

CO₂ Incubator Shakers

Application areas:

Mammalian / human cell cultures

It is ideally suited for the cultivation of mammalian and human cell cultures due to its accurate and efficient CO₂ 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



AWTech
Advanced Worldwide Technologies

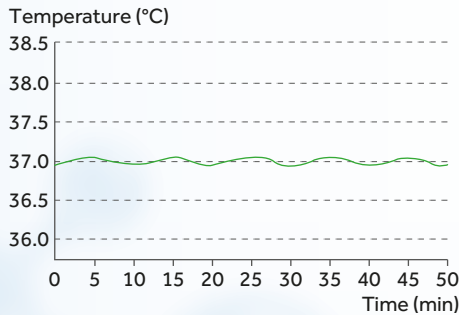
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Product Feature

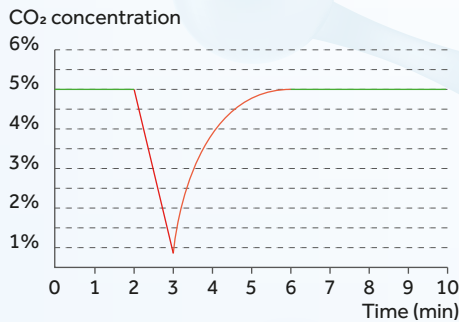


Reliable, Versatile Units for Enhanced Cell Growth



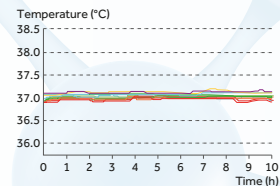
Temperature control fluctuation inside the cabinet $\leq \pm 0.2^{\circ}\text{C}$.

Cross-flow wind field + unique air duct design, temperature uniformity $\leq \pm 0.3^{\circ}\text{C}$ at 37°C .



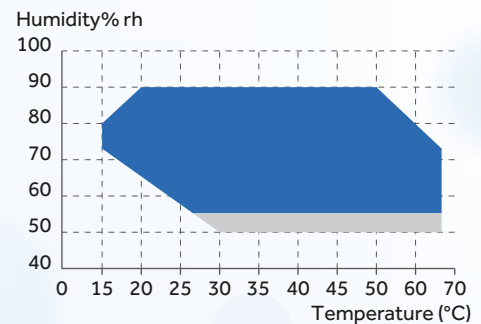
Professional humidity sensor, precise humidity control, no condensation during humidification (at 37°C , $5\%\text{CO}_2$, $\text{RT}22 \pm 3^{\circ}\text{C}$).

Using ART intelligent sensing and control technology, the temperature accuracy inside the cabinet is $\leq \pm 0.2^{\circ}\text{C}$.



Note: test conditions: $\text{RT}22 \pm 3^{\circ}\text{C}$

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.



