy absolute	±%	0.40 at 5% CO_2	0.40 at 5% CO_2
Temperature range	°C	up to 60	up to 60
CO_2 supply	bar	max.1.2 bar overpressure	max.1.2 bar overpressure
Principle of sensor	type	Infrared (IR)	Infrared (IR)

Shaking Control			
Motor	type	Multidimensional self-balancing	Multidimensional self-balancing
Shaking diameter	mm	50(standard)/26(optional)	50(standard)/26(optional)
Shaking motion	type	orbital	orbital
Shaking frequency range at 26 mm	rpm	0/10-300 (top layer 250)	0/10-300 (top layer 250)
Shaking frequency range at 50 mm	rpm	0/10-250 (top layer 200)	0/10-250 (top layer 200)
Tray size max.	mm	900*560	600*560
Loading max.	kg	35	25
Setting, digital	rpm	1 rpm	1 rpm
Accuracy absolute	±rpm	0.5rpm	±0.5rpm
Timer	s:h	0-999h59min	0-999h59min
Acceleration		controlled	controlled
Active brake		adjustable	adjustable
Stop on position		no	no
Power of standard motor (EM-Z/ EM-Z (HP/HS))	W	250	250
General			
Incubation gas volume	L	380	260
Net/Gross Weight(approx)	kg	248/295	180/220
	lbs	547/650	397/485
Illumination	type	LED	LED
Operation menu MMI		EN, CN	EN, CN
Operation menu Insight		EN	EN
Interface, standard		USB	USB
Interface, optional		RS485/Printer/Remote alarm	RS485/Printer/Remote alarm
Ambient temperature	°C	5-35	5-35
Cable feedthrough port	mm	26	26
Material incubation chamber		stainless steel	stainless steel
Material outer chamber		cold-rolled steel powder coated	cold-rolled steel powder coated
Useful height above shaker tray	mm	395	395
Door glass and frame		heated	heated
Packing dimensions (w*d*h) with packaging base	mm	1510*1000*850	1140*970*850
	in	59.5*39.4*33.5	44.9*38.2*33.5
Internal dimensions (w*d*h)	mm	1095*695*495	725*675*495
	in	43.1*27.4*19.5	28.5*26.6*19.5
External dimensions (w*d*h) (Excluding the door handle and casters)	mm	one layer 1400*840*625 two layers 1400*840*1250 three layers 1400*840*1875	one layer 1030*840*625 two layers 1030*840*1250 three layers 1030*840*1875
	in	one layer 55.1*33.1*24.6 two layers 55.1*33.1*49.2 three layers 55.1*33.1*73.8	one layer 40.6*33.1*24.6 two layers 40.6*33.1*49.2 three layers 40.6*33.1*73.8
Refrigerant		R134A	R134A

Incubator Shakers

Suspension Cell Culture
It is ideally suited for the cultivation of mammalian and human cell cultures due to its accurate and efficient CO_2 and humidity control. Every machine is factory calibrated (with performance certification) and Haier biomedical guarantees a precise control of the environmental parameters over the complete lifespan of the machine – for reliable and reproducible cultivation processes.

Plant cell cultures
For the cultivation of phototrophic plant cell cultures, the ceiling of the Haier biomedical incubator shaker can be fitted with an illumination unit for photosynthesis (LED modules). The control module allows full programming of night/day cycles and variable light intensity.

For all applications in

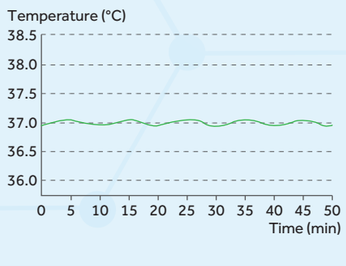
Laboratories | Research centres | Production facilities | Automatization | GMP



HYP-380C Pro/260C Pro

Product Feature

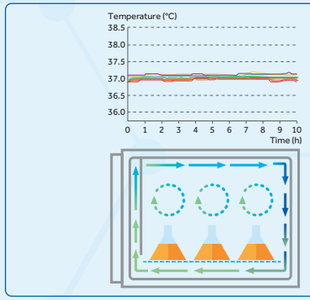
Reliable, Versatile Units for Enhanced Cell Growth



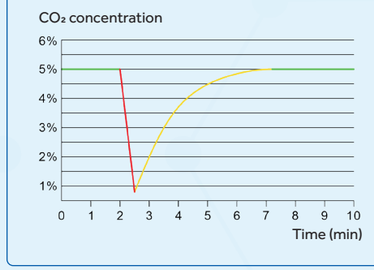
Temperature control fluctuation inside the cabinet ≤ ±0.2°C.

Using intelligent sensing and control technology, the temperature accuracy inside the cabinet is ≤±0.2°C.

Cross-flow wind field + unique air duct design, temperature uniformity ≤ ±0.3°C at 37°C.

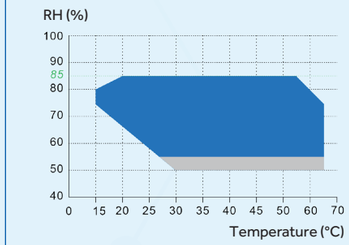


Note : test conditions: RT22±3°C



With the CO_2 concentration stably set at 5%, open the door for 30 seconds and then close it. The CO_2 concentration inside the box can recover to the set value of 5% in the fastest 4 minutes.

(Optional) Professional humidity sensor, precise humidity control (at37°C, 5%CO_2, RT22±3°C).



- For areas with controlled ambient temperature and humidity.
- Due to environmental humidity or excess moisture inside the unit, humidity fluctuations or instability may occur. Please drain any excess water from inside the cabinet before use.

**Ambient temperature 22°C±3, set at 37°C, 5% CO_2

Convenience, Precision and Programming at Your Fingertips

Ease of Use:
The 10-inch color touchscreen interface is intuitive and user-friendly, allowing for easy control and adjustment of parameters such as temperature, speed, CO_2 and humidity. All parameters can be viewed, set, started and stopped from the main screen.

Real-time Monitoring:
The smart system shares information in real time, allowing users to see both the set value and current value for each parameter. This enables better monitoring and control of the incubation process to help ensure optimal conditions for experimentation and sample growth.



User Access Control:
With this feature, you can assign different levels of access for authorized personnel to enhance security and enable only authorized individuals to make changes to critical parameters.

Data Query and Export:
Users can easily retrieve run data, alarm history and operation logs in PDF or xls format.

Customizable Programming:
From the home screen, you can create and program up to 50 customized protocols, with each protocol containing a maximum of 50 steps.

This flexibility allows for precise control over incubation time, temperature and speed, helping ensure reproducibility and accuracy. You can also operate in Manual mode for continuous or timed operation

Incubator Shakers

Stable and Efficient Operation

Using multi-dimensional eccentric self-balancing drive technology, the whole machine's vibration displacement is <0.01 mm, the speed accuracy is ±1 rpm, and long-term operational stability is more reliable, ensuring that cells/microorganisms are subjected to uniform force, higher mixing consistency, and higher cell survival rates.

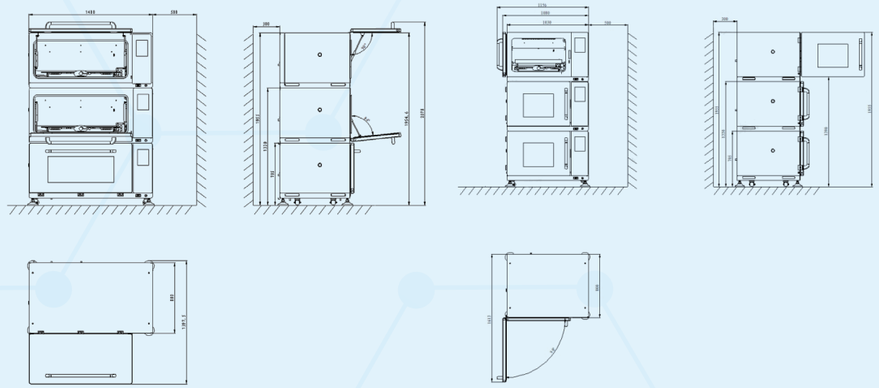
Gentle shaking ramp up and ramp down helps minimize cell damage. An insulated chamber design with hydrocarbon refrigeration enables improved energy efficiency and quiet operation.

Optional active humidity-control system incorporates high-precision humidity sensors and auto-water-feeding units to dynamically adjust chamber relative humidity with superior regulation accuracy. It maintains a long-lasting uniform and stable incubation microenvironment, cuts down water loss and ambient interference, and suits humidity-sensitive experiments including cell culture and microbial fermentation.

Protect Your Hard Work:
- Parameter alarms: Speed, temperature,%RH, CO_2, communication, low gas concentration alarm
- Parameter calibration: Temp, %RH, CO_2
- Thermal protection switches: Monitor the equipment temperature and cut off the power supply when the temperature exceeds the set limit, preventing overheating, fire, and component damage while protecting the safety of the equipment and laboratory.
- Overheating shutdown: Prevents runaway heating element
- Door monitoring: Shaking stops automatically when the door is open

Product Dimensions

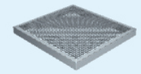
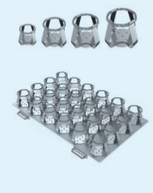
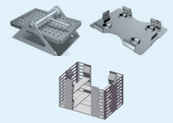
unit :mm



HYP-380C Pro

HYP-260C Pro

Accessories

Universal spring clamps	HYP-260C Pro	HYP-380C Pro	Picture
590 x 550mm	√	-	
890 x 550mm	-	√	
Adhesive silicone pad (recommended speed <200rpm)	HYP-260C Pro	HYP-380C Pro	Picture
140 x 140mm	Max. Qty 16	Max. Qty 24	
Stainless steel conical flask clamps	HYP-260C Pro	HYP-380C Pro	Picture
250ml	x 42	x 67	
300ml	x 42	x 67	
500ml	x 25	x 40	
1L	x 16	x 28	
2L	x 9	x 15	
3L	x 8	x 11	
5L(Thomson)	x 4	x 8	
Other specifications of flask clamps can be customized as needed (25mL-200mL)			
Adjustable-angle stainless steel test tube/centrifuge tube rack	HYP-260C Pro	HYP-380C Pro	Picture
W *D *H (mm)=305*82*100	Optional specifications, configure a maximum of 5	Optional specifications, configure a maximum of 7	
5ml tube (φ14mm×56)			
10ml tube/15ml centrifuge tube(φ16mm×40)			
15ml tube (φ18mm×36)			
20ml tube (φ22mm×30)			
50ml tube/50ml centrifuge tube(φ30mm×14)			
15ml centrifuge tube (φ18.5mm×36)			
10, 15 ml centrifuge tube (φ15.5mm×40)			
20ml tube (φ21.5mm×30)			
Stainless Steel Hole Clamp	HYP-260C Pro	HYP-380C Pro	Picture
Universal Standard Deep Hole Plate	Optional according to user's demand	Optional according to user's demand	
W *D *H (mm)=130*100*65			
Universal Standard Microplate			
W *D *H (mm)=135*93*15			
Double-Deck Deep-Well Plate Holder			
W*D*H (mm)=155*105*100			
Support stand	HYP-260C Pro	HYP-380C Pro	
W*D*H (mm)	990*800*400 (casters not included)	1360*800*400 (casters not included)	



Incubator Shakers

Specifications

		HYP-380C Pro	HYP-260C Pro
	unit		
Voltage/Frequency		220v/50/60hz	220v/50/60hz
Temperature Control			
Cooling	yes/no	yes	yes
Temp. minimum	°C	4(RT-20)	4(RT-20)
Temp. maximum	°C	65	65
Setting, digital	°C	0.1	0.1
Temperature uniformity at 37° (RT22±3°C)	±°C	±0.3	±0.3
Power of heating (electric)	W	1000	500
Power of cooling (electric)	W	231	231
Principle of temp. sensor	type	PT-100	PT-100
Humidification (standard)			
Humidity max. at 37°C	% r. H.	85	85
Humidity Control (optional, 15°C and above 15°C)			
Humidity max. at 37°C	% r. H.	85	85
Humidity min. at 37°C	% r. H.	50	50
Setting, digital	r. H.	0.1	0.1
Accuracy absolute	±% r. H.	3	3
Power of waterbath heater	W	400	400
Door Body, Door Glass Heating	W	60+100	60+60
Water refill		automatic	automatic
Principle of hum. Sensor	type	capacitive	capacitive
Principle of hum. Control	type	evaporation	evaporation
CO_2 Control*			
CO_2 max.	%	20	20
CO_2 min.	%	0	0
Setting, digital	%	0.1	0.1
Accuracy absolute	±%	0.40 at 5% CO_2	0.40 at 5% CO_2
Temperature range with CO_2 control	°C	up to 60	up to 60
CO_2 supply	bar	0.8~1.2bar	0.8~1.2bar
Principle of sensor	type	Infrared (IR)	Infrared (IR)

Shaking Control			
Motor	type	Multidimensional self-balancing	magnetic direct-drive
Shaking diameter	mm	Standard: 25 / Optional: 50	Standard: 25 / Optional: 3,12.5,19,50
Shaking motion	type	orbital	orbital
Shaking frequency range at 3 mm		/	0/30-300 (top layer 250)
Shaking frequency range at 12.5 mm	rpm	/	0/30-300 (top layer 250)
Shaking frequency range at 19 mm		/	0/30-300 (top layer 250)
Shaking frequency range at 25 mm	rpm	0/10-300 (top layer 250)	0/30-300 (top layer 250)
Shaking frequency range at 50 mm	rpm	0/10-250 (top layer 200)	0/30-300 (max 250ml flask) (top layer 250)
Tray size max.	mm	900*560	600*560
Loading max. (≤200 rpm)	kg	35	20
Setting, digital	rpm	1	1
Accuracy absolute	±rpm	±1	±1
Timer	s:h	0-999h59min	0-999h59min
Acceleration		controlled	controlled
Active brake		adjustable	adjustable
Power of standard motor (EM-Z/ EM-Z (HP/HS))	W	250	400
General			
Incubation gas volume	L	380	260
Net/Gross Weight(approx)	kg	248/295	200/240
	lbs	547/650	441/529
Illumination	type	LED	LED
Operation menu MMI		EN, CN	EN, CN
Operation menu Insight		EN	EN
Interface, standard		USB	USB
Interface, optional		RS485, Printer, Remote alarm	RS485, Printer, Remote alarm
Ambient temperature	°C	5-35	5-35
Cable feedthrough port	mm	26	26
Material incubation chamber		stainless steel	stainless steel
Material outer chamber		cold-rolled steel powder coated	cold-rolled steel powder coated
Useful height above shaker tray	mm	395	395
Door glass and frame		heated	heated
packing dimensions(w*d*h)	mm	1510*1000*850	1140*970*850
With packaging base	in	59.5*39.4*33.5	44.9*38.2*33.5
Internal dimensions(w*d*h)	mm	1095*695*495	725*675*495
	in	43.1*27.4*19.5	28.5*26.6*19.5
External dimensions(w*d*h) (Excluding the door handle and casters)	mm	one layer 1400*840*625 two layers 1400*840*1250 three layers 1400*840*1875	one layer 1030*840*625 two layers 1030*840*1250 three layers 1030*840*1875
	in	one layer 55.1*33.1*24.6 two layers 55.1*33.1*49.2 three layers 55.1*33.1*73.8	one layer 40.6*33.1*24.6 two layers 40.6*33.1*49.2 three layers 40.6*33.1*73.8

Incubator Shakers

Scope of Application
It creates a dynamic culture environment for cells and microorganisms. Through the shaking plate, it initiates orbital shaking of the culture containers, significantly enhancing gas transfer and mass transfer rates within the culture medium. This makes it perfect for high - density culturing of cells and microorganisms as well as process amplification in production. Its main application areas cover the dynamic culturing of cells, bacteria, fungi and various other microorganisms.

Magnetic Direct Drive:
Precise and Reliable Rotation Speed

Peltier Cooling:
Precise and Gentle Temperature Control

Consistent and uniform CO_2 distribution:
precise concentration and a lightning - fast recovery rate

Personalized Options:
Empowering Limitless Multifunctional Expansion

Applications

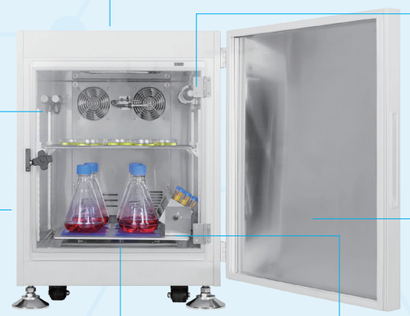
- Bacteria and yeast culture
- Solubility studies
- General mixing
- Staining and destaining
- Hybridizations
- Diagnostic tests
- Washing procedures
- Protein production
- Plasmid production



HYLP-135C

Product Feature

Multi - safety & User - friendly Design



Comprehensive Safety Configuration
Supports high/low/over-temperature warning, abnormal speed alert and automatic heating cutoff. A dedicated slow-stop safety design ensures all-round protection ofoperators, samples and facilities

User-Friendly Operation
Passive humidity regulation; Supports UV sterilization with adjustable timing; Auto-recovery after abnormal power outage to prevent experiment interruption and data missing

Optimal Space Utilization
Supports single and dual-layer stacking configurations with a side-opening door design. It effectively minimizes floor footprint and maximizes overall space utilization efficiency.

Zero Condensation Design
Equipped with dedicated door heating function to eliminate condensation under high humidity, which restrains bacterial growth.

Professional Structural Design
Specially designed side vents deliver sufficient oxygen circulation for sample cultivation, creating a superior growth environment.

Dynamic - Static Fusion:
A dynamic shaking plate paired with an adjustable - height static shelf provides versatile functionality for various experiments.

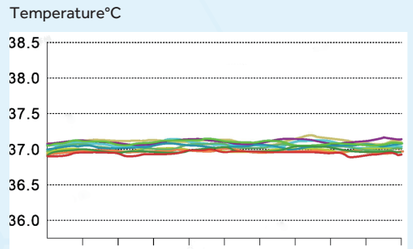
Effortless Cleaning and Maintenance:
The inner tank's bottom is crafted from 304 brushed stainless steel, offering not only easy cleaning but also excellent corrosion resistance. The fully flushable base design eliminates cleaning dead corners completely. Equipped with an integrated sloped structure, it enables efficient and rapid drainage

Precision Direct Drive Motor for Reliable, Accurate Speed Control:

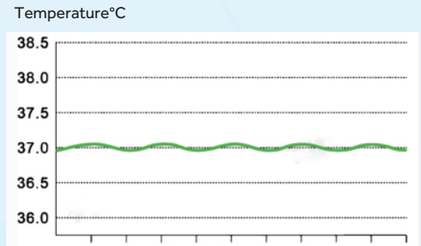
- Unrivaled Precision, Reliability & Low – Temperature
- Operation with Multiple Amplitudes for All Your Needs
- EMC Certified & Filter - Equipped to Minimize EM Interference

Peltier refrigeration for exquisitely precise and gentle temperature control:

- Precise temperature control with a fast response speed, ≤±0.4°C (at 37°C, RT22±3°C).
- No - frost design enables long - term operation in the low - temperature area, ensuring stable temperature with low fluctuation
- Quiet operation without vibration, energy - saving, environmentally friendly, pollution - free, safe, reliable and long - lasting



Temperature uniformity ≤±0.4°C (at 37°C,RT22±3)



Temperature fluctuations ±0.2°C

Personalized options for multi - functional expansion:

- Oxygen concentration control module: Concentration range from 1 - 21%
- Active humidity control module with a humidity range of 50 - 90%

"*Data source: Tested under the conditions of ambient temperature 22±3°C, temperature set at 37°C, and carbon dioxide set at 5%, the results are clear

Durable construction, reliable performance:

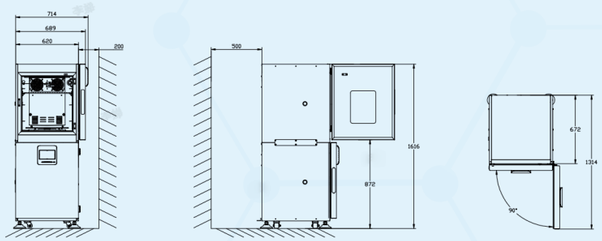
- Durable powder-coated, cold-rolled steel exterior construction
- Precisely monitor and control chamber temperature over complete range with 0.1° C accuracy with PID temperature controller
- Solid-state DC brushless motor, variable speed control from 30 to 300 rpm
- Continuous, timed, or multi-step programs with up to 50 steps, fifty programs storable

Smart shaker drive control:

- Smooth acceleration and deceleration avoid splashing and mechanical damage; for safety, shaker stops, if door is opened to prevent the shaker from walking

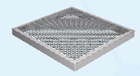
Incubator Shakers

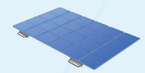
unit: mm



HYLP-135C

Accessories

Universal Spring Clamps	HYLP-135C	Picture
420 x 420mm	√	

Adhesive silicone pad (recommended speed <200rpm)	HYLP-135C	Picture
140 x 140mm	Max. Qty 9	

Stainless steel conical flask clamps	HYLP-135C	Picture
250ml	x 16	
300ml	x 16	
500ml	x 13	
1L	x 9	
2L	x 4	
3L	x 4	
5L(Thomson)/5L normall	x 1	
25-200ml customized		

Adjustable-angle stainless steel test tube/centrifuge tube rack W *D *H (mm)=305*82*100	HYLP-135C	Picture
5ml tube (φ14mm×56)	Max. Qty 3	
10ml tube/15ml centrifuge tube(φ15mm×40)		
15ml tube (φ18mm×36)		
15ml tube (φ22mm×30)		
50ml tube/50ml centrifuge tube(φ30mm×14)		
15ml centrifuge tube (φ18mm×33)		
15ml centrifuge tube (φ18.5mm×36)		
10, 15 ml centrifuge tube (φ15.5mm×40)		
20ml tube (φ21.5mm×30)		

Stainless Steel Hole Clamp	HYLP-135C	Picture
Universal Standard Deep Hole Plate	Optional according to user's demand	
W *D *H (mm)=130*100*65		
Universal Standard Microplate		
W *D *H (mm)=135*93*15		

Specifications

			HYLP-135C
Voltage/Frequency			220v/50/60hz
Construction	Chamber Volume		135L
	Interior Chamber		304 stainless steel
	Exterior Chamber		Powder coated cold rolled plate + hot zinc plate
	Access Port		26 mm diameter
	Sterilization Method		UV sterilization, timer adjustable
	Cooling Method		Peltier
Chamber Construction	The Main Body Material		cold-rolled steel powder coated
	Inner Material		304 stainless steel
	Noise dB(A)		≤52dB(A) at 25℃, 150 rpm; ≤54 dB(A) under other operating conditions.
Dimensions	Net/Gross Weight (approx)	kg	113/135
		lbs	249.12/297.62
	Internal Dimensions (W*D*H)	mm	500*510*500
		in	19.69*20.08*19.69
	External Dimensions (W*D*H) Includes Base Feet and Casters	mm	620*740*845
		in	24.41*29.13*33.27
	Packing Dimensions (W*D*H) With Packaging Bottom Support	mm	720*840*980
		in	28.35*33.07*38.58
	Container Load (20'/40'/40'H)		42/84/84
Shelves	Dimensions(W*D) mm		473*436
	Number Standard/Maximum		1 /6
	Max.Load per Shelf (kg)		10kg
Universal Platform	Dimensions(W*D) mm		420*420
	Number		1
	Max.load (kg)		10
Electrical	Rated Voltage Power Supply (V/HZ)		220v/50/60hz
	Nominal Consumption (kw.h)		0.1 kWh/h (Test conditions: 37°C, 200 rpm (no load), 5% CO_2, passive humidification)
			2.4 kWh/24h (Test conditions: 37°C, 200 rpm (no load), 5% CO_2, passive humidification)
Control	Rated Power (W)		800
	Controller		Microprocessor
	Display		7 inch trouch screen (HD)
Temperature Range and Accuracy	Operating Temperature range (°C)		4-65 (RT-15)
	Temperature Accuracy (°C)		0.1
	Temperature Uniformity (°C)		≤±0.4°C (at 37°C, RT22±3)
	Temperature Fluctuations (°C)		±0.2
	Temperature Uniformity		0.4°C at 37°C
	Temperature Fluctuation		0.2°C at 37°C
CO_2 Control	CO_2 Range		0-20%
	CO_2 Fluctuation		±0.1%
	CO_2 Recovery After 30s Door Open		3min (fastest)

Incubator Shakers

			HYLP-135C
Shaking Control	No-load Shaking Speed (rpm)		30-300
	Speed Accuracy (rpm)		±1
	Shaking Mode		Orbital shaking (Magnetic direct drive · Variable amplitude)
	Orbital Diameter		25mm (standard); 19 mm (optional); Other amplitudes can be customized
Function	IOT		Optional
	RS485		Optional
	Remote Alarm		Optional
	4-20mA		Optional
	Blackout Curtain		Optional
	USB		Standard
	Humidity Control	Natural Humidification	Standard
		Humidity Display	Optional
		Humidity Sensor Type	Optional
		Active Humidity Control	Optional
	Timer		standard: 999h59min
	Lighting		2W LED light with manual & automatic control
	Door Heating		Standard
	Reverse Rotation Switching		Standard
	Timer Start		Standard
	Safety	Operation Stops when Door is Opened	Soft stop when door opens, soft start
		Speed Failure Alarm	Shaking abnormality alarm
		Over-temperature Alarm	High temp. low temp. & over-temperature alarms
		Power-off Restart	Restores previous settings after power interruption
	Program Storage	History Data Storage	Data storage for more than 10 years
		Data Recording Interval	Adjustable
		Number of Storable Programs	50
		Program Segments	50
		Program Segment Cycle Times	99
Other	Certificate		CE

Scope of Application
Incubator Shakers is a kind of biological incubator to provide dynamic culture environment for microorganisms, through the oscillation structure to drive the culture vessel for orbital oscillation to improve the aeration and mass transfer rate inside the medium, suitable for microorganisms in high-density cultivation and process amplification in the production process.

