



CO₂ Shaking Incubators

Catalogue of 2021

Model: ZCZY-AS9/BS9/CS9
ZCZY-ASE/BSE/CSE
ZCZY-AS8E/BS8E/CS8E
ZCZY-AN/BN/CN
ZCLY-180E

Shanghai Zhichu Instrument Co., Ltd.

Floor2, 2nd building, No.3609 South Hongmei Road, Minhang District, Shanghai

Tel: 86-021-34531721 Fax:86-021-34531722

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

Large Capacity CO₂ Shaking Incubator (Stackable)

Model: ZCZY-ASE/BSE/CSE

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and visible alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. the bottom two layers are downward opening doors, the third layer is upward opening doors.
7. Each unit operates independently. Each layer can run at the same time under different temperature and speed, or run one, two or three layers as needed
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.

■ Specifications

1. The stainless steel frames with heating function around door class can adjust the temperature as user's need.
2. Mobile and PC monitor(**Option**)
3. Imported infrared CO₂ sensor measures the CO₂ concentration automatically with high sensitivity. Matching controller, solenoid valve and pressure reducing valves are all installed.
4. With humidity control function, ranging from ambient humidity to 95%.
5. The bottom of the chamber can be washed thoroughly.
6. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
7. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
8. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, humidity, CO₂ concentration, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.



9. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design under the transparent box which registration card can be placed.
10. The main structure of the inner chamber is all 304 stainless steel design.
11. With embedded fabric curtain stretching repeatedly and not easy to damage, completely avoids light influence on culture.
12. For each incubator, a bottle of CO₂ gas (20kg) can be used not less than 35 days if the door is open normally, and about 145 days when door is not opened.
13. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. parameters

Product Name	Large Capacity CO ₂ Shaking Incubator (Stackable)		
Model	ZCZY-ASE (1 unit)	ZCZY-BSE(2 units)	ZCZY-CSE(3 units)
Shaking Speed Range	10-250rpm		
Shaking Control Accuracy	±1rpm		
Orbit (diameter)	φ 50mm (standard)、 φ 26mm(option)		
Temp. Range	4℃~60℃(at 23℃~25℃)		
Temp. Control Accuracy	±0.1℃		
Temp. Control Uniformity	±0.5℃(at 37℃)		
Humidity Adjustment Accuracy	1%		
Humidity Control Accuracy	5%		
Humidity Range	Ambient humidity~95% R.H		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×77 or 500ml×45 or 1000ml×28 or 2000ml×18 or 2800ml×12		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×18		
Timer Range	0-999.9 hrs.		
Platform Size (L×W)	(1 unit) 1020mm×630mm		
Power Source	AC220±10% (110V is optional) 50~60Hz		
Overall Dimensions (L×W×H)	1430mm×895mm×630mm	1430mm×895mm×1185m	1430mm×895mm×1740
Weight	282kg	526kg	758kg
Noise Level	<55dB		
Internal Height	345mm		



CO₂ Shaking Incubator (Stackable)

Model: ZCZY-AS9/BS9/CS9

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and visible alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. the bottom two layers are downward opening doors, the third layer is upward opening doors.
7. Each unit operates independently. Each layer can run at the same time under different temperature and speed, or run one, two or three layers as needed
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.

■ Specifications

1. The stainless steel frames with heating function around door glass can adjust the temperature as user's need.
2. Mobile and PC monitor(**Option**)
3. Imported infrared CO₂ sensor measures the CO₂ concentration automatically with high sensitivity. Matching controller, solenoid valve and pressure reducing valves are all installed.
4. With humidity control function, ranging from ambient humidity to 95%.
5. The bottom of the chamber can be washed thoroughly.
6. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
7. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
8. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
9. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-60 minutes adjustable, ensures machine working long time in low temperature without ice block.
10. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, humidity, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.



11. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design under the transparent box which registration card can be placed.
12. The main structure of the inner chamber is all 304 stainless steel design.
13. With embedded fabric curtain stretching repeatedly and not easy to damage, completely avoids light influence on culture.
14. For each shaker, a bottle of CO₂ gas (20kg) can be used not less than 35 days if the door is open normally, and about 145 days when door is not opened.
15. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	CO2 Shaking Incubator (Stackable)		
Model	ZCZY-AS9(1 unit)	ZCZY-BS9(2 units)	ZCZY-CS9(3 units)
Shaking Speed Range	10-250rpm		
Shaking Control Accuracy	±1rpm		
Orbit (diameter)	φ 50mm (standard)、φ 26mm(optional)		
Temp. Range	4℃~60℃(at 23℃~25℃)		
Temp. Control Accuracy	±0.1℃		
Temp. Control Uniformity	±0.5℃(at 37℃)		
Humidity Adjustment Accuracy	1%		
Humidity Control Accuracy	5%		
Humidity Range	Ambient humidity~95% R.H		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×72 or 500ml×45 or 1000ml×28 or 2000ml×18		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×18		
Timer Range	0-999.9 hrs.		
Platform Size (L×W)	(1 unit) 1020mm×530mm		
Power Source	AC220±10% (110V is optional) 50~60Hz		
Overall Dimensions (L×W×H)	1430mm×845mm×630mm	1430mm×845mm×1185mm	1430mm×845mm×1740mm
Weight	272kg	506kg	728kg
Noise Level	<55dB		



CO₂ Shaking Incubator (Stackable)

Model: ZCZY-AS8E/BS8E/CS8E

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user .
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. Each machine operates independently.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. The stainless steel frames with heating function around door class can adjust the temperature as user's need.
2. Mobile and PC monitor(**Option**)
3. Imported infrared CO₂ sensor measures the CO₂ concentration automatically with high sensitivity. Matching controller, solenoid valve and pressure reducing valves are all installed.
4. The bottom of the chamber can be washed thoroughly.
5. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
6. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
7. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
8. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
9. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.

10. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design under the transparent box which registration card can be placed.
11. **(Option)** Embedded fabric curtain stretching repeatedly and not easy to damage, completely avoids light influence on culture.
12. For each shaker, a bottle of CO₂ gas (20kg) can be used not less than 35 days if the door is open normally, and about 145 days when door is not opened.
13. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	CO2 Shaking Incubator (Stackable)		
Model	ZCZY-AS8E(1 unit)	ZCZY-BS8E(2 units)	ZCZY-CS8E(3 units)
Shaking Speed Range	10-250rpm		
Shaking Control Accuracy	±1rpm		
Orbit (diameter)	φ 50mm (standard) φ 26mm(optional)		
Temp. Range	4°C~60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.5°C(at 37°C)		
CO2 Control Range	0-20%		
CO2 Control Accuracy	0.1%		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×60 or 500ml×40 or 1000ml×23 or 2000ml×15		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 928mm×530mm		
Power Source	AC220±10% (110V is optional) 50~60Hz		
Overall Dimensions (L×W×H)	1360mm×845mm×630mm	1360mm×845mm×1185mm	1360mm×845mm×1740mm
Weight	264kg	482kg	678kg
Noise Level	<55dB		



Small Capacity CO₂ Shaking Incubator (Stackable)

Model: ZCZY-AN/BN/CN

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. Each machine operates independently.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. The stainless steel frames with heating function around door class can adjust the temperature as user's need.
2. Mobile and PC monitor(**Option**)
3. Imported infrared CO₂ sensor measures the CO₂ concentration automatically with high sensitivity. Matching controller, solenoid valve and pressure reducing valves are all installed.
4. The bottom of the chamber can be washed thoroughly.
5. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
6. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
7. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
8. Timing frost-removing function, the timing range is 1 to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
9. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.

10. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design under the transparent box which registration card can be placed.
11. **(Option)** Embedded fabric curtain stretching repeatedly and not easy to damage, completely avoids light influence on culture.
12. For each shaker, a bottle of CO₂ gas (20kg) can be used not less than 35 days if the door is open normally, and about 145 days when door is not opened.
13. The plastic molding clamps make it easily to put and take flasks with one hand.
14. **(Option)** Built-in humidity control, ranging from ambient humidity to 95%.

■ Tech. Parameters

Product Name	Small Capacity CO ₂ Shaking Incubator (Stackable)		
Model	ZCZY-AN (1 unit)	ZCZY-BN (2 units)	ZCZY-CN(3 units)
Shaking Range	10-250rpm		
Shaking Control	±1rpm		
Orbit (diameter)	φ 50mm (standard), φ 26mm(optional)		
Temp. Control Range	4°C~60°C(at 23°C~25 °C)		
Temp. Control Accuracy	±0.1 °C		
Temp. Uniformity	±0.5°C(at 37°C)		
CO ₂ Measuring Range	0-20%		
CO ₂ Accuracy	0.1%		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×36 or 500ml×25 or 1000ml×16 or 2000ml×9		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×30 or 500ml×24 or 1000ml×14 or 2000ml×9		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 555mm×530mm		
Power Source	AC220±10% (110V is optional) 50~60Hz		
Overall Dimensions (L×W×H)	990mm×845mm×630mm	990mm×845mm×1185mm	990mm×845mm×1740mm
Weight	200kg	368kg	515kg
Noise Level	<55dB		

Floored CO2 Shaking Incubator (Double Layer)

Model: ZCLY-180E

■ Product Overview



1. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
2. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
3. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
4. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
5. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
6. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
7. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
8. With ultraviolet sterilization function.

■ Specifications

1. The stainless steel frames with heating function around door glass can adjust the temperature as user's need.
2. Mobile and PC monitor(**Option**)
3. Imported infrared CO2 sensor measures the CO2 concentration automatically with high sensitivity. Matching controller, solenoid valve and pressure reducing valves are all installed.
4. The bottom of the chamber can be washed thoroughly.
5. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
6. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
7. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
8. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
9. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.



■ Tech. Parameters

Product Name	Floored CO ₂ Shaking Incubator (Double Layer)
Model	ZCLY-180 E
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	φ 26mm
Temp. Range	4°C~60°C(at 23°C~25 °C)
Temp. Accuracy	±0.1°C
Temp. Uniformity	±0.8°C(at37°C)
CO ₂ Measuring Range	0-20%
CO ₂ Accuracy	0.1%
Display	LCD(Touch Screen)
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	(One layer) 250ml×25 or 500ml×16 or 1000ml×9
Max. Capacity (Plastic cement clamps)	(One layer) 250ml×25 or 500ml×16 or 1000ml×9
Timer Range	0-999.9 hrs.
Platform Size(L×W)	(One layer) 485mm×485mm
Power Source	AC220±10% 50~60Hz
Overall Dimensions(L×W×H)	760mm×680mm×1280mm
Weight	183kg
Noise Level	<55dB
Internal Height	558mm



Refrigerated Shaking Incubators (Stackable)

Catalogue of 2021

Model: ZQZY-108 (New)

ZQZY-98AE/BE/CE

ZQZY-88AE/BE/CE

ZQZY-78AE/BE/CE

ZQZY-AS9/BS9/CS9

ZQZY-AS8E/BS8E/CS8E

ZQZY-AF8E/BF8E/CF8E

ZQZY-A8E/B8E/C8E

ZQZY-VS1/VS2/VS3

ZQZY-88AH/BH/CH

Shanghai Zhichu Instrument Co., Ltd.

Floor2, 2nd building, No.3609 South Hongmei Road, Minhang District, Shanghai

Tel: 86-021-34531721 Fax:86-021-34531722

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

(New) Refrigerated Shaking Incubators (Stackable)

Model: ZQZY-108

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Insulating and tempered glass door which is non-screw design provides good view of incubating state without opening lids.
6. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. The data easily transfer through the USB interface.
3. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
4. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
5. Special designed vent satisfy the oxygen need of sample.
6. The plastic molding clamps make it easily to put and take flasks with one hand.
7. Product upgrade plan (**option**): lighting system : the light intensity can be as high as 16000LX, high efficiency and energy saving, high light efficiency, 1%-100% step 1% adjustable (1%, 2%, 3%—100%) ; long service life (multiple light sources can be upgraded)

