

SHAKER INCUBATOR



STACKABLE SHAKING INCUBATOR

AUTOMATION



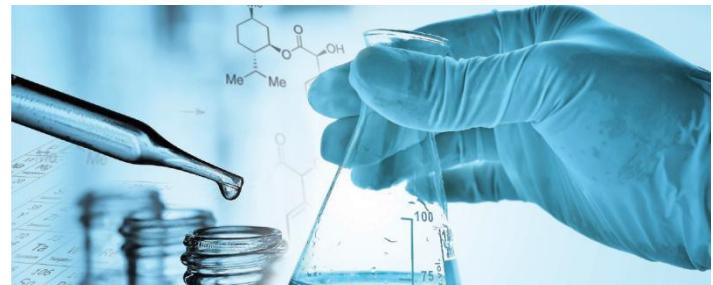
ZQZY-ZD8A/ZD8B/ZD8C

Build an incubator shaker with the spirit of building an airplane

STACKABLE SHAKING INCUBATOR SERIES

INTRODUCTION

ZHICHU shaker incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.



It can provide the prime solution for cell culture by maximizing your lab space with availability in single, double, or triple-tier configurations. Each unit offers independent temperature and speed control, catering to your unique needs.



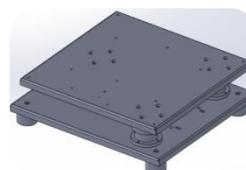
FEATURES

Ergonomic Interface



7'' LCD touch screen is designed to show all critical parameters simultaneously including temperature, speed, time.

Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque , high load bearing, quiet and precise control.

Interior Mirror SUS 304 Stainless Steel



The inner chamber is also seamless welded, where the bottom can be washed thoroughly

Easy to clean the chamber bottom



The bottom of the chamber can be washed thoroughly without dead ends.

Real-time Humidity Control (Optional)

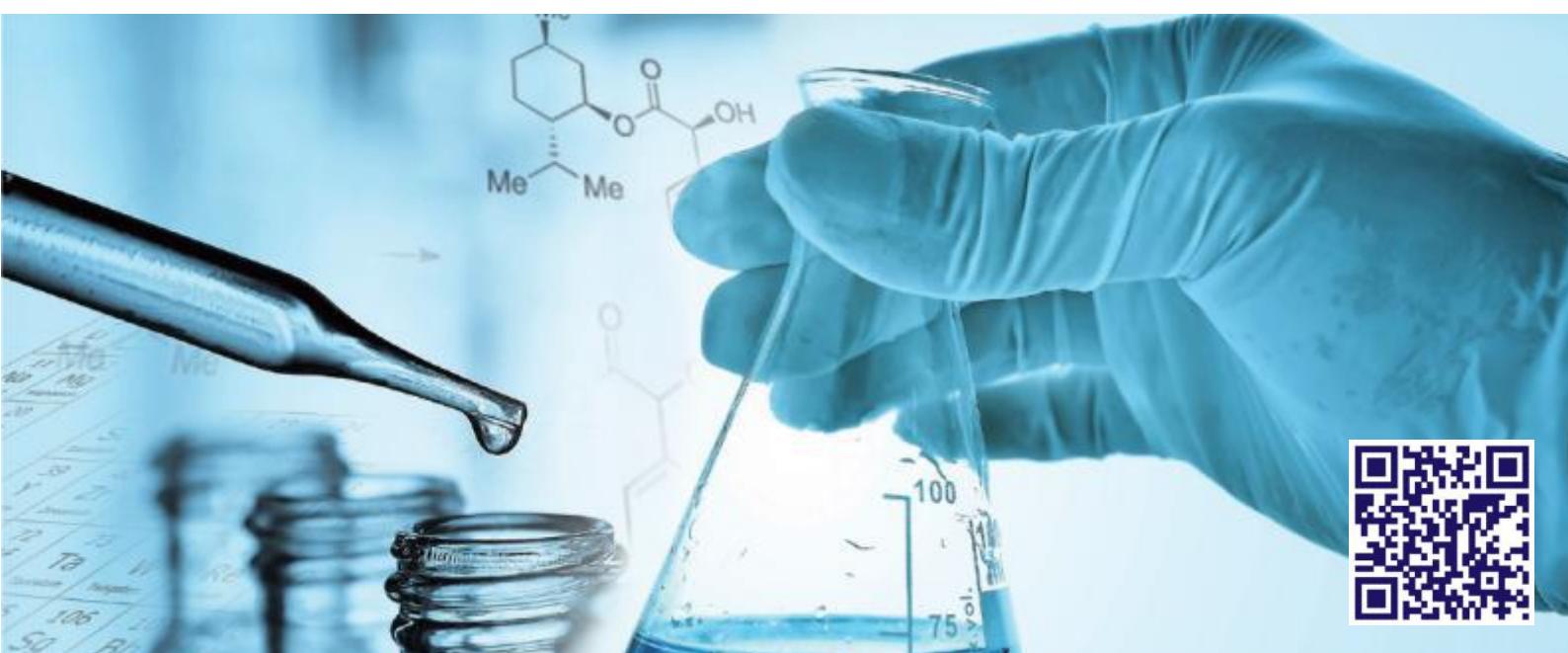


An optional external humidity control module is used to replenish water and vaporizes it to high-temperature steam, reaching humidity up to 90%.

Programmable Photosynthetic Light Bank(optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



OTHER FEATURES

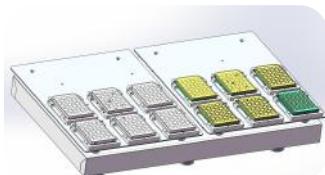
█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Remotely controlled automatic door

█ Tray automatic positioning system

█ Customize the suitable clamp according to the customer's culture bottle/microplate and robotic systems.



█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ 25 mm access port

For adding instrumentation or additional probes.



█ UV sterilization

A UV light sited next to the circulation fan works to sterilize the air in the incubator.
Option timed UV sterilization

█ Safety feature

- Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- Automatic restart after power Interrupt with non-volatile setpoint memory to keep studies running smoothly.
- Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- Over-temperature alarm, shuts off heaters if high limit is exceeded.

█ Automatic humidification by humidifier(optional)

The high-temperature heating module instantly turns water droplets into sterile steam and enters the chamber through the air duct circle, automatically and accurately controlling the humidity of the incubator.



SPECIFICATIONS

Product Name	Automation Shaking Incubator	
Model	ZQZY-ZD8A(1 tier) ZQZY-ZD8B(2 tiers) ZQZY-ZD8C(3 tiers)	
Shaking Speed Range	10-300 rpm, 10-250 rpm(optional)	
Shaking Control Accuracy	±1rpm	
Orbit (diameter)	φ25mm, φ50mm(optional)	
Temp. Range	Cooling 4°C~60°C(at 23°C~25 °C)	
Temp. Accuracy	±0.1°C	
Temp. Uniformity	±0.6°C(at 37°C)	
Inner chamber material	SUS 304 mirror stainless steel	
CO ₂ Control Range	0-20% optional	
CO ₂ Control Accuracy	0.1% optional	
Humidity Adjustment Accuracy	1% optional	
Humidity Control Accuracy	5% optional	
Humidity Control Range	Ambient humidity~90% R.H optional	
Display	LCD (7" Touch Screen)	
Air circulation	Forced air circulation	
Parameter Control	P.I.D Microprocessor	
Timer Range	0-999.9 hrs.	
Noise Level	<55dB	
Power Source	AC220±10% (110V is optional) 50~60Hz	
Each Platform Size (W×D,mm)	800*530	
Internal effective height	320mm	
Overall Dimension(W*D*H,mm)	1360*845*680 1360*845*1290 1360*845*1900	
Net Weight(kg)	210 400 586	



CO₂ SHAKING INCUBATOR

Stackable Series



ZCZY-AN/BN/CN (193L)



ZCZY-AS8/BS8/CS8 (306L)



ZCZY-AS9/BS9/CS9 (339L)



ZCZY-ASE/BSE/CSE (365L)

Build an incubator shaker with the spirit of building an airplane

CO₂ SHAKING INCUBATOR STACKABLE SERIES

INTRODUCTION

ZHICHU shaker CO₂ incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.

It can provide the prime solution for cell culture by maximizing your lab space with availability in single, double, or triple-tier configurations. Each unit offers independent temperature and speed control, catering to your unique needs.



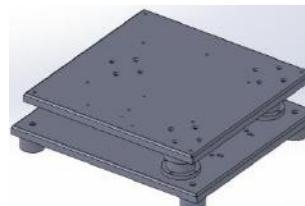
FEATURES

Ergonomic Interface



7'' LCD touch screen is designed on the right top side and embedded in a memo storage panel, which is rather ergonomic and practical for lab scientists.

Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque, high load bearing, quiet and precise control.

Antibacterial S.S Interior Material



Antibacterial stainless steel inner chamber with arc angle is easy to clean and inhibits bacteria breeding. Antibacterial rate can reach to 99%.

IR Sensitive CO₂ Sensor



The IR sensor measures CO₂ concentration automatically with high sensitivity and accuracy, especially suitable for cell cultures that require precise culture conditions and frequent door openings.

Stamping mold door



Zhichu applies stamping mold door without any screws which incur possible bacterial contamination.

Real-time Humidity Control (Optional)



An optional external humidity control module is used to replenish water and vaporizes it to high-temperature steam, reaching humidity up to 90%.

Easy to clean the chamber bottom



The bottom of the chamber can be washed thoroughly without dead ends.

Programmable Photosynthetic Light Bank(optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ Embedded darkening curtain(optional)

It can be stretched repeatedly and not easily damaged, completely protected from light to avoid the impact of external light on culture (Built in models ZCZY-AS9/BS9/CS9/ASE/BSE/CSE)



█ 7" LCD touch screen intuitive display

- The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
- Platform can be freely set to rotate forward or reverse.
- Data logging can be checked the history record within approx. 5 years.
- It can display temperature, CO₂ concentration, humidity, and speed curves to facilitate data analysis.
- It has a USB interface to export and save the above data.
- Optional with RS232 or RS485 port
- Optional programmable controller to automate changes to parameter setpoints on a timed basis.



█ Glass door with Heating Function

Hollow tempered glass door with a heating function to prevent fogging and condensation, provides good view of incubating state without opening.