Applications

- Growth of Bacteria or Yeast
- Protein Production
- Dissolution Studies
- Hybridizations
- Extractions
- DNA Production

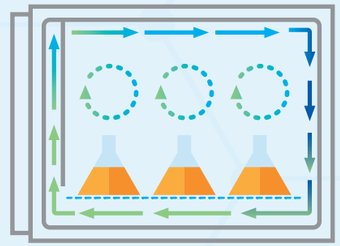


HYP-380Q/260Q

Product Feature

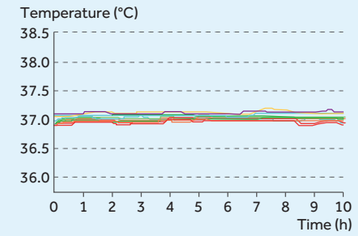
- High Precision of Temperature Uniformity
- Stable and Efficient Operation
- Ergonomic and Intuitive Handling

High Precision of Temperature Uniformity

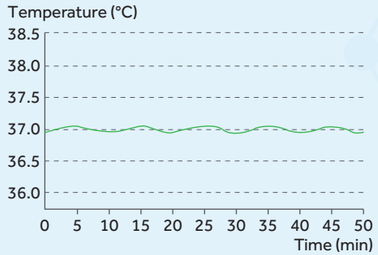


Fuzzy PID precision controlCross-flow wind field air duct design, more uniform temperature inside the cabinet

Temperature fluctuation of the center point of the cabinet ≤±0.2°C (at 37°C, test conditions: RT22+3°C)



Incubator Shakers



Test uniformity ≤±0.3°C at 37°C (test conditions: RT22±3°C)

Stable and Efficient Operation

Multi-dimensional integrated eccentric self-balancing drive technology, strong load capacity, high speed and long-term operational stability

Units can be stacked two to three high for space savings with a speed range of 10 to 250 rpm ±1 rpm

Customized high-quality servo motors, precise speed control system, stable performance and long life

Shaker door features a magnetic gasket for a tight seal, pneumatic dampers for smooth controlled opening, and hinges with counter- balance springs to ease door closing

Refrigeration system temperature zone design, to ensure that the temperature control of different working conditions is more accurate and stable

Abnormal power failure recovery function, after recovery in accordance with the original parameters to continue to run, to avoid the termination of the experiment and data loss due to power outages, computer crash

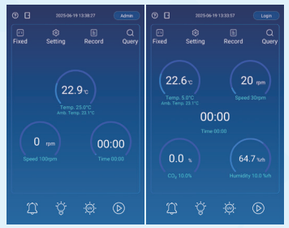
The whole machine through the electromagnetic compatibility EMC certification, equipped with filters, to reduce the outside world, their own electromagnetic interference; to ensure that the equipment runs more safely, stable

Ergonomic and Intuitive Handling

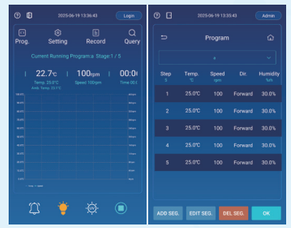
Ergonomically designed fold down door and rocker platform with one-touch pull-out locking; maximum platform height of 61" (154.9 cm) when stacked three units high improves sample handling

Intuitive operation by 10 inch touch interface

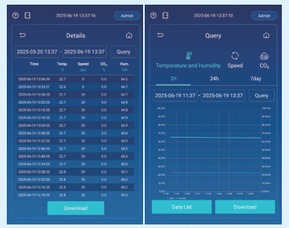
Logging of alarms, chamber temperature, rpm, door openings; Track temperature and RPM as chart on user interface or export data from the device; Access restriction to change settings by user management



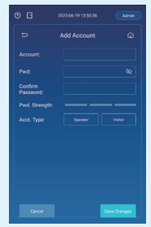
Parameter one-screen display



Real-time display of program segments and curves

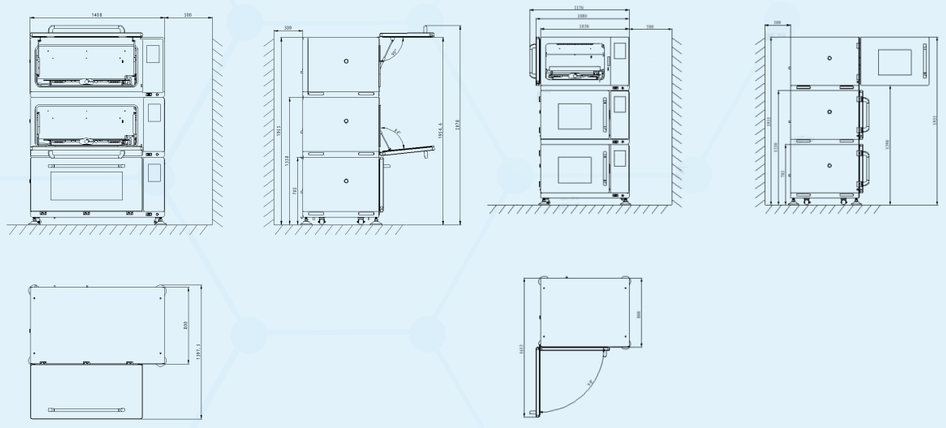


Operating data, events, alarms, curves



Three levels of authority

Product Dimensions

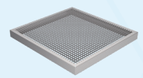


HYP-380Q

HYP-260Q

Incubator Shakers

Accessories

Universal Spring Clamps	HYP-260Q	HYP-380Q	Picture
590 x 550mm	√	-	
890 x 550mm	-	√	
Adhesive silicone pad (recommended speed <200rpm)	HYP-260Q	HYP-380Q	Picture
140 x 140mm	Max. Qty 16	Max. Qty 24	
Stainless steel conical flask clamps	HYP-260Q	HYP-380Q	Picture
250ml	x 42	x 60	
300ml	x 38	x 60	
500ml	x 25	x 40	
1L	x 16	x 28	
2L	x 9	x 15	
3L	x 8	x 11	
5L(Thomson)	x 4	x 8	
Other specifications of flask clamps can be customized as needed (50mL-200mL)			
Adjustable-angle stainless steel test tube/centrifuge tube rack	HYP-260Q	HYP-380Q	Picture
W *D *H (mm)=305*82*100	Optional specifications, configure a maximum of 5	Optional specifications, configure a maximum of 7	
5ml tube (φ14mm×56)			
10ml tube/15ml centrifuge tube(φ16mm×56)			
15ml tube (φ18mm×33)			
15ml tube (φ22mm×30)			
50ml tube/50ml centrifuge tube (φ30mm×14)			
15ml centrifuge tube (φ18.5mm×36)			
10,15 ml centrifuge tube (φ15.5mm×56)			
20ml tube (φ21.5mm×30)			
Stainless Steel Hole Clamp	HYP-260Q	HYP-380Q	Picture
Universal Standard Deep Hole Plate	Optional according to user's demand	Optional according to user's demand	
W *D *H (mm)=130*100*65			
Universal Standard Microplate			
W *D *H (mm)=135*93*15			
Support stand	HYP-260Q	HYP-380Q	
W*D*H (mm)	990*800*400 (casters not included)	1360*800*400 (casters not included)	



Specifications

		HYP-380Q	HYP-260Q
Voltage/Frequency		220v/50Hz	220v/50Hz
			
Temperature Control			
Cooling	yes/no	yes	yes
Temp. minimum	°C	4(RT-20)	4(RT-20)
Temp. maximum	°C	65	65
Setting, digital	°C	0.1	0.1
Temperature uniformity @ 37° (RT22±3°C)	±°C	±0.3	±0.3
Power of heating (electric)	W	800	650
Power of cooling (electric)	W	165	165
Principle of temp. sensor	type	PT-1000	PT-1000
Gas circulation	m3/h	/	/
Shaking Control			
Motor	type	Multidimensional self-balancing	Multidimensional self-balancing
Shaking diameter	mm	26(standard)/50(optional)	26(standard)/50(optional)
Shaking motion	type	orbital	orbital
Shaking frequency range at 12.5 mm	rpm	/	/
Shaking frequency range at 26 mm	rpm	0/10-300(top layer 250)	0/10-300(top layer 250)
Shaking frequency range at 50 mm	rpm	0/10-250(top layer 200)	0/10-250(top layer 200)
Shaking frequency range at 70 mm	rpm	/	/
Tray size max.	mm	900*560	600*560
Loading max.	kg	35	25
Setting, digital	rpm	1	1
Accuracy absolute	±rpm	1	1
Timer	s:h	0-999h59min	0-999h59min
Acceleration		controlled	controlled
Active brake		adjustable	adjustable
Stop on position		no	no
Power of standard motor (EM-Z/ EM-Z (HP/HS))	W	250	250
General			
Power consumption typical		/	/
Power consumption max.		/	/
Incubation gas volume		380	260
Net/Gross Weight (approx)		248/295	180/220
		547/650	397/485
Illumination		LED	LED
Operation menu MMI		EN/CN	EN/CN
Operation menu Insight		EN	EN
Interface, standard		USB	USB
Interface, optional		RS485/Printer/Remote alarm	RS485/Printer/Remote alarm
Ambient temperature		5-35	5-35
Cable feedthrough port		26	26
Material incubation chamber		stainless steel	stainless steel
Material outer chamber		cold-rolled steel powder coated	cold-rolled steel powder coated
Useful height above shaker tray		395	395
Door glass and frame		heated	heated
Packing dimensions (w*d*h) with packaging base		1510*1000*850	1140*970*850
		59.5*39.4*33.5	44.9*38.2*33.5
Internal dimensions (w*d*h)		1095*695*495	725*675*495
		43.1*27.4*19.5	28.5*26.6*19.5
External dimensions (w*d*h) (Excluding the door handle and casters)		one layer 1400*840*625 two layers 1400*840*1250 three layers 1400*840*1875	one layer 1030*840*625 two layers 1030*840*1250 three layers 1030*840*1875
		one layer 55.1*33.1*24.6 two layers 55.1*33.1*49.2 three layers 55.1*33.1*73.8	one layer 40.6*33.1*24.6 two layers 40.6*33.1*49.2 three layers 40.6*33.1*73.8
Refrigerant		R134A	R134A

Incubator Shakers

Scope of Application
Incubator Shakers is a kind of biological incubator to provide dynamic culture environment for microorganisms, through the oscillation structure to drive the culture vessel for orbital oscillation to improve the aeration and mass transfer rate inside the medium, suitable for microorganisms in high-density cultivation and process amplification in the production process.

Applications

- Growth of Bacteria or Yeast
- Protein Production
- Dissolution Studies
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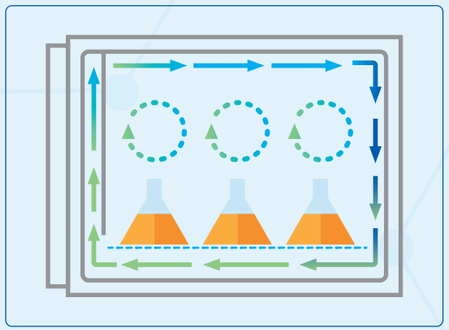
HYP-380Q Pro/260Q Pro

Product Feature

High Precision of Temperature Uniformity

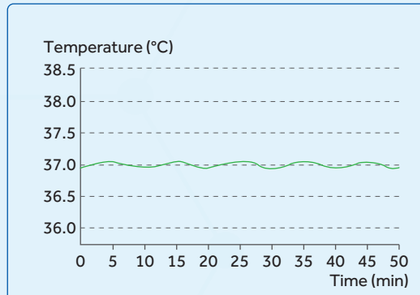
Stable and Efficient Operation

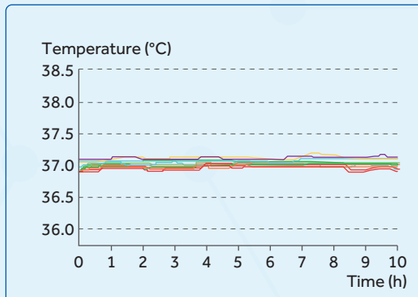
Ergonomic and Intuitive Handling



Fuzzy PID precision controlCross-flow wind field air duct design, more uniform temperature inside the cabinet

Temperature fluctuation of the center point of the cabinet ≤±0.2°C (at 37°C, test conditions: RT22+3°C)





Test uniformity ≤±0.3°C at 37°C (test conditions: RT22±3°C)

Stable and Efficient Operation

Multi-dimensional integrated eccentric self-balancing drive technology, strong load capacity, high speed and long-term operational stability

Units can be stacked two to three high for space savings with a speed range of 10~300rpm ±1 rpm

Customized high-quality servo motors, precise speed control system, stable performance and long life

The cabinet door is equipped with a magnetic sealing gasket to ensure excellent cabinet sealing performance. The 380Q Pro model supports both top-opening and bottom-opening configurations and is equipped with pneumatic dampers for smooth and controlled door opening and closing. A balance spring is also provided to make door closing easy and effortless. The 260Q Pro series features a side-opening door design.

Refrigeration system temperature zone design, to ensure that the temperature control of different working conditions is more accurate and stable

Abnormal power failure recovery function, after recovery in accordance with the original parameters to continue to run, to avoid the termination of the experiment and data loss due to power outages, computer crash

The whole machine through the electromagnetic compatibility EMC certification, equipped with filters, to reduce the outside world, their own electromagnetic interference; to ensure that the equipment runs more safely, stable

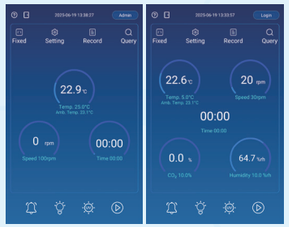
Incubator Shakers

Ergonomic and Intuitive Handling

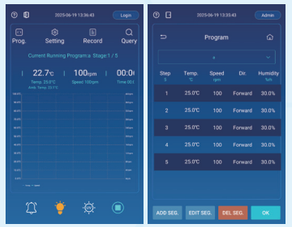
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Intuitive operation by 10 inch touch interface

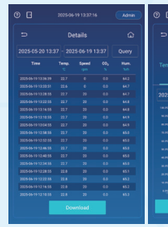
Logging of alarms, chamber temperature, rpm, door openings; Track temperature and RPM as chart on user interface or export data from the device; Access restriction to change settings by user management



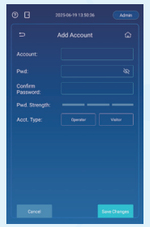
Parameter one-screen display



Real-time display of program segments and curves

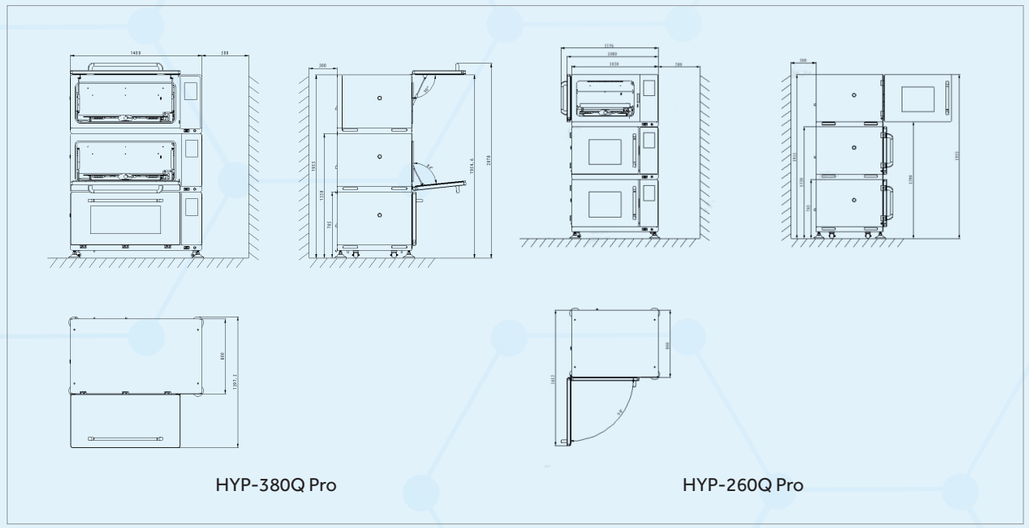


Operating data, events, alarms, curves



Three levels of authority

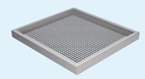
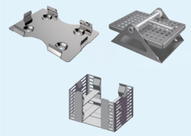
Product Dimensions



HYP-380Q Pro

HYP-260Q Pro

Accessories

Universal Spring Clamps	HYP-260Q Pro	HYP-380Q Pro	Picture
590 x 550mm	√	-	
890 x 550mm	-	√	
Adhesive silicone pad (recommended speed <200rpm)	HYP-260Q Pro	HYP-380Q Pro	Picture
140 x 140mm	Max. Qty 16	Max. Qty 24	
Stainless steel conical flask clamps	HYP-260Q Pro	HYP-380Q Pro	Picture
250ml	x 42	x 67	
300ml	x 42	x 67	
500ml	x 25	x 40	
1L	x 16	x 28	
2L	x 9	x 15	
3L	x 8	x 11	
5L(Thomson)	x 4	x 8	
Other specifications of flask clamps can be customized as needed (25mL-200mL)			
Adjustable-angle stainless steel test tube/centrifuge tube rack	HYP-260Q Pro	HYP-380Q Pro	Picture
W *D *H (mm)=305*82*100	Optional specifications, configure a maximum of 5	Optional specifications, configure a maximum of 7	
5ml tube (φ14mm×56)			
10ml tube/15ml centrifuge tube(φ16mm×56)			
15ml tube (φ18mm×33)			
20ml tube (φ22mm×30)			
50ml tube/50ml centrifuge tube (φ30mm×14)			
10,15 ml centrifuge tube (φ15.5mm×56)			
20ml tube (φ21.5mm×30)			
Stainless Steel Hole Clamp	HYP-260Q Pro	HYP-380Q Pro	Picture
Universal Standard Deep Hole Plate	Optional according to user's demand	Optional according to user's demand	
W *D *H (mm)=130*100*65			
Universal Standard Microplate			
W *D *H (mm)=135*93*15			
Double-Deck Deep-Well Plate Holder			
W*D*H (mm)=155*105*100			
Support stand	HYP-260Q Pro	HYP-380Q Pro	
W*D*H (mm)	990*800*400 (casters not included)	1360*800*400 (casters not included)	



Incubator Shakers

Specifications

		HYP-380Q Pro	HYP-260Q Pro
			
Voltage/Frequency		220v/50/60hz	220v/50/60hz
Temperature Control			
Cooling	yes/no	yes	yes
Temp. minimum	℃	4(RT-20)	4(RT-20)
Temp. maximum	℃	65	65
Setting, digital	℃	0.1	0.1
Temperature uniformity at 37° (RT22±3°C)	±℃	±0.3	±0.3
Power of heating (electric)	W	1000	500
Power of cooling (electric)	W	231	231
Principle of temp. sensor	type	PT-100	PT-100
Shaking Control			
Motor	type	Multidimensional self-balancing	magnetic direct-drive
Shaking diameter	mm	Standard: 25 / Optional: 50	Standard: 25 / Optional, 3, 12.5, 19, 50
Shaking motion	type	orbital	orbital
Shaking frequency range at 3 mm		/	0/30-300 (top layer 250)
Shaking frequency range at 12.5 mm	rpm	/	0/30-300 (top layer 250)
Shaking frequency range at 19 mm		/	0/30-300 (top layer 250)
Shaking frequency range at 25 mm	rpm	0/10-300 (top layer 250)	0/30-300 (top layer 250)
Shaking frequency range at 50 mm	rpm	0/10-250 (top layer 200)	0/30-300(max 250ml flask) (top layer 250)
Tray size max.	mm	900*560	600*560
Loading max. (≤200 rpm)	kg	35	20
Setting, digital	rpm	1	1
Accuracy absolute	±rpm	±1	±1
Timer	s:h	0-999h59min	0-999h59min
Acceleration		controlled	controlled
Active brake		adjustable	adjustable
Power of standard motor (EM-Z/ EM-Z (HP/HS))	W	250	400
General			
Incubation gas volume	L	380	260
Net/Gross Weight(approx)	kg	248/295	200/240
	lbs	547/650	441/529
Illumination	type	LED	LED
Operation menu MMI		EN, CN	EN, CN
Operation menu Insight		EN	EN
Interface, standard		USB	USB
Interface, optional		RS485, Printer, Remote alarm	RS485, Printer, Remote alarm
Ambient temperature	℃	5-35	5-35
Cable feedthrough port	mm	26	26
Material incubation chamber		stainless steel	stainless steel
Material outer chamber		cold-rolled steel powder coated	cold-rolled steel powder coated
Useful height above shaker tray	mm	395	395
Door glass and frame		heated	heated
Packing Dimensions (w*d*h)	mm	1510*1000*850	1140*970*850
With packaging base	in	59.5*39.4*33.5	44.9*38.2*33.5
Internal Dimensions (w*d*h)	mm	1095*695*495	725*675*495
	in	43.1*27.4*19.5	28.5*26.6*19.5
External dimensions (w*d*h) (Excluding the door handle and casters)	mm	one layer 1400*840*625 two layers 1400*840*1250 three layers 1400*840*1875	one layer 1030*840*625 two layers 1030*840*1250 three layers 1030*840*1875
	in	one layer 55.1*33.1*24.6 two layers 55.1*33.1*49.2 three layers 55.1*33.1*73.8	one layer 40.6*33.1*24.6 two layers 40.6*33.1*49.2 three layers 40.6*33.1*73.8

Scope of Application
It is a kind of biological incubator to provide dynamic culture environment for microorganisms, through the shaking structure to drive the culture vessel for orbital shaking to improve the aeration and mass transfer rate inside the medium, suitable for microorganisms in high-density cultivation and process amplification in the production process.

Magnetic Direct Drive:
Precise and Reliable Rotation Speed

Peltier Cooling:
Precise and Gentle Temperature Control

Personalized Options:
Empowering Limitless Multifunctional Expansion

Applications

- Bacteria and yeast culture
- Solubility studies
- General mixing
- Staining and destaining
- Hybridizations
- Diagnostic tests
- Washing procedures
- Protein production
- Plasmid production



HYLP-135Q

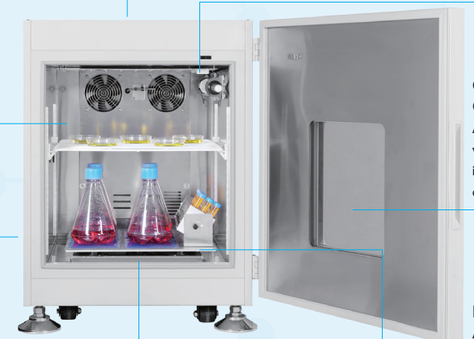
Product Feature

Multi - safety & User - friendly Design

Comprehensive Safety Configuration
Supports high/low/over-temperature warning, abnormal speed alert and automatic heating cutoff.
A dedicated slow-stop safety design ensures all-round protection of operators, samples and facilities

User-Friendly Operation
Passive humidity regulation;
Supports UV sterilization with adjustable timing;
auto-recovery after abnormal power outage to prevent experiment interruption and data missing

Optimal Space Utilization
Supports single and dual-layer stacking configurations with a side-opening door design. It effectively minimizes floor footprint and maximizes overall space utilization efficiency.



Convenient & Secure Observation:
A large triple-pane thermal-insulated viewing window paired with internal illumination ensures full visibility of the chamber interior

Professional Structural Design:
Specially designed side vents deliver sufficient oxygen circulation for sample cultivation, creating a superior growth environment.

Dynamic - Static Fusion:
A dynamic shaking plate paired with an adjustable - height static shelf provides versatile functionality for various experiments.