■ Tech. parameters

Product Name	Refrigerated Shaking Incubators (Stackable)		
Model	ZQZY-108		
Shaking Speed Range	10-300rpm		
Shaking Control Accuracy	±1rpm		
Orbit (diameter)	φ26mm		
Temp. Control Range	4°C~60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.7°C(at 37 °C)		
Display	LCD (touch screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×42 or 500ml×25 or 1000ml×16 or 2000ml ×9 or 3000ml×8		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×42 or 500ml×25 or 1000ml×16 or 2000ml ×9 or 3000ml×8		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 625mm×555mm		
Power Source	AC220 ~ 10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions (L×W×H)	980mm×800mm×635mm	980mm×800mm×1200mm	980mm×800mm×1765mm
Weight	132kg	255kg	366kg
Noise Level	<55dB		
Internal Height	366mm		

Refrigerated Shaking Incubators (Stackable)

Model: ZQZY-98AE/BE/CE

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Insulating and tempered glass door which is non-screw design provides good view of incubating state without opening lids.
6. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. The data easily transfer through the USB interface.
3. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
4. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
5. Special designed vent satisfy the oxygen need of sample.
6. The plastic molding clamps make it easily to put and take flasks with one hand.
7. Product upgrade plan (**option**): lighting system models: ZQZY-98CGE, ZQZY-98BGE, the light intensity can be as high as 16000LX, high efficiency and energy saving, high light efficiency, 1%-100% step 1% adjustable (1%, 2%, 3%—100%); Long service life (multiple light sources can be upgraded)



■ Tech. parameters

Product Name	Refrigerated Shaking Incubators (Stackable)		
Model	ZQZY-98AE (1 unit)	ZQZY-98BE (2 units)	ZQZY-98CE (3 units)
Shaking Range	10-300rpm	10-300rpm	10-300rpm
Shaking Control Accuracy	±1rpm		
Orbit (diameter)	φ26mm		
Temp. Range	4°C~60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.6°C(at 37 °C)		
Display	LCD (touch screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×30 or 500ml×20 or 1000ml×12 or 2000ml ×8 or 5000ml×4		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×30 or 500ml×20 or 1000ml×12 or 2000ml ×8		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 575mm×465mm		
Power Source	AC220 ~ 10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions (L×W×H)	920mm×700mm×685mm	920mm×700mm×1315mm	920mm×700mm×1950mm
Weight	161kg	289kg	438kg
Noise Level	<55dB		
Internal Height	432mm		

Refrigerated Shaking Incubators

(The middle and bottom units cannot be separated)

Model: ZQZY-88AE/BE/CE

■ Product Overview



1. **Bottom and middle units are integrated double-decker structure which can stack up to three units high, space-saving and high-capacity.**
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and visible Alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Insulating and tempered glass door which is non-screw design provides good view of incubating state without opening lids.
6. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design to make machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. The data easily transfer through the USB interface.
3. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
4. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
5. Special designed vent satisfy the oxygen need of sample.
6. The plastic molding clamps make it easily to put and take flasks with one hand.





7. Product upgrade plan (**option**) : lighting system-the light intensity can be as high as 16000LX, high efficiency, energy saving, high light efficiency, 1%-100% step 1% adjustable (1%, 2%, 3%-100%), long service life (if there are special requirements, it can be upgraded to three colors of light, and the intensities of the three lights are adjustable)

■ Tech. parameters

Product Name	Refrigerated Shaking Incubators (The middle and bottom units cannot be separated)		
Model	ZQZY-88AE (1 unit)	ZQZY-88BE (2 units)	ZQZY-88CE (3 units)
Shaking Range	10-300rpm	10-350rpm	10-350rpm (the top unit 10-300rpm)
Shaking Control	±1rpm		
Orbit (diameter)	Φ 26mm		
Temp. Range	4°C~60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1 °C		
Temp. Uniformity	±0.6 °C(at 37 °C)		
Display	LCD (touch screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×30 or 500ml×20 or 1000ml×12 or 2000ml ×8 or 3000ml×5		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×30 or 500ml×20 or 1000ml×12 or 2000ml ×8 or 3000ml×5		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 575mm×465mm		
Power Source	AC220~10% (110V is optional) 50~60Hz		
Overall Dimensions (L×W×H)	920mm×700mm×600mm	920mm×700mm×1170mm	920mm×700mm×1735mm
Weight	121kg	268kg	385kg
Noise Level	<55dB		
Internal Height	362mm		

Small Refrigerated Shaking Incubators

(The middle and bottom units cannot be separated)

Model: ZQZY-78AE/BE/CE

■ Product Overview



1. Bottom and middle units are integrated double-decker structure which can stack up to three units high, space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Insulating and tempered glass door which is non-screw design provides good view of incubating state without opening lids.
6. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design to make machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. The data easily transfer through the USB interface.
3. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
4. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
5. Special designed vent satisfy the oxygen need of sample.
6. The plastic molding clamps make it easily to put and take flasks with one hand.



7. Product upgrade plan (**option**) : lighting system-the light intensity can be as high as 16000LX, high efficiency, energy saving, high light efficiency, 1%-100% step 1% adjustable (1%, 2%, 3%-100%), long service life (if there are special requirements, it can be upgraded to three colors of light, and the intensities of the three lights are adjustable).
The upgraded model is: ZQZY-78AGE (1 unit), ZQZY-78BGE (2 units), and ZQZY-78CGE (3 units);
The upgraded model (three-color light with single control) is: ZQZY-78AGD(1 unit), ZQZY-78BGD(2 units), ZQZY-78CGD (3 units)

■ Tech. parameters

Product Name	Small Refrigerated Shaking Incubators (The middle and bottom units cannot be separated)		
Model	ZQZY-78AE(1 unit)	ZQZY-78BE(2 units)	ZQZY-78CE(3 units)
Shaking Range	10-300rpm	10-350rpm	10-350rpm (the top unit 10-300rpm)
Shaking Control	±1rpm		
Orbit (diameter)	φ26mm		
Temp. Range	4°C~60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.6°C(at 37 °C)		
Display	LCD(touch screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×25 or 500ml×16 or 1000ml×9 or 2000ml ×5 or 3000ml ×5		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×25 or 500ml×16 or 1000ml×9 or 2000ml ×5 or 3000ml ×4		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 475mm×465mm		
Power Source	AC220±10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions (L×W×H)	820mm×700mm×600mm	820mm×700mm×1170mm	820mm×700mm×1735mm
Weight	115kg	250kg	365kg
Noise Level	<55dB		
Internal Height	362mm		

Large Capacity Refrigerated Shaking Incubators (Stackable)

Model: ZQZY-AS9/BS9/CS9

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. Each machine operates independently.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
3. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
4. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
5. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
6. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature, speed can be displayed.
 - g. The data easily transfer through the USB interface.



7. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design, under the transparent box which registration card can be placed.
8. The plastic molding clamps make it easily to put and take flasks with one hand.
9. The humidity control function (**option**) : range from room humidity to 95%.

■ Tech. parameters

Product Name	Large Capacity Refrigerated Shaking Incubators (Stackable)		
Model	ZQZY-AS9 (1 unit)	ZQZY-BS9 (2 units)	ZQZY-CS9(3 units)
Shaking Range	10-300rpm		
Shaking Control	±1rpm		
Orbit (diameter)	φ26mm(φ50mm is optional)		
Temp. Range	4°C~60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.8°C(at 37 °C)		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×72 or 500ml×45 or 1000ml×28 or 2000ml×18		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×18		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 1020mm×530mm		
Power Source	AC220±10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions (L×W×H)	1430mm×845mm×630m	1430mm×845mm×1185m	1430mm×845mm×1740m
Weight	272kg	506kg	728kg
Noise Level	<55dB		

Refrigerated Shaking Incubators (Stackable)

Model: ZQZY-AS8E/BS8E/CS8E

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. Each machine operates independently.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
3. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
4. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
5. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
6. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature, speed can be displayed.
 - g. The data easily transfer through the USB interface.



7. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design, under the transparent box which registration card can be placed.
8. The plastic molding clamps make it easily to put and take flasks with one hand.
9. The humidity control function (**opt ion**): range is from room humidity to 95%.

Tech. parameters

Product Name	Refrigerated Shaking Incubators (Stackable)		
Model	ZQZY-AS8E(1 unit)	ZQZY-BS8E(2 units)	ZQZY-CS8E(3 units)
Shaking Range	10-300rpm		
Shaking Control	±1rpm		
Orbit (diameter)	φ26mm (φ50mm is optional)		
Temp. Range	4°C~ 60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.6°C(at 37 °C)		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×60 or 500ml×40 or 1000ml×23 or 2000ml×15		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 928mm×530mm		
Power Source	AC220±10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions (L×W×H)	1360mm×845mm×630m	1360mm×845mm×1185m	1360mm×845mm×1740m
Weight	255kg	461kg	647kg
Noise Level	<55dB		
Internal Height	345mm		

Refrigerated Shaking Incubators (Stackable)

Model: ZQZY-AF8E/BF8E/CF8E

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. Each machine operates independently.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
3. Special refrigerating process with adjustable cooling capacity makes temperature control more accuracy.
4. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
5. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature, speed can be displayed.
 - g. The data easily transfer through the USB interface.





6. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design, under the transparent box which registration card can be placed.
7. The plastic molding clamps make it easily to put and take flasks with one hand.
8. Product upgrade plan (**option**): lighting system : the light intensity can be as high as 16000LX, high efficiency and energy saving, high light efficiency, 1%-100% step 1% adjustable (1%, 2% , 3%—100%) ; long service life (multiple light sources can be upgraded).

■ Tech. parameters

Product Name	Refrigerated Shaking Incubators (Stackable)		
Model	ZQZY-AF8E(1 unit)	ZQZY-BF8E(2 units)	ZQZY-CF8E(3 units)
Shaking Range	10-300rpm		
Shaking Control	±1rpm		
Orbit (diameter)	φ26mm(φ50mm is optional)		
Temp. Range	4°C~ 60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.8°C(at 37 °C)		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×60 or 500ml×40 or 1000ml×23 or 2000ml×15		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 928mm×530mm		
Power Source	AC220±10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions (L×W×H)	1360mm×845mm×630m	1360mm×845mm×1185m	1360mm×845mm×1740m
Weight	246kg	445kg	621kg
Noise Level	<55dB		
Internal Height	364mm		

Refrigerated Shaking Incubators (Stackable)

Model: ZQZY-A8E/B8E/C8E

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door which is non-screw design and slide-out platform provide easy access to all samples. Each machine operates independently.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
3. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
4. The plastic molding clamps make it easily to put and take flasks with one hand.
5. Product updated plan **(option)**: lighting system. Incubator shakers with a powerful lighting system guarantee excellent homogenous parameters for testing and growth conditions. Stepless adjustable LED Lighting System which is long service life, energy saving and highly efficient. Maximum lighting intensity can be reached 30000LX.



■ Tech. parameters

Product Name	Refrigerated Shaking Incubators (Stackable)		
Model	ZQZY-A8E(1 unit)	ZQZY-B8E(2 units)	ZQZY-C8E(3 units)
Shaking Range	10-300rpm		
Shaking Control	±1rpm		
Orbit (diameter)	φ26mm(φ50mm is optional)		
Temp. Range	4°C~ 60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±1°C(at 37 °C)		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×60 or 500ml×40 or 1000ml×23 or 2000ml×15		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 928mm×530mm		
Power Source	AC220±10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions (L×W×H)	1360mm×830mm×630m	1360mm×830mm×1185m	1360mm×830mm×1740m
Weight	248kg	438kg	626kg
Noise Level	<55dB		

Refrigerated Shaking Incubators (Stackable)

(High-precision temperature control)

Model: ZQZY-VS1/VS2/VS3

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Each unit operates independently.
3. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
4. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
5. Audible and Visible Alarms alert the user.
6. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
7. One-time molded plastic door, it has glass heating function to avoid glass fogging and dripping caused by operation under low temperature or high humidity phenomenon.
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.





3. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
4. Unique air duct design guarantee the high homogeneity of temperature which is $\pm 0.5^{\circ}\text{C}$.
5. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
6. The plastic molding clamps make it easy to put and take flasks with one hand.