█ Slide-out platform

The shaker platform can be freely pulled out for easy loading and unloading of shake flasks, hold by stainless steel or plastic clamps, dedicated sticky mats, or spring grids.

█ UV sterilization

A UV light sited next to the circulation fan works to sterilize the air in the incubator.

█ Safety feature

- Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- Automatic restart after power Interrupt with non-volatile setpoint memory to keep studies running smoothly.
- Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- Over-temperature alarm, shuts off heaters if high limit is exceeded.
- Alarms(audible & visible) may be muted.

█ 25 mm access port

For adding instrumentation or additional probes.

█ Removable stainless steel humidity pans

Includes removable stainless steel humidity pans (except ZCZY-AS9/BS9/CS9/ASE/BSE/CSE)

█ Automatic humidification by humidifier(optional)

The high-temperature heating module instantly turns water droplets into sterile steam and enters the chamber through the air duct circle, automatically and accurately controlling the humidity of the incubator.

(Built in models ZCZY-AS9/BS9/CS9/ASE/BSE/CSE)



SPECIFICATIONS

Product Name	CO ₂ Shaking Incubator (Stackable)			
Model	ZCZY-AN (1 tier) ZCZY-BN (2 tiers) ZCZY-CN (3 tiers)	ZCZY-AS8(1 tier) ZCZY-BS8(2 tiers) ZCZY-CS8(3 tiers)	ZCZY-AS9(1 tier) ZCZY-BS9(2 tiers) ZCZY-CS9(3 tiers)	ZCZY-ASE(1 tier) ZCZY-BSE(2 tiers) ZCZY-CSE(3 tiers)
Shaking Speed Range	10-250rpm, 10-300 rpm(Φ25mm)			
Shaking Control Accuracy	±1rpm			
Orbit (diameter)	Φ50mm (standard),Φ25mm(optional)			
Temp. Range	Cooling 4 °C~60 °C(at 23 °C~25 °C), option to 80 °C			
Temp. Accuracy	±0.1 °C			
Temp. Uniformity	±0.5 °C(at 37 °C)			
Inner chamber material	Antibacterial stainless steel			
CO ₂ Control Range	0-20%			
CO ₂ Control Accuracy	0.1%			
Humidity Adjustment Accuracy	1%			
Humidity Control Accuracy	5%			
Humidity Control Range	Ambient humidity~90% r.h (optional)			Included
Embedded darkening curtain	optional			Included
Display	LCD (7" Touch Screen)			
Air circulation	Forced air circulation			
Parameter Control	P.I.D Microprocessor			
Timer Range	0-999.9 hrs.			
Noise Level	<55dB			
Power Source	AC220±10% (110V is optional) 50~60Hz			
Each Platform Size(W×D,mm)	555*530	928*530	1000*530	1000*630
Internal effective height	345mm (Height measured from top of platform)			
Each Inner Chamber Capacity	193L	306L	339L	365L
Overall Dimension (W*D*H,mm)	990*845*630 990*845*1185 990*845*1740	1360*845*630 1360*845*1185 1360*845*1740	1430*845*630 1430*845*1185 1430*845*1740	1430*895*630 1430*895*1185 1430*895*1740
Net Weight(kg)	200 368 515	214 409 596	272 506 728	282 526 758
Certifications	   			



ACCESSORIES



Universal platform
with s.s. clamps



Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps



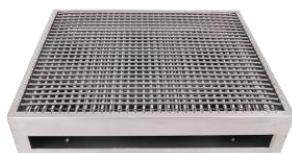
Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack



Zhichu Erlenmeyer sterile cell flask (125ml/250ml/500ml/1000ml/2800ml/5000ml)



Shaker Capacities Using Dedicated Platform

Model		ZCZY-AN	ZCZY-AS8	ZCZY-AS9	ZCZY-ASE
Test tube rack		4	7	9	9
Erlenmeyer Flask	50ml	Stainless steel	90	135	144
	100ml	Stainless steel	56	91	98
		Plastic	49	84	98
	125ml	Stainless steel	49	91	98
	150ml	Stainless steel	49	84	91
	200ml	Stainless steel	36	66	72
	250ml	Plastic	30	60	66
		Stainless steel	36	66	77
	300ml	Stainless steel	30	60	66
	500ml	Plastic (bottom Ø 110mm)	25	40	45
		Plastic (bottom Ø 114mm)	20	32	36
		Stainless steel	25	45	45
	1000ml	Plastic	14	23	28
		Stainless steel	16	28	28
	2000ml	Plastic	9	15	15
		Stainless steel	9	15	18
	3000ml	Plastic	5	11	14
		Stainless steel	5	11	14
	2800ml	Stainless steel	5	8	11
	5000ml	Stainless steel	-	-	-
Dimensions of single platform(mm)		555*530	928*530	1000*530	1000*630



UPGRADES



Model ZCZY-CSR8

- █ Arc angle design for whole machine body
- █ Timed UV sterilization

Model ZCZY-VCN / VCS8

- █ Inverter compressor
- █ Timed UV sterilization
- █ Temperature uniformity: $\leq \pm 0.3^{\circ}\text{C}$ @ 37°C

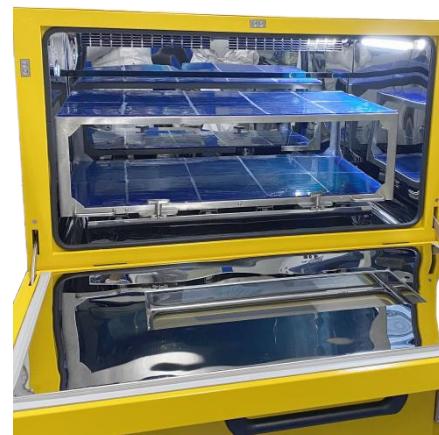


Model ZCZY-CH / CNH

- █ Orbit 3mm or 1.5mm, the shaking speed up to 1200rpm
- █ Design for microplate shaking

Model ZCDY-AS8/BS8

- █ Double shaking platform(larger capacity)
- █ 2 units stacked



VERTICAL CO₂ SHAKING INCUBATOR

ZCLY-180 / ZCLY-100



Only ZCLY-100 - 2 units can be stacked

Build an incubator shaker with the spirit of building an airplane

VERTICAL SHAKING INCUBATOR

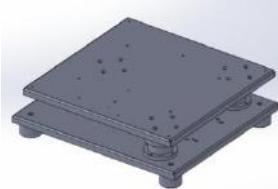
INTRODUCTION

ZHICHU shaker incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.

ZCLY-180 / ZCLY-100 can be well integrated with temperature control including refrigeration, precise control of CO₂ measurement for mammalian cell cultures, or photosynthetic illumination supply for plants or algae.

FEATURES

Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque, high load bearing, quiet and precise control.

Antibacterial Stainless steel interior material



Antibacterial stainless steel inner chamber with arc angle is easy to clean and inhibits bacteria breeding. Antibacterial rate can reach 99%.

IR Sensitive CO₂ Sensor



The IR sensor measures CO₂ concentration automatically with high sensitivity and accuracy, especially suitable for cell cultures that require precise culture conditions and frequent door openings.

Real-time Humidity Control (Optional)



An optional external humidity control module is used to replenish water and vaporizes it to high-temperature steam, reaching humidity up to 90%.

Easy to clean the chamber bottom



The bottom of the chamber can be washed thoroughly without dead ends.

Programmable Photosynthetic Light Bank(optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ Embedded darkening curtain(optional)

It can be stretched repeatedly and not easily damaged, completely protected from light to avoid the impact of external light on culture



█ 4.3" LCD touch screen intuitive display

- The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
- Platform can be freely set to rotate forward or reverse.
- Data logging
- It can display temperature, CO₂ concentration, humidity, and speed curves to facilitate data analysis.
- It has a USB interface to export and save the above data.
- Optional programmable controller to automate changes to parameter setpoints on a timed basis.



█ Glass door with Heating Function

Hollow tempered glass door with a heating function to prevent fogging and condensation, provides good view of incubating state without opening.

█ Two layers platforms

Having 2 layers shaking platforms with larger capacity (except ZCLY-100), hold by stainless steel or plastic clamps, dedicated sticky mats, or spring grids.

█ UV sterilization

A UV light sited next to the circulation fan works to sterilize the air in the incubator. Model ZCLY-100 with UV timed sterilization.

█ Safety feature

- Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- Automatic restart after power Interrupt with non-volatile setpoint memory to keep studies running smoothly.
- Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- Over-temperature alarm, shuts off heaters if high limit is exceeded.
- Alarms(audible & visible) may be muted.

█ 25 mm access port

For adding instrumentation or additional probes.

█ Removable stainless steel humidity pans

Includes removable stainless steel humidity pans

█ Automatic humidification by humidifier(optional)

The high-temperature heating module instantly turns water droplets into sterile steam and enters the chamber through the air duct circle, automatically and accurately controlling the humidity of the incubator.