Effortless Cleaning and Maintenance:
The fully flushable base design eliminates cleaning dead corners completely.
Equipped with an integrated sloped structure, it enables efficient and rapid drainage

Incubator Shakers

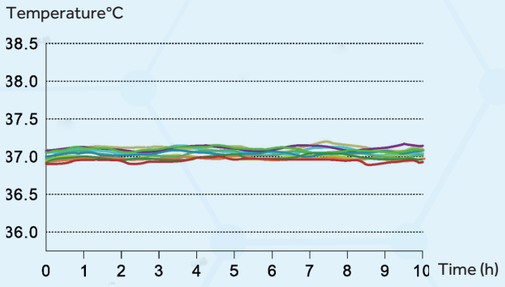
Product Feature

Precision Direct Drive Motor for Reliable, Accurate Speed Control:

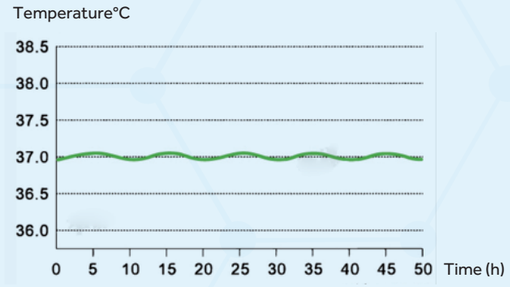
- Unrivaled Precision, Reliability & Low – Temperature
- Operation with Multiple Amplitudes for All Your Needs
- EMC Certified & Filter - Equipped to Minimize EM Interference

Durable construction, reliable performance:

- Durable powder-coated, cold-rolled steel exterior construction
- Precisely monitor and control chamber temperature over complete range with ±0.1° C accuracy at 37° C with PID temperature controller
- Solid-state DC brushless motor, variable speed control from 30 to 300 rpm
- Continuous, timed, or multi-step programs with up to 8 steps, eight programs storable



Temperature uniformity ≤±0.4°C (at 37°C, RT22±3)



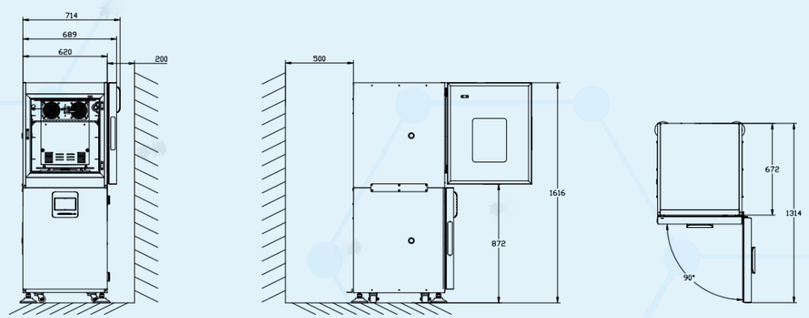
Temperature fluctuations ±0.2°C

Smart shaker drive control:

- Smooth acceleration and deceleration avoid splashing and mechanical damage; for safety, shaker stops, if door is opened to prevent the shaker from walking

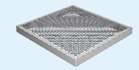
Product Dimensions

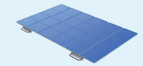
unit: mm



HYLP-135Q & HYLP-135C

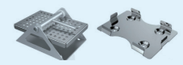
Accessories

Universal Spring Clamps	HYLP-135Q	Picture
420 x 420mm	√	

Adhesive silicone pad (recommended speed <200rpm)	HYLP-135Q	Picture
140 x 140mm	Max. Qty 9	

Stainless steel conical flask clamps	HYLP-135Q	Picture
250ml	x 16	
300ml	x 16	
500ml	x 13	
1L	x 9	
2L	x 4	
3L	x 4	
5L(Thomson)/5L normall	x 1	
25-200ml customized		

Adjustable-angle stainless steel test tube/centrifuge tube rack W *D *H (mm)=305*82*100	HYLP-135Q	Picture
5ml tube (φ14mm×56)	Max. Qty 3	
10ml tube/15ml centrifuge tube(φ15mm×40)		
15ml tube (φ18mm×36)		
15ml tube (φ22mm×30)		
50ml tube/50ml centrifuge tube(φ30mm×14)		
15ml centrifuge tube (φ18mm×33)		
15ml centrifuge tube (φ18.5mm×36)		
10, 15 ml centrifuge tube (φ15.5mm×40)		
20ml tube (φ21.5mm×30)		

Stainless Steel Hole Clamp	HYLP-135Q	Picture
Universal Standard Deep Hole Plate	Optional according to user's demand	
W *D *H (mm)=130*100*65		
Universal Standard Microplate		
W *D *H (mm)=135*93*15		

Flexible Stackable Combination Solutions



Incubator Shakers

Specifications

			HYLP-135Q
Voltage/Frequency			220v/50/60hz
Construction	Chamber Volume		135L
	Interior Chamber		304 stainless steel
	Exterior Chamber		Powder coated cold rolled plate + hot zinc plate
	Access Port		26 mm diameter
	Sterilization Method		UV sterilization, timer adjustable
	Cooling Method		Peltier
Chamber Construction	The Main Body Material		cold-rolled steel powder coated
	Inner Material		304 stainless steel
	Noise dB(A)		≤52 dB(A) at 25°C, 150 rpm; ≤54 dB(A) under other operating conditions.
Dimensions	Net/Gross Weight (approx)	kg	113/135
		lbs	249.12/297.62
	Internal Dimensions (W*D*H)	mm	500*510*500
		in	19.69*20.08*19.69
	External Dimensions (W*D*H) Includes Base Feet and Casters	mm	620*740*845
		in	24.41*29.13*33.27
	Packing Dimensions (W*D*H) With Packaging Bottom Support	mm	720*840*980
		in	28.35*33.07*38.58
	Container load (20'/40'/40'H)		42./84/84
Shelves	Dimensions(w*d) mm		473*436
	Number Standard/Maximum		1 /6
	Max.Load per Shelf (kg)		10kg
Universal Platform	Dimensions(w*d) mm		420 x 420
	Number		1
	Max.Load (kg)		10
Electrical	Rated Voltage Power Supply (V/HZ)		220v/50/60hz
	Nominal Consumption (kw.h)		0.09 kWh/h (Test conditions: 37°C, 200 rpm, no load)
			2.16 kWh/24h (Test conditions: 37°C, 200 rpm, no load)
	Rated Power (W)		700
Control	Controller		Microprocessor
	Display		7 inch trouch screen
Temperature Range and Accuracy	Operating Temperature Range (°C)		4-65 (RT-15)
	Temperature accuracy (°C)		0.1
	Temperature uniformity (°C)		≤±0.4°C (at 37°C, RT22±3)
	Temperature fluctuations (°C)		±0.2
Shaking Control	No-load shaking speed (rpm)		30-300
	Speed accuracy (rpm)		±1
	Shaking mode		Orbital shaking(Magnetic direct drive · Variable amplitude)
	Orbital diameter		25mm (standard); 19 mm(optional); Other amplitudes can be customized
Function	IOT		Optional
	RS485		Optional
	Remote Alarm		Optional
	4-20mA		Optional
	Blackout Curtain		Optional
	USB		Standard(csv format)
	Timer		standard: 999h59min
	Lighting		2W LED light with manual & automatic control
	Heated Visible Window		standard
	Clockwise/Anticlockwise Rotation Switching		standard
	Timer Start		standard
	Safety	Operation stops when door is opened	Soft stop when door opens, soft start
		Speed failure alarm	Shaking abnormality alarm
		Over-temperature alarm	High temp., low temp. & over-temperature alarms
		Power-off restart	Restores previous settings after power interruption
	Program Storage	History data storage	Data storage for more than 3 months
		Data recording interval	Adjustable
		Number of storable programs	8
		Program segments	8
		Program segment cycle times	999
Other	Certificate		CE

Water Jacketed CO_2 Incubator

A water-jacketed CO_2 incubator is a laboratory culture device specifically designed for culturing cells and tissues. It is widely used in fields such as cell biology, molecular biology, immunology, bioengineering, and drug development. Its excellent heat preservation performance and temperature control ability make it especially suitable for applications in the fields of assisted reproduction and genetics.



Innovative Design

To cultivate with a high survival rate

Accurate control of temperature and concentration to optimize the cell growth environment.

A more reliable environment

Multiple air circulation filtration technology creates a Class 100 clean environment inside the cabinet.

Full process monitoring

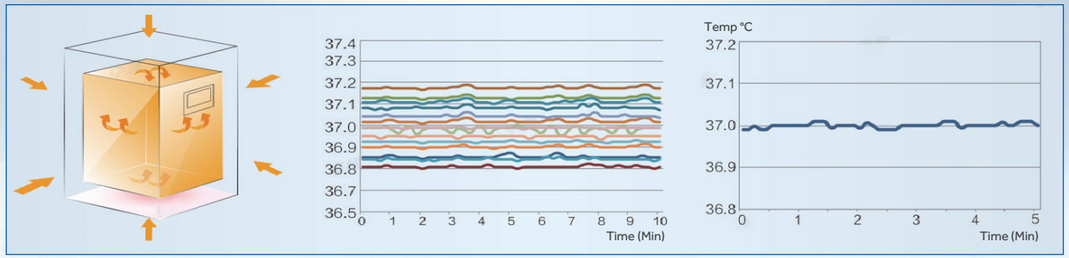
A comprehensive and improved safety alarm system.
Water level alarm inside the box, audible and visual alarm reminder; Temperature, CO_2 concentration, O_2 concentration exceeded alarm level and door open timeout and other alarm functions; Optional IoT.

Product Advantages

Optimize the cell growth environment and precisely control the temperature and concentration.

Precisely control the temperature to safeguard the experimental results

Based on the principle of fuzzy PID control, using water jacketed heating and outer door heating, the temperature is precisely controlled within the fluctuation range of ±0.1°C, and the temperature uniformity is ≤ ±0.2°C to ensure the normal growth of cells throughout the life cycle.



Schematic diagram of water jacketed heating and outer door heating

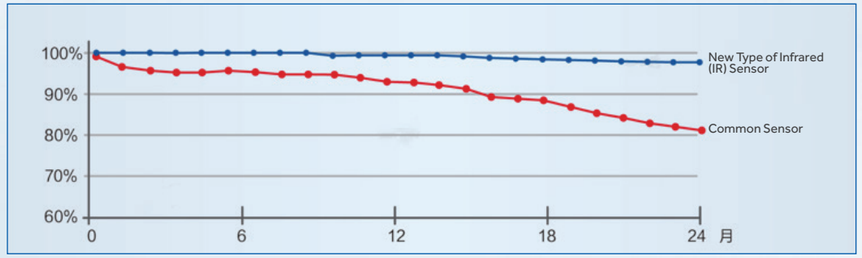
The uniformity of 27 test points is less than ±0.2°C

The fluctuation degree at the center point is less than ±0.1°C

Note: The above data were measured at a set temperature of 37°C and an ambient temperature of 22±3°C

Precise CO_2 concentration control, no calibration required for daily use

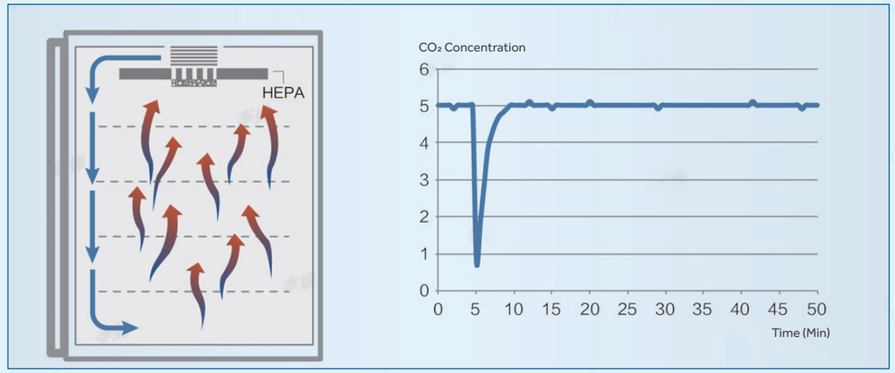
- Using a new type of IR sensor that can withstand high temperatures of 100°C, based on the NDIR measurement principle, and using a silicon MEMS emitter with a service life of up to 15 years.
- With built-in temperature and humidity compensation to reduce the influence of humidity and temperature, no need to recalibrate after high-temperature sterilization.
- Using five-point calibration has higher measurement accuracy, sensitivity, accuracy, and small drift, and the measurement offset is less than 0.3% within 2 years.



Water Jacketed CO_2 Incubator

The rapid recovery system of the environment inside the cabinet

Using active airflow control technology, based on the principle of fuzzy PID control, after opening the door for 30 seconds, the CO_2 concentration can quickly return to the set state within 3 minutes. Even if multiple people share one CO_2 incubator and open and close the door frequently, it can still ensure the stability and uniformity inside the cabinet.



A schematic diagram of the purification airflow

The CO_2 concentration recovery curve (with the door open for 30 seconds)

Precise O_2 concentration control to meet more incubator requirements (optional)

Using a ZrO_2 sensor to achieve control of the oxygen concentration, with an oxygen control range of 1 to 21% and a control accuracy of 0.1%. After opening the door for 30 seconds, it only takes 12 minutes for the O_2 to recover to 5% and 24 minutes to recover to 1%.

A Class 100 clean environment inside the cabinet

Multiple air filtration technologies with a filtration efficiency of up to 99.99%

- The HEPA filtration system ensures that the air quality inside the enclosure reaches Class 100 within 5 minutes after the door is closed.
- The inlet filter can capture particles larger than or equal to 0.2um with a filtration efficiency of 99.99%.



The real-time air purification circulation system inside the cabinet

Water jacketed technology for longer insulation time

Power outage insulation: within 1 hour of power outage, the temperature ≤1°C; within 10 hours of power outage, the temperature ≤ 7°C

Seamless one-piece stainless steel inner tank for easy cleaning with no dead corner

The working chamber is made of mirror stainless steel, with a seamless one-piece inner tank and a large rounded corner and easy-to-remove bracket design.



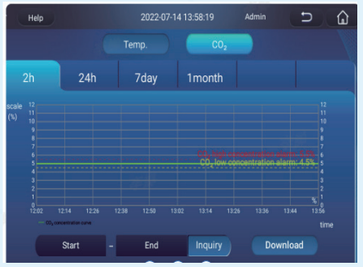


A complete safety alarm system and flexible and convenient interface operation.

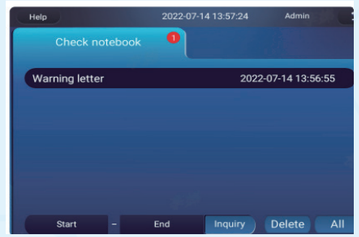
- A comprehensive and improved safety alarm system water level alarm inside the cabinet, audible and visual alarm reminder; Temperature, CO_2 concentration, O_2 concentration exceeded alarm level and door open timeout and other alarm functions; Optional IoT.
- Standard 7-inch trouch screen, even wearing rubber gloves can be quickly recognized.
- The status data is clear at a glance: normal operating parameters are displayed in green; abnormal operating parameters are displayed in red for warning.



Home screen red warning



Real-time viewing of operating data



Announcement function designed for multiple persons to use the same incubator making it clear to all users on important matters



Operation mode clear management authority: three-levels of authority to ensure the security of data

Water Jacketed CO_2 Incubator

Specification Data

Model	Volume (L)	External Dimensions (W*D*H)	Internal Dimensions (W*D*H)	Net Weight/ Gross Weight (kg)	Shelf Dimensions (W*D)(mm)	Shelf Qty Standard/Max	The Humidity Control Range	Temperature Sensor
HCP-188W	185	680*635*998	540*506*679	120/140	473*445	4/17	93%RH±2.5	PT1000

The Temperature Control Range	Temperature Fluctuation	Temperature Uniformity	Power Outage Insulation
Ambient temperature +3~55°C	±0.1°C	±0.2°C	within 1 hour of power outage, the temperature ≤1°C; within 10 hours of power outage, the temperature ≤ 7°C

Temperature Control Mode	CO_2 Sensor	CO_2 Control Range	CO_2 Control Accuracy
water jacketed	IR	0-20%	0.1%

Accessories

Optional List	Functional Description
Three-Gas Incubator	Control the oxygen concentration to achieve a hypoxic / hyperoxic culture environment
IoT	Remote monitoring of equipment operating status
4/8 Inner Door	Reduces the impact of opening the door on the environment inside the box and reduces air consumption
Pressure Reducing Valve	Reduce the outlet pressure of the gas cylinder to the operating pressure range of the machine to ensure stable operation
Cylinder Changer (2in1/4in1)	Connect two or four gas cylinders simultaneously to achieve uninterrupted gas supply and reduce the frequency of gas cylinder replacement
Electromagnetic Lock	Private use to avoid cross-disturbance, can not open the door during sterilization
Humidity Display	Humidity display real-time display of humidity environment inside the box
4-20mA	Temperature/concentration and other signals are transmitted, solving many problems such as signal interference in long-wire transmission
Shelve	Increase the number of cultured samples; Various materials available: 304/316/single mirror/double mirror
Heightening Stand	Keeping away from ground contamination
Removable Bottom Frame / Wheeled Trolley	Prevents bacterial contamination of the floor, easy to move position, height can be customized

CO_2 Incubator

Haier Biomedical CO2 incubator with 180°C dry heat sterilisation provides a safe and secure reproducible growth environment for cell cultures.



HCP-80 (B)



HCP-168 (B)



HCP-258 (B)

IR Sensitive Control of CO_2 Concentration

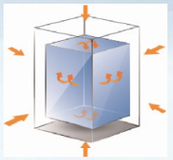
The new IR sensor with high temperature resistance of 190°C is based on the NDIR measurement principle and uses a silicon MEMS transmitter to replace the traditional light source. It can withstand more than 300 dry heat sterilization cycles with a service life of up to 15 years and control accuracy of ±0.1%. German IR infrared sensing technology, zero drift, without need for calibration, drift less than 0.3% within 2 years

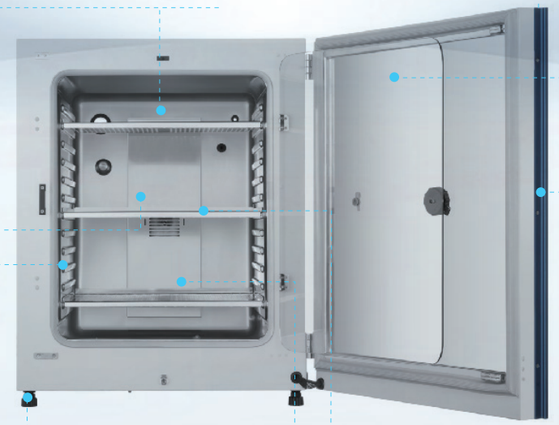


7-inch Touchscreen

Displays CO_2 concentration and temperature data in real time. 15 years of data can be exported via USB

6-sided heating sketch





Inner Door

The door ensures the inside of the cabinet is sealed

Outer Door

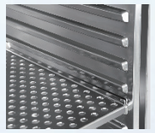
The heated outer door prevents the condensation of the inner door

Internal Partition

Safety anti-slip design of pull out shelves



304 Stainless Interior



Adjustable Feet

It can be double stacked

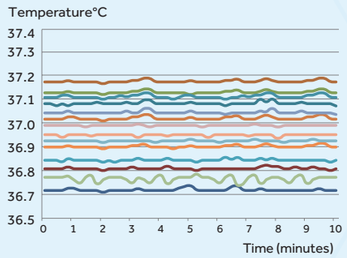
180°C Dry-heat Sterilization

All internal components do not need to be disassembled and do not need separate autoclave sterilization to prevent secondary pollution. Cleaning consumables are not needed, one-button sterilization. The unit can withstand sterilization at 180°C with no disassembly and no manual calibration

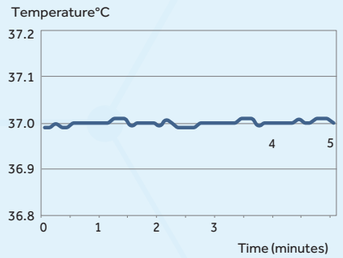
CO_2 Incubator

Precise and Accurate Temperature Control

Controls the temperature precisely, within ±0.1°C, with six-sided heating based on the fuzzy PID control principle,to provide a stable temperature to ensure the normal growth of cells throughout their life cycle.



Uniformity of 27 measuring points <±0.3°C

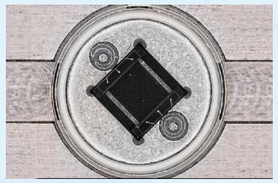


Central consistency point <±0.1°C

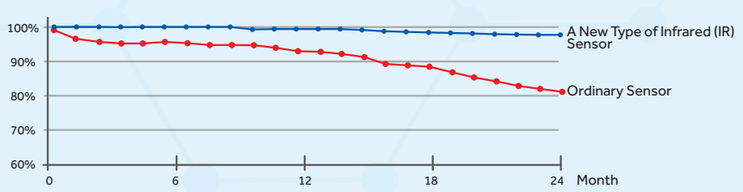
Note: The above data were measured at a set temperature of 37°C and an ambient temperature of 22±3°C

Precise CO_2 Concentration Using New IR Sensor Control Technology

Haier Biomedical's new IR Sensor technology uses NDIR measurement principles and withstands high temperatures of 190°C. The silicon MEMS transmitter can carry out more than 300 dry heat sterilization cycles to extend the service life to 15 years. Built-in temperature and humidity compensation technology reduces the impact of changes in humidity and temperature without the need for calibration after the high temperature sterilization. Five point calibration yields a higher measuring accuracy, sensitivity with less drift.



Silicon-based mems transmitter



Sketch of drift less than 0.3%

Fast Environment Recovery for Optimal Cell Growth

Adopting active air flow control technology, and based on the fuzzy PID control principle, the parameters can be restored without overshoot. After opening the door for 30 seconds, the temperature and CO_2 concentration can be quickly restored within 4 minutes. Even if multiple users share a CO_2 incubator and frequently open and close the door, the stability and uniformity of the incubator can be ensured.

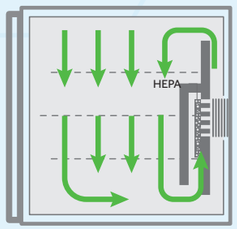
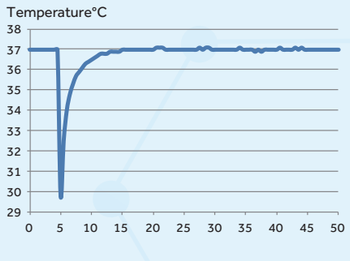
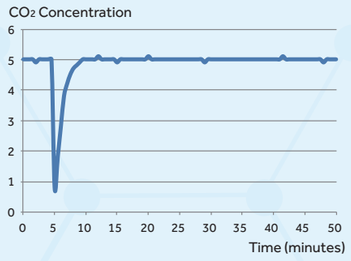


Illustration of purified airflow



Temperature recovery curve
(door open for 30s)



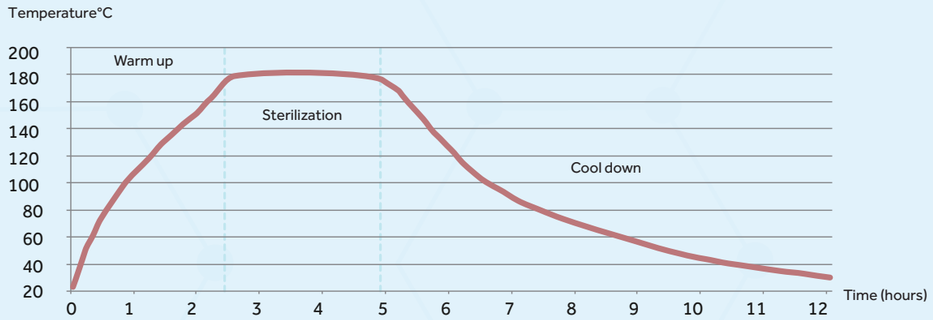
CO_2 concentration recovery curve
(door open for 30s)

180°C Dry-Heat Sterilization Technology Minimises Contamination

Easy and effective sterilization of microorganisms including bacteria, fungi and microplasma with strong resistance, at 180°C high temperatures without the need for consumables. Simply press the "sterilization key" to activate and complete the sterilization process automatically in just 12 hours.

Delivers sterility level within the chamber of all surfaces to meet WS/T367-2012 standards.

All components are sterilized during the process, there is no need to dissemble internal components (including CO_2 sensors) and decontaminate separately, thus avoiding secondary pollution.

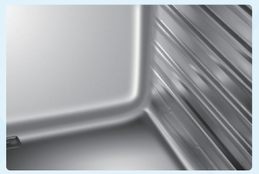


High Efficiency Microbial Filter



The CO_2 inlet is equipped with a high-efficiency microbial filter, with 99.99% filtration efficiency for particles larger than or equal to 0.2μm in diameter. It can effectively filter bacteria and dust particles in the CO_2 gas line to ensure the safety of experimental results.

Seamless Stainless Steel Inner Chamber Easy to Clean





The working chamber is high-precision mirror polishing stainless steel, stamped stainless steel with wide-arc. Bracketless shelving design ensures that it is quick and easy to clean.

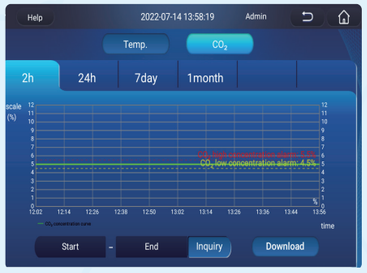
CO_2 Incubator

Interactive Intelligent Display with Easy Touch Operation

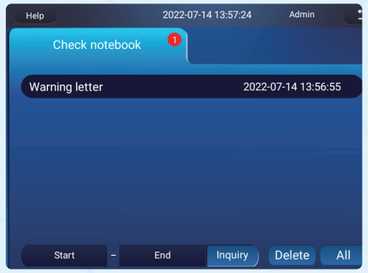
Touch-sensitive screen with rapid sensing even in rubber gloves. Green indicates normal operational parameters, while a red warning display indicates abnormal, making it easy to view data at a glance. A red warning display and audible buzzer will alarm when water level is low.