■ Tech. parameters

Product Name	Refrigerated Shaking Incubators (Stackable) (High-precision temperature control)		
Model	ZQZY-VS1(1 unit)	ZQZY-VS2(2 units)	ZQZY-VS3(3 units)
Shaking Range	10-300rpm		
Shaking Control	$\pm 1\text{rpm}$		
Orbit (diameter)	$\phi 26\text{mm}$ ($\phi 50\text{mm}$ is optional)		
Temp. Range	$4^{\circ}\text{C} \sim 60^{\circ}\text{C}$ (at $23^{\circ}\text{C} \sim 25^{\circ}\text{C}$)		
Temp. Accuracy	$\pm 0.1^{\circ}\text{C}$		
Temp. Uniformity	$\pm 0.5^{\circ}\text{C}$ (at 37°C)		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml $\times$ 40 or 500ml $\times$ 24 or 1000ml $\times$ 15 or 2000ml $\times$ 8		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml $\times$ 28 or 500ml $\times$ 18 or 1000ml $\times$ 15 or 2000ml $\times$ 8		
Timer Range	0-999.9 hrs.		
Platform Size(L $\times$ W)	(1 unit) 693mm $\times$ 416mm		
Power Source	AC220 $\pm$ 10% (110V is optional) 50 ~ 60Hz		
Overall Dimensions(L $\times$ W $\times$ H)	950mm $\times$ 912mm $\times$ 620mm	950mm $\times$ 912mm $\times$ 1165mm	950mm $\times$ 912mm $\times$ 1700mm
Weight	208kg	392kg	568kg
Noise Level	<55dB		
Internal Height	301mm		

Refrigerated Shaking Incubators(High speed)

(The middle and bottom units cannot be separated)

Model: ZQZY-88AH/BH/CH

■ Product Overview



1. Stack up to three units high, Space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Audible and Visible Alarms alert the user.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Insulating and tempered glass door which is non-screw design provides good view of incubating state without opening lids.
6. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design to make machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Seamless welding inner chamber, its bottom can be washed thoroughly.
2. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. The data easily transfer through the USB interface.
3. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
4. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
5. Special designed vent satisfy the oxygen need of sample.
6. Cylindrical clamps special for high speed.
7. The humidity control function (optional): range is from room humidity to 95%.



■ Tech. parameters

Product Name	Refrigerated Shaking Incubators(High speed) (The middle and bottom units cannot be separated)		
Model	ZQZY-88AH(1 unit)	ZQZY-88BH(2 units)	ZQZY-88CH(3 units)
Shaking Range	10-800rpm (10-1200rpm is optional)		
Shaking Control	±1rpm		
Orbit (diameter)	φ 3mm (φ 1.5mm is optional)		
Temp. Range	4℃~60℃(at 23℃~25℃)		
Temp. Accuracy	±0.1℃		
Temp. Uniformity	±0.6℃(at 37℃)		
Display	LCD (touch screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Microprocessor		
Timer Range	0-999.9 hrs.		
Platform Size(L×W)	(1 unit) 575mm×435mm		
Standard Platform	cylindrical clamps special for high speed		
Power Source	AC220±10% (110V is optional)		50~60Hz
Overall Dimensions (L×W×H)	920mm×700mm×600mm	920mm×700mm×1170mm	920mm×700mm×1735mm
Weight	104kg	245kg	352kg
Noise Level	<55dB		



Temperature Controlled Shaking Incubators

Catalogue of 2021

Model: **ZHTY-50E**
 ZHTY-70E/ZQTY-70E
 ZQTY-90E
 ZHTY-90X/ZQTY-90X
 ZQLY-180E
 ZQLY-300E
 ZQLY-380E
 ZQWY-200E
 ZQWY-218E
 ZQWY-220E

Shanghai Zhichu Instrument Co., Ltd.

Floor2, 2nd building, No.3609 South Hongmei Road, Minhang District, Shanghai

Tel: 86-021-34531721 Fax:86-021-34531722

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

Benchtop Thermostatic Shaking Incubator

Model: ZHTY-50E

■ Product Overview



1. Side door design that open easily on the lab bench.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Insulating and tempered glass door provides good view of incubating state without opening lids.
7. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.

■ Specifications

1. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
2. Data memory function can check the history record within 3 months.
3. Such data curves as temperature and speed can be displayed. The data easily transfer through the USB interface.
4. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
5. The plastic molding clamps make it easily to put and take flasks with one hand.



■ Tech. Parameters

Product Name	Benchtop Thermostatic Shaking Incubator
Model	ZHTY-50E
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	φ 26mm
Temp. Range	Ambient Temp.+5℃~60℃
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃(at 37℃)
Display	LCD (Touch Screen)
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×12 or 500ml×9 or 1000ml×4
Max. Capacity (Plastic cement clamps)	250ml×12 or 500ml×9 or 1000ml×4
Timer Range	0-999.9 hrs.
Platform Size (L×W)	344mm×307mm
Power Source	AC220±10% (110V is optional) 50~60Hz
Overall Dimensions (L×W×H)	650mm×480mm×620mm
Weight	64kg
Noise Level	<55dB
Internal Height	342mm

Thermostatic/Refrigerated Shaking Incubator

Model: ZHTY-70E/ZQTY-70E

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions..
6. Insulating and tempered glass door provides good view of incubating state without opening lids.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable (only for ZQTY-70E).
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.



■ Specifications

1. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block (only for ZQTY-70E).
2. Special designed vent satisfy the oxygen need of sample.
3. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
4. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Thermostatic Shaking Incubator	Refrigerated Shaking Incubator
Model	ZHTY-70E	ZQTY-70E
Shaking Range	10-400rpm	10-400rpm
Shaking Control	±1rpm	±1rpm
Orbit (Diameter)	φ 26mm	φ 26mm
Temp. Range	Ambient Temp.+5℃~60℃	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃	±0.1℃
Temp. Uniformity	±1℃(at 37℃)	±1℃(at 37℃)
Display	LCD	LCD
Air circulation	Forced air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×30 or 500ml×20 or 1000ml×12	250ml×30 or 500ml×20 or 1000ml×12
Max. Capacity (Plastic cement clamps)	250ml×30 or 500ml×20 or 1000ml×9	250ml×30 or 500ml×20 or 1000ml×9
Timer Range	0-999.9 hrs.	0-999.9 hrs.
Platform Size (L×W)	518mm×424mm	518mm×424mm
Power Source	AC220±10% 50~60Hz	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	860mm×670mm×500mm	860mm×670mm×500mm
Weight	99kg	115kg
Noise Level	<55dB	<55dB
Internal Height	252mm	252mm

Refrigerated Shaking Incubator

Model: ZQTY-90E

■ Product Overview

1. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
2. Audible and Visible Alarms alert the user and shuts off heaters to setpoint deviation.
3. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
4. Forced air circulation via low noise fan ensures a homogenous air mixture.
5. Insulating and tempered glass door provides good view of incubating state without opening lids.
6. Streamlined shape, stainless interior chamber and backing finish outer cover.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.