SPECIFICATIONS

Vertical Shaking Incubator		
Product Name	ZCLY-180	ZCLY-100
Model	221L	168L
Inner capacity		
Shaking Speed Range	10-300 rpm	
Shaking Control Accuracy	±1rpm	
Orbit (diameter)	φ25mm	
Temp. Range	Cooling 4 °C ~ 60 °C (at 23 °C ~ 25 °C)	
Temp. Accuracy	±0.1 °C	
Temp. Uniformity	±0.8 °C (at 37 °C)	±0.5 °C (at 37 °C)
Inner chamber material	Antibacterial SUS304 stainless steel	
CO ₂ Control Range	0-20%	
CO ₂ Control Accuracy	0.1%	
Humidity Adjustment Accuracy	1%	optional
Humidity Control Accuracy	5%	optional
Humidity Control Range	Ambient humidity ~ 90% R.H optional	
Display	LCD (4.3" Touch Screen)	
Air circulation	Forced air circulation	
Parameter Control	P.I.D Microprocessor	
Timer Range	0-999.9 hrs.	
Noise Level	<55dB	
Power Source	AC220±10% (110V is optional) 50~60Hz	
Each Platform Size (W×D,mm)	485*485	485*410
Internal effective height	563mm	488mm
Overall Dimension (W*D*H,mm)	760*680*1280	600*766*998(1 unit) 600*766*1938(2-unit stacked)
Net Weight(kg)	183	125(1 unit) 255(2-unit stacked)
Certifications	 RoHS Compliant   	



ACCESSORIES



Universal platform
with s.s. clamps



Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps



Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack



Zhichu Erlenmeyer sterile cell flask (125ml/250ml/500ml/1000ml/2800ml/5000ml)



Shaker Capacities Using Dedicated Platform

Model		ZCLY-180	ZCLY-100
Test tube rack		4	3
Erlenmeyer Flask	50ml	Stainless steel	81
	100ml	Stainless steel	49
		Plastic	36
	125ml	Stainless steel	36
	150ml	Stainless steel	36
	200ml	Stainless steel	25
	250ml	Plastic	25
		Stainless steel	25
	300ml	Stainless steel	25
	500ml	Plastic	16
		Stainless steel	16
	1000ml	Plastic	9
		Stainless steel	9
	2000ml	Plastic	5
		Stainless steel	5
	3000ml	Plastic	4
		Stainless steel	4
	2800ml	Stainless steel	4
	5000ml	Stainless steel	Double platforms are not enough to put 5L flask
Dimensions of single platform(mm)		485*485	485*410

OPTIONS



Adjustable static tray with universal spring (Optional)



Adjustable static tray with universal sticky mat (Optional)

ERLENMEYER FLASKS

WITH VENT CAP

DEDICATED DESIGN FOR ZHICHU CO₂ SHAKER INCUBATOR



125ml

250ml

500ml

1000ml

2800ml

5000ml

Distributor

Information is subject to change and/or updating without notice

@ 2024 Zhichu. ORBITAL SHAKER-202408

Shanghai Zhichu Instrument Co., Ltd

Building 37, No.158,Chexin Road Chedun Town,

Songjiang District,Shanghai, China

Tel +86 21 34531721

E-mail :foreigntrade@shzhichu.com

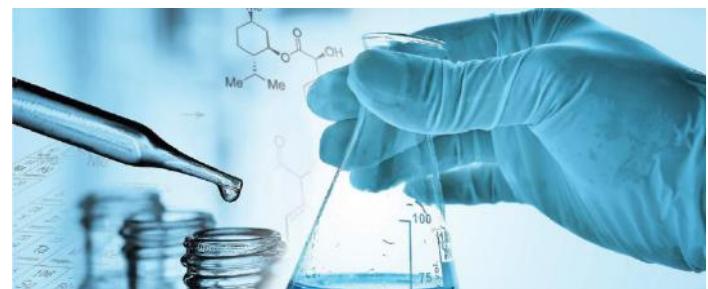
Website <https://www.zhichushakers.com>



Erlenmeyer Shake Flask

ZHICHU shake flasks, also known as Erlenmeyer flasks or conical flasks, are commonly used in biotechnology, microbiology, and various other fields of research.

They are especially useful for growing microbial cultures, cell cultures, and for mixing or stirring solutions. They come in various sizes, ranging from a few milliliters to several liters, depending on the application and the volume requirements of the experiment.



PRODUCT FEATURES

- PP vent cap with a $0.2\text{ }\mu\text{m}$ breathable membrane
 - a. effectively block microorganisms,
 - b. prevent pollution
 - c. ensure gas exchange, so that cells or bacteria grow well
- Bottle body is made of BPA-free PETG or Styrene-butadiene(BS), adopting extrusion blowing process technology with extremely smooth characteristic which reduces the risk of cell adhesion and culture medium bubbling
- The handle of the 5L flask is designed to be easy to carry, avoiding the risk of contamination caused by customers' hands being too close to the mouth of the bottle during use. The bottom of the 2.8L shaker bottle is optimized to save space, greatly improve the use rate of the shaker, and reduce customer R&D cost of production
- Sterilized by electron beam, SAL=10-6, to ensure no DNase/RNase, no pyrogen, no endotoxin
- Individually packaged and sterilized for immediate use



TECHNICAL DATA

Model	Z2022125G	Z2022250G	Z2022500G	Z20221000G	Z20222800G	Z20225000G
Flask Size	125ml	250ml	500ml	1000ml	2800ml	5000ml
Shaking Accuracy	$\pm 1\text{ rpm}$					
Flask body	PETG					
Screw Vent Cap	$0.2\text{ }\mu\text{m}$, PP					
Height (mm)	113	138	178	211	243	260
Neck Diameter(mm)	34	34	39	39	96	96
Bottom Diameter(mm)	66	83	101	127	164	228
Sterilization method	Irradiation sterilization					
PCS/Box	24	12	12	6	6	4
Box Size(W*D*H,mm)	465*315*150	380*290*155	455*345*200	415*275*230	580*390*290	490*490*300



SHAKING INCUBATOR

High Speed Series

up to 1200rpm



ZQZY-3CS8H (306L)

(Triple platforms)



ZCZY-CH/CNH (193L)

(Single/Dual platforms)



ZQZY-88 AH/BH/CH (155L)

(Single platform)



ZSZY-88 AH/BH/CH (155L)

(Dual platforms)

Build an incubator shaker with the spirit of building an airplane

SHAKING INCUBATOR, HIGH SPEED SERIES

INTRODUCTION

ZHICHU high speed shaker incubator is designed for large-scale and efficient cultivation of cell cultures, particularly suited for research and industrial applications where space-saving and high productivity are crucial.

Dual or triple multiple high-speed platform design enhances experiment handling capacity, efficiency, and consistency, particularly suitable for environments requiring large-scale and high-throughput processing.

Below recommended table may help experimenters choose appropriate oscillation parameters based on specific experimental needs, improving efficiency and consistency of results.

Application Type	Oscillation Frequency (RPM)	Amplitude (mm)	Remarks
Bacterial Culture	200-400	3-5	Ensure uniform distribution of nutrients and oxygen, promote bacterial growth
Yeast Culture	200-400	3-5	Similar to bacterial culture, ensure thorough mixing
Suspension Cell Culture	50-150	1-3	Low-speed oscillation to avoid cell damage, suitable for sensitive cells
Enzyme and Chemical Reactions	200-800	3-10	Ensure thorough mixing of reactants, improve reaction efficiency
Dissolving Solids	400-1200	5-10	High-speed oscillation to quickly dissolve solid substances
Mixing Liquids	200-800	3-10	Select appropriate amplitude as needed to ensure uniform mixing
Drug Screening	200-800	3-5	Ensure uniform mixing in high-throughput screening for efficient reactions
Gene Expression Analysis	200-800	3-5	Ensure uniform mixing and efficient reactions
96-Well Microplate	200-800	3-5	Common high-throughput screening platform, suitable for various applications
384-Well Microplate	400-1200	3-5	Smaller wells require higher oscillation frequency for uniform mixing



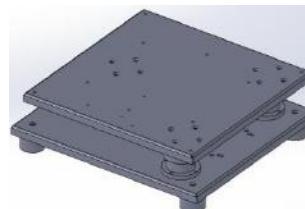
FEATURES

Ergonomic Interface



7'' LCD touch screen is designed on the right top side and embedded in a memo storage panel, which is rather ergonomic and practical for lab scientists.
(Except Model 88 series)

Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque , high load bearing, quiet and precise control.

Antibacterial S.S Interior Material



Antibacterial stainless steel inner chamber with arc angle is easy to clean and inhibits bacteria breeding.
Antibacterial rate can reach to 99% (Except Model 88 &3CS8Hseries)

IR Sensitive CO₂ Sensor



The IR sensor measures CO2 concentration automatically with high sensitivity and accuracy, especially suitable for cell cultures that require precise culture conditions and frequent door openings.(Except Model 88 &3CS8Hseries)

Stamping mold door



Zhichu applies stamping mold door without any screws which incur possible bacterial contamination.(Except Model 88 &3CS8Hseries)

Real-time Humidity Control (Optional)



An optional external humidity control module is used to replenish water and vaporizes it to high-temperature steam, reaching humidity up to 90%.

Easy to clean the chamber bottom



The bottom of the chamber can be washed thoroughly without dead ends.

Programmable Photosynthetic Light Bank(optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ Embedded darkening curtain(optional)

It can be stretched repeatedly and not easily damaged, completely protected from light to avoid the impact of external light on culture



█ 7" LCD touch screen intuitive display

- The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
- Platform can be freely set to rotate forward or reverse.
- Data logging can be checked the history record within approx. 5 years.
- It can display temperature, CO₂ concentration, humidity, and speed curves to facilitate data analysis.
- It has a USB interface to export and save the above data.
- Optional with RS232 or RS485 port
- Optional programmable controller to automate changes to parameter setpoints on a timed basis.



█ Glass door with Heating Function

Hollow tempered glass door with a heating function to prevent fogging and condensation, provides good view of incubating state without opening.(Only built in ZCZY-CH/CNH)

█ UV sterilization

A UV light sited next to the circulation fan works to sterilize the air in the incubator.

█ Safety feature

- Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- Automatic restart after power Interrupt with non-volatile setpoint memory to keep studies running smoothly.
- Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- Over-temperature alarm, shuts off heaters if high limit is exceeded.
- Alarms(audible & visible) may be muted.

█ 25 mm access port

For adding instrumentation or additional probes.

█ Automatic humidification by humidifier(optional)

The high-temperature heating module instantly turns water droplets into sterile steam and enters the chamber through the air duct circle, automatically and accurately controlling the humidity of the incubator.

█ Platform

Multi high-speed platform can run separately and allow different research in the same time.