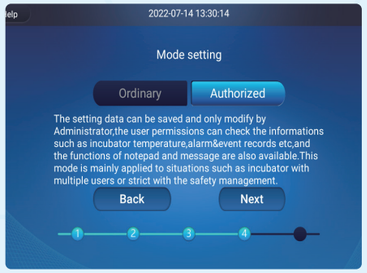
Home screen red warning.



Real-time display of operation data & real-time display of temperature, for CO_2 concentration and O_2 concentration, and the data during the culture cycle can be viewed at any time.



Announcement function designed for multiple persons to use the same incubator making it clear to all users on important matters.



Operation mode clear management authority: three-levels of authority to ensure the security of data.

Optional : Real-time Monitoring



An IoT module with multi-screen interface provides real-time uploaded parameters, operation parameters, operation curves, records and event records through the IoT cloud platform. The operation of the incubator can be monitored anytime and anywhere through a computer terminal. Alarm function and service function are available through a one-button touch.

Anti-Condensation Heating System to Reduce Pollution Risk

The door on the CO_2 incubator radiates heat to the inner glass door, effectively preventing the glass door from forming condensation.

The possibility of microbial contamination caused by the condensate water is eliminated.

Intelligent Control of Circulating Air Maintains Uniformity

Automatically adjusts the circulation of the air flow, optimising the air flow to avoid air volatilization of samples and ensuring proper uniformity throughout the chamber.

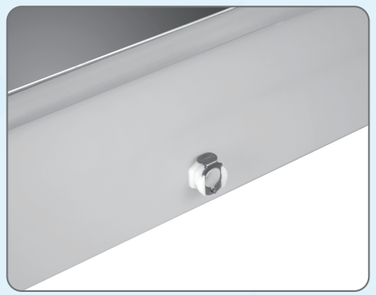
Comprehensive Safety Alarm System

The system ensures the safety of experiments and processes by utilizing an independent temperature alarm system, including a sound light and remote reminder. Other alarms include CO_2 concentration, door ajar, water shortage and cylinder low-pressure alarm reminder to prompt the replacement of the gas cylinder.

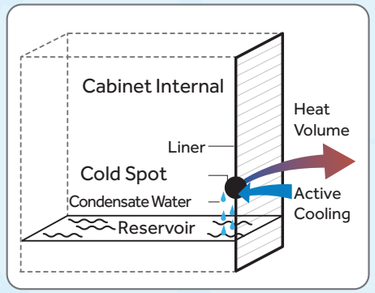
Innovative and User-friendly Design with Attention to Detail



Safe anti-slip design with pull out shelves.



Drainage design



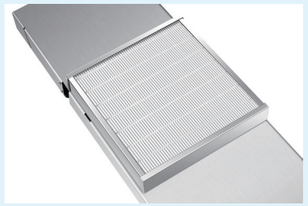
The active condensation technology is limited to the lower back position, ensuring that no condensed water is generated at any location within the cell culture area.



Data traceable for 15 years with large storage capacity and data exportable through USB.

CO_2 Incubator

The Quality of ISO Class 5 Clean Room Can Ensure a Better Cell Growth Environment



The optional HEPA or ULPA high-efficiency filtration, it can withstand 90° C moist heat sterilization/180° C dry heat sterilization. There is no need to take it out during sterilization, avoiding secondary pollution and also combined with the unique air duct circulation design can continuously filter pollutants (biological pollutants and suspended particles) in the cabinet, ensuring that the incubator can reach the ISO class 5 clean room within 5 minutes after the external door is closed, which is equivalent to the class 100 environment of the 209 E standard of the united states.

The Drain Pipe Undergoes Dry Heat Sterilization at 150°C

Comprising a 304 stainless-steel pipe , it's sterilized by dry heat at 150 ° C for 2.5 hours, achieving a sterilization efficiency of 99.999%.

Optional Accessories

Name	Material Description
Oxygen Module	Zirconia O_2 sensor, control accuracy: 0.1%; control range: 1-21% or 5-90%
3 Inner Door (for HCP-168/B)	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
6 Inner Door (for HCP-168/B)	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
8 Inner Door (for HCP-258/B)	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
Water Tray	Provides different bottom humidification methods
Roller Base	Easy to move, prevent the ground bacteria contamination
HEPA or ULPA Filter	Ensure the cleanliness of the cabinet, suitable for users who open and close the door frequently; After opening the door for 30 seconds, the air inside the cabinet can be passed through HEPA filters within 5 minutes and reach ISO 5 clean room quality
Pressure Reducing Valve	Suitable for users with cylinder gas supply
Shelf	Increase the number of samples cultured 4 materials: SUS304 single mirror surface SUS304 double mirror surface tempering glass Pure copper
Humidity Display (for HCP-168/B)	Real time monitoring of humidity inside the box
Cylinder Switching	Supports switching between multiple steel cylinders to ensure uninterrupted air intake into the incubator
Electromagnetic Lock (HCP-168/B)	Important tests can be dedicated by dedicated personnel to ensure test safety
Heightening Stand	Keeping away from ground contamination
4-20mA	The analog acquisition interface for carbon dioxide and oxygen concentrations Multiple incubators can have the temperatures and carbon dioxide concentration data of all the incubators monitored at one computer terminal
Liner	SUS 304 SUS 316 Pure copper
Antibacterial Silver Ion Coating	Inhibit the growth of miscellaneous bacteria and reduce the risk of pollution

Specifications

Model			HCP-80	HCP-80B	HCP-168	HCP-168B	HCP-258	HCP-258B
Type			Air Jacket					
Construction	Chamber Volume (L/Cu.Ft)		80/2.8		170/6.0		258/9.1	
	Interior Chamber		304 Stainless Steel					
	Exterior Chamber		Cold-Rolled Steel Powder Coated					
	Access Port		/		42mm Diameter		35mm Diameter	
	Data Outputs		Remote Alarm Contacts, USB					
Dimensions	Net/Gross Weight (approx)	kg	75/95		95/130		110/155	
		lbs	165/209		209.4/286.6		243/341	
	Interior Dimensions (W*D*H)	mm	400*420*490		490*560*650		570*610*745	
		in	15.7*16.5*19.3		19.3*22*25.6		22.4*24.0*29.3	
	Exterior Dimensions (W*D*H)	mm	625*684*735		714*812*887		794*867*985	
		in	24.6*26.9*28.5		28.1*32*34.9		31.3*34.1*38.8	
	Packing Dimensions (W*D*H)	mm	700*770*910		800*890*1050		870*950*1150	
		in	27.6*30.3*35.8		31.5*35.0*41.3		34.2*37.4*45.3	
Shelves	Dimensions (W*D)	mm	380*300		473*434		550*484	
	Number Standard/Maximum		3/8		3/11		3/13	
	Max.Load Per Shelf/Total Load	kg	15/45					
	Construction		Perforated, Adjustable					
Electrical	Rated Voltage Power Supply (kwh/h)		220-240/50/60	115/60	220-240/50/60	115/60	220-240/50/60	115/60
	Nominal Consumption (kw) (Steri-Run)		0.08 (0.85)	0.08 (0.75)	0.095 (1.3)	0.095 (1.1)	0.12 (1.35)	0.12 (1.2)
	Sterilization Power (W)		850	750	1300	1100	1350	1200
Control	Controller		Microprocessor					
	Display		7 "LCD Screen					
CO_2	Control Accuracy		±0.1%					
	Range		0-20%					
	Alarm Range		±0.5%					
	Inlet Pressure		12-17psi (0.8-1.2 Bar)					
	Gas Purity		min.99.5% or Medical Quaity					
	CO_2 Inlet		1/4" Hose (Barbed)					
	Senser		IR					
	Recovery Time ** (after 30s door opening, 98% from initial value) Min		4					
	CO_2 Inlet Filter (μm)		＜0.2μm					
Alarms	High/Low Temperature		Y					
	Remote Alarm		Y					
	Sensor Error		Y					
	Excessive CO_2 Concentration		Y					
	Water Shortage Reminder		Y					
	Door Ajar		Y					
Temperature Parameter	Control Accuracy (°C)		0.1					
	Range		Ambient Temperature+3-55°C					
	Uniformity (°C) @ 37°C		±0.3					
	Ambient Range (°C)		18-32					
	Temperature Fluctuations (°C) @ 37°C		±0.1					
	Senser		2*PT1000					
	Recovery Time *** (after 30s door opening, 98% from initial value) Min		4					
Sterilization Cycle	Cycle Temperature		180°C Dry-Heat Sterilization					
	Cycle Duration		Under 12 Hours					
Humidity	RH		93% ± 3% @ 37°C					
	Humidity Reservoir		Max.1.75L/Min 0.5L		Max.3.5L/Min 0.5L		Max.5.5L/Min 0.5L	
Optional	HEPA Filter		Y		Y		Y	
	Pressure Reducing Valve		Y		Y		Y	
	4-20mA		Y		Y		Y	
	The Cylinder Switch		Y		Y		Y	
	Shelf		Y		Y		Y	
	Water Tray		Y		Y		Y	
	3 Inner Door		N		Y		N	
	4/8 Inner Door		N		Y		N	
	8 Inner Door		N		N		Y	
	Roller Base		Y		Y		Y	
	Pure Copper Inner Liner		Y		Y		Y	
	Pure Copper Shelf		Y		Y		Y	
	Humidity Display		N		Y		N	
	Oxygen Module		Y		Y		Y	
	Electromagnetic Lock		N		Y		N	
	Heightening Stand		Y		Y		Y	
	IoT		Y		Y		Y	
Others	Certification		CE	UL	CE	UL	CE	UL

**For CO_2 not exceeding 5.2%
***For temperature not exceeding 37°C

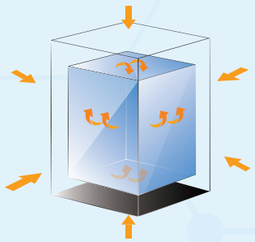
CO_2 Incubator



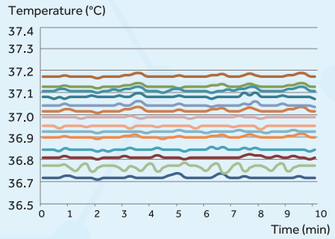
HCP-80E HCP-168E HCP-258E

Precise and Accurate Temperature Control

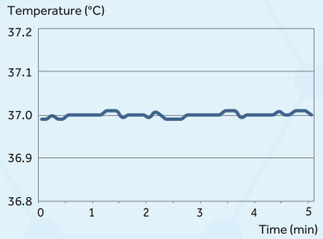
Controls the temperature precisely, within ±0.1°C, with six-sided heating based on the fuzzy PID control principle, to provide a stable temperature to ensure the normal growth of cells throughout their life cycle.



Six-sided heating



Uniformity of 27measuring points<±0.3°C

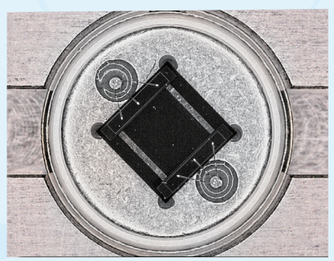


Central consistency point<±0.1°C

Note: The above data were measured at a set temperature of 37°C and an ambient temperature of 22±3°C

Precise CO_2 Concentration Using New IR Sensor Control Technology

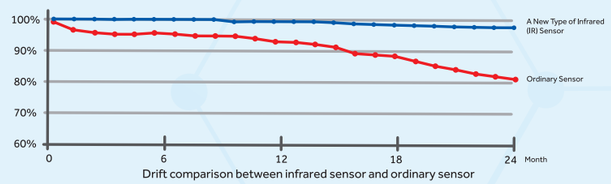
Haier Biomedical's new IR Sensor technology uses NDIR measurement principles and withstands high temperature of 100°C. The silicon MEMS transmitter can carry out more than 300 dry heat sterilization cycles to extend the service life to 15 years. Built-in temperature and humidity compensation technology reduce the impact of changes in humidity and temperature without the need for calibration after the high temperature sterilization. Five points calibration yields a higher measuring accuracy, sensitivity with less drift (less than 3% within 2 years).



Silicon-based mems transmitter



Infrared (IR) sensor



Drift comparison between infrared sensor and ordinary sensor

*The equipment is tested by Haier in a controlled environment. Haier does not guarantee that the results of field tests under different conditions will be consistent. The test model is HCP-168E

Fast Environment Recovery for Optimal Cell Growth

Adopting active air flow control technology, based on the fuzzy PID control principle, the parameters can be restored without overshoot. After opening the door for 30 seconds, the temperature and CO_2 concentration can be quickly restored within 4 minutes. Even if multiple users share a CO_2 incubator and frequently open and close the door, the stability and uniformity of the incubator can be ensured.

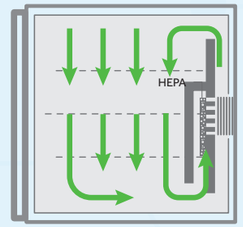
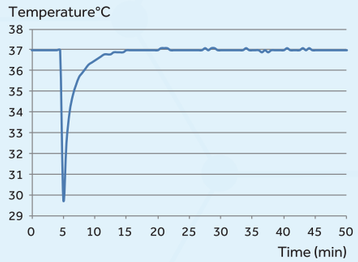
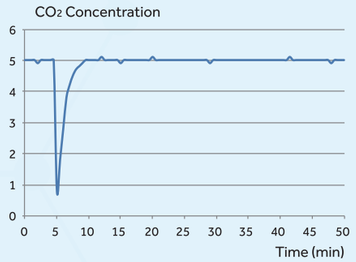


Illustration of purified airflow



Temperature recovery curve (door open for 30s)



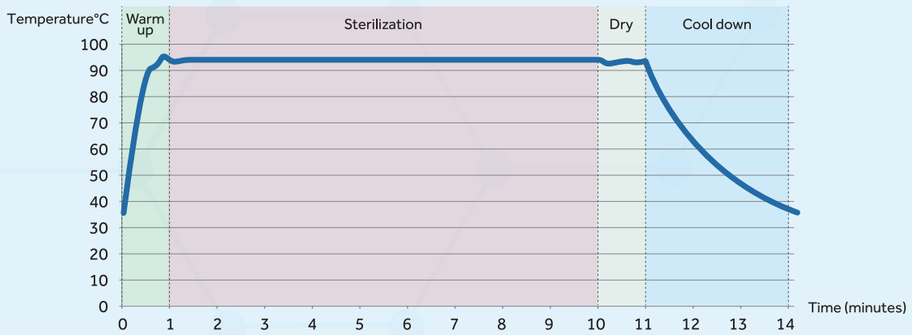
CO_2 concentration recovery curve (door open for 30s)

90°C Moist Heat Sterilization Technology

Effective sterilization of microorganisms including bacillus and spores with strong resistance, at 90°C under moist heat, without the need for consumables. Simply press the "sterilization button", to activate and complete the sterilization process automatically in 14 hours.

Delivers sterility level within the chamber of all surfaces to meet WS/T367-2012 standards.

All components are sterilized during the process, there is no need to dissemble internal components (including CO_2 sensors) and decontaminate separately, thus avoiding secondary pollution.



Sterilization Temperature Profile

Forty-seven points were tested in the working chamber, including glass inner doors and partitions. All regions reached 90°C and maintained for 9 hours.

*The equipment is tested by Haier in a controlled environment. Haier does not guarantee that the results of field tests under different conditions will be consistent. The test model is HCP-168E

CO_2 Incubator

Air Jacketed With Six-sides Heating Design

- Fast temperature recovery and superior temperature uniformity
- High temperature sterilization can ensure that the temperature of each surface can reach 90°C

Co_2 Sensor

- The new IR sensor with high temperature resistance of 100°C, can withstand more than 300 high heat sterilization cycles
- Based on the NDIR measurement principle and uses a silicon MEMS transmitter to replace the traditional light source
- Zero drift and without need for calibration

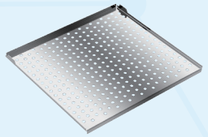


Door Switch

When the door opens, heating, air intake and fan automatically stop to minimize the risk of cross contamination

Partition

- Anti-slip design
- High levelness ensures uniform growth of adherent cells
- Mirror stainless steel to ensure high surface cleanliness, easy to clean



Air Flow System

The air flow circulation ensures proper uniformity throughout the chamber

Integrated Liner

Integral design, large arc design, easy to clean



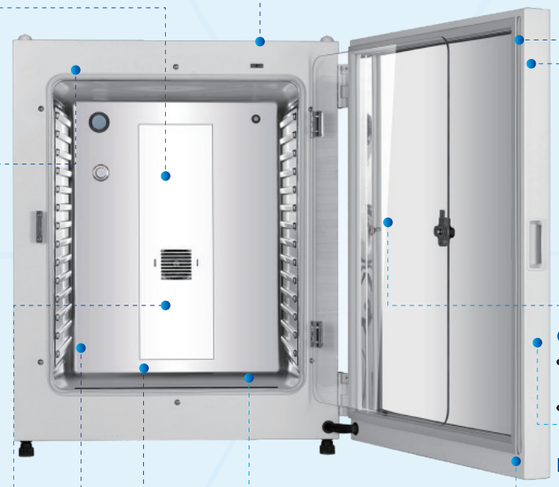
Inner Door

- Tempered glass provides easy observation of sample growth
- Three/six inner doors optional

Operation Panel

- 4-inch LCD screen, vivid display and easy operation
- Abnormal operation sound and light alarm to ensure sample safety
- Running data can be traced, large capacity storage, data can be exported through USB





Test Hole

Providing access for convenient measurement of internal statistics



Outer Door

- Prevents the condensation of the inner door
- Left/right hand door optional

Inner and Outer Door Seal

- Silicone material, prevent aging after heating
- Close the inner cavity to ensure the cleanliness and uniformity of the inner chamber

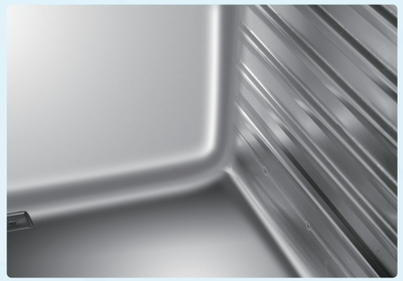
Bottom Reservoir Humidification

- Reservoir humidification method, no water tray, easy to clean, avoid breeding bacteria
- Large evaporation area and fast humidity recovery



Seamless Stainless Steel Inner Chamber Easy to Clean

The working chamber is high-precision mirror polishing stainless steel, stamped stainless steel with wide-arc. Bracketless shelving design ensures that it is quick and easy to clean.





Innovative Design with Attention to Detail

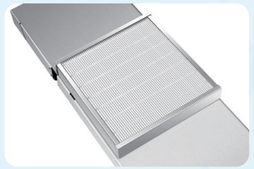


Safe anti-slip design of pull-out shelves.



Data traceable for 15 years with large storage capacity and data exportable through USB.

The Quality of ISO Class 5 Clean Room Can Ensure a Better Cell Growth Environment



The optional ULPA or HEPA high-efficiency filtration system combined with the unique air duct circulation design can continuously filter pollutants (biological pollutants and suspended particles) in the cabinet, ensuring that the incubator can reach the ISO class 5 clean room within 5 minutes after the external door is closed, which is equivalent to the class 100 environment of the 209 E standard of the united states

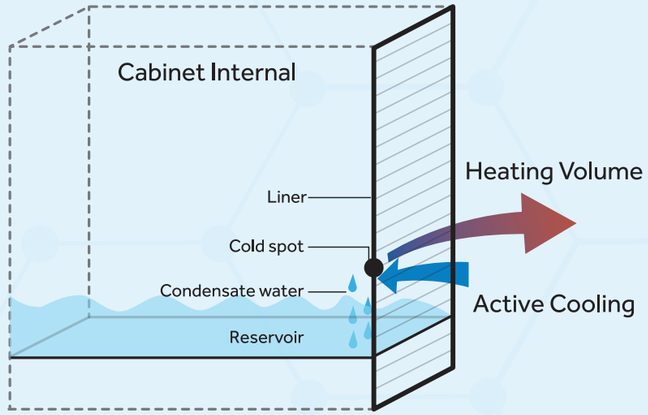
The Drain Pipe Undergoes Sterilization at 90°C

Comprising a 304 stainless-steel pipe , it's sterilized at 90 ° C for 9 hours, achieving a sterilization efficiency of 99.999%

CO_2 Incubator

Reservoir Humidification Without Condensation

The active condensation technology is limited to the lower back position, ensuring that no condensed water is generated at any location within the cell culture area



Optional Accessories

Name	Material Description
Oxygen Module	Zirconia O_2 sensor, control accuracy: 0.1%; control range: 1-21% or 5-90%
3 Inner Door (for HCP-168E)	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
6 Inner Door (for HCP-168E)	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
8 Inner Door (for HCP-258E)	Reduce the temperature, humidity and carbon dioxide concentration in the box after opening the door, and minimize the mutual influence of multiple cultures
Water Tray	Provides different bottom humidification methods
Roller Base	Easy to move, prevent the ground bacteria contamination
HEPA or ULPA Filter	Ensure the cleanliness of the cabinet, suitable for users who open and close the door frequently; After opening the door for 30 seconds, the air inside the cabinet can be passed through HEPA or ULPA filters within 5 minutes and reach ISO 5 clean room quality
Pressure Reducing Valve	Suitable for users with cylinder gas supply
Shelf	Increase the number of samples cultured 4 materials: SUS304 single mirror surface SUS304 double mirror surface tempering glass Pure copper
Cylinder Switching	Supports switching between multiple steel cylinders to ensure uninterrupted air intake into the incubator
Heightening Stand	Keeping away from ground contamination
4-20mA	The analog acquisition interface for carbon dioxide and oxygen concentrations Multiple incubators can have the temperatures and carbon dioxide concentration data of all the incubators monitored at one computer terminal
Liner	SUS 304 SUS 316 Pure copper
Antibacterial silver ion coating	Inhibit the Growth of Miscellaneous Bacteria and Reduce the Risk of Pollution

Specifications

Model			HCP-80E	HCP-168E	HCP-258E
Type				Air Jacket	
Construction	Chamber Volume (L/Cu.Ft)		80/2.8	170/6.0	258/9.1
	Interior Chamber			304 Stainless Steel	
	Exterior Chamber			Cold-Rolled Steel Powder Coated	
	Access Port		/	42mm Diameter	35mm Diameter
	Data Outputs			Remote Alarm Contacts, USB	
Dimensions	Net/Gross Weight (approx)	kg	75/90	95/125	110/150
		lbs	165/198	209.4/275	243/330
	Interior Dimensions (W*D*H)	mm	400*420*490	490*560*650	570*610*745
		in	15.7*16.5*19.3	19.3*22*25.6	22.4*24.0*29.3
	Exterior Dimensions (W*D*H)	mm	625*684*735	714*812*887	794*867*985
		in	24.6*26.9*28.5	28.1*32*34.9	31.3*34.1*38.8
	Packing Dimensions (W*D*H)	mm	700*770*910	800*890*1050	870*950*1150
		in	27.6*30.3*35.8	31.5*35.0*41.3	34.2*37.4*45.3
Shelves	Dimensions (W*D)	mm	380*300	473*434	550*484
	Number Standard/Maximum		3/8	3/11	3/13
	Max.Load Per Shelf/Total Load	kg		15/45	
	Construction			Perforated, Adjustable	
Electrical	Rated Voltage Power Supply (V/hz)		220-240/50/60	220-240/50/60	220-240/50/60
	Nominal Consumption (kw) (Steri-Run)		0.08 (1.0)	0.095 (1.5)	0.12 (1.8)
	Sterilization Power (W)		1000	1500	1800
Control	Controller			Microprocessor	
	Display			4 inch LED Button Screen	
CO_2	Control Accuracy			0.10%	
	Range			0-20%	
	Alarm Range			±0.5%	
	Inlet Pressure			12-17PSI (0.8-1.2bar)	
	Gas Purity			Min.99.5% or Medical Quaity	
	CO_2 Inlet			1/8" Hose (Barbed)	
	Sensor			IR	
	Recovery Time ** (after 30s door opening, 98% from initial value) Min			4	
	CO_2 Inlet Filter (μm)			<0.2	
Alarms	High/Low Temperature			Y	
	Remote Alarm			Y	
	Sensor Error			Y	
	Excessive CO_2 Concentration			Y	
	Water Shortage Reminder			N	
	Door Ajar			Y	
Temperature Parameter	Control Accuracy (℃)			0.1	
	Range			Ambient Temperature+3-55℃	
	Uniformity			±0.3	
	Ambient Range (℃)			18-34	
	Temperature Fluctuations (℃)			±0.1	
	Sensor			1*PT1000	
	Recovery Time *** (after 30s door opening, 98% from initial value) Min			4	
Sterilization Cycle	Cycle Temperature			90℃ Moist Heat Sterilization	
	Cycle Duration			Under 14 Hours	
Humidity	RH			93% ± 3% @ 37℃	
	Humidity Reservoir		Max.1.75L/Min 0.5L	Max.3.5L/Min 0.5L	Max.5.5L/Min 0.5L
Optional	HEPA Filter		Y	Y	Y
	Pressure Reducing Valve		Y	Y	Y
	4-20mA		Y	Y	Y
	The Cylinder Switch		Y	Y	Y
	Shelf		Y	Y	Y
	Water Tray		Y	Y	Y
	3 Inner Door		N	Y	N
	6 Inner Door		N	Y	N
	8 Inner Door		N	N	Y
	Roller Base		Y	Y	Y
	Pure Copper Inner Liner		Y	Y	Y
	Pure Copper Shelf		Y	Y	Y
	Humidity Display		N	N	N
	Oxygen Module		Y	Y	Y
	Electromagnetic Lock		N	N	N
	Heightening Stand		Y	Y	Y
	IoT		Y	Y	Y
Others	Certification		CE	CE	CE

CO_2 Incubator



HCP-190

Multi-dimensional Application Scenarios:

As a core piece of equipment in life sciences, clinical medicine, biopharmaceutical R&D, and cell therapy, this incubator precisely controls temperature, CO_2 concentration, and a clean environment to simulate in vivo physiological conditions, thereby providing a stable and reliable growth environment for the in vitro culture of cells, tissues, microorganisms, and more. It is widely used in stem cell culture, immune cell expansion, drug screening, virology research, vaccine production, embryo culture, and other scenarios, making it an indispensable key instrument.