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

Product Feature



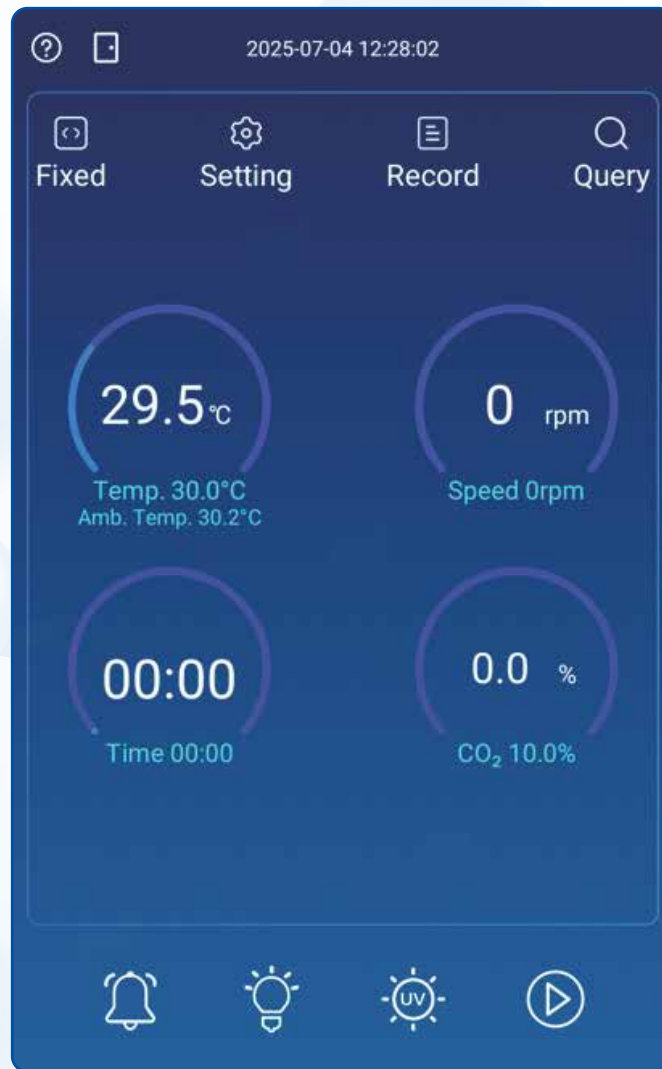
Convenience, Precision and Programming at Your Fingertips

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, CO₂ 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

Product Feature



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.

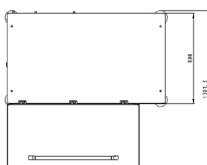
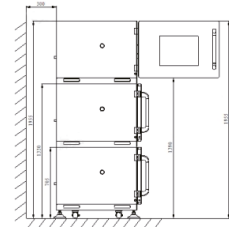
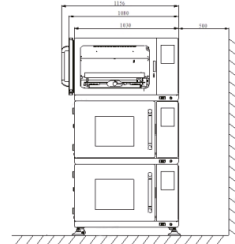
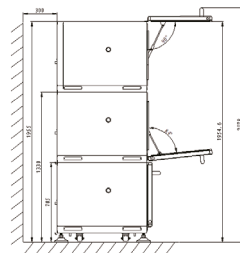
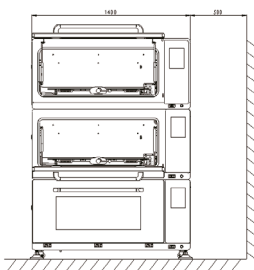
A steam generator and carboy kit (sold separately) let you control humidity, while a calibration system, thermal protection switches and parameter alarms provide reliable sample protection. You may also store, retrieve and analyze run data through the touchscreen interface and control user access for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

Protect Your Hard Work:

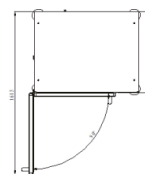
- Parameter alarms: Speed, temperature, %RH, CO₂, communication, no gas
- Parameter calibration: Temp, %RH, CO₂
- Thermal protection switches: Protect from high power input
- Overheating shutdown: Prevents runaway heating element
- Door monitoring: Shaking stops automatically when the door is open

Product Dimensions

unit :mm

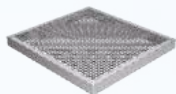


HYP-380C



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)	



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)

Specifications

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)	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) Excluding hand and foot wheels	mm	one layer 1400*840*625	one layer 1030*840*625
		two layers 1400*840*1250	two layers 1030*840*1250
		three layers 1400*840*1875	three layers 1030*840*1875
	in	one layer 55.1*33.1*24.6	one layer 40.6*33.1*24.6
		two layers 55.1*33.1*49.2	two layers 40.6*33.1*49.2
		three layers 55.1*33.1*73.8	three layers 40.6*33.1*73.8
External dimensions(w*d*h)	mm	1510*1000*715	1140*970*715
	in	59.5*39.4*28.2	44.9*38.2*28.2
Refrigerant		R134A	R134A

*Haier Biomedical reserves the right to change products and specifications without prior notice.