Single



Dual



Triple



SPECIFICATIONS

High Speed Shaking Incubator (Stackable)						
Model	ZQZY-3AS8H (1 tier) ZQZY-3BS8H (2 tiers) ZQZY-3CS8H (1 tiers)	ZCZY-A(N)H(1 tier) ZCZY-B(N)H(2 tiers) ZCZY-C(N)H(3 tiers)	ZQZY-88AH(1 tier) ZQZY-88BH(2 tiers) ZQZY-88CH(3 tiers)	ZSY-88AH(1 tier) ZSY-88BH(2 tiers) ZSY-88CH(3 tiers)		
Shaking Speed Range	10-1000rpm	10-800/1200rpm (H series,Φ3/1.5mm) 10-1000rpm (NH series Φ3mm)	10-800rpm (Φ3mm) 10-1200rpm(Φ1.5mm)	10-1000rpm		
Shaking Control Accuracy	±1rpm					
Orbit (diameter)	Φ3mm	Φ3mm (standard) Φ1.5mm(optional)	Φ3mm (standard) Φ1.5mm(optional)	Φ3mm		
Temp. Range	Cooling 4°C~60°C(at 23°C~25 °C)					
Temp. Accuracy	±0.1°C					
Temp. Uniformity	±0.6°C(at 37°C)	±0.5°C(at 37°C)	±0.6°C(at 37°C)	±0.6°C(at 37°C)		
Interior Material	Mirror polished S.S	Antibacterial S.S	Mirror polished S.S			
CO ₂ Control Range	optional	0-20%	NA	NA		
CO ₂ Control Accuracy	optional	0.1%	NA	NA		
Humidity Control Range	optional	optional	NA	NA		
Embedded Darkening Curtain	optional					
Display	LCD (7" Touch Screen)		LCD (4.3" Touch Screen)			
Air circulation	Forced air circulation					
Parameter Control	P.I.D Microprocessor					
Timer Range	0-999.9 hrs.					
Noise Level	<55dB					
Power Source	AC220±10% (110V is optional) 50~60Hz					
Quantity of shaking platform (Each can be controlled independently)	Triple	H series - Single NH series - Dual	Single	Dual		
Each Platform Size(WxD,mm)	535*298 *3 pcs	575*435*1pcs (H) 435*298*2pcs (NH)	575*435	435*298*2pcs		
Internal effective height (mm)	345	365	350			
Each Inner Chamber Capacity	306L	193L	155L			
Overall Dimension (W*D*H,mm)	1360*845*630 1360*845*1185 1360*845*1740	990*845*630 990*845*1185 990*845*1740	920*700*635 920*700*1200 920*700*1765			
Net Weight(kg)	210/400/586	182/328/462	104/245/352	106/249/358		
Max. Capacity for each tier (96-well microplate)	96-well plate *60pcs	96-well plate *32pcs				
Certifications	CE RoHS Compliant	ISO 9001	ISO 14001	ISO 45001		



STACKABLE SHAKING INCUBATOR

LARGE CAPACITY ZQZY SERIES (282L/306L/339L)



ZQZY-A8/B8/C8 (282L)



ZQZY-AF8/BF8/CF8 (282L)



ZQZY-AS8/BS8/CS8 (306L)



ZQZY-AS9/BS9/CS9 (339L)

Build an incubator shaker with the spirit of building an airplane

STACKABLE SHAKING INCUBATOR SERIES

INTRODUCTION

ZHICHU shaker incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.



It can provide the prime solution for cell culture by maximizing your lab space with availability in single, double, or triple-tier configurations. Each unit offers independent temperature and speed control, catering to your unique needs.



FEATURES

Ergonomic Interface



7'' LCD touch screen is designed to show all critical parameters simultaneously including temperature, speed, time, applied on model ZQZY-CF8/CS8/CS9

Interior Mirror SUS 304 Stainless Steel



The inner chamber is also seamless welded, where the bottom can be washed thoroughly

Easy to clean the chamber bottom



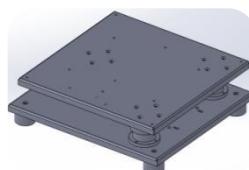
The bottom of the chamber can be washed thoroughly without dead ends. (except model ZQZY-C8/CF8)

Real-time Humidity Control (Optional)



An optional external humidity control module is used to replenish water and vaporizes it to high-temperature steam, reaching humidity up to 90%.

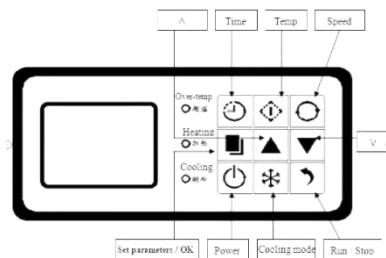
Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque, high load bearing, quiet and precise control.

LCD screen with membrane switch

Model ZQZY-A8/B8/C8



Programmable Photosynthetic Light Bank(optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



ZQZY-CR8/CSR8



ZQZY-CF8W (Reciprocating)



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ Embedded darkening curtain(optional)

It can be stretched repeatedly and not easily damaged, completely protected from light to avoid the impact of external light on culture.



█ Reciprocating amplitude (optional)

It can also accept reciprocating amplitude as demand in high speed , ranging from 10 rpm to 120rpm with linear throw 50mm or 100mm.(Built in Model ZQZY-AF8W/BF8W/CF8W)

█ 25 mm access port

For adding instrumentation or additional probes.

█ Be enough for 5L Erlenmeyer flask

The height from top of platform is 465mm, which is enough for 5L erlenmeyer flask. (Only model ZDZY-BS8/BF8 series)

█ Slide-out platform

The shaker platform can be freely pulled out for easy loading and unloading of shake flasks, hold by stainless steel or plastic clamps, dedicated sticky mats, or spring grids.

█ UV sterilization

A UV light sited next to the circulation fan works to sterilize the air in the incubator.
Option timed UV sterilization(Built in model ZQZY-CSR8/CR8)

█ Arc angle design for whole machine body

Model ZQZY-CSR8/CR8 series

█ Safety feature

- Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- Automatic restart after power Interrupt with non-volatile setpoint memory to keep studies running smoothly.
- Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- Over-temperature alarm, shuts off heaters if high limit is exceeded.

█ Automatic humidification by humidifier(optional)

The high-temperature heating module instantly turns water droplets into sterile steam and enters the chamber through the air duct circle, automatically and accurately controlling the humidity of the incubator.



ZDZY-BS8/BF8(for 5L)



SPECIFICATIONS

Product Name	Stackable Shaking Incubator																
Model	ZQZY-A8 (1 tier)	ZQZY-AF8(1 tier)	ZQZY-AF8W(1 tier)	ZQZY-AR8(1 tier)	ZDZY-AF8(1 tier)	ZQZY-AS8(1 tier)	ZQZY-ASR8(1 tier)	ZDZY-AS8(1 tier)	ZQZY-AS9(1 tier)								
	ZQZY-B8 (2 tiers)	ZQZY-BF8(2 tiers)	ZQZY-BF8W(2 tiers)	ZQZY-BR8(2 tiers)	ZDZY-BF8(2 tiers)	ZQZY-BS8(2 tiers)	ZQZY-BSR8(2 tiers)	ZDZY-BS8(2 tiers)	ZQZY-BS9(2 tiers)								
	ZQZY-C8 (3 tiers)	ZQZY-CF8(3 tiers)	ZQZY-CF8W(3 tiers)	ZQZY-CR8(3 tiers)		ZQZY-CS8(3 tiers)	ZQZY-CSR8(3 tiers)		ZQZY-CS9(3 tiers)								
Shaking Speed Range	10-300rpm		10-120rpm	10-300rpm													
Shaking Control Accuracy	±1rpm																
Shaking way	Orbital		Reciprocating	Orbital													
Shaking diameter	φ25mm, φ50mm(option)		Φ50mm, φ100mm(option)	φ25mm, φ50mm(option)													
Temp. Range	Cooling 4°C~60°C(at 23°C~25 °C)																
Temp. Accuracy	±0.1°C																
Temp. Uniformity	±1°C(at 37°C)	±0.8°C(at 37°C)			±0.5°C(at 37°C)												
Inner chamber material	Mirror SUS 304 stainless steel																
Photosynthesis Illumination	Optional, Up to 16,000 lux, adjustable 1%~100% with 1% increment																
Humidity Control Range	Optional , Ambient humidity~90% R.H																
Display Screen	LCD screen with membrane switch	LCD (7" Touch Screen)															
Interior structure	Arc angle (R)																
UV light	Built in (Option timed)		Timed	Built in(Option timed)		Timed	Built in(Option timed)										
Air circulation	Forced air circulation																
Parameter Control	P.I.D Microprocessor																
Timer Range	0-999.9 hrs.																
Noise Level	<55dB	<60dB	<55dB														
Power Source	AC220±10% (110V is optional) 50~60Hz																
Each Platform Size(W×D,mm)	928*530		880*530	928*530				1000*530									
Internal effective height	365mm		310mm	365mm	465mm	345mm	465mm	345mm									
Each Inner Chamber Capacity	282L	282L			347L	306L	372L	339L									
Overall Dimension (W*D*H,mm)	1360*830*630 1360*830*1185 1360*830*1740	1360*845*630 1360*845*1185 1360*845*1740			1360*845*730 1360*845*1390	1360*845*630 1360*845*1185 1360*845*1740	1360*845*750 1360*845*1430	1430*845*630 1430*845*1185 1430*845*1740									
Net Weight(kg)	205 398 584	206 399 585	270 489 688	206 399 585	210 412	210 400 586	218 428	272 506 728									
Certifications	   																



ACCESSORIES



Universal platform
with s.s. clamps



Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps



Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack



Shaker Capacities Using Dedicated Platform

Model		ZQZY-A8	ZQZY-AF8 ZQZY-AR8	ZQZY-AF8W	ZQZY-AS8 ZQZY-ASR8	ZDZY-AF8 ZDZY-AS8	ZQZY-AS9
Microplate holder (four spaces)		6	6	6	6	6	7
Test tube rack		7	7	7	7	7	9
	50ml	Stainless steel	135	135	126	135	135
	100ml	Stainless steel	91	91	84	91	91
		Plastic	84	84	84	84	98
	125ml	Stainless steel	91	91	84	91	98
	150ml	Stainless steel	84	84	84	84	91
	200ml	Stainless steel	66	66	60	66	72
	250ml	Plastic	60	60	54	60	60
		Stainless steel	66	66	60	66	66
	300ml	Stainless steel	60	60	45	60	66
Erlenmeyer Flask	500ml	Plastic (bottom ϕ 110mm)	40	40	40	40	40
		Plastic (bottom ϕ 114mm)	32	32	28	32	32
		Stainless steel	45	45	40	45	45
	1000ml	Plastic	23	23	24	23	23
		Stainless steel	28	28	24	28	28
	2000ml	Plastic	15	15	-	15	15
		Stainless steel	15	15	-	15	18
	3000ml	Plastic	11	11	-	11	11
		Stainless steel	11	11	-	11	14
	2800ml	Stainless steel	8	8	-	8	11
	5000ml	Stainless steel	-	-	-	8	-
Dimensions of single platform(mm)		928*530	928*530	880*530	928*530	928*530	1000*530



STACKABLE SHAKING INCUBATOR

MEDIUM CAPACITY ZQZY SERIES (128L/155L/176L/197L)



ZQZY-78A/78B/78C (128L)



ZQZY-88A/88B/88C (155L)



ZQZY-98A/98B/98C (176L)



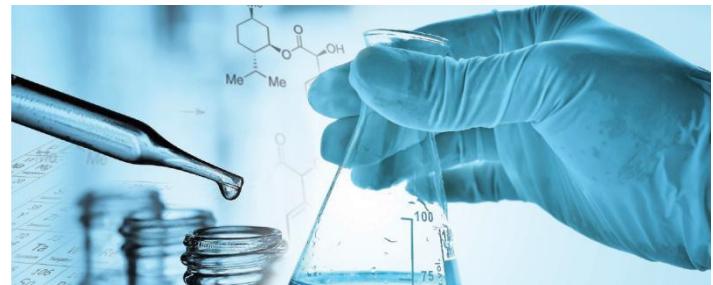
ZQZY-108A/108B/108C (197L)

Build an incubator shaker with the spirit of build an airplane

STACKABLE SHAKING INCUBATOR SERIES

INTRODUCTION

ZHICHU shaker incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.