Superior Product Excellence: Core Technology, Renewed Experience

Real-time sterile purification during cell culture

Real-time sterile purification during cell culture
Eliminate downtime and waiting
HEPA real-time filtration and sterilization during the culture process
Purifies to Class 100 clean air environment



Inhibit bacterial growth from the source

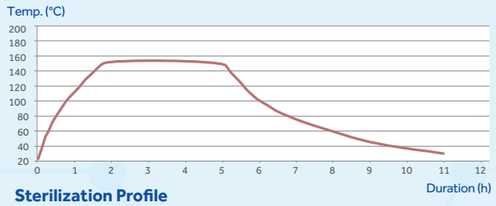
Large-radius, dead-angle-free precision forming process
Ra≤0.3um → Chamber with precision 8K mirror finish, Ra≤0.3μm
Inlet high-efficiency filtration module

Thorough Sterilization After Use

All Components are High-Temperature Resistant and Support In-Situ Sterilization Effectively Avoid the Risk of Secondary Contamination

Multi-dimensional Aseptic Assurance

- **Seamless Bacteriostasis:** Structural antimicrobial design
  - Ra≤0.3μm → Mirror-finished inner chamber, Ra ≤ 0.3μm
  - Large-radius, dead-angle-free stainless steel inner chamber
- **Full-process Sterilization:** Process purification 99.999%
  - HEPA high-efficiency particulate air filtration
- **99.999% → In-situ Sterilization:** Stepwise dry heat sterilization 99.999%
  - Modules such as sensors and sterile filtration components
  - High-temperature resistant selection supports in-situ sterilization



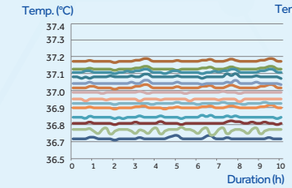
Sterilization Profile

Strain	Time	Tests	Groups	Rate
Escherichia coli	120min	3	5	> 99.999%
Staphylococcus aureus	120min	3	5	> 99.999%
Pseudomonas aeruginosa	120min	3	5	> 99.999%
Candida albicans	120min	3	5	> 99.999%
Bacillus atrophaeus	120min	3	5	> 99.999%
Aspergillus niger	120min	3	5	> 99.999%
Bacillus stearothermophilus spores	120min	3	5	> 99.999%

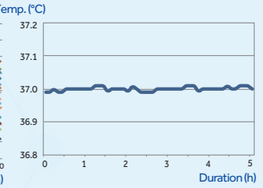
*Third-party validation confirms sterilization effectiveness. When maintained at 150° C for 120 minutes, the microbial kill rate reaches 99.999%. Third-party validation reports are available upon request.

Precise and Stable Environment Control

- **Precise Control:**
  Temperature and CO_2 Concentration
  - Uniformity ±0.25℃, Fluctuation ±0.1℃
  - Dual-channel IR sensor, control accuracy 0.1%



Uniformity of ±0.25℃across 27 measurement points

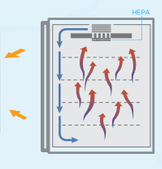


Fluctuation of ±0.1℃at the center point

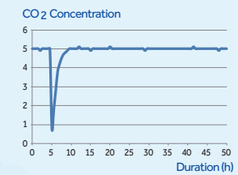
- **Fast Recovery:**
  Temperature and concentration recovery after door opening ≤4 min
  - Adopting fuzzy-PID algorithm control to deliver excellent performance



Schematic diagram of air jacket heating and outer door heating

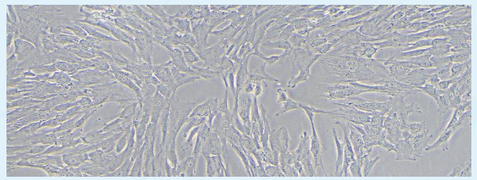


Purified airflow diagram

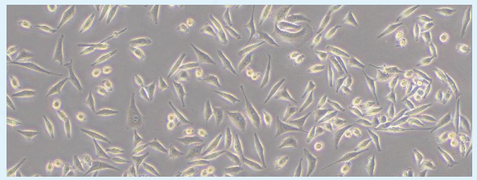


CO_2 concentration recovery curve (after 30-second door opening)

- **Efficient Culture:** High cell viability
  - Six-sided heating mechanism
  - PT1000 temperature sensor



Effect on umbilical cord mesenchymal stem cells



Effect on MCF-7 cells

Smart Human-Machine Interaction

- **Friendly Interaction:**
  Smart Touch Screen for Convenient Operation
  - 7-inch Touch HD Display
  - Key parameters displayed at a glance
- **Remote IoT (Optional):**
  Real-time Monitoring of Culture Status
  - Real-time data logging and export
  - Key parameters displayed at a glance
- **Emergency Protection**
  - Audible and visual alarm for operational anomalies





CO_2 Incubator

Key Specifications

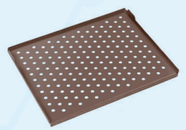
Model	Volume (L)	External Dimensions (W x D x H) (mm)	Internal Dimensions (W x D x H)(mm)	Net Weight / Gross Weight(kg)	Shelf Dimensions (W x D)(mm)	Number of Shelves (Standard / Maximum)	Humidity Control Range	Temperature Sensor	Sterilization Cycle	Recovery Time after 30-second Door Opening
HCP-190	190	680x635x998	540x521x679	98/125	473x445	4/17	93%RH±2.5	PT1000	≤11hr	Temperature≤4min Concentration≤3min
Temperature Control Range	**Temperature Fluctuation**	**Temperature Uniformity**	**Temperature+ Control Accuracy**	**Temperature Control Mode**	**Sensor**	**Control Range**	**Control Accuracy**	**Particle Filtration**	**O_2 Control range**	**O_2 Censor**
ambient temperature +3~60℃	±0.1℃	±0.25℃	≤±0.1℃	Air jacketed	Infrared(IR)	0~20%	≤±0.1℃	Class 100 cleanliness	1~21% (optional)	ZrO_2

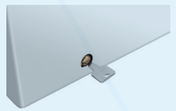
*Tested in-house per Haier Biomedical factory standards, with reference to DIN 12880 and Chinese industry standard YY1621-2018.

Options


Tri-gas Incubator


4/8 Inner Doors


Pure Copper Shelf


Electromagnetic Lock


Gas Cylinder Changeover

Options List	Functional Description
Tri-gas Incubator	Control oxygen concentration to achieve a hypoxic culture environment.
IoT Module	Remotely monitor the operating status of the equipment.
4 Small Inner Doors / 8 Small Inner Doors	Reduce the impact of door opening on the internal environment and minimize gas consumption.
Pressure Reducing Valve	Reduce the cylinder outlet pressure to the machine's applicable pressure range to ensure stable operation.
Gas Cylinder Changeover (2in1 / 4in1)	Connect 2 or 4 gas cylinders simultaneously for uninterrupted gas supply, reducing the frequency of cylinder changes.
Electromagnetic Lock	Designate for exclusive use to avoid cross-interference or contamination.
Humidity Display	Display the internal humidity environment in real time.
4-20mA Communication	Transmit temperature/concentration signals, solving issues such as signalinterference over long -distance transmission.
Inner Chamber Shelves (Standard / Double-Mirror Finish / 316 Stainless Steel)	Increase the number of culture samples.
Pure Copper Shelf	Provide relatively better antibacterial performance.
Tempered Glass Shelf	Meet the needs of heavy-load culture applications, such as using culture bags.
Ag+ Antibacterial Coating	Spray Ag+ antibacterial coating on the surfaces of the chamber and door to reduce the risk of contamination.
Elevating Stand / Rolling Cart	Elevating stand / wheeled cart (or rolling cart).

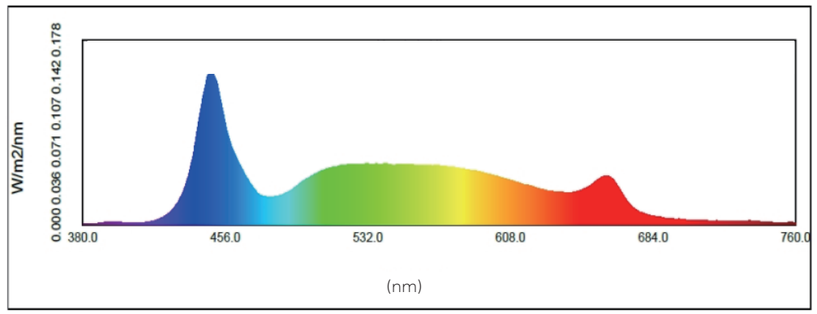
Growth Chamber

With its unique ability to adapt to different research applications, Haier offers an economical and flexible solution for plant science. The base chamber can be fitted with one of three specially configured kits each with airflow, lighting and shelving designed to suit specific plants and applications.


HGP-860

- Interactive touchscreen with advanced programming, control, reporting and traceability
- Space-efficient design
- High-performance, air-cooled refrigeration and optimised air-flow provide uniform conditions and quick recovery
- Optional humidity and IoT connectivity

LED Spectrum



LED full spectrum 380-760nm, ideal for research requiring an all-purpose broad white spectrum.

Product Features

- Precise environmental control for consistent and reproducible growth conditions to deliver enhanced research capabilities
- Comprehensive monitoring via the initiative touchscreen interface, view live and historical data, stores information for up to 15 years. Download data for compliance
- Durable construction, with top-deck refrigeration cassette design for easy maintenance
- Versatile programming, users can set temperature, humidity and illuminance to needs, with ability to set and store 50 different programmes
- Flexible internal configurations for different experimental needs and easy reconfiguration

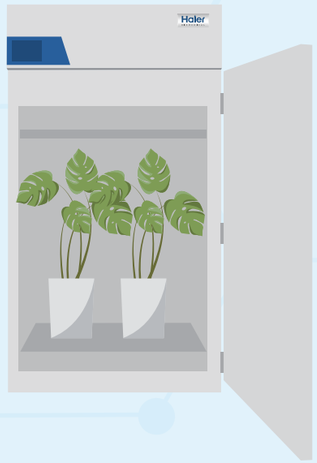
One Chamber. Multiple Applications

◎ **Short Plant:**
Horizontal airflow over multiple shelves optimizes the growing area of short plants, such as Arabidopsis thaliana. Ideal for research into propagation, genetics, physiology and other moderate light experiments.

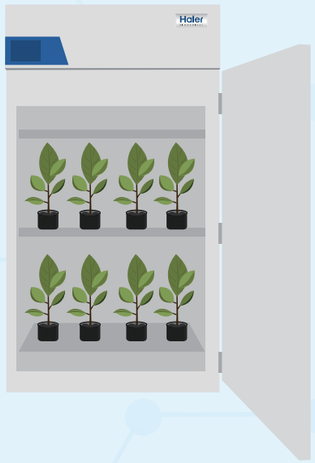
◎ **Tissue Culture:**
Low light and multi-layers, to maximize space, and provide upward airflow, to minimize condensation in Petri dishes and jars used in reproductive and genetic experiments.

◎ **Incubation:**
Low light and multiple tiers for nurturing young seedlings into shorter plants.

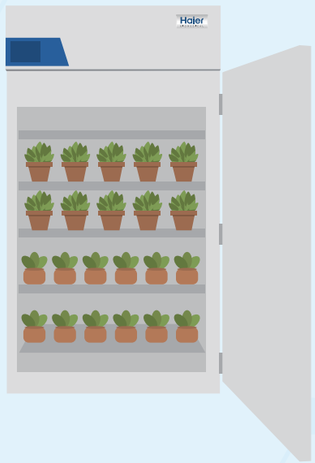
The HGP-860 can be fitted with different cabinet configurations to allow users to adapt the unit to a variety of research programs that require different light intensity, airflow directions, growth height and growth space. (HGP-860 with 2 shelves as standard)



Max growth height of a single tier: 1120mm



Max growth height of the double tiers: 520mm



Maximum growth height of four tiers: 200mm

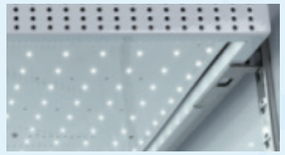
Product Information

Capacity
·860L (30.37 ft³) volume
Max growth height from
·200mm to 1120mm shelf space

Control & Monitoring
·7" high resolution,full-color touchscreen
·Intuitive graphic interface
·Advanced programming,control and reporting & traceability

Fresh Air
Manual adjustable

Lighting
·Broad-spectrum , energy-efficient LEDs
·Easy to disassemble design
·Standard with 350μmol/m²/s with two tiers ;optional three/four tiers
·Optional 550μmol/m²/s with one/ two tiers
·Optional 700μmol/m²/s with one tier
·Optional : Light illuminance sensor



Mobility
·Heavy duty ,front locking casters
·Adjustable leveling bolts



Humidity Control (optional)
·Ultrasonic humidification
·module50~90%RH
·Fluctuation ±5%RH

Refrigeration
·Top-mounted air-cooled condensing unit , combined with solenoid valve cooling control and tight temperature control
·Space-saving design and easy access for maintenance

Temperature
·0-60 °C lights off
·10-60°C lights on
·Fluctuation ±0.2°C (5-60°C)

Integrated Foaming Technology
Improved thermal insulation performance, small temperature difference, stable

Magnetic Door Seal
Stable sealing

Shelf Adjustable
Convenient placement



Growth Chamber

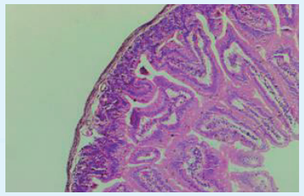
Specifications

Model		HGP-860	HGP-610
Interior Volume	L	860	610
	ft³	30.37	21.54
Inner Dimension (W*D*H)	mm	955*695*1480	760*685*1480
	in	37.6*27.4*58.3	29.9*27.0*58.3
External Dimensions (W*D*H)	mm	1075*842 (With handle 882)*1982	905*816(with handle 856)*1980
	in	42.3*33.1 (With handle 34.7)*78.0	35.6*32.1(with handle 33.7)*78.0
Packing Dimensions (W*D*H)	mm	1240*1005*2100	1050*965*2130
	in	48.8*39.6*82.7	41.3*38.0*83.9
Net/Gross Weight	kg	250/305	190/250
Temperature	℃	10~60 Lights on 0~60 Lights off	0~60℃ (lights on /lights off)
Temperature Fluctuation	℃	±0.2 (5-60)	±0.2 (5-60)
Temperature Uniformity/Accuracy	℃	±0.5@25 Unload	±0.5@25 Unload
Humidity range	RH %	50-90 optional	50-90 optional
Lighting		350μmol/ ㎡/s@150mm, two tiers	350μmol/ ㎡/s@150mm, two tiers (0~10℃ Lighting: 150μmol/ ㎡/s)
Adjust		Infinitely adjustable (Value setting)	Infinitely adjustable (value setting)
Illuminance Sensor		Optional	Optional
Lighting Method		Top-level horizontal installation	Top-level horizontal installation
Programmable Control		Temperature, humidity, illuminance set separately, programming can set 50 programs, each set 0-24h	Temperature, humidity, illuminance set separately, programming can set 50 programs, each set 0-24h
Max Input Power	W	1800	1800
Power Supply	V/Hz	AC220V 50Hz	AC220V 50Hz
Working Ambient Temperature	℃	+5-38	+5-38
Shelf Size (W*D)	mm	905*615	730*583
	in	35.6*24.2	28.7*23.0
Number of Shelves: Standard/Max.		2/15	2/15
Shelf Loading	kg	30	30
Lamp Board Size (W*D)	mm	905*610	690*535
	in	35.6*24.0	27.1*21.1
Number of Light Panels: Standard/Max.		2/4	2/2

Standard Incubator

Scope of Application

The solution is widely used in bacteria, fungi and other microorganism cultures; as well as enzyme digestion reaction, ligation reaction, embedded incubation and other related constant temperature experiments.



Embedded incubation



Bacteria



Fungus



HZP-168 HFP-80

Product Advantages

Personalized interface, easy to link

Equipped with USB and RS485 interfaces to meet the different needs of users to transfer data

Multiple protection benefits for increased security

Overheat protection (OPT), over current protection (FU), sensor error detection, independent temperature limit, compliance with DIN 12880 requirements and EU 3.1 safety level. Sound, light and remote alarms (optional) which guarantee experiment safety. Multiple alarms, such as over temperature alarm, high and low temperature alarm, door ajar, and sensor error alarm

Data traceability

Data traceable up to 15 years with base storage 8GB and data exportable through USB

High thermal insulation performance, energy saving and environmental protection

The unit is manufactured with aluminum foil insulation cotton, which improves the overall insulation performance and reduces energy consumption, lowering costs while also being environmentally friendly

Standard Incubator

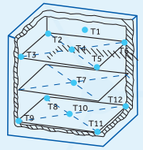
Fuzzy PID Control Technology



HZP-168
Natural Convection



HFP-80
Forced Convection



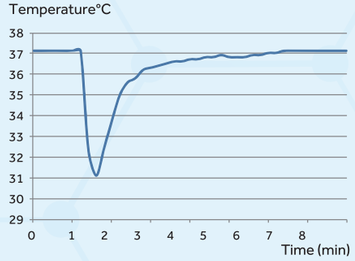
ASTM standard,
12 points testing

Based on PID control principle, manufactured with U-shaped 3-sided heating to achieve superior temperature control and uniformity control.

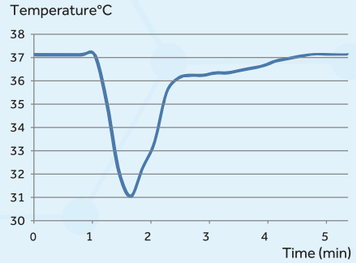
Rapid Recovery After Door Open

Rapid warming: the temperature inside the unit quickly recovers after opening the door to reduce the influence of temperature fluctuation on the sample.

The temperature rise curve to 37°C after opening the door for 30 sec at 22°C ambient temperature



HZP-168



HFP-80

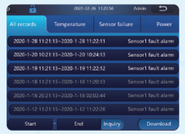
Convenient and Intelligent Management at a Glance



7-inch touchscreen, easy to operate and sensitive, it can respond quickly even when wearing rubber gloves.



Real-time display of temperature data, one-touch to review previous data.



Records abnormal information in real time, eliminating any hidden abnormalities which ensures the culturing is more secure.



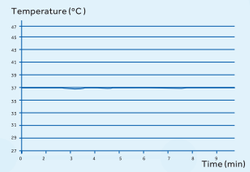
Multiple operating modes.



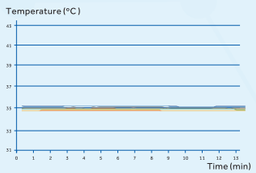
The program can be edited and set at any number of segments to meet the needs of various detection tests.

Precise Temperature Control, Energy-efficient and Environment-friendly

An energy-efficient model with superior control and heating mechanisms, high-quality insulation material and cabinet structure to ensure heating requirements are met while keeping power consumption to a minimum.

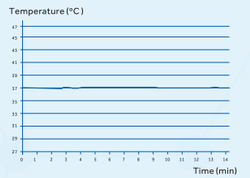


Temperature fluctuation ±0.1°C (37°C)

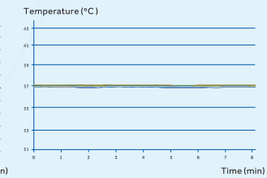


Temperature uniformity ±0.5°C (37°C)

HZP-168



Temperature fluctuation ±0.1°C (37°C)



Temperature uniformity ±0.3°C (37°C)

HFP-80

Optional IoT Technology for Real-time Remote Monitoring

Through the mobile app, the status of the incubator can be checked in real time, and information such as temperature alarm, sensor error alarm and door ajar can be controlled with one button, which provides more security for the experiment process.

Pictures in Details



Seamless, curved internal chamber for easy cleaning and decontamination.



Standard independent intelligent temperature safety controller to ensure experimental safety; RS485 achieves seamless IoT data connection.

Standard Incubator

Product Parameters

Model			HFP-80	HZP-168
Performance	Temperature Sensor		PT100	PT100
	Control Accuracy	℃	±0.1	±0.1
	Control Range	℃	RT+5~105	RT+5~105
	Temperature Fluctuation (37℃)	℃	±0.1	±0.1
	Temperature Uniformity (37℃)	℃	±0.3 at 37	±0.5 at 37
	Recovery Time After Open Door for 30s (37℃)	min	2.5	5
Control	Heating Mode		Direct Heating	Direct Heating
	Control Principle		Fuzzy PID	Fuzzy PID
	Display		7" LCD Touchscreen	7" LCD Touchscreen
Electrical	Power Supply (V/Hz)		220-240~50/60	220-240~50/60
	Power (W)		510	640
Dimensions	Capacity (L/Cu.Ft)		80/2.8	168/5.9
	Net/Gross Weight	Kg	72/80	99/110
		lbs	158.4/176	217.8/242
	Interior Dimension (W*D*H)	mm	400*400*480	490*550*626
		in	15.7*15.7*18.9	19.3*21.7*24.6
	Exterior Dimension (W*D*H)	mm	560*662*870	650*782*1028
		in	22.0*26.1*34.3	25.6*30.8*40.5
	Packing Dimension (W*D*H)	mm	720*770*1060	800*900*1200
		in	28.3*30.2*41.6	31.4*35.4*47.2
	Shelves		2/12	2/17
	Shelf Capacity	Kg	20	20
	Partition Spacing	mm	20	20
Alarms	High/Low Temperature		Y	Y
	Over-temperature Protection		Y	Y
	Sensor Error		Y	Y
	Door Ajar		Y	Y
	End of Program		Y	Y
	Alarm Mode		Sound and Light / Buzzer	Sound and Light / Buzzer
Accessories	Mechanical Independent Temperature Limiting Switch		Y	Y
	RS485		Y	Y
	USB		Y	Y
	IoT Module		Optional	Optional
Certification	CE		Y	Y

Scope of Application

Widely used in medical and health, pharmaceutical, biochemistry, and agricultural science sectors for bacterial culture, fermentation, and constant temperature tests. It can be used for the culture and determination of microorganisms like bacteria, molds, fungi (e.g. Staphylococcus aureus, Streptococcus, Escherichia coli), food and beverage testing, and preheating of cell culture equipment.