■ Specifications

1. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.
2. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
3. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
4. Special designed vent satisfy the oxygen need of sample.
5. The plastic molding clamps make it easily to put and take flasks with one hand.



■ Tech. Parameters

Product Name	Refrigerated Shaking Incubator	
Model	ZQTY-90E	
Shaking Range	10-400rpm	
Shaking Control	±1rpm	
Orbit (Diameter)	φ 26mm	
Temp. Range	4~60℃(at 23℃~25℃)	
Temp. Accuracy	±0.1℃	
Temp. Uniformity	±1℃(at 37℃)	
Display	LCD (Touch Screen)	
Air circulation	Forced air circulation	
Parameter Control	P.I.D Microprocessor	
Max. Capacity (Stainless steel clamps)	250ml×30 or 500ml×20 or 1000ml×12 or 2000ml×6	
Max. Capacity (Plastic cement clamps)	250ml×30 or 500ml×20 or 1000ml×9 or 2000ml×6	
Timer Range	0-999.9 hrs.	
Platform Size (L×W)	518mm×424mm	
Power Source	AC220±10%(110V is optional) 50~60Hz	
Overall Dimensions (L×W×H)	860mm×665mm×640mm	
Weight	118kg	
Noise Level	<55dB	
Internal Height	377mm	

Thermostatic/Refrigerated Shaking Incubator(Rotatable)

Model: ZHTY-90X/ZQTY-90X

■ Product Overview

1. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
2. Forced air circulation via low noise fan ensures a homogenous air mixture.
3. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Insulating and tempered glass door provides good view of incubating state without opening lids.
6. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable (only for ZQTY-90X).
7. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
8. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
9. With ultraviolet sterilization function.



■ Specifications

1. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface. Special designed vent satisfy the oxygen need of sample.
2. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
3. **(Option)** Program control (forward and reverse programmable settings).
4. The clamp holder is a special customized PE bottle fixture.



■ Tech. Parameters

Product Name	Thermostatic Rotatable Shaking Incubator	Refrigerated Rotatable Shaking Incubator
Model	ZHTY-90X	ZQTY-90X
Shaking Range	10-200rpm	10-200rpm
Shaking Control	±1rpm	±1rpm
Temp. Range	Ambient Temp.+5℃~60℃	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃	±0.1℃
Temp. Uniformity	±1℃(at 37℃)	±1℃(at 37℃)
Display	LCD (Touch Screen)	LCD(Touch Screen)
Air circulation	Forced air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor	P.I.D Microprocessor
Max. Capacity (PE bottle fixture)	250ml×15 or 500ml×12 or 1000ml×8 or 2000ml×6 or 2500ml×6	250ml×15 or 500ml×12 or 1000ml×8 or 2000ml×6 or 2500ml×6
Timer Range	0-999.9 hrs.	0-999.9 hrs.
Platform Size (L×W)	505mm×320mm	505mm×320mm
Power Source	AC220±10% 50~60Hz	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	860mm×665mm×640mm	860mm×665mm×640mm
Weight	99kg	115kg
Noise Level	<55dB	<55dB

Floored Refrigerated Shaking Incubator (Double Layer)

Model: ZQLY-180E

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Insulating and tempered glass door provides good view of incubating state without opening lids.
7. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.



■ Specifications

1. One shaker having two layers that space-saving and high-capacity.
2. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
3. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
4. With adjustable support foot and roller for easy movement.
5. Special designed vent satisfy the oxygen need of sample.
6. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Floored Refrigerated Shaking Incubator (Double Layer)
Model	ZQLY-180E
Shaking Range	10-320rpm
Shaking Control	±1rpm
Orbit (Diameter)	Φ 26mm
Temp. Range	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃(at 37℃)
Display	LCD
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps of one layer)	Each layer 250ml×25 or 500ml×16 or 1000ml×9
Max. Capacity (Plastic cement clamps of one layer)	Each layer 250ml×25 or 500ml×16 or 1000ml×9
Timer Range	0-999.9 hrs.
Platform Size (L×W)	485mm×485mm
Standard Platform	Each layer 500ml×16
Power Source	AC220±10% 50~60Hz
Overall Dimensions(L×W×H)	760mm×680mm×1280mm
Weight	188kg
Noise Level	<55dB
Internal Height	635mm

Floored Refrigerated Shaking Incubator (Double Layer)

Model: ZQLY-300E

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.



2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. Insulating and tempered glass door provides good view of incubating state without opening lids.
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.

■ Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
3. With adjustable support foot and roller for easy movement.
4. Special designed vent satisfy the oxygen need of sample.
5. Product can be updated to LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. The data easily transfer through the USB interface.
6. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Floored Refrigerated Shaking Incubator (Double Layer)
Model	ZQLY-300E
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	Φ 26mm(standard) Φ 50mm(optional)
Temp. Range	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃
Display	LCD
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×40 or 500ml×28 or 1000ml×15 or 2000ml×8
Max. Capacity (Plastic cement clamps)	250ml×40 or 500ml×28 or 1000ml×15 or 2000ml×8
Timer Range	0-999.9 hrs.
Platform Size (L×W)	786mm×455mm
Power Source	AC220±10%(110V is optional) 50~60Hz
Overall Dimensions (L×W×H)	960mm×780mm×1410mm
Weight	265kg
Noise Level	<55dB

Large Capacity Floored Refrigerated Shaking Incubator

Model: ZQLY-380E

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.