It can provide the prime solution for cell culture by maximizing your lab space with availability in single, double, or triple-tier configurations. Each unit offers independent temperature and speed control, catering to your unique needs.



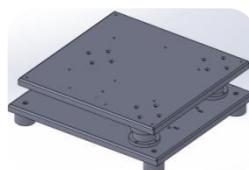
FEATURES

Ergonomic Interface



4.3'' LCD touch screen is designed to show all critical parameters simultaneously including temperature, speed, time. Data logging, all data can transfer by USB interface.

Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque , high load bearing, quiet and precise control.

Interior Mirror SUS 304 Stainless Steel



The inner chamber is also seamless welded, where the bottom can be washed thoroughly

Easy to clean the chamber bottom



The bottom of the chamber can be washed thoroughly without dead ends.

Programmable Photosynthetic Light Bank(optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



ZQZY-78B



ZQZY-88B



ZQZY-98B



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ Embedded darkening curtain(optional)

It can be stretched repeatedly and not easily damaged, completely protected from light to avoid the impact of external light on culture.



█ Be enough for 5L Erlenmeyer flask

The height from top of platform is 435mm, which is enough for 5L erlenmeyer flask. (Only model ZQZY-98 series)

█ 25 mm access port

For adding instrumentation or additional probes.

█ Slide-out platform

The shaker platform can be freely pulled out for easy loading and unloading of shake flasks, held by stainless steel or plastic clamps, dedicated sticky mats, or spring grids.

█ UV timing sterilization

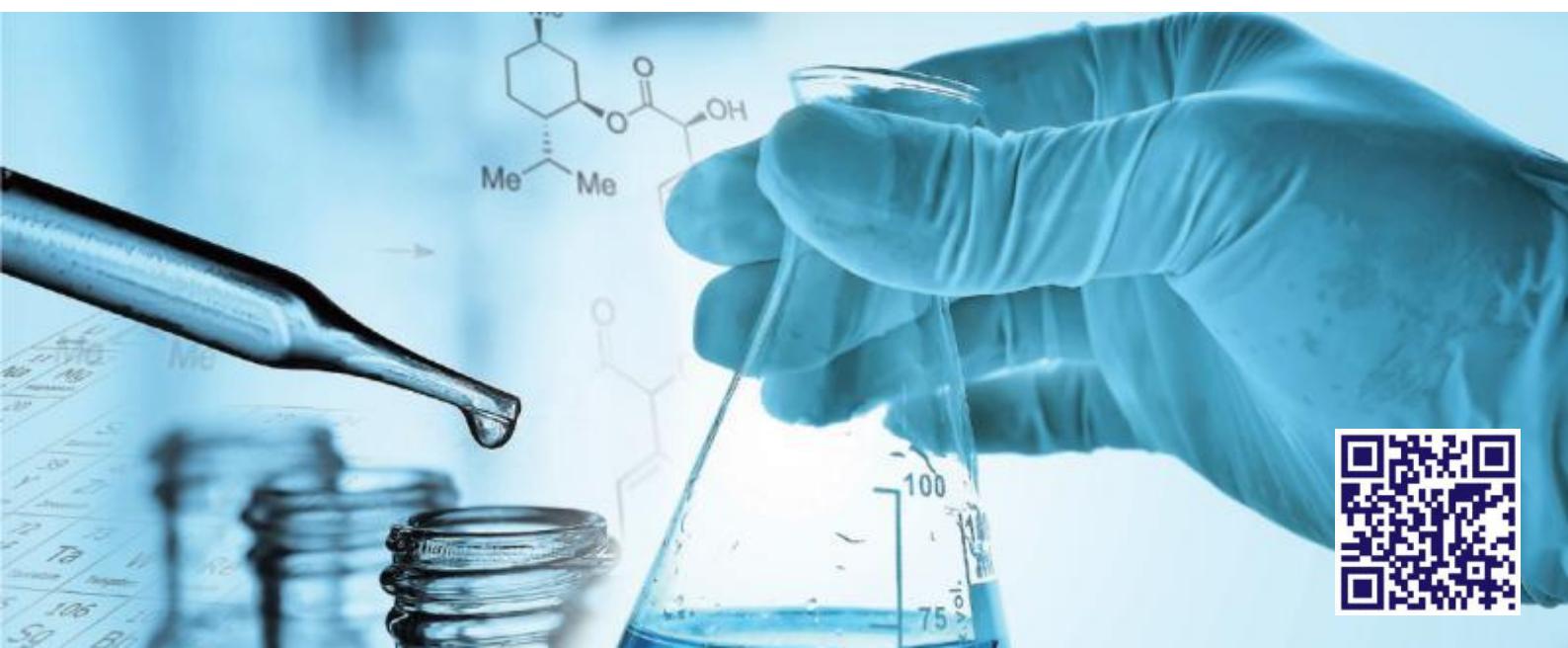
A UV light sited next to the circulation fan works to sterilize the air in the incubator.

█ Safety feature

- a. Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- b. Automatic restart after power Interrupt with non-volatile setpoint memory to keep studies running smoothly.
- c. Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- d. Over-temperature alarm, shuts off heaters if high limit is exceeded.

█ Automatic humidification by humidifier(optional)

The high-temperature heating module instantly turns water droplets into sterile steam and enters the chamber through the air duct circle, automatically and accurately controlling the humidity of the incubator.



SPECIFICATIONS

Stackable Shaking Incubator				
Product Name	ZQZY-78A (1 tier) ZQZY-78B (2 tiers) ZQZY-78C (3 tiers)	ZQZY-88A(1 tier) ZQZY-88B(2 tiers) ZQZY-88C(3 tiers)	ZQZY-98A(1 tier) ZQZY-98B(2 tiers) ZQZY-98C(3 tiers)	ZQZY-108A(1 tier) ZQZY-108B(2 tiers) ZQZY-108C(3 tiers)
Shaking Speed Range	10-350rpm(3rd top tier 10-300rpm)		10-300rpm	
Shaking Control Accuracy	±1rpm			
Orbit (diameter)	φ25mm (50mm is optional)			
Temp. Range	Cooling 4°C~60°C(at 23°C~25 °C)			
Temp. Accuracy	±0.1°C			
Temp. Uniformity	±0.6°C(at 37°C)			
Interior material	Mirror SUS304 stainless steel			
Photosynthesis Illumination	optional			
Illumination intensity	Up to 16,000 lux, adjustable 1%~100% with 1% increment			
Display	LCD (4.3" Touch Screen)			
Air circulation	Forced air circulation			
Parameter Control	P.I.D Microprocessor			
Timer Range	0-999.9 hrs.			
Noise Level	<55dB			
Power Source	AC220±10% (110V is optional) 50~60Hz			
Each Platform Size(WxD,mm)	475*465	575*465	575*465	625*555
Internal effective height	365mm	345mm	435mm	365mm
Each Inner Chamber Capacity	128L	155L	176L	197L
Overall Dimension (W*D*H,mm)	820*700*635 820*700*1200 820*700*1765	920*700*635 920*700*1200 920*700*1765	920*700*705 920*700*1340 920*700*1975	980*800*635 980*800*1200 980*800*1765
Net Weight(kg)	115 250 365	121 268 385	161 289 438	132 255 366
Certifications	CE RoHS Compliant	ISO 9001 ISO 14001 ISO 45001	ISO 9001 ISO 14001 ISO 45001	ISO 9001 ISO 14001 ISO 45001

ACCESSORIES



Universal platform
with s.s. clamps



Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps

Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



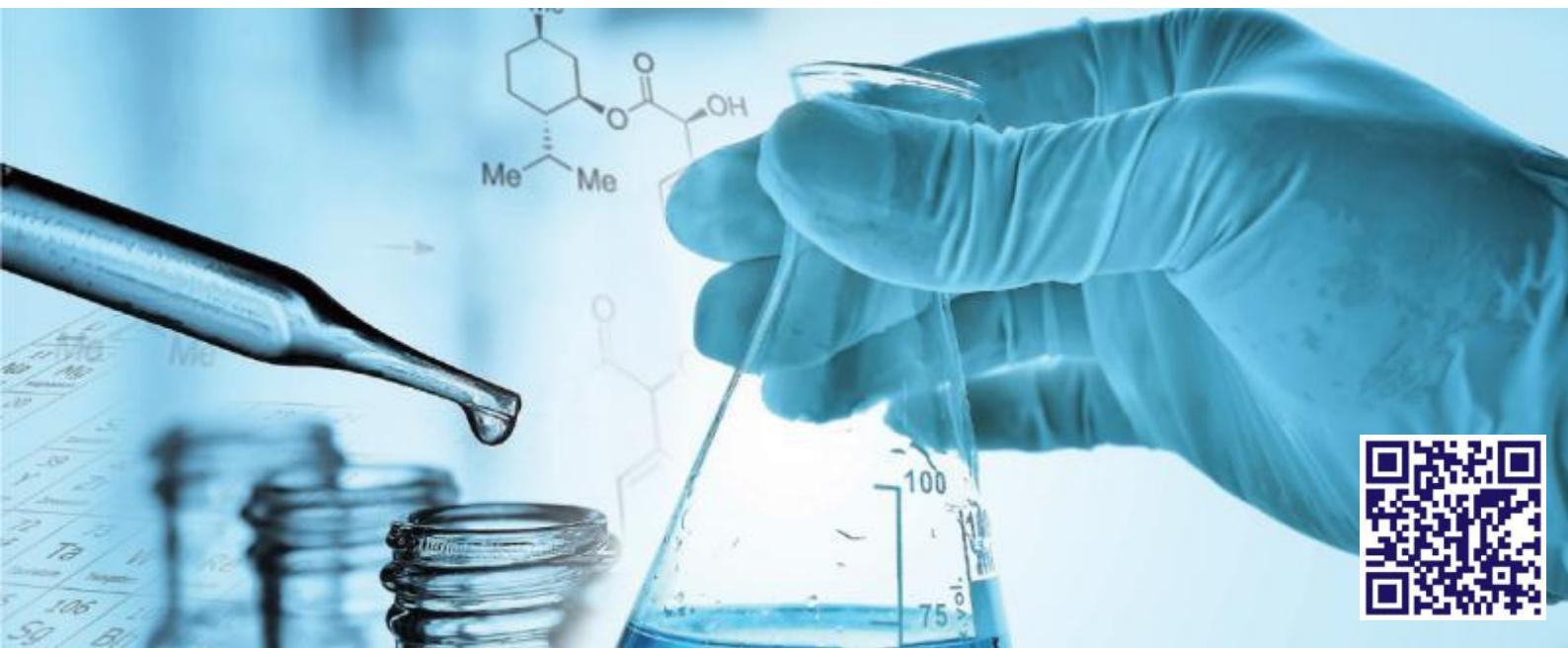
Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack



Shaker Capacities Using Dedicated Platform

Model		ZQZY-78A	ZQZY-88A	ZQZY-98A	ZQZY-108A
Microplate holder (four spaces)		2	3	3	4
Test tube rack		4	4	4	6
	50ml	SS	64	80	80
	100ml	SS	42	56	56
		Plastic	36	42	42
	125ml	SS	42	48	48
	150ml	SS	36	42	42
	200ml	SS	30	35	35
	250ml	Plastic	25	30	30
		SS	25	30	30
	300ml	SS	25	30	30
Erlenmeyer Flask	500ml	Plastic (bottom Ø 110mm)	16	20	20
		Plastic (bottom Ø 114mm)	16	20	20
		SS	16	20	20
	1000ml	Plastic	9	12	12
		SS	9	12	12
	2000ml	Plastic	5	8	8
		SS	5	8	8
	3000ml	Plastic	4	5	5
		SS	5	5	5
	2800ml	SS	4	5	5
	5000ml	SS	-	-	4
Dimensions of single platform(mm)		475*465	575*465	575*465	625*555



SHAKING INCUBATOR

BENCHTOP SERIES



ZHTY-50 (54L)



ZQTY-50 (50L)



ZH/QTY-70 (78L)



ZH/QTY-90 (116L)
(For 5L Erlenmeyer Flask)



ZH/QTY-90X (116L)
(360° flip oscillation)
(For PE bottle or test tube)

Build an incubator shaker with the spirit of building an airplane

BENCHTOP SHAKING INCUBATOR

Introduction

ZHICHU shaker incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.

They are in flexible design, besides the durable shaking platforms, they can be well integrated with temperature control including refrigeration, precise control of temperature for microorganisms cultures.

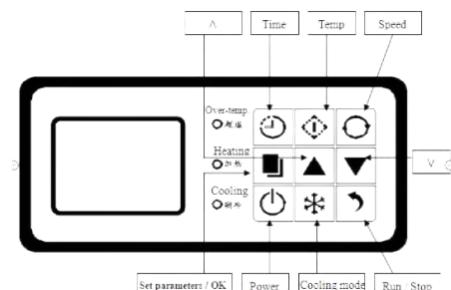
FEATURES

Interior Mirror SUS 304 Stainless Steel

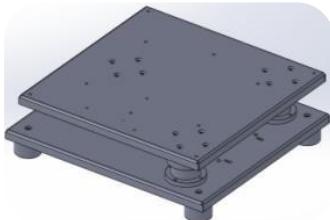


The inner chamber is also seamless welded, where the bottom can be washed thoroughly

LCD screen with membrane switch (except ZHTY-50 & 90series)



Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque, high load bearing, quiet and precise control.



Open door upwards

Model ZHTY-50

Model ZH/QTY-70

Model ZH/QTY-90(X)



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.(except H series)

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.(except H series)

█ 25 mm access port

(except model ZHTY-50)

For adding instrumentation or additional

█ UV sterilization(except model ZHTY-50)

A UV light sited next to the circulation fan works to sterilize the air in the incubator.

█ Safety feature

- a. Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- b. Automatic restart after power Interrupt with non-volatile setpoint memory to keep studies running smoothly.
- c. Open door/lid Cut-Off Switch stops shaker motion when door/lid is open(except model ZHTY-50)
- d. Over-temperature alarm, shuts off heaters if high limit is exceeded.
- e. Alarms(audible & visible) may be muted.

█ Intuitive 4.3" touch screen (optional)

Built in model ZHTY-50

Built in ZH/QTY-90(X) with data logging and USB interface.



360° Flip Oscillation



SPECIFICATIONS

Product Name	Benchtop Shaking Incubator																		
	ZHTY-50	ZQTY-50	ZHTY-70	ZQTY-70	ZHTY-90	ZQTY-90	ZHTY-90X	ZQTY-90X											
Shaking Speed Range	10-300 rpm		10-400 rpm				10-200 rpm												
Shaking Control Accuracy	±1rpm																		
Orbit (diameter)	φ25mm						NA	NA											
Temp. Range	R.T.+5°C~60°C	Cooling 4°C~60°C (at 23°C~25 °C)	R.T.+5°C~60°C	Cooling 4°C~60°C (at 23°C~25 °C)	R.T.+5°C~60°C	Cooling 4°C~60°C (at 23°C~25 °C)	R.T.+5°C~60°C	Cooling 4°C~60°C (at 23°C~25 °C)											
Temp. Accuracy	±0.1°C																		
Temp. Uniformity	±1°C(at 37°C)																		
Interior Material	Mirror SUS304 Stainless Steel																		
Display	4.3" LCD touch screen	LCD screen with button			4.3" LCD touch screen														
Air circulation	Forced air circulation																		
Parameter Control	P.I.D Microprocessor																		
Timer Range	0-999.9 hrs.																		
UV light	NA	Built in																	
Noise Level	<55dB																		
Power Source	AC220±10% (110V is optional) 50~60Hz																		
Each Platform Size (W×D, mm)	344*307	420*348	518*424				NA	NA											
Internal effective height	342mm	252mm	320mm		430mm		NA	NA											
Each Inner Chamber Capacity	54L	50L	78L		116L		NA	NA											
Overall Dimension (W*D*H,mm)	650*480*620	740*565*510	860*670*550		860*665*685		860*665*640												
Net Weight(kg)	64	89	118	102	128	112	120	104											
Certifications	   																		



Shaker Capacities Using Dedicated Platform

Model		ZHTY-50	ZQTY-50	ZHTY-70 ZQTY-70	ZHTY-90 ZQTY-90	ZHTY-90X ZQTY-90X
Microplate holder (four spaces)		-	2	3	3	-
Test tube rack		2	2	4	4	-
Erlenmeyer Flask	50ml	Stainless steel	30	42	63	-
	100ml	Stainless steel	20	30	42	-
		Plastic	16	20	42	-
	125ml	Stainless steel	16	20	42	-
	150ml	Stainless steel	12	20	30	-
	200ml	Stainless steel	12	20	30	-
	250ml	Plastic	12	12	30	-
		Stainless steel	12	16	30	-
	300ml	Stainless steel	12	12	30	-
	500ml	Plastic (bottom ϕ 110mm)	9	9	20	-
		Plastic (bottom ϕ 114mm)	6	9	16	-
		Stainless steel	9	9	20	-
	1000ml	Plastic	4	6	9	-
		Stainless steel	4	6	12	-
	2000ml	Plastic	-	-	6	-
		Stainless steel	-	-	6	-
	3000ml	Plastic	-	-	-	-
		Stainless steel	-	-	-	-
	2800ml	Stainless steel	-	-	-	-
	5000ml	Stainless steel	-	-	-	-
Dimensions of single platform(mm)		344*307	420*348	518*424	518*424	518*424



ACCESSORIES



Universal platform
with s.s. clamps



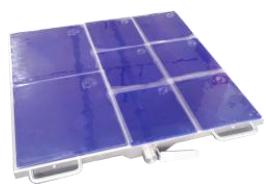
Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps



Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack

Distributor

Information is subject to change and/or updating without notice

@ 2024 Zhichu. SHAKING INCUBATOR -202408

Shanghai Zhichu Instrument Co., Ltd

Building 37, No.158,Chexin Road Chedun Town,
Songjiang District,Shanghai, China
Tel +86 21 34531721
E-mail : foreigntrade@shzhichu.com
Website <https://www.zhichushakers.com>



VERTICAL SHAKING INCUBATOR

ZQLY-180 213L

ZQLY-300 402L

ZQLY-380 495L



ZQLY-180



ZQLY-300



ZQLY-380

Build an incubator shaker with the spirit of building an airplane

VERTICAL SHAKING INCUBATOR

Introduction

ZHICHU shaker incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.

They are in flexible design, besides **TWO** durable shaking platforms, they can be well integrated with temperature control including refrigeration, precise control of temperature for microorganisms cultures, or photosynthetic illumination supply for plants or algae.

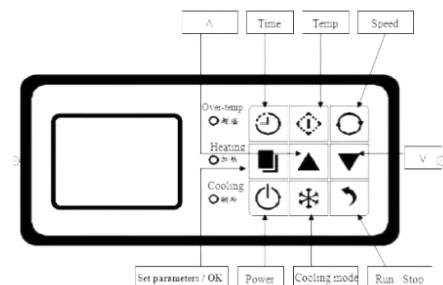
FEATURES

Interior Mirror SUS 304 Stainless Steel

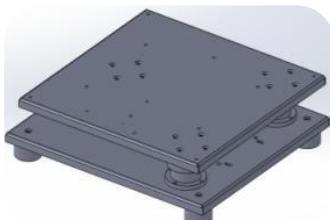


The inner chamber is also seamless welded, where the bottom can be washed thoroughly

LCD screen with membrane switch



Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque, high load bearing, quiet and precise control.