HFP-168E



HZP-80E

Product Advantages

Multiple Security Protection
Multiple protection systems such as overheating, overcurrent, and independent temperature limiting; overtemperature, high and low temperature and other smart alarms for safety

High Thermal Insulation Performance
Superior insulation that improves chamber stability and reduces heat load output to the laboratory and operating power consumption, that lowers operating costs

4-inch Display Screen
The real-time display of the set temperature and running temperature makes the operation more convenient

Smart IoT Module (optional)
The status of the incubator can be checked in real-time

Broad Temperature Range
Temperatures from 5°C above ambient up to 105°C

Ergonomic Design
Efficient utilization of interior with flexible shelf system

100°C Decontamination
The disinfection routine at 100 °C minimizes the risk of contamination

Standard Incubator



4-inch LCD screen with simple operation and clear display





Standard independent intelligent temperature safety controller to ensure experimental safety



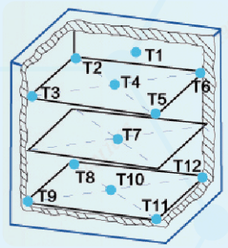
Smooth inner chamber with easy to clean rounded corners

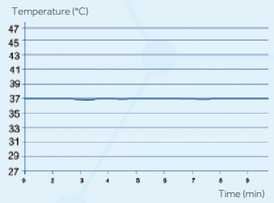


Adjustable feet for easy positioning and levelling

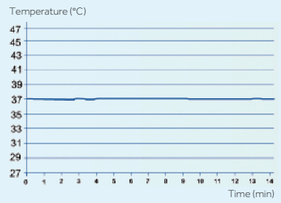
Precise Temperature Control

Vaildated through ASTM standard 12 points temperature detection method, the incubator can achieve high-precision temperature control with a temperature fluctuation of only ± 0.1°C





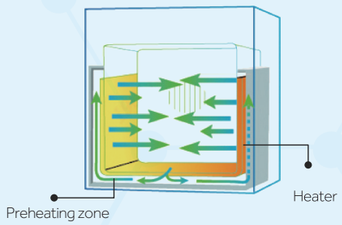
Temperature fluctuations±0.1°C
(HZP-80E)



Temperature fluctuations ±0.1°C
(HFP-168E)

Rapid Temperature Recovery After Door Open

The U-shaped 3- sided heating design enables the incubator to heat up quickly. After opening the door for 30 seconds, the temperature inside the chamber recovers to the set value within 3 minutes, significantly reducing the impact of temperature fluctuations on the experiments



Product Parameters

Model			HZP-80E	HFP-168E
Performance	Temperature Sensor		PT100	PT100
	Control Accuracy	℃	±0.1	±0.1
	Control Range	℃	RT+5~105	RT+5~105
	Temperature Fluctuation (37℃)	℃	±0.1	±0.1
	Temperature Uniformity (37℃)	℃	±0.5 at 37	±0.3 at 37
	Recovery Time After Open Door for 30s (37℃)	min	5	2.5
Control	Heating Mode		Direct Heating	Direct Heating
	Control Principle		Fuzzy PID	Fuzzy PID
	Display		4 inch LCD screen	4 inch LCD screen
Electrical	Power Supply (V/Hz)		220-240~50/60	220-240~50/60
	Power (W)		350	520
Dimensions	Capacity (L/Cu.Ft)		80/2.8	168/5.9
	Net/Gross Weight	Kg	72/80	99/110
		lbs	158.4/176	217.8/242
	Interior Dimension (W*D*H)	mm	400*400*480	490*560*630
		in	15.7*15.7*18.9	19.3*21.7*24.6
	Exterior Dimension (W*D*H)	mm	560*620*870	650*780*1028
		in	22.0*26.1*34.3	25.6*30.8*40.5
	Packing Dimension (W*D*H)	mm	720*770*1060	800*900*1200
		in	28.3*30.2*41.6	31.4*35.4*47.2
	Shelves qty (standard/max.)		2/12	2/17
	Max. load per shelf	Kg	20	20
	Partition Spacing	mm	20	20
Alarms	High/Low Temperature		Y	Y
	Over-temperature Protection		Y	Y
	Sensor Error		N	N
	Door Ajar		Y	Y
	End of Program		Y	Y
	Alarm Mode		Sound and Light/Buzzer	Sound and Light / Buzzer
Accessories	Mechanical Independent Temperature Limiting Switch		Y	Y
	RS485		Optional	Optional
	USB		N	N
	IoT Module		Optional	Optional
Certification	CE		N	N

Constant Climate Chamber

Multi-dimensional Application Scenarios
This high-end equipment is professionally designed for pharmaceutical stability testing, featuring Peltier-based temperature and humidity control. It is widely deployed in pharmaceutical companies and drug testing laboratories, and fully complies with ICH Q1A stability testing guidelines. The system is ideally suited for long-term, accelerated, and stress testing of both temperature-sensitive and conventional drug products, and is also applicable to stability testing for food and cosmetic products

Uniform & Stable Control

Regulatory Compliance & Full Traceability

Energy-Saving & Eco-Friendly Operation

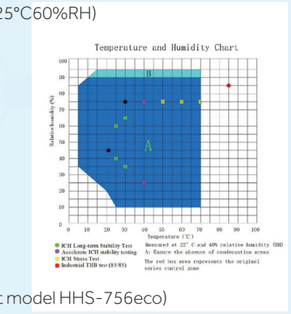


HHS-256eco HHS-506eco HHS-756eco

Product Advantages

Uniform & Stable Control

ART Patented Intelligent Temperature Control – Unmatched Precision
- Proprietary ART temperature control patent with matrix air duct + high-precision PID
- Temperature fluctuation: ±0.05°C | Uniformity: ≤±0.15°C | Humidity fluctuation: ±1% RH (@25°C60%RH)
- Zero drift over long-term operation – fully compliant with ICH and pharmacopoeia guidelines for stability and bio-testing



One System, Unlimited Versatility
- Wide range: 0–70°C / 10–95% RH – covers 5±3°C long-term storage and accelerated stress testing
- Single-unit solution for heat-sensitive drugs and all QC compliance applications – no need for multiple instruments

Maximum Efficiency, Minimum Cost
- 1.7 kWh/day – 80% less energy than conventional compressor models (@25°C60%RH, Test model HHS-756eco)
- Robust insulation + smart energy management for 24/7 continuous use
- Significant long-term savings on electricity and maintenance

Regulatory Compliance & Full Traceability

ALCOA+ Data Integrity – GMP/GCP Compliant
- Full compliance with ALCOA+ principles – attributable, legible, contemporaneous, original, accurate, complete, consistent, enduring, available
- Complete data traceability with original records permanently retained – meets global pharmaceutical data integrity mandates

21 CFR Part 11 Certified – Audit-Ready Security
- Three-tier user access control + compliant e-signatures
- Permanent, immutable audit trails for every operation
- Electronic records fully satisfy FDA 21 CFR Part 11 – stress-free regulatory inspections

One-Click Batch Records – Inspection & Submission Ready
- Automatically outputs complete batch records with drug info, trend curves, and logs
- Supports sub-batch splitting for flexible reporting
- Ready for registration filings and unannounced inspections – eliminates manual paperwork and transcription errors

Energy-Saving & Eco-Friendly Operation

Peltier Refrigerant-Free Temperature Control – Low-Carbon, Silent, and Sustainable
- Powered by Peltier semiconductor technology – completely refrigerant-free with zero carbon emissions, aligning with carbon peaking/neutrality goals and corporate ESG initiatives. Ultra-quiet operation at ≤46 dB(A) – library-grade silence with zero mechanical vibration – ideal for lab-office integrated environments and perfectly suited for sensitive samples including vaccines and biologics.

Enhanced Environmental Adaptability – Stable Performance Across Conditions
- Temperature control performance improved by 50%, supporting frost-free operation at 4°C. The system accommodates ambient temperatures from 15-30°C with rapid self-regulation under external fluctuations – delivering superior anti-interference capability and expanding the range of possible testing scenarios.

Parallel Modular Fault-Tolerant Architecture – Long-Term Reliability
- Second-generation multi-stage parallel semiconductor modules ensure uninterrupted temperature control even in the event of a single module failure. Full stainless steel interior combined with industrial-grade core components delivers a service life of up to 10 years – safeguarding the integrity of long-term experimental data.

Constant Climate Chamber

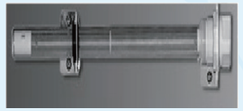
Specification

Model			HHS-756eco	HHS-506eco	HHS-256eco
Construction	Capacity L (L/Cu.Ft)		776/27.4	500/17.7	250/8.8
	Interior Material		SUS304 Stainless Steel	SUS304 Stainless Steel	SUS304 Stainless Steel
	Exterior Material		Coated Cold-rolled Steel	Coated Cold-rolled Steel	Coated Cold-rolled Steel
	Access Port		35mm Diameter	35mm Diameter	35mm Diameter
Electrical	Power Supply		220V~/50/60Hz	220V~/50/60Hz	220V~/50/60Hz
	Rated Power (W)		2300	1850	1400
	Lighting Power		LED 2W(optional)	LED 2W(optional)	LED 2W(optional)
Temperature Control & Dehumidification	Number of Peltier Elements (Temperature Control)		4	3	2
	Number of Peltier Elements (Dehumidification)		4	3	2
Dimensions	External Dimensions (w×d×h)mm		1380x1000x1545	920X1000X1545	670 X 820X1310
	Interior Dimensions (w×d×h)mm		1100x570x1260	650 X610X1260	520X480X1000
	Packing Dimensions (w×d×h)mm		1465x1090x1690	985x1090x1690	740x925x1460
	Water Tank Capacity (L)			25L / Width:350mm	
	Net Weight (kg)		280	215	135
	Container load (20'/40'/40'H)		7/15/15	10/22/22	15/33/33
Shelves	Standard qty/Max qty		3/12	3/12	3/10
	Dimension/mm (W*D)		1073*528	623*528	495*465
Temperature Parameters	Temperature Control Range (°C)		Temperature only: 0–70°C Temperature + Humidity: 5–70°C Temperature + Light: 10–60°C Temperature + Humidity + Light: 10–60°C		
	Temperature Accuracy (°C)		0.1	0.1	0.1
	Temperature Sensor Type		PT100	PT100	PT100
Humidity Parameters	Humidity Control Range (RH)		10%~95%	10%~95%	10%~95%
Technical Performance	Temperature Fluctuation°C (@25-40°C)		±0.05	±0.05	±0.05
	Temperature Uniformity°C (@25°C)		±0.15	±0.15	±0.15
	Temperature Uniformity°C (@40°C)		±0.3	±0.3	±0.3
	Humidity Uniformity%RH (@25°C60%RH, @40°C75%RH)		±1	±1	±1
	Optional ICH-Q1B-Compliant Light Source for Photostability Test	Illuminance Range (Lux)		0-10000	
		Illuminance Deviation (Lux)		±500	
		UV Wavelength (nm)		320-400	
		UV Energy (W/m²)		0-1.7	
	Noise Level (dB (A))		46	46	46
	Energy Consumption kW·h/24h(at25°C60%Rh)		1.7	2	1.8
	Energy Consumption kW·h/24h(at40°C75%Rh)		4.7	4.2	3.6
Optional Accessories	Printer		Y	Y	Y
	UV disinfection module		Y	Y	Y
	BOD connector		Y	Y	Y
	Internal Chamber Light		Y	Y	Y
	Electromagnetic lock		Y	Y	Y
	RS485		Y	Y	Y
	USB		Y	Y	Y

All technical specifications are measured at an ambient temperature of 22±3°C, with a power supply voltage variation of ±10%, under no-load conditions with standard equipment configuration. Humidity performance data are obtained under two operating conditions: 25°C/60% RH and 40°C/75% RH, in compliance with DIN 12880 and Haier internal standards, with testing carried out in Haier laboratories. All values presented are average measurements, and the data for this product series are typical values

Optional Accessories


Dot Matrix Printer


UV Disinfection Module


Internal Chamber Light

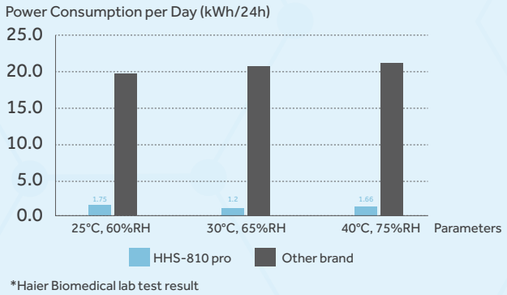

BOD Connector

Scope of Application
Drug stability testing, food shelf-life testing, electronic component aging testing, microbiological research, sample storage.


HHS-260 pro HHS-500 pro HHS-810 pro HHS-1060 pro

- Exceptional Energy Efficiency
- Security and Traceability
- Stable Operation Under Constant Temperature
- Precise and Uniform Temperature Distribution

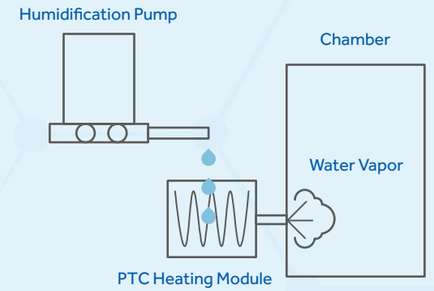
Product Advantages



*Haier Biomedical lab test result

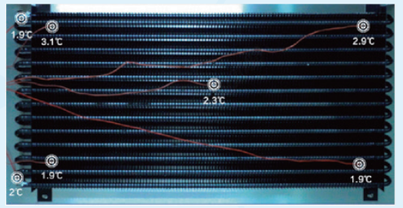
ART Intelligent Sensing and Control Technology

1. Pre-mixed lattice circulating air duct in the inner chamber combined with PID algorithm control delivers excellent temperature and humidity performance, ensures stable long-term operation, and meets pharmacopoeia requirements of multiple countries.
2. Equipped with a high-efficiency intelligent variable-frequency compressor and premium thermal insulation system, it achieves over 80% energy savings compared with conventional equipment, significantly reducing long-term operating costs.



Preheats and vaporizes water droplets. Water consumption < 320 ml per day

Latest high-temperature steam injection humidification technology. Conserve both energy and water. Reduce the need for frequent water refills.



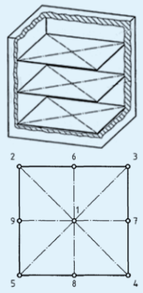
Dual evaporator system ensures a frost-free environment at a stable 4°C

Dual evaporators operate independently. Intelligent defrosting. Consistent frost-free operation and a stable internal temperature as low as 4°C.

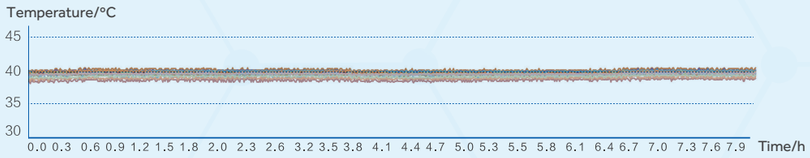
Constant Climate Chamber

Circulating air flow system. Temperature uniformity ±0.2°C

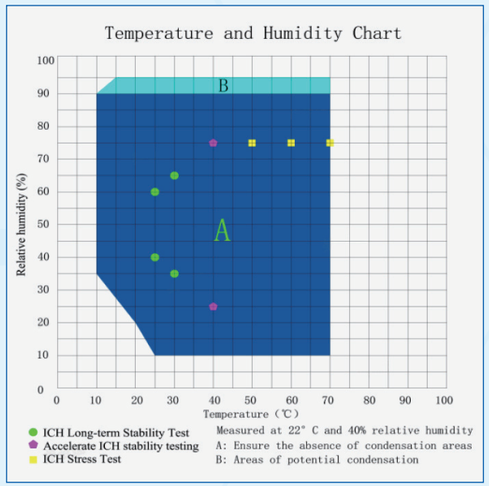
10 adjustable wind speed levels. Pre-mixed and split-flow circulation system. Lattice-type airflow structure. Temperature uniformity ±0.2°C.



DIN12880 standard 27 test points



27 test points temperature uniformity is ±0.2°C(ambient temperature: 22°C, setting temperature: 40°C)
*Above data based on HHS-810pro



- Sample dehumidification is not applicable, which may cause the humidity to deviate from the initial setting
- Changes in the ambient temperature may cause the temperature and humidity to fluctuate beyond the limit

ALCOA+ Data Integrity – GMP/GCP Compliant

- Full compliance with ALCOA+ principles – attributable, legible, contemporaneous, original, accurate, complete, consistent, enduring, available
- Complete data traceability with original records permanently retained – meets global pharmaceutical data integrity mandates

21 CFR Part 11 Compliance – Audit-Ready Security

- Three-tier user access control + compliant e-signatures
- Permanent, immutable audit trails for every operation
- Electronic records fully satisfy FDA 21 CFR Part 11 – stress-free regulatory inspections

One-Click Batch Records – Inspection & Submission Ready

- Automatically outputs complete batch records with drug info, trend curves, and logs
- Supports sub-batch splitting for flexible reporting
- Ready for registration filings and unannounced inspections – eliminates manual paperwork and transcription errors

Specifications

Model		HHS-260pro	HHS-500pro	HHS-810pro	HHS-1060pro
Structure	Capacity (L)	260	497	786	1032
	Chamber Material	SUS304			
	Housing Material	Coated cold-rolled steel and Galvanized steel			
	Test Port (mm)	35			
Electricity	Power Supply	220~240V 50/60Hz			
	Rated Power (W)	1500	1800	2000	2600
	LED Power (W) (option)	2			
Dimension	External Dimension (WDH) (mm)	665*840*1585	920*970*1855	1380*930*1855	1630*970*1855
	Internal Dimension (WDH) (mm)	520*520*1000	650*615*1260	1100*575*1260	1350*615*1260
	Package Dimension (WDH) (mm)	740*925*1730	1060*1060*2010	1495*1010*1990	1800*1065*2000
	Water Carboy (L) (option 5L)	25L / Width: 350mm			
	Gross Weight (kg)	175	292	371	438
	Net Weight (kg)	150	241	310	360
	Container Load (20/40/40H)	18/39/39	10/22/22	7/15/15	6/13/13
Shelves	Shelves STD/MAX	3/13	3/16	3/16	3/16
	Shelf Size (W*D) (mm)	495*465	623*528	1073*528	1323*528
Temperature	Temperature Range (°C)	0...70			
	Temperature Range (humidity) (°C)	10...70			
	Temperature Range (light) (°C)	0...60			
	Temperature Range (humidity&light) (°C)	10...60			
	Temperature Accuracy (K)	0.1			
	Temperature Sensor	PT100			
Humidity	Humidity Range (%RH)	10...95			
Technical Performance	25°C/60%RH Temperature Fluctuation (K)	±0.05	±0.05	±0.15	±0.2
	40°C/75%RH Temperature Fluctuation (K)	±0.05	±0.05	±0.15	±0.1
	25°C/60%RH Temperature Uniformity (K)	±0.4	±0.2	±0.2	±0.2
	40°C/75%RH Temperature Uniformity (K)	±0.5	±0.3	±0.2	±0.2

Constant Climate Chamber

	Model	HHS-260pro	HHS-500pro	HHS-810pro	HHS-1060pro
Technical Performance	25°C/60%RH Humidity Uniformity (%RH)	±2	±2	±2	±2
	40°C/75%RH Humidity Uniformity (%RH)	±2	±2	±2	±2
	25°C/60%RH Humidity Fluctuation (%RH)	±2.5	±1	±1	±1
	40°C/75%RH Humidity Fluctuation (%RH)	±1	±1	±1	±1
	25°C/60%RH Recovery Time After 30s Door Opening (min)	1	1	1	1
	40°C/75%RH Recovery Time After 30s Door Opening (min)	3	4	4	5
	Optional Light Range (Lux)	0-10000			
	Optional Light Deviation (Lux)	±500			
	Optional UV Wavelength (nm)	320-400			
	Optional UV Power (W/m²)	0-1.7			
	Noise Level (dB)	50			
	5°C Power Consumption	2.7kW·h/d	2.9kW·h/d	3.2kW·h/d	3.25kW·h/d
	25°C 60%RH Power Consumption	1.45kW·h/d	1.65kW·h/d	1.75kW·h/d	1.9kW·h/d
	30°C 65%RH Power Consumption	1.1kW·h/d	1.1kW·h/d	1.2kW·h/d	1.25kW·h/d
	40°C 75%RH Power Consumption	1.4kW·h/d	1.54kW·h/d	1.66kW·h/d	1.78kW·h/d
Accessories	RS485	Standard			
	USB	Standard			
	Printer	Optional			
	Illuminating	Optional			
	Light Module (photostability)	Optional			
	Electromagnetic Lock	Optional			
	Automatic Water Supply	Optional			
	Water Recycle System	Optional			
	Shelf Slide Rail	Optional			
	Stainless Steel Wire Shelves	Optional			
	IOT Module	Optional			

All technical specifications are measured at an ambient temperature of 22±3°C,
with a power supply voltage variation of ±10%, under no-load conditions with standard equipment configuration.
Humidity performance data are obtained under two operating conditions: 25°C/60% RH and 40°C/75% RH, in compliance with DIN 12880 and Haier internal standards,
with testing carried out in Haier laboratories. All values presented are average measurements, and the data for this product series are typical values

Climate Chamber

Drug stability testing, food shelf-life testing, electronic component aging testing, microbiological research, sample storage.

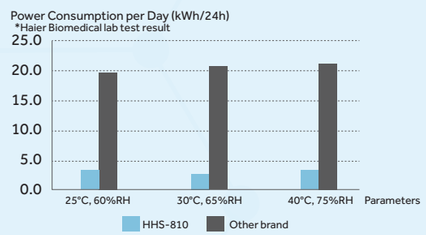


HHS-500/810/1060

Product Advantages

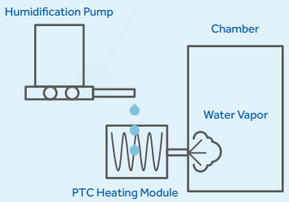
ART Intelligent Sensing and Control Technology

Intelligent dynamic control to optimize refrigerant levels, prevent evaporator frosting, and deliver excellent energy efficiency.



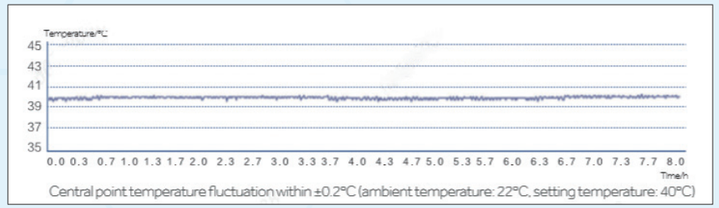
Preheats and vaporizes water droplets. Water consumption < 320 ml per day

Latest high-temperature steam injection humidification technology. Conserve both energy and water. Reduce the need for frequent water refills.



Intelligent fuzzy algorithm. Temperature fluctuation of ±0.2°C

Intelligent temperature control system. PT100 temperature sensor. Precise regulation. Temperature fluctuation of ±0.2°C.

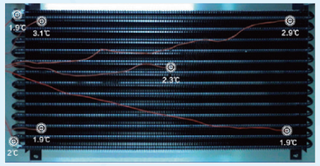


Central point temperature fluctuation within ±0.2°C (ambient temperature: 22°C, setting temperature: 40°C)

Climate Chamber

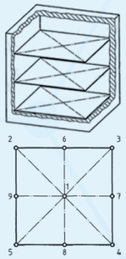
Dual evaporator system ensures a frost-free environment at a stable 4°C

Dual evaporators operate independently. Intelligent defrosting. Consistent frost-free operation and a stable internal temperature as low as 4°C.

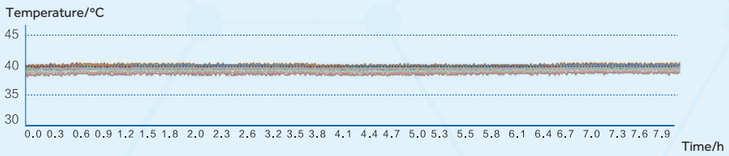


Circulating air flow system. Temperature uniformity ±0.5°C

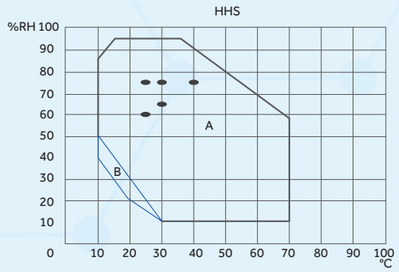
10 adjustable wind speed levels. Pre-mixed and split-flow circulation system. Lattice-type airflow structure.Temperature uniformity ±0.5°C.



DIN12880 standard
27 test points



27 test points temperature uniformity is ±0.5°C(ambient temperature: 22°C, setting temperature: 40°C)



A: Stable humidity and relative humidity control range

B: Environmental temperature and humidity below 22°C and 40%RH

• Temperature and humidity measurement standards meet those outlined in the ICH guidelines

Imported humidity sensor with a wide humidity range of 10%RH–95%RH

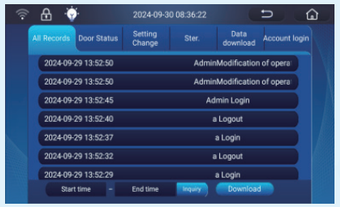
A wider range of humidity control to accommodate even the most stringent testing requirements.

There needs to be some clearance around the product, and the clearance on the back should be no less than 150 cm to facilitate heat dissipation and cut off the power supply in case of an emergency;

- Sample dehumidification is not applicable, which may cause the humidity to deviate from the initial setting;
- Changes in the ambient temperature may cause the temperature and humidity to fluctuate beyond the limit;
- In Area B, make sure the ambient temperature is lower than 22°C and the ambient humidity is less than 40% Rh.

If the ambient temperature exceeds the range, the humidity may deviate from the setting.

Safe and traceable. Data can be traced for up to 15 years.



8G data storage. Store and track data for up to 15 years.

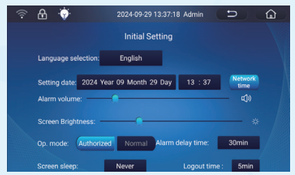


Optional IoT module. Real-time monitoring of equipment operational status.

User-Friendly Design

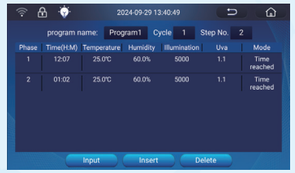


- 7-inch LCD touch screen for easy operation.
  PID control algorithm ensures precise temperature control.

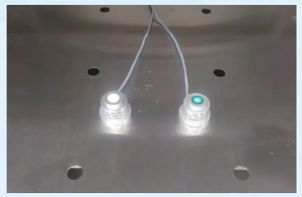


• Compliant with GMP requirements, meeting audit trail

Multi-level user management system for safety and compliance. Electronic signature and records meet US FDA PART11 certification requirements.

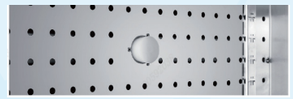


- Programmable mode up to 50 segments and 99 cycles. Simplify temperature and humidity settings for diverse testing and detection needs.