2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. Insulating and tempered glass door provides good view of incubating state without opening lids.
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.

■ Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
3. With adjustable support foot and roller for easy movement.
4. Special designed vent satisfy the oxygen need of sample.
5. Product can be updated to LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. The data easily transfer through the USB interface.
6. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Large Capacity Floored Refrigerated Shaking Incubator
Model	ZQLY-380E
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	Φ 26mm(standard) Φ 50mm(optional)
Temp. Range	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃
Display	LCD
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×50 or 500ml×32 or 1000ml×18 or 2000ml×10
Max. Capacity (Plastic cement clamps)	250ml×50 or 500ml×32 or 1000ml×18 or 2000ml×10
Timer Range	0-999.9 hrs.
Platform Size (L×W)	786mm×455mm
Power Source	AC220±10%(110V is optional) 50~60Hz
Overall Dimensions (L×W×H)	1162mm×780mm×1430mm
Weight	265kg
Noise Level	<55dB

Horizontal Refrigerated Shaking Incubator

Model: ZQWY-200E

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. Insulating and tempered glass door provides good view of incubating state without opening lids.
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.



■ Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
3. With adjustable support foot and roller for easy movement.
4. Special designed vent satisfy the oxygen need of sample.
5. Product can be updated to LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. The data easily transfer through the USB interface.
6. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Horizontal Refrigerated Shaking Incubator
Model	ZQWY-200E
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	Φ 26mm(standard); Φ 50mm(optional)
Temp. Range	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃(at 37℃)
Display	LCD
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×60 or 500ml×40 or 1000ml×24 or 2000ml×15 or 3000ml×11 or 5000ml×8
Max. Capacity (Plastic cement clamps)	250ml×60 or 500ml×40 or 1000ml×23 or 2000ml×15 or 3000ml×11
Timer Range	0-999.9 hrs.
Platform Size (L×W)	905mm×530mm
Power Source	AC220±10% (110V is optional) 50~60Hz
Overall Dimensions (L×W×H)	1340mm×780mm×840mm
Weight	232kg
Noise Level	<55dB

Horizontal Refrigerated Shaking Incubator

Model: ZQWY-218E

■ Product Overview

1. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
2. Forced air circulation via low noise fan ensures a homogenous air mixture.
3. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Insulating and tempered glass door provides good view of incubating state without opening lids.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.



■ Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
3. With adjustable support foot and roller for easy movement.
4. Special designed vent satisfy the oxygen need of sample.
5. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.
6. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Horizontal Refrigerated Shaking Incubator
Model	ZQWY-218E
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	Φ 26mm(standard); Φ 50mm(optional)
Temp. Range	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃(at 37℃)
Display	LCD(Touch screen)
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×18 or 3000ml×14 or 5000ml×8
Max. Capacity (Plastic cement clamps)	250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×18 or 3000ml×14
Timer Range	0-999.9 hrs.
Platform Size (L×W)	1050mm×530mm
Power Source	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	1440mm×780mm×840mm
Weight	238kg
Noise Level	<55dB
Internal Height	493mm

Horizontal Refrigerated Shaking Incubator(Large Capacity)

Model: ZQWY-220E

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. Insulating and tempered glass door provides good view of incubating state without opening lids.
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.



■ Specialities

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
3. With adjustable support foot and roller for easy movement.
4. Special designed vent satisfy the oxygen need of sample.
5. Product can be updated to LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. The data easily transfer through the USB interface.
6. The plastic molding clamps make it easily to put and take flasks with one hand.



■ Tech. Parameters

Product Name	Horizontal Refrigerated Shaking Incubator(Large Capacity)
Model	ZQWY-220E
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	Φ 26mm(standard); Φ 50mm(optional)
Temp. Range	4~60℃(at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃(at 37℃)
Display	LCD
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×70 or 500ml×48 or 1000ml×24 or 2000ml×15 or 15000ml×4
Max. Capacity (Plastic cement clamps)	250ml×70 or 500ml×48 or 1000ml×24 or 2000ml×15
Timer Range	0-999.9 hrs.
Platform Size (L×W)	905mm×630mm
Power Source	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	1340mm×880mm×990mm
Weight	314kg
Noise Level	<55dB
Internal Height	614mm



Orbital Shakers

Catalogue of 2021

Model: ZTJ-9

ZFY-9

ZTY-70E/ZLY-200E

ZDY-BE/ZZY-BE(CE)

Shanghai Zhichu Instrument Co., Ltd.

Floor2, 2nd building, No.3609 South Hongmei Road, Minhang District, Shanghai

Tel: 86-021-34531721 Fax:86-021-34531722

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

Smear Orbital Shaker

Model: ZTJ-9

■ Product Overview

1. The exquisite and compact structure greatly saves users' space.
2. Streamlined shape with electro-static coating surface and high anti-corrosion property.
3. The platform and clamps made from stainless steel have corrosion resistance and oxidation-resistance properties that easy to take out and cleaning.

■ Specifications

1. The plane can move in multiple tracks.
2. Specially designed two-layer rocker mechanism, the up and down rockers can be rotated forward or reverse at the same time, or rotated inversely, which can make the bacteria spread evenly and meet the unique requirements of the user.
3. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting speed, time and the real speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
4. Data memory function can check the history record within 3 months.



■ Tech. Parameters

Product Name	Smear Orbital Shaker
Model	ZTJ-9
Shaking Range	10-150rpm
Shaking Control	±1rpm
Orbit (diameter)	Φ26mm
Display	LCD (Touch Screen)
Timer Range	0-999.9 hrs
Platform Size(L×W)	390mm×350mm
Power Source	AC220±10%50~60Hz
Overall Dimensions (L×W×H)	510mm×442mm×318mm
Weight	45kg
Noise Level	<55dB

Orbital Shaker for Separatory Funnel

Model: ZFY-9

■ Product Overview

1. The exquisite and compact structure greatly saves users' space.
2. Streamlined shape made by stainless steel and aluminum are lightweight and durable.

■ Specifications

1. Shaking frequency is accurately displayed and can remain stable for a long time.
2. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
3. LCD Touch Screen that making parameters setting and viewing easily.