Programmable Photosynthetic Light Bank (optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ 25 mm access port

For adding instrumentation or additional probes.

█ UV sterilization

A UV light sited next to the circulation fan works to sterilize the air in the incubator.

█ Safety feature

- a. Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- b. Automatic restart after power interrupt with non-volatile setpoint memory to keep studies running smoothly.
- c. Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- d. Over-temperature alarm, shuts off heaters if high limit is exceeded.

█ Double shaking platforms

The double shaker platform holding by stainless steel or plastic clamps, dedicated sticky mats, or spring grids can be enough for bigger capacity.



Double shaking platforms



SPECIFICATIONS

Product Name	Vertical Shaking Incubator				
Model	ZQLY-180	ZQLY-300	ZQLY-380		
Shaking Speed Range	10-320 rpm	10-300 rpm(Φ25mm), 10-250 rpm(Φ50mm)			
Shaking Control Accuracy	±1rpm				
Orbit (diameter)	Φ25mm	Φ25mm, Φ50mm (optional)			
Temp. Range	Cooling 4°C~60°C(at 23°C~25 °C)				
Temp. Accuracy	±0.1°C				
Temp. Uniformity	±1°C(at 37°C)				
Inner chamber material	Mirror SUS 304 Stainless Steel				
CO2 Control Range	0-20%, optional	N/A			
CO2 Control Accuracy	0.1%	N/A			
Photosynthetic illumination	0~16000LX 1% step adjustable (optional)				
Display	LCD non-touch screen with membrane switch				
Air circulation	Forced air circulation				
Parameter Control	P.I.D Microprocessor				
Timer Range	0-999.9 hrs.				
Noise Level	<55dB				
Power Source	AC220±10% (110V is optional) 50~60Hz				
Each Platform Size (W×D,mm)	485*485	786*455	986*455		
Internal effective height	640mm	805mm			
Each Inner Chamber Capacity	213L	402L	495L		
Overall Dimension (W*D*H,mm)	760*680*1295	960*780*1430	1162*780*1430		
Net Weight(kg)	188	265	285		
Certifications	   				



Shaker Capacities Using Dedicated Platform

Model			ZQLY-180	ZQLY-300	ZQLY-380
Microplate holder (four spaces)			2	4	5
Test tube rack			4	6	9
	50ml	SS	81	104	112
	100ml	SS	49	66	84
		Plastic	36	60	78
	125ml	SS	36	66	78
	150ml	SS	36	45	78
	200ml	SS	25	45	55
	250ml	Plastic	25	40	50
		SS	25	40	50
	300ml	SS	25	40	50
Erlenmeyer Flask	500ml	Plastic (bottom Ø 110mm)	16	28	32
		Plastic (bottom Ø 114mm)	16	24	28
		SS	16	28	32
	1000ml	Plastic	9	15	18
		SS	9	15	18
	2000ml	Plastic	5	8	10
		SS	5	8	10
	3000ml	Plastic	4	6	8
		SS	4	6	8
	2800ml	SS	4	6	8
	5000ml	SS	-	-	-
Dimensions of single platform(mm)			485*485	786*455	986*455



ACCESSORIES



Universal platform
with s.s. clamps



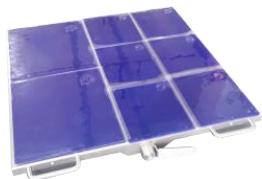
Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps



Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack



Distributor

Information is subject to change and/or updating without notice
© 2024 Zhichu. SHAKING INCUBATOR -202408

Shanghai Zhichu Instrument Co., Ltd

Building 37, No.158, Chexin Road Chedun Town,
Songjiang District, Shanghai, China
Tel +86 21 34531721
E-mail : foreigntrade@shzhichu.com
Website <https://www.zhichushakers.com>



VERTICAL SHAKING INCUBATOR

ZQWY-200 263L

ZQWY-218 398L

ZQWY-220 466L



ZQWY-220



ZQWY-218



ZQWY-200

Build an incubator shaker with the spirit of building an airplane

VERTICAL SHAKING INCUBATOR

Introduction

ZHICHU shaker incubator is ideal for application in the fields of cell biology, bio-similar production, crystallography, genomics and new drug development, etc.

They are in flexible design, besides the durable shaking platforms, they can be well integrated with temperature control including refrigeration, precise control of temperature for microorganisms cultures, or photosynthetic illumination supply for plants or algae.

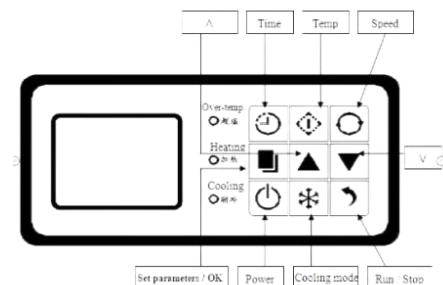
FEATURES

Interior Mirror SUS 304 Stainless Steel

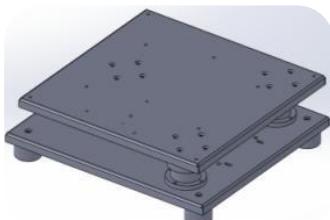


The inner chamber is also seamless welded, where the bottom can be washed thoroughly

LCD screen with membrane switch



Stable and Durable Triple-eccentric Drive



Triple-eccentric counterbalanced drive provides vibration and trouble free operation for years. Driven by brushless DC motor, which can start from 10rpm with large torque, high load bearing, quiet and precise control.

Programmable Photosynthetic Light Bank (optional)



Can be fitted with LED modules for cultivation of phototropic organisms, and allows programming of time cycles and variable light intensity. Available colour red/blue/white



OTHER FEATURES

█ CFC-free compressor

High quality and low noise imported CFC-free compressor with refrigerant R134a/R600a ensure refrigeration effect.

█ Unique timing defrost function

1~250 seconds can be freely set. Defrost interval is adjustable from 30 to 600 minutes, ensuring that the evaporator does not freeze when running at low temperatures for a long time.

█ 25 mm access port

For adding instrumentation or additional probes.

█ UV sterilization

A UV light sited next to the circulation fan works to sterilize the air in the incubator.

█ Safety feature

- a. Acceleration -Deceleration circuit prevents sudden starts and stops and minimizes mechanical damage for longer shaker life.
- b. Automatic restart after power interrupt with non-volatile setpoint memory to keep studies running smoothly.
- c. Open door/lid Cut-Off Switch stops shaker motion when door/lid is open
- d. Over-temperature alarm, shuts off heaters if high limit is exceeded.

█ Intuitive 4.3" touch screen (optional)

Only Built in model ZQWY-218 with data logging and USB interface.



Applied special bottle



SPECIFICATIONS

Product Name	Horizontal Shaking Incubator		
Model	ZQWY-200	ZQWY-218	ZQWY-220
Shaking Speed Range	10-300 rpm (φ25mm), 10-250 rpm (φ50mm),		
Shaking Control Accuracy	±1rpm		
Orbit (diameter)	φ25mm, φ50mm(optional)		
Temp. Range	Cooling 4 °C ~ 60 °C (at 23 °C ~ 25 °C)		
Temp. Accuracy	±0.1 °C		
Temp. Uniformity	±1 °C (at 37 °C)		
Interior Material	Mirror SUS304 Stainless Steel		
Display	LCD screen with button	4.3" LCD touch screen	LCD screen with button
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Timer Range	0-999.9 hrs.		
Sterilization	UV		
Noise Level	<55dB		
Power Source	AC220±10% (110V is optional) 50~60Hz		
Each Platform Size (W×D, mm)	905*530	1050*530	905*630
Internal effective height	495mm		645mm
Each Inner Chamber Capacity	263L	398L	466L
Overall Dimension (W*D*H, mm)	1340*780*840	1440*780*840	1340*880*990
Net Weight(kg)	232	213	314
Certifications	 RoHS Compliant	 ISO 9001	 ISO 14001



Shaker Capacities Using Dedicated Platform

Model			ZQWY-200	ZQWY-218	ZQWY-220
Microplate holder (four spaces)			6	7	6
Test tube rack			7	9	9
	50ml	SS	150	171	165
	100ml	SS	96	105	117
		Plastic	84	98	96
	125ml	SS	84	98	108
	150ml	SS	77	78	88
	200ml	SS	60	72	77
	250ml	Plastic	60	66	70
		SS	60	66	70
	300ml	SS	60	66	70
Erlenmeyer Flask	500ml	Plastic (bottom Ø 110mm)	40	45	48
		Plastic (bottom Ø 114mm)	32	36	40
		SS	40	45	48
	1000ml	Plastic	23	28	24
		SS	24	28	24
	2000ml	Plastic	15	18	15
		SS	15	18	15
	3000ml	Plastic	11	14	12
		SS	11	14	12
	2800ml	SS	8	11	11
	5000ml	SS	8	8	11
Dimensions of single platform(mm)			905*530	1050*530	905*630



ACCESSORIES



Universal platform
with s.s. clamps



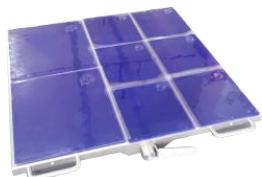
Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps



Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack



Distributor

Information is subject to change and/or updating without notice
© 2024 Zhichu. SHAKING INCUBATOR -202408

Shanghai Zhichu Instrument Co., Ltd

Building 37, No.158, Chexin Road Chedun Town,
Songjiang District, Shanghai, China
Tel +86 21 34531721
E-mail : foreigntrade@shzhichu.com
Website <https://www.zhichushakers.com>



WATER BATH SHAKER

ORBIT AGITATION / RT-99.9°C MODEL ZHSY-50

ORBIT AGITATION / Cooling 4-99.9°C MODEL ZQSY-50

RECIPROCATING AGITATION / RT-99.9°C MODEL ZHSY-50W



Distributor

[Shanghai Zhichu Instrument Co., Ltd](#)

Building 37, No.158, Chexin Road, Chedun Town,
Songjiang District, Shanghai, China
Tel +86 21 34531721
E-mail : foreigntrade@shzhichu.com
Website <https://www.zhichushakers.com>



Water Bath Shaker

ZHICHU water bath shaker is used for mixing and agitation of samples in a temperature-controlled water bath. It combines the functions of a water bath and a shaker, providing both temperature control and mechanical agitation simultaneously.