• UV sensor & illuminance sensor

ICH Q1B-compliant illumination for photostability testing [0–10000 lux, UV-A 320–400 nm, 0–1.1 W/m] Positionable illumination cassettes with ICH-compliant UV/Vis-light sources. Independent light-dose control for UV-A and visible light with sensor.



• Observation test hole

Equipped with a 35-mm diameter test hole on the left side of the chamber, allowing easy observation and recording of the test conditions inside to meet various testing requirements.



• Optional lock module

Provides two secure unlocking options: electromagnetic and mechanical locks to ensure the safety of test samples.

Climate Chamber

Specifications

Model			HHS-500	HHS-810	HHS-1060
Construction	Chamber Volume (L)		515	810	1070
	Interior Chamber		Stainless Steel	Stainless Steel	Stainless Steel
	Exterior Chamber		Coated Cold Rolled Steel	Coated Cold Rolled Steel	Coated Cold Rolled Steel
	Access Port		35mm Diameter	35mm Diameter	35mm Diameter
Dimensions	Net/Gross Weight	kg	248/305	320/383	360/430
		lbs	546.75/672.41	705.48/844.37	793.66/947.99
	Interior Dimensions (W*D*H)	mm	650*630*1260	1100*590*1260	1350*630*1260
		in	25.61*24.82*49.64	43.34*23.25*49.64	53.19*24.82*49.64
	Exterior Dimensions (W*D*H)	mm	1300*1000*1858	1380*1050*1858	1750*1000*1858
		in	51.22*39.40*73.21	54.37*41.37*72.89	68.95*39.40*73.21
	Packing Dimensions (W*D*H)	mm	1080*1060*1990	1495*1010*1990	1780*1050*1990
		in	42.55*41.76*78.41	58.9*39.79*78.41	70.13*41.37*78.41
	Container Load (20'/40'/40'H)		10/22/22	7/15/15	6/13/13
Shelves	Dimension (W*D)(mm)		598*528	1048*528	1298*528
	Shelves qty (standard/max.)		2/16	2/16	2/16
	Max. load per shelf		45	45	45
	Structure		Slide Rail, Adjustable	Slide Rail, Adjustable	Slide Rail, Adjustable
	Shelves Material		SUS304	SUS304	SUS304
Electrical	Voltage/ Frequency (V/Hz)		220-240/50/60	220-240/50/60	220-240/50/60
	Power (W)		2000	2000	2600
	Daily Consumption at 25°C & 40%RH (kWh)		4.3	4.3	6.5
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		7 "LCD Screen	7 "LCD Screen	7 "LCD Screen
Temperature Parameter	Setting Range (°C)		without Humidity without Light: 0-70°C with Humidity without Light: 10-70°C with Humidity with Light: 10-60°C	without Humidity without Light: 0-70°C with Humidity without Light: 10-70°C with Humidity with Light: 10-60°C	without Humidity without Light: 0-70°C with Humidity without Light: 10-70°C with Humidity with Light: 10-60°C
	Control Precision (°C)		±0.1	±0.1	±0.1
	Temperature Uniformity at 25°C		±0.5	±0.5	±0.5
	Temperature Fluctuation at 25°C		±0.2	±0.2	±0.2
	Sensor		PT100*1	PT100*1	PT100*1
	30 Seconds Recovery Time after Door Opening at 40°C (min)		≤4min	≤4min	≤4min
Humidity Parameter	Humidity Setting Range (%RH)		10~95	10~95	10~95
	Humidity Setting Accuracy (%RH)		0.1	0.1	0.1
	Humidity Fluctuation at 40°C & 75%RH (%RH)		±2	±2	±2
	Daily Water Consumption (ml)		240	320	400
Optional	Electromagnetic Lock (Password)		Y	Y	Y
	Printer		Y	Y	Y
	IoT Module		Y	Y	Y
Standard	Remote Alarm Interface		Y	Y	Y
	RS485		Y	Y	Y
	Water Level Alarm		Y	Y	Y

Cooled Incubator

Scope of Application

The equipment finds extensive use across variety of settings, including the scientific research institutions, university laboratories and production departments, in the realms of environmental conservation, public health and epidemic prevention, agriculture and animal husbandry, drug testing, and aquatic industries. It is highly specialized in cultivation, enabling it to meet the cultivation and preservation of most bacteria, molds, and microorganisms, as well as to serve purposes such as water analysis and biochemical oxygen demand (BOD) determination, and it can also conduct darkroom cultivation of plant tissues.



HSP-260

HSP-160

Product Advantages

Temperature Range
The temperature control ranges from 0˚C to +70˚C regardless of ambient conditions

Multiple Operating Modes
Meet a variety of experimental requirements.

Safe and Stable
Multiple protection systems such as overheating, overcurrent, and independent temperature limiting; overtemperature, high and low temperature and other smart alarms for safety

Smart IoT (Optional)
7-inch intelligent touchscreen with optional IoT technology for real-time checking the operating status via mobile phones or PC, simple and reliable

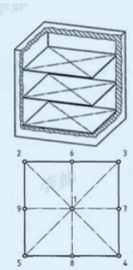
Data Traceability
Data traceable up to 15 years with base storage 8GB and data exportable through USB

High Thermal Insulation Performance, Energy Saving and Environmental Protection
The chamber features a two doors (one inner door ;another is outer door) configuration and utilizes separate inner liner foam to enhance thermal insulation performance, reduces energy consumption, while also being environmentally friendly

Cooled Incubator

Fuzzy PID Control Technology

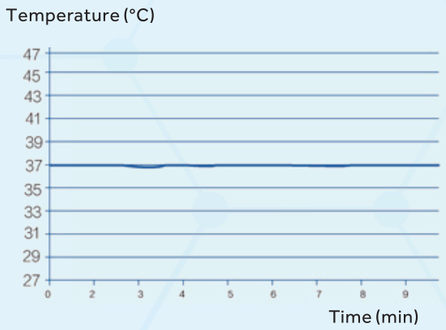
Based on the principle of fuzzy PID control, this product achieves high-precision temperature control. Referring to the DIN 12880 standard, with 27-point testing, the temperature fluctuation is ±0.2°C (@37°C, ambient temperature 22°C).

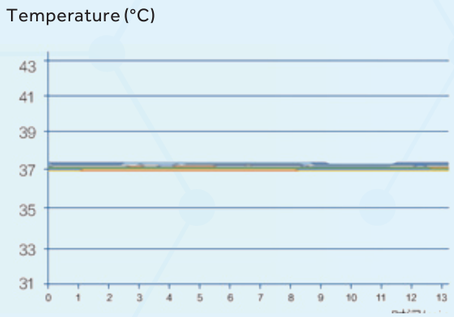


DIN12880 standard 27 test points

Precise Temperature Control, Energy Efficiency, and Eco-friendly

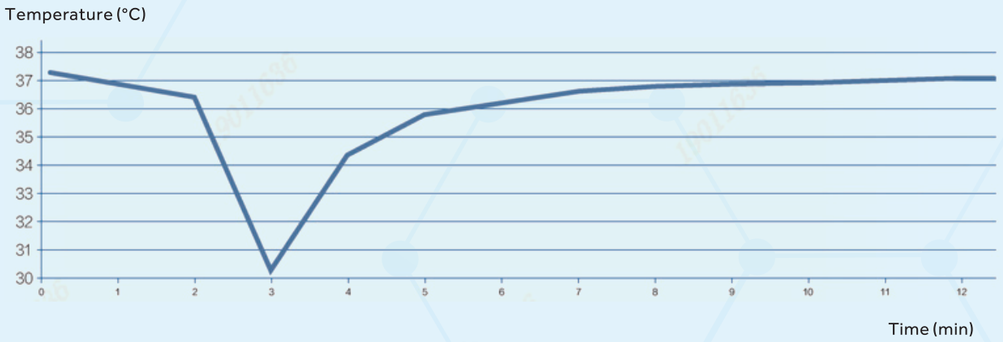
High-quality insulation materials, and professional air duct design to ensure precise temperature control while keeping power consumption to a minimum





Rapid Temperature Recovery After Door Opening

Fast recovery: the temperature inside the unit quickly recovers after opening the door to reduce the influence of temperature fluctuation on the sample



HSP-160/260



Product Parameters

Model			HSP-160	HSP-260
Performance	Temperature Sensor		PT100	PT100
	Control Accuracy	°C	±0.1	±0.1
	Control Range	°C	0~70	0~70
	Temperature Fluctuation (37°C)	°C	±0.2	±0.2
	Temperature Uniformity (37°C)	°C	±0.6 at 37°C	±0.6 at 37°C
	Recovery Time After Open Door for 30s (37°C)Restore to 98%	min	7	7
Control	Heating Mode		Direct heating	Direct heating
	Control Principle		Fuzzy PID	Fuzzy PID
	Display		7" LCD Touchscreen	7" LCD Touchscreen
Electrical	Power Supply (V/Hz)		220-240V~50/60Hz	220-240V~50/60Hz
	Power (W)		1760	1870
Construction	Capacity (L/Cu.Ft)		160/5.7	260/9.2
	Net/Gross Weight	kg	105/135	125/165
		lbs	231.49/297.62	275.58/363.76
	Interior Dimension (W*D*H)	mm	520*520*610	520*520*1000
		in	20.47*20.47*24.02	20.47*20.47*39.37
	Exterior Dimension (W*D*H)	mm	640*800*1255	640*800*1650
		in	25.2*31.5*49.4	25.2*31.5*65.0
	Packing Dimension (W*D*H)	mm	745*865*1440	745*865*1835
		in	29.33*34.06*56.69	29.33*34.06*72.24
	Container load (20'/40'/40'H)		12/28/28	12/28/28
	Shelves qty (standard/max.)		3/7	4/11
	Max. load per shelf	kg	15	15
Alarms	High/Low Temperature		Y	Y
	Over-temperature Protection		Y	Y
	Sensor Error		Y	Y
	Door Ajar		Y	Y
	End of program		Y	Y
	Alarm Mode		Sound and Light / Buzzer	Sound and Light / Buzzer
Accessories	Mechanical Independent Temperature Limiting Switch		Y	Y
	RS485		Y	Y
	USB		Y	Y
Optional	Electromagnetic lock(password)		Y	Y
	Printer		Y	Y
	UV-lamp		Y	Y
	IoT Module		Y	Y
Certification	CE		Y	Y
Cooling Mode	Refrigerant		R134a	R134a

- The power includes a reserved 1000W for the BOD socket;
- The temperature will return to 98% of the set value after opening the door;
- When the set temperature is less than 20°C, the temperature may fluctuate during the default low-temperature automatic defrosting of the device, which is a normal phenomenon. Do not use it beyond the working environment range.

Drying Oven

Scope of Application

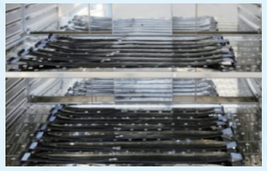
Typically used for drying and sterilization of laboratory consumables, instruments and samples; as well as heating and curing, drying and dehydration, heat removal, moisture content determination of materials and samples in the fields of medicine, chemical industry, agricultural products. Other uses include, high temperature heat resistance tests and thermal aging tests of rubber, plastic products and electrical insulation materials. The solution is widely used in medical, enterprise, universities, scientific research institutions, environmental monitoring centers, pharmaceutical, food and drug quality monitoring centers and other related industries.



Laboratory consumables



Instruments



Thermal aging test



HFS-160 HZS-60

Product Advantages

High thermal insulation performance, energy saving and environmental protection
Environmentally-friendly aluminium foil cotton insulation provides excellent insulation performance to reduce energy consumption and lower running costs.

Personalized interface, easy to transfer data
Equipped with USB and RS485 interfaces to better meet the different needs of users for transfer data.

Precise high temperature control
Superior preheating technology with an innovative air duct structure.

Safe and stable
Multiple safety protection features.

Multiple safety protections
Overheat protection (OPT), over current protection (FU), sensor error detection, independent temperature limit, compliance with DIN 12880 requirements and EU 3.1 safety level. Sound,light and remote alarms guarantee experiment safety.

Scalable bulk data storage
The touch-screen can be increased to 64GB with capacity to store 15 years' data. The data can be exported using a USB flash drive.

Smart interface
7-inch intelligent touchscreen with optional IoT technology for real-time remote monitoring via an app.

Operation mode
Four operation modes for multiple temperature requirements.

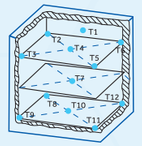
PID Control Technology



HFS-160
Forced convection



HZS-60
Natural convection

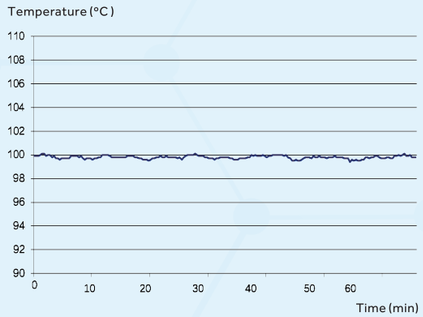


ASTM standard,
12 points testing

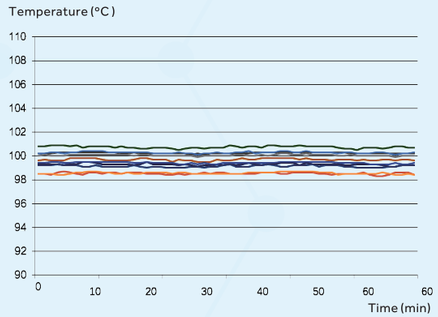
Based on PID control principle, manufactured with U-shaped 3-sided heating to achieve superior temperature control and uniformity control.

Precise Temperature Control, Energy-efficient and Quiet

High performance 3-sided heating and professional air duct design, high-quality fan components and insulation materials ensures precise temperature control while keeping power consumption to minimum.

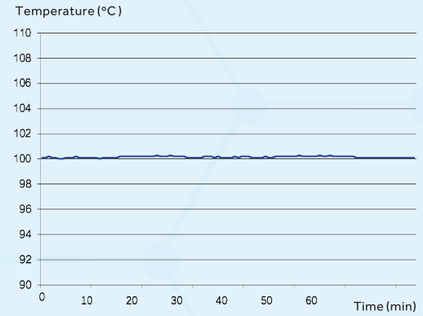


Temperature fluctuation ±0.3°C (100°C)

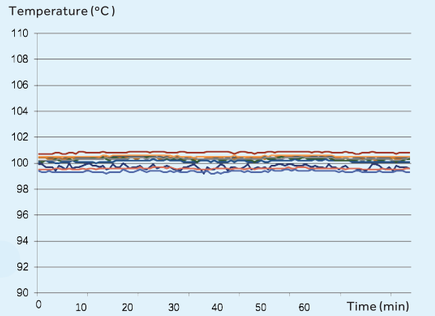


Temperature uniformity ±2°C (100°C)

HFS-160



Temperature fluctuation ±0.2°C (100°C)



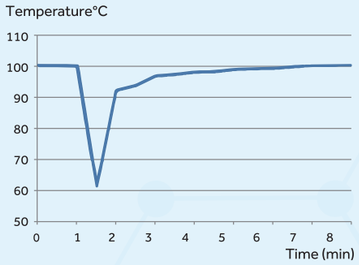
Temperature uniformity ±1.5°C (100°C)

HZS-60

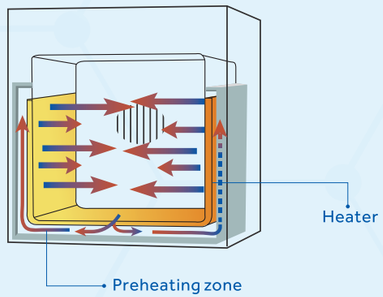
Drying Oven

Rapid Recovery After Door Open

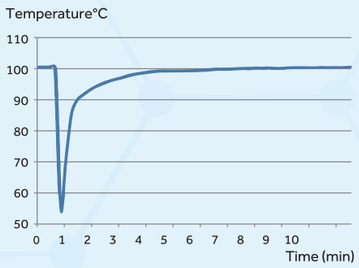
The temperature inside the unit quickly recovers after opening the door without overshoot.



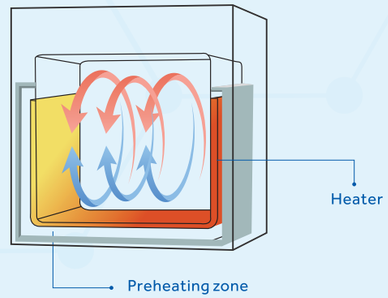
Temperature recovery curve to 100°C after opening the door for 30s



HFS-160



Temperature recovery curve to 100°C after opening the door for 30s



HZS-60

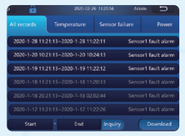
Convenient and Intelligent Management at a Glance



7-inch touchscreen, easy to operate and sensitive, it can respond quickly even when wearing rubber gloves.



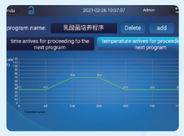
Real-time display of temperature data, one-touch to review previous data.



Records abnormal information in real time, to eliminate hidden errors.



Multiple operating modes.



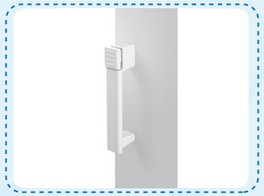
The program can be edited and set at any number of segments to meet the needs of various detection tests.

Optional IoT Technology for Real-time Remote Monitoring



The status of the dry chamber can be checked in real time, and information such as temperature abnormal alarm,sensor error alarm and door ajar can be controlled with one button, which provides more security for the experiment process.

Pictures in Details



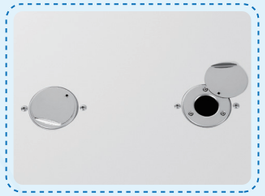
Ergonomic self-locking handle, firm and durable, easy to use.



Large arc angle 304 mirror stainless steel inner liner, easy to clean.



Standard independent intelligent temperature safety controller to ensure experimental safety.



It is equipped with portholes to facilitate external equipment monitoring to record the experimental process.

Drying Oven

Product Parameters

Model			HZS-60	HFS-160
Performance	Control Accuracy	℃	±0.1	±0.1
	Control Range	℃	RT+10~200	RT+10~200
	Temperature Fluctuation	℃	±0.2 at 100	±0.2 at 100
			±0.3 at 150	±0.3 at 150
	Temperature Uniformity	℃	±1.5 at 100	±1.2 at 100
			±2.5 at 150	±2 at 150
	Heating Rate (Ambient 22℃)		40 min to 100℃	20 min to 100℃
			50 min to 150℃	30 min to 150℃
	Recovery Time After Open Door for 30s		9 min to 100℃	4 min to 100℃
			20 min to 150℃	5 min to 150℃
Control	Heating Mode		Pre-Heating Air Jacket Type	Pre-Heating Air Jacket Type
	Control Principle		Fuzzy PID	Fuzzy PID
	Display		7" LCD Touchscreen	7" LCD Touchscreen
Electrical	Power Supply (V/Hz)		220-240~50/60	220-240~50/60
	Power (W)		900	2500
Dimensions	Capacity (L/Cu.Ft)		60/2.1	160/5.7
	Net/Gross Weight	Kg	77/85	113/125
		lbs	169.4.4/187	248.6/275
	Interior Dimension (W*D*H)	mm	370*385*420	550*492*600
		in	14.6*15.2*16.5	21.7*19.4*23.7
	Exterior Dimension (W*D*H)	mm	572*719*792	752*809*973
		in	22.5*28.3*31.2	29.6*31.9*38.3
	Packing Dimension (W*D*H)	mm	730*830*970	910*920*1140
		in	28.6*32.6*38.1	35.7*36.2*44.8
	Shelves (Standard/Maximum)		2/9	2/15
	Shelves Dimensions (W*D)		340*345	520*445
	Max. load per shelf	Kg	20	20
	Partition Spacing	mm	20	20
Alarms	Temperature Control Failure		Y	Y
	Timer End		Y	Y
	Sensor Error		Y	Y
	Door Ajar		Y	Y
	End of Program		Y	Y
	Alarm Mode		Sound and Light / Buzzer	Sound and Light / Buzzer
Accessories	Mechanical Independent Temperature Limiting Switch		Y	Y
	Air Vents		Y	Y
	Porthole		Y	Y
	Observation Window		/	Y
	RS485		Y	Y
	USB		Y	Y
	IoT Module		Optional	Optional
Certification	CE		Y	Y

Scope of Application

Typically used for drying and sterilization of laboratory consumables, instruments and samples as well as heating and curing, drying and dehydration, heat removal, moisture content determination of materials and samples. The solution is widely used in medical, enterprise, universities, scientific research institutions, environmental monitoring centers, pharmaceutical, food and drug quality monitoring centers and other related industries.



HZS-160E HFS-60E

Product Advantages

Wide Temperature Range
Operating from 10°C above ambient temperature up to 250°C

PID Control Technology
Ensures superior temperature and uniformity control

Smart IoT Module (optional)
Through the mobile app, the status of the drying oven can be checked in real time

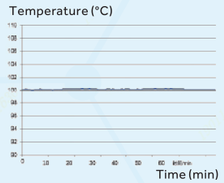
4-inch Display Screen
Intuitive user interface and easy-to-read display

Multiple Safety Protections
Multiple protection systems such as overheating, overcurrent, and independent temperature limiting; overtemperature, high and low temperature and other alarms for safety

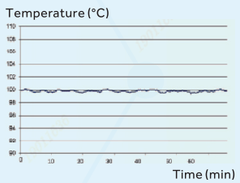
Innovative Air Duct Structure
Improved level of temperature uniformity inside the chamber as good as ±2°C at 100°C (HFS-60E)

Precise Temperature Control

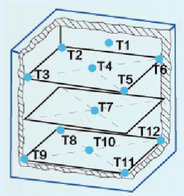
Based on the principle of fuzzy PID control, the product achieves high-precision temperature control. The temperature fluctuation measured using the ASTM standard 12 points temperature detection method is less than 0.3° C. (Test environment temperature 22° C, set temperature 100°C)



Temperature fluctuations±0.2°C (HFS-60E)



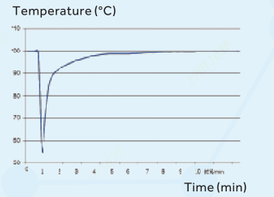
Temperature fluctuations±0.1°C (HZS-160E)



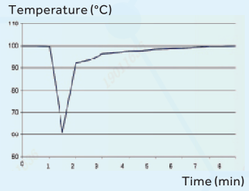
Drying Oven

Rapid Temperature Recovery After Door Opening

The U-shaped 3- sided heating system provides a continuous source of power for quick temperature recovery when opening the door, and high-performance insulation materials reduces heat loss



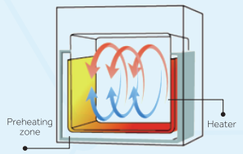
Temperature recovery curve to 100°C after opening the door for 30s (HFS-60E)



Temperature recovery curve to 100°C after opening the door for 30s (HZS-168E)

Air Jacket Heating Without Overshoot of Temperature

By adopting pre-heated air jacket heating (HFS-60E), the temperature remains stable and recovers quickly without any overshoot, enabling precise temperature control across the entire range of temperature segments, and enhancing the temperature uniformity of the chamber





4-inch LCD screen with simple operation and clear display

New ergonomic handle design

Smooth inner chamber with easy to clean rounded corners

Standard independent intelligent temperature safety controller to ensure experimental safety

Multiple shelves of adjustable height

Adjustable feet for easy positioning and leveling

Product Parameters

	Model		HFS-60E	HZS-160E
Performance	Control Accuracy	℃	±0.1	±0.1
	Control Range	℃	RT+10~250	RT+10~250
	Temperature Fluctuation	℃	±0.2 at 100	±0.2 at 100
			±0.3 at 150	±0.3 at 150
	Temperature Uniformity	℃	±1.2 at 100	±1.5 at 100
			±2 at 150	±2.5 at 150
	Heating Rate (Ambient 22°C)		20 min to 100°C	40 min to 100°C
			30 min to 150°C	50 min to 150°C
	Recovery Time After Open Door for 30s		4 min to 100°C	9 min to 100°C
			5 min to 150°C	20 min to 150°C
Control	Heating Mode		Pre-Heating Air Jacket Type	Pre-Heating Air Jacket Type
	Control Principle		Fuzzy PID	Fuzzy PID
	Display		4 inch LCD	4 inch LCD
Electrical	Power Supply (V/Hz)		220-240~50/60	220-240~50/60
	Power (W)		900	1900
Dimensions	Capacity (L/Cu.Ft)		60/2.1	160/5.7
	Net/Gross Weight	Kg	72/80	99/110
		lbs	158/176	217.8/242
	Interior Dimension (W*D*H)	mm	370*385*420	550*492*600
		in	14.6*15.2*16.5	21.7*19.4*23.7
	Exterior Dimension (W*D*H)	mm	572*719*792	752*809*973
		in	22.5*28.3*31.2	29.6*31.9*38.3
	Packing Dimension (W*D*H)	mm	730*800*970	920*890*1150
		in	28.6*32.6*38.1	36.2*35*45.2
	Shelves (Standard/Maximum)		2/9	2/15
	Shelves Dimensions (W*D)		340*345	520*445
	Max. load per shelf	Kg	20	20
	Partition Spacing	mm	20	20
Alarms	Temperature Control Failure		Y	Y
	Timer End		Y	Y
	Sensor Error		N	N
	Door Ajar		Y	Y
	End of Program		Y	Y
	Alarm Mode		Sound and Light / Buzzer	Sound and Light / Buzzer
Accessories	Mechanical Independent Temperature Limiting Switch		Y	Y
	Air Vents		Y	Y
	Porthole		Y	Y
	Observation Window		N	N
	RS485		Optional	Optional
	USB		N	N
	IoT Module		Optional	Optional
Certification	CE		N	N

Autoclave

Multi-dimensional Application Scenarios
As a type of high pressure sterilizer, it takes steam as its sterilization medium which is fast, safe and economic .They are common used in scientific institutions or R&D institution to make the sterilization for wrapped or unwrapped instrument, fabric, utensils, culture medium, unsealed liquid, etc.