They are commonly used in various scientific and research laboratories for applications such as cell culture, microbiology, biochemistry, and molecular biology.

PRODUCT FEATURES

- LCD display that making parameters setting and viewing easily, keyboard blocking prohibits miss operation.
- Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform
- Stainless steel interior chamber, platform, spring and flask clamps. The user friendly design is equipped with water drain valve.
- Audible and Visible Alarms alert the user and shuts off heaters to set-point deviation.
- Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
- Servo-motor makes speed control precisely and ensures high-speed performance and stability.
- The temperature of the water bath can be precisely controlled within $\pm 0.2^{\circ}\text{C}$.
- High quality and low noise imported CFC free compressors ensure refrigeration effect(ZQSY-50).

TECHINICAL DATA

Model	ZHSY-50	ZQSY-50	ZHSY-50W
Shaking Range	10~280rpm		10~180rpm
Shaking Accuracy		$\pm 1\text{rpm}$	
Oscillation	Orbit $\phi 25\text{mm}$		Reciprocation 20mm
Temp. Range	RT-99.9 $^{\circ}\text{C}$	Cooling 4-99.9 $^{\circ}\text{C}$	RT-99.9 $^{\circ}\text{C}$
Temp. Accuracy		$\pm 0.1^{\circ}\text{C}$	
Temp. Uniformity		$\pm 0.2^{\circ}\text{C}$ (at 37 $^{\circ}\text{C}$)	
Display	LCD screen with membrane switch button		LCD touch screen 4.3''
Parameter Control		P.I.D Microprocessor	
Timer Range		0-999.9 hrs.	
Platform Size (W*D) mm	420*330	436*343	455*303
Power Source		AC220V $\pm 10\%$ 50~60Hz	
Overall Dimensions (W*D*H) mm	691*553*540	880*600*550	925*488*435
Weight	62kg	85kg	44kg
Noise Level		<55dB	
Internal Effective Height	246mm	230mm	271mm



Shaker Capacities Using Dedicated Platform

Model			ZHSY-50	ZQSY-50	ZHSY-50W
Test tube rack			2	2	2
Erlenmeyer Flask	50ml	SS	35	35	35
	100ml	SS	24	24	24
		Plastic	20	20	24
	125ml	SS	20	20	24
	150ml	SS	20	20	15
	200ml	SS	12	12	15
	250ml	Plastic	12	12	12
		SS	12	12	15
	300ml	SS	12	12	12
	500ml	Plastic (bottom Ø 110mm)	8	8	8
		Plastic (bottom Ø 114mm)	8	8	6
		SS	8	8	11
	1000ml	Plastic	4	4	6
		SS	4	4	6
	2000ml	Plastic	--	--	--
		SS	--	--	--
	3000ml	Plastic	--	--	--
		SS	--	--	--
	2800ml	SS	--	--	--
	5000ml	SS	--	--	--
Dimensions of single platform(mm)			420*330	436*343	455*303



SHAKERS

- ❖ Separatory Funnel Shaker ZFY-9
- ❖ Benchtop Orbital Shakers ZTY-70
- ❖ Floored Orbital Shaker ZLY-200
- ❖ Cell Culture Roller ZGP-9
- ❖ Lager-capacity Orbital Shaker ZDY-B, ZZY-C



Build an incubator shaker with the spirit of building an airplane

SEPARATORY FUNNEL SHAKER ZFY-9

PRODUCT FEATURES

- Streamlined design with anti-static powder -coat and high anti-corrosion surface
- Aluminum alloy structure, lightweight and durable
- Driven by servo motor, precise and stable control on speed
- LCD Touch Screen that making parameters setting and viewing easily.
 - a. Simultaneously display setting/real speed and time.
 - b. Keyboard lock to prohibit misoperations.
 - c. Orbit rotation can be adjusted in positive direction and inversion.
- Data logging, recording data every minute, and can record data for the past three months.



TECHNICAL DATA

Item	Separatory Funnel Shaker		
Model	ZFY-9	Max Capacity	250ml*6 500ml*6 1000ml*6
Shaking Range	10-250rpm	Platform Size(W*D)	NA
Shaking Control	±1rpm	Power	AC220V±10% 50~60Hz
Orbit (diameter)	Φ35mm	Overall Dimensions (W*D*H)	750mm*465mm*565mm
Display	4.3 LCD (Touch Screen)	Net Weight	92kg
Timer Range	0-999 hrs	Noise Level	<55dB



ORBITAL SHAKER ZTY-70, ZLY-200

PRODUCT FEATURES

- Streamlined design with anti-static powder -coat and high anti-corrosion surface
- Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
- Platform made of stainless steel easy to detach and clean
- Driven by servo motor, precise and stable control on speed
- LCD Touch Screen that making parameters setting and viewing easily.
 - a. Simultaneously display setting/real speed and time.
 - b. Keyboard lock to prohibit misoperations.
 - c. Orbit rotation can be adjusted in positive direction and inversion.
- Data logging, recording data every minute, and can record data for the past three months.



TECHNICAL DATA

Product Name	Benchtop Orbital Shaker	Floored Orbital Shaker
Model	ZTY-70	ZLY-200
Shaking Range	10-300rpm	
Shaking Control	±1rpm	
Orbit (diameter)	φ25mm, φ50mm (optional)	
Display	4.3" LCD (Touch Screen)	
Max. Capacity (Stainless steel clamps)	250ml*30 OR 500ml*20 1000ml*12 OR 2000ml*8	250ml*66 OR 500ml*45 1000ml*28 OR 2000ml*15 3000ml*15 OR 5000ml*11
Max. Capacity (Plastic clamps)	250ml*30 OR 500ml*20 1000ml*12 OR 2000ml*8	250ml*66 OR 500ml*45 1000ml*28 OR 2000ml*15 3000ml*15 OR 5000ml*11
Timer Range	0-999.9 hrs	
Platform Size(W×D)	550mm*440mm	1003mm*592mm
Power Source	AC220V±10% 50~60Hz	
Overall Dimensions (L×W×H)	550mm×550mm×224mm	1003mm×670mm×310mm
Net Weight	44KG	148KG
Noise Level	<55dB	



CELL CULTURE ROLLER ZGP-9

PRODUCT FEATURES

- Use high-performance motors and conveyor belts to ensure stable and durable operation of the equipment
- Data protection: It has the function of automatic power-off under abnormal conditions, and can be restored after power-off to avoid data loss.
- Detailed treatment: All parts of the equipment have been treated with anti-collision and anti-scratch treatments to prevent personnel and culture bottles from being injured during operation.
- Convenient and integrated operation: integrates the display, control panel and equipment into one, greatly reducing the equipment space and also improving the convenience of operation.



TECHNICAL DATA

Item	Cell Culture Roller		
Model	ZGP-9	Max Capacity of culture bottles	2*2000ml OR 3*1000ml
Shaking Range	2-50rpm	Platform Size(W*D)	400mm*270mm
Shaking Control	±1rpm	Power	AC220V±10% 50~60Hz
Stackable	3 units can be stacked	Overall Dimensions (W*D*H)	500mm*315mm*410mm
Display	LCD screen with membrane switch button	Net Weight	30kg
Timer Range	0-999 hrs	Noise Level	<55dB



Large-capacity Orbital Shaker ZDY-B, ZZY-B/C

PRODUCT FEATURES

- Streamlined design with anti-static powder -coat and high anti-corrosion surface
- Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
- Each layer can be independently controlled.
- Platform made of stainless steel easy to detach and clean
- Driven by servo motor, precise and stable control on speed
- LCD Touch Screen that making parameters setting and viewing easily.
 - a. Simultaneously display setting/real speed and time.
 - b. Keyboard lock to prohibit misoperations.
 - c. Orbit rotation can be adjusted in positive direction and inversion.
- Data logging, recording data every minute, and can record data for the past three months.



TECHNICAL DATA

Product Name	Large-capacity Orbital Shaker							
Model	ZDY-B (2 tiers)			ZZY-B(2 tiers) / ZZY-C(3 tiers)				
Shaking Range	10-250rpm				10-300rpm(top tier max 250rpm)			
Shaking Control	±1rpm							
Orbit (diameter)	φ25mm, φ50mm(optional)							
Display	4.3'' LCD (Touch Screen)							
Max. Capacity for each layer (Stainless steel clamps)	250ml*88	OR	500ml*63	250ml*77	OR	500ml*54		
	1000ml*35	OR	2000ml*24	1000ml*35	OR	2000ml*20		
	3000ml*20	OR	5000ml*12	3000ml*15	OR	5000ml*12		
Max. Capacity for each layer (Plastic clamps)	250ml*88	OR	500ml*63	250ml*77	OR	500ml*54		
	1000ml*35	OR	2000ml*24	1000ml*35	OR	2000ml*20		
	3000ml*20				3000ml*15			
Timer Range	0-999.9 hrs							
Platform Size(WxD)	1074mm*793mm			1029mm*718mm				
Power Source	AC220V±10% 50~60Hz							
Overall Dimensions (WxDxH)	1400mm×880mm×1120mm			1250mm×780×900mm 1250mm×780mm×1530mm				
Net Weight	314KG			255kg 312KG				
Noise Level	<55dB							



ACCESSORIES



Universal platform
with s.s. clamps



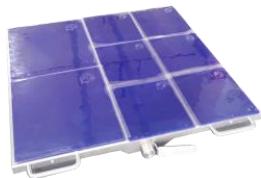
Stainless steel clamps
(50ml~5000ml)



Universal platform
with plastic clamps



Plastic clamps
(100ml~3000ml)



Universal platform
with sticky mat



Sticky mat



Universal platform
with spring



Microplate holder
(three spaces)



Platform with column clamps
for 96 well plates



Test tube rack

Distributor

Distributor

Information is subject to change and/or updating without notice

@ 2024 Zhichu. ORBITAL SHAKER-202408

Shanghai Zhichu Instrument Co., Ltd

Building 37, No.158, Chexin Road Chedun Town,

Songjiang District, Shanghai, China

Tel +86 21 34531721

E-mail :foreigntrade@shzhichu.com

Website <https://www.zhichushakers.com>