HRTM-18/23

- High security ensured by extensive safety devices.
- 4 Inch touch-button TFT screen, intuitive and easy to operate.
- Adopting a new type of steam generator, high-efficiency heat exchange provides saturated steam for rapid and efficient sterilization

Product Advantages

Triple protection of temperature, pressure monitoring electronic lock, and mechanical safety device; automatically release pressure when overpressure and over-temperature

Eight Safety Protection

Over-temperature, over-pressure, leakage, over-current, anti-dry burning, door lock safety, sensor disconnection, door status protection

Superior drying performance:

Adopting negative-pressure air-blowing and controlled forced-vacuum drying technology, eliminating wet packages and delivers thorough drying of items

The status of each component on the touch screen is intuitively displayed, and the program process is monitored and displayed in real time for clear visibility

Optional-Intelligent IoT

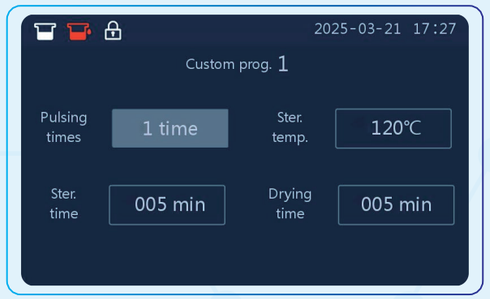
It occupies little space, is easy to install and can sterilize in a narrow space. The design is novel and won the German Industrial Design Award

Ergonomic Design



10 Preset Programs

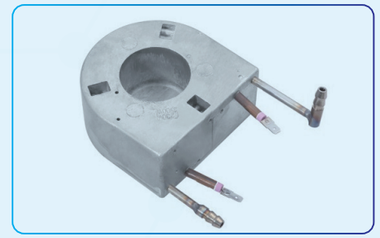
Exposed (121°C /134°C), Sealed (121°C /134°C), Fabric (121°C /134°C), Enhanced (134°C), B&D/HELIX , Vacuum test, Pipeline self-cleaning, Liquid (121°C, optional)

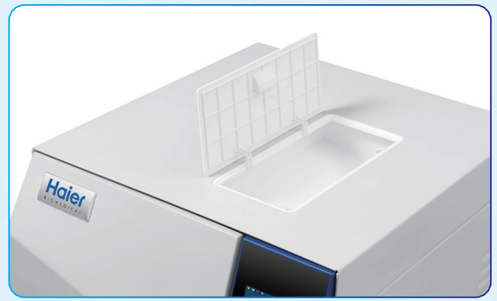


Up to 10 custom programs may be added

Adopting a new type of steam generator to improve the efficiency of saturated steam

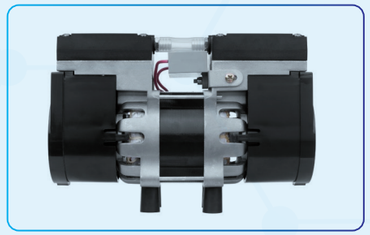
Adopting a highly efficient steam generator with high heat exchange efficiency and large gas production to meet the requirements of the sterilizer for rapid temperature rise and rapid sterilization.





Storage tank

- Open storage tank, easy to clean.
- High water level display, low water level alarm, and when the low water level alarm is triggered, it can meet one sterilization cycle.
- Direct discharge design, the sterilization water does not circulate to ensure the cleanliness of the load.



High-efficiency vacuum pump

Greatly shorten the sterilization cycle and improve the sterilization and drying effects.

New sterilization chamber structure

The sterilization chamber is integrally stretched and formed, without dead corners, easy to clean, and ensures a sterile environment.



Autoclave

Specifications

Model			HRTM-18	HRTM-23
Technica Data& Dimensions	Display		4 inch TFT screen	4 inch TFT screen
	Chamber Volume (L)	Capacity (L/Cu.Ft)	18/0.6	23/0.8
	Internal Dimensions (w*d*h)	mm	Φ247*350	Φ247*450
		in	Φ9.7*13.8	Φ9.7*17.7
	External Dimensions (w*d*h)	mm	490*600*455	490*690*455
		in	19.3*23.6*7.9	19.3*27.2*17.9
	Packing Dimensions (w*d*h) (With Packaging Bottom Support)	mm	590*680*620	590*760*620
		in	23.2*26.8*24.4	23.2*29.9*24.4
	Net/Gross Weight (approx)	kg	47/56	53/64
		lbs	103.6/123.5	116.8/141.1
	Container Load (20'/40'/40'H)		72/153/204	63/126/168
	Inner Material		304 stainless steel (option:316 stainless steel)	304 stainless steel (option:316 stainless steel)
	The Main Body Material		Coated cold rolled steel	Coated cold rolled steel
Electrical Data	Power (W)		2800	3200
	Power Supply(V/Hz)		220-240~50/60	220-240~50/60
	Electrical Current (A)		13.0	14.5
Performance	The sterilization temperature range (°C)		105-138	105-138
	Temperature fluctuations (°C)		0~3	0~3
	Temperature uniformity (°C)		<2	<2
	Design Temperature (°C)		150	150
	Design Pressure (Mpa)		0.3	0.3
	Rated Working Pressure (Mpa)		0.22	0.22
	Dynamic Pulse Exhaust Times		1-9 (settable)	1-9 (settable)
	Sterilization Time (min)		1-999	1-999
	Noise (dB(A))		≤65	≤65
	Temperature Sensor		PT100	PT100
	Ambient Range (°C)		5-40	5-40
	Humidity Reservoir (L)		2.6	2.6
Accessories	Shelves Dimensions (w*d)(mm)		281*183	376*183
	Shelves Number Standard/Maximum		3/5	3/5
	USB		Y	Y
	Printer		Optional	Optional
Others	CE		Y	Y
	PED		Optional	Optional
	Type		Class B	Class B

Multi-dimensional Application Scenarios
It's suitable for sterilizing exposed medical devices, conventional metal and glass packs, surgical gowns, dressing packs, cotton cloth, masks, etc. It's used by medical, health and scientific research units for sterilizing medical devices and materials that may contact blood or body fluids in places like stomatology, ophthalmology, operating rooms, beauty institutions, pet hospitals, tattoo stores and community service stations.



HRTM-45

- High security ensured by extensive safety devices.
- User-friendly interface design, with a standard 7-inch touch screen for convenient interaction.
- Using a new type of steam generator to improve the saturation of saturated steam and make sterilization more thorough.

Product Advantages

Triple protection of temperature, pressure monitoring electronic lock, and mechanical safety device; automatically release pressure when overpressure and over-temperature

Eight Safety Protection

Over-temperature, over-pressure, leakage, over-current, anti-dry burning, door lock safety, sensor disconnection, door status protection

Superior drying performance:

Adopting negative-pressure air-blowing and controlled forced-vacuum drying technology, eliminating wet packages and delivers thorough drying of items

Touchscreen with intuitive user interface for simple operation like your smartphone - even with medical gloves

Optional-Intelligent IoT

It occupies little space, is easy to install and can sterilize in a narrow space. The design is novel and won the German Industrial Design Award

Ergonomic Design

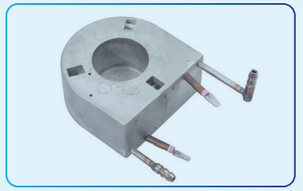


7-inch intelligent touch LCD screen

The status of each component on the touch screen is intuitively displayed, easy to understand and convenient to operate

Adopting a new type of steam generator to improve the efficiency of saturated steam

Adopting a highly efficient steam generator with high heat exchange efficiency and large gas production to meet the requirements of the sterilizer for rapid temperature rise and rapid sterilization.



Autoclave



Automatically Detect the Water Quality

When the water quality is unqualified, the sign of the clean water tank automatically turns yellow to timely remind to replace the pure water



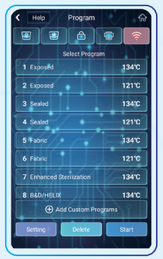
Temperature-Pressure Curve

The temperature-pressure curve is displayed in real-time during the sterilization process, making the entire process clear at a glance



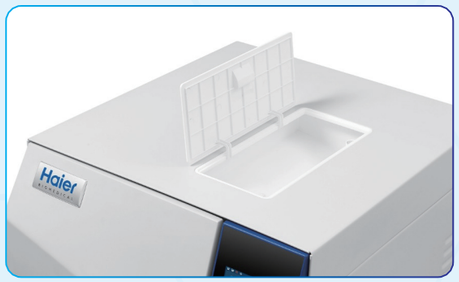
Customizable Program

Support addition of unlimited custom programs



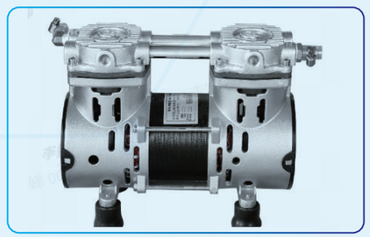
10 Preset Programs

Exposed (121°C /134°C), Sealed (121°C /134°C), Fabric (121°C /134°C), Enhanced (134°C), B&D/HELIX , Vacuum test, Pipeline self-cleaning, Liquid (121°C, optional)



Storage tank

- Open storage tank, easy to clean.
- High water level display, low water level alarm, and when the low water level alarm is triggered, it can meet one sterilization cycle.
- Direct discharge design, the sterilization water does not circulate to ensure the cleanliness of the load.



High-efficiency vacuum pump

Greatly shorten the sterilization cycle and improve the sterilization and drying effects.

New sterilization chamber structure

The sterilization chamber is integrally stretched and formed, without dead corners, easy to clean, and ensures a sterile environment.



Specifications

Model			HRTM-45
Technica Data & Dimensions	Display		7-inch Touchscreen
	Chamber Volume (L)	Capacity (L/Cu.Ft)	45/1.6
	Internal Dimensions (w*d*h)	mm	Φ316*615
		in	Φ24.2*47.2
	External Dimensions (w*d*h)	mm	640*840*575
		in	25.2*33.1*22.6
	Packing Dimensions (w*d*h) (With Packaging Bottom Support)	mm	720*965*730
		in	28.3*38*28.7
	Net/Gross Weight (approx)	kg	120/140
		lbs	264.6/308.6
	Container Load (20'/40'/40'H)		54/72/108
	Inner Material		304 stainless steel (option:316 stainless steel)
	The Main Body Material		Coated cold rolled steel
Electrical Data	Power (KW)		4.8KW
	Power Supply(V/Hz)		220-240V~50/60Hz
	Electrical Current (A)		22A
Performance	The sterilization temperature range (°C)		115-134℃
	Temperature fluctuations (°C)		0-3℃
	Temperature uniformity (°C)		<2℃
	Design Temperature (°C)		150℃
	Design Pressure (Mpa)		0.3
	Rated Working Pressure (Mpa)		0.22Mpa
	Dynamic Pulse Exhaust Times		1-9 (settable)
	Sterilization Time (min)		1-999min
	Noise (dB(A))		≤65
	Temperature Sensor		PT100
	Ambient Range (°C)		5-40℃
	Humidity Reservoir (L)		8.5
Accessories	Shelves Dimensions (w*d)(mm)		500*215
	Shelves Number Standard/Maximum		3/5
	USB		Y
	Printer		Standard
Others	CE		Y
	PED		Optional
	Type		Class B

Autoclave

A top-loading autoclave for automatic, rapid steam sterilization, utilizing high temperature saturated steam; suitable for a wide range of applications used within laboratories, disease control centers and other biomedical/biomedical research.
Applications include instrument and glassware sterilization, media preparation, biohazard and waste sterilization.



HRLM-80

- One-click Start of Stored Procedures
- Two Pressure Relief Methods
- Multiple Exhaust Methods
- Automatic Drying Function (Auxiliary Drying)
- Warm-up Control and Timing Start
- Automatic Program Control

Product Advantages

One-click Start of Stored Procedures
Equipped with quick programs for instruments, dressings, rubber and liquids, one-button start for easy operation.

Two Pressure Relief Methods
Two pressure relief methods are available: fast pressure relief and slow pressure relief. The slow pressure relief method for liquid sterilization can prevent liquid overflow caused by rapid buildup of pressure.

Warm-up Control and Timing Start
The preheating control function supports the sterilizer heating process, which shortens the heating time of the sterilizer and improves the efficiency of the experiment; equipped with timing start function, it can start the sterilization program according to the predetermined time and run the experiment time accordingly.

Automatic Drying Function (Auxiliary Drying)
The drying time can be set after the sterilization is completed.

Automatic Program Control
One-click, automatic program control – users can control the whole process (water injection, heating, exhaust, sterilization, pressure relief, drainage, drying) with just one click.

Multiple Exhaust Methods
A variety of exhaust methods such as regular temperature setting exhaust, dynamic exhaust and full-process air escape, completely eliminates the cold air in the sterilizer and improves steam saturation, ensuring effective sterilization.

Vacuum Drying (Optional)
Automatically activated after sterilization. The chamber works with negative pressure. Alternating negative pressure gradients speed up instant evaporation to achieve even and complete drying.

Safety Mechanisms

Automatic overpressure pressure relief
When the set pressure is exceeded, the safety valve opens automatically to release the pressure.

Sensor disconnection detection
Monitors the status of the sensor in real time to ensure that the sensor is working properly to prevent excessive temperature caused by abnormal sensors.

Anti-drying protection
When the water level is too low, the power will automatically cut off, the operation is stopped, and an alarm is automatically generated.

Automatic over-temperature protection
When the set temperature is exceeded, the system cuts off the power supply and alarms automatically generated.

Full protection thermal insulated door cover
The door cover is made of high-performance thermal insulation material, making the door cool to touch.

Standard over-current, over-voltage protection and leakage protection.

Door safety protection
Real-time detection of door status. The sterilization procedures cannot be started if the door is not tightly closed and there is a reminder to open the door. The sterilization can only start when the door is properly closed. However, when there is pressure in the sterilizer, the sealing door cannot be opened to prevent damage caused by steam leakage.

Air Switch Solution for HRLM-80

More secure and reliable connection

Over-current, overvoltage, current leakage protection, in case of tripping operation, the other equipment connected to the air switch will not be affected.



Air switch

Shell material
ABS box/PC Transparent cover

Waterproof level
IP65

Features
Waterproof, dustproof, corrosion-resistant, high-strength insulation



Nylon connector
Fix, waterproof



External cable
2m

Model	HT Switch Box	Dimension (mm)
HT-5	Length	120
	Width	160
	Height	95

Standard configuration

Nylon connector + external cable (2m) + air switch
(residual current operated circuit-breaker+ protection box)

Autoclave

Specifications

Model			HRLM-80
Technical Data	Cabinet Type		Upright
	Temp Range (°C)		5~40
	Heating Type		Electric Heating Tube
	Cool Air Removal Type		Gravity Displacement, Positive Pressure Pulsation
	Drainage Method		Auto
	Dry Function		Y/Auxiliary
	Water Tank		Y
	Sterilization Process		Auto
	Water Infusion		Auto
	Chamber Materials		SUS304
	Protection		Anti-dry burning, over-temperature power failure, automatic over-pressure relief, over-current protection, sensor disconnection detection
	Scheduled Start		Y
	Sensor Type		PT100
	Open the Door		Hand Wheel Horizontal Opening
Performance	Temperature Range (°C)		105~136
Control	Controller		Microprocessor
	Display		LCD Screen
Electrical Data	Power Supply (V/Hz)		220-240~50/60
	Power (W)		4200
	Electrical Current (A)		15.5
Dimensions	Capacity (L/Cu.Ft)		80
	Net/Gross Weight (approx)	Kg	105/140
		lbs	231.5/308.65
	Interior Dimension (mm)	mm	ϕ386*695
		in	ϕ15*27
	Exterior Dimensions (W*D*H)	mm	546*750*1085
		in	21*29*43
	Packing Dimensions (W*D*H)	mm	633*847*1246
		in	24.61*33.19*48.43
	Container Load (20'/40'/40'H)		21/42/84
Alarms	Design Pressure (Mpa)		0.28
	Design Temperature (°C)		150
	Rated Working Pressure (Mpa)		0.22
	Pressure Display Range (Mpa)		-0.1-0.3
	Sterilization Temperature Range (°C)		105-136
	Temperature Control Precision (°C)		±0.1
	Dynamic Pulse Exhaust Times		0-99(Settable)
	Dynamic Pulse Exhaust Temperature (°C)		110-136
	Dissolution Temperature (°C)		40~100
	Heat Preservation Temperature (°C)		40~100
	Sterilization Time (min)		1~999
	Printer		Optional
Accessories	Instruction		1
	Basket		2(Ø364.5x270)
	Beaker		1
	Drain Pipe		1
	Power Cord		1
Others	Certificate		PED, CE

Applicable to inspection departments, laboratories, operating rooms, universities, animal husbandry, disease control and other medical and biomedical research units at all levels. Applicable to the sterilization of items such as instruments, dressings, rubbers, liquids, glassware, culture media, waste, and bloody samples.



HRLM-60A/80A



HRLM-110A

- Multiple Options
- Pneumatic Pressure Door Lock
- Ten-model Exhaust Control Technology

Product Advantages

Dual Cooling System

High density finned condenser and high air volume cooling fan are connected in series to provide two-stage cooling for the outdoor steam exhaust of sterilization, ensuring the condensation effect of the exhaust steam.

Ten-Moodel Exhaust Control Technology

Adopting PID control technology to achieve controllable cooling time and non boiling liquid, selecting a suitable exhaust mode scheme can save time and improve efficiency.

Linkage Door Lock System

Pressing self-locking structure, safety electromagnetic lock, door pressure mechanical interlocking, locking in place before connecting to the power supply.

Pneumatic Pressure Door Lock

The detection of pressure in the internal chamber will automatically lock to ensure absolute safety, and this function is also available even under conditions such as power off and out of control.

Anti-Dry Burning Protection

The use of floating balls and manual reset temperature controllers ensures sterilization safety and can extend the service life of the equipment.

Multiple Options

Optional IoT module, fast cooling module, 316 stainless steel sterilization chamber, stainless steel bucket, matrix printer, high-efficiency sterilization filter, and item temperature sensor.

Autoclave

Experience Upgrade

Drainage Without Exhaust



Dual cooling system and ten-model exhaust control technology ensures zero steam discharge during the entire process of program equipment operation, this is to ensure environmental cleanliness, and avoid aerosol generation and biological laboratory hazards.

One-Click Start of Sterilization

Standarding dressings, instruments, rubber, liquid one click start program.

Ergonomic Design



Ergonomic and anti-scald door handle.



4-inch LCD display screen and touch buttons.



Mechanical safety valve.



Vaporous protection plate of door cover.



Waterway and electrical circuit of correspond to independent access door.



Article temperature sensor.

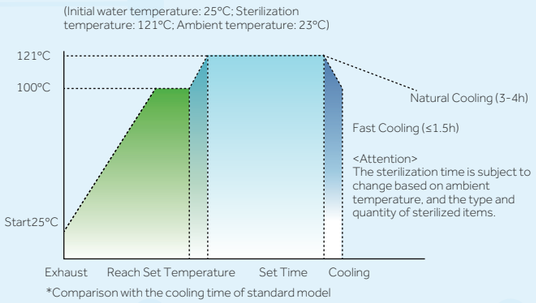
Optional Module

Fast cooling, Bio-safety, IoT Module, 316 Stainless Steel Sterilization Chamber, Stainless Steel Pail, Dot Matrix Printer, Pulse vacuum



Fast cooling

- After sterilization, the cooling fan activates.
- Cool to a safe temperature.
- Shortens the removal time of sterilized items.
- Free selection of forced cooling and natural cooling.



*Comparison with the cooling time of standard model

Bio-safety

Opt for a 0.2um pore size PTFE filter to trap aerosols, microorganisms, viruses and other hazardous exhaust during steam discharge. The system concurrently sterilizes the filter to fully prevent cross-contamination.

Pulse vacuum (HRLM-80A)

Through alternating cycles of vacuuming and steam injection, negative pressure thoroughly removes cold air and non-condensable gases inside the chamber. This allows high-temperature saturated steam to penetrate the device interior without obstruction for efficient and complete sterilization. After sterilization, the unit automatically enters the vacuum drying phase. Leveraging the physical principle of reduced water boiling point under vacuum, residual moisture on and inside items is rapidly removed to achieve thorough drying, supporting subsequent sterile storage.

Specifications

	Model		HRLM-60A	HRLM-80A	HRLM-110A
Technical Data	Cabinet Type		Upright	Upright	Upright
	Temp Range (°C)		5~40	5~40	5~40
	Heating Type		Electric Heating Tube	Electric Heating Tube	Electric Heating Tube*3
	Cool Air Removal Type		Gravity Displacement, Positive Pressure Pulsation	Gravity Displacement, Positive Pressure Pulsation	Gravity Displacement, Positive Pressure Pulsation
	Drainage Method		Standard: Hand Movement; Optional: Auto	Standard: Hand Movement; Optional: Auto	Standard: Hand Movement; Optional: Auto
	Dry Function		Optional	Optional	Optional
	Water Tank		Condensate Water Tank	Condensate Water Tank	Condensate Water Tank
	Sterilization Process		Auto	Auto	Auto
	Water Infusion		Standard: Hand Movement; Optional: Auto	Standard: Hand Movement; Optional: Auto	Standard: Hand Movement; Optional:Auto
	Chamber Materials		SUS304	SUS304	SUS304
	Protection		Anti-dry burning, over-temperature power failure, automatic over-pressure relief, over-current protection, sensor disconnection detection	Anti-dry burning, over-temperature power failure, automatic over-pressure relief, over-current protection, sensor disconnection detection	Anti-dry burning, over-temperature power failure, automatic over-pressure relief, over-current protection, sensor disconnection detection
	Scheduled Start		Y	Y	Y
	Sensor Type		PT100	PT100	PT100
	Open the Door		Action Bars+Upward Fipping Door	Action Bars+Upward Fipping Door	Action Bars+Upward Fipping Door
Performance	Sterilization Temperature Range (°C)		105~136	105~136	105~136
Control	Controller		Micro-Computer	Micro-Computer	Micro-Computer
	Display		TFT	TFT	TFT
Electrical Data	Power Supply (V/Hz)		220-240-50/60	220-240-50/60	3~380~50/60
	Power (W)		4000	4000	9000
	Electrical Current(A)		15	15	12
Dimensions	Capacity (L/Cu.Ft)		60/2.1	80/2.8	110/3.9
	Net/Gross Weight (Approx)	kg	100/125	120/145	130/160
		lbs	220.5/275.6	264.5/320	286.6/352.7
	Interior Dimension (mm)	mm	Φ386*520	Φ386*695	Φ450*727
		in	Φ15*20.5	Φ15*27	Φ17.7*28.6
	Exterior Dimensions (W*D*H)	mm	581*706*903	581*706*1020	640*640*1030
		in	23*28*35.5	23*28*41	25.2*25.2*40.6
	Packing Dimensions (W*D*H)	mm	665*860*1200	665*860*1230	835*790*1235
		in	26.2*34*47.24	26.2*34*48.43	32.9*31.1*48.6
	Container Load (20'/40'/40'H)		18/39/78	18/39/78	18/28/56
Functions	Design Pressure (Mpa)		0.28	0.28	0.28
	Design Temperature (°C)		150	150	150
	Rated Working Pressure (Mpa)		0.22	0.22	0.22
	Pressure Display Range (Mpa)		-0.1-0.3	-0.1-0.3	-0.1-0.3
	Sterilization Temperature Range (°C)		105-136	105-136	105-136
	Temperature Control Precision (°C)		±0.1	±0.1	±0.1
	Dynamic Pulse Exhaust Times		0-99 (Settable)	0-99 (Settable)	0-99 (Settable)
	Dynamic Pulse Exhaust Temperature (°C)		105-132	105-132	105-132
	Dissolution temperature (°C)		40-100	40-100	40-100
	Heat Preservation Temperature (°C)		40-100	40-100	40-100
	Sterilization Time (min)		0-9999	0-9999	0-9999
	Printer		Optional	Optional	Optional
	316 Stainless Steel Sterilization Chamber		Optional	Optional	Optional
	Stainless Steel Pail		Optional	Optional	Optional
	IoT Module		Optional	Optional	Optional
Accessories	Instruction		1	1	1
	Basket		2(Φ364.5*190)	2(Φ364.5*270)	2(Φ430*265)
	Beaker		1	1	1
	Drain Pipe		1	1	1
	Power Cord		N, Air Switch	N, Air Switch	N
Certificate	PED		Y	Y	NO
	CE		Y	Y	Y