Such as:

- a. The setting speed, time and the real speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
4. Data memory function can check the history record within 3 months.



■ Tech. Parameters

Product Name	Orbital Shaker for Separatory Funnel
Model	ZFY-9
Shaking Range	0-250rpm
Shaking Control	±1rpm
Orbit (diameter)	Φ 35 mm
Display	LCD (Touch Screen)
Timer Range	0-999.9 hrs
Max. Capacity	250ml×6 or 500ml×6 or 1000ml×6
Power Source	AC220±10%50~60Hz
Overall Dimensions (L×W×H)	750mm×465mm×565mm
Weight	92kg
Noise Level	<55dB

Orbital Shaker

(ZTY-70E/ZLY-200E)

Product Overview

1. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
2. Streamlined shape with electro-static coating surface and high anti-corrosion property.
3. The platform and clamps made from stainless steel have corrosion resistance and oxidation-resistance properties that easy to take out and cleaning.



Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. LCD Touch Screen that making parameters setting and viewing easily.
Such as:
 - a. The setting speed, time and the real speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
3. Data memory function can check the history record within 3 months.
4. The plastic molding clamps make it easily to put and take flasks with one hand.



Tech. Parameters

Product Name	Benchtop Orbital Shaker	Floored Orbital Shaker
Model	ZTY-70E	ZLY-200E
Shaking Range	10-300rpm	10-300rpm
Shaking Control	±1rpm	±1rpm
Orbit (diameter)	φ 26mm (φ 50mm)	φ 26mm (φ 50mm)
Display	LCD (Touch Screen)	LCD (Touch Screen)
Max. Capacity (Stainless steel clamps)	250ml×30 or 500ml×20 or 1000ml×12 or 2000ml×8	250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15 or 5000ml×11
Max. Capacity (Plastic cement clamps)	250ml×30 or 500ml×20 or 1000ml×12 or 2000ml×8	250ml×66 or 500ml×45 or 1000ml×28 or 2000ml×15 or 3000ml×15
Timer Range	0-999.9 hrs	0-999.9 hrs
Platform Size(L×W)	550mm×440mm	1003mm×592mm
Standard Platform	250ml×30 (optional in other sizes clamps)	500ml×45 (optional in other sizes clamps)
Power Source	AC220±10%50~60Hz	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	550mm×550mm×224mm	1003mm×670mm×300mm
Weight	44kg	148kg
Noise Level	<55dB	<55dB

Lager-capacity Orbital Shaker

(ZDY-BE/ZZY-BE(CE))

■ Product Overview



1. Multi layers structure, space-saving and high-capacity.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
4. Streamlined shape with electro-static coating surface and high anti-corrosion property.
5. The platform and clamps made from stainless steel have corrosion resistance and oxidation-resistance properties that easy to take out and cleaning.
6. Each layer independently regulated.

■ Specifications

1. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
2. Data memory function can check the history record within 3 months.
3. The data easily transfer through the USB interface.
4. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
5. The plastic molding clamps make it easily to put and take flasks with one hand.



■ Tech. Parameters

Product Name	Lager-capacity Orbital Shaker	Lager-capacity Stackable Shaker
Model	ZDY-BE	ZZY-BE(2 Units) ZZY-CE(3 Units)
Shaking Range	10-250rpm	10-300rpm(Top10-250rpm)
Shaking Control	±1rpm	±1rpm
Orbit(diameter)	φ 26mm(φ 50mm)	φ 26mm(φ 50mm)
Display	LCD (Touch Screen)	LCD (Touch Screen)
Max. Capacity (Stainless steel clamps)	Single 250ml×88 or 500ml×63 or 1000ml×35 or 2000ml×24 or 3000ml×20 or 5000ml×12	Single 250ml×77 or 500ml×54 or 1000ml×35 or 2000ml×20 or 3000ml×15 or 5000ml×12
Max. Capacity (Plastic cement clamps)	Single 250ml×88 or 500ml×63 or 1000ml×35 or 2000ml×24 or 3000ml×20	Single 250ml×77 or 500ml×54 or 1000ml×35 or 2000ml×20 or 3000ml×15
Timer Range	0-999.9 hrs	0-999.9 hrs
Platform Size(L×W)	1074mm×793mm	1029mm×718mm
Power Source	AC220±10% 50~60Hz	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	1400mm×880mm×1120mm	2 Units:1250mm×780mm×900mm 3 Units:1250mm×780mm×1530mm
Weight	314kg	2 Units: 255kg/3 Units: 312kg
Noise Level	<55dB	<55dB



Lighting Shaking Incubators

Catalogue of 2021

Model: ZQLY-180GE

ZQWY-200GE

ZQZY-CGS8E

Shanghai Zhichu Instrument Co., Ltd.

Floor2, 2nd building, No.3609 South Hongmei Road, Minhang District, Shanghai

Tel: 86-021-34531721 Fax:86-021-34531722

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

Floored Lighting Shaking Incubator(Double Layer)

Model : ZQLY-180GE

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Insulating and tempered glass door provides good view of incubating state without opening lids.
7. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
8. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
9. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
10. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
11. With ultraviolet sterilization function.

■ Specifications

1. Incubator shakers with a powerful lighting system guarantee excellent homogenous parameters for testing and growth conditions.
2. The lighting mode can be set as user's needs by the time control switch.
3. Stepless adjustable LED Lighting System which is long service life, energy saving and highly efficient. Maximum lighting intensity can be reached 18000LX.
4. Timing frost-removing function, the timing range is 1 to 89minutes and the defrost Interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
5. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
6. With adjustable support foot and roller for easy movement.
7. Special designed vent satisfy the oxygen need of sample.



■ Tech. parameters

Product Name	Floored Lighting Shaking Incubator (Double Layer)
Model	ZQLY-180GE
Lighting intensity	0~16000LX Stepless adjustable
Shaking Range	10-320rpm
Shaking Control	±1rpm
Orbit (Diameter)	φ 26mm
Temp. Range	4~60℃ (at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃(at 37℃)
Display	LCD
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity(Stainless steel clamps)	(One layer) 250ml×25 or 500ml×16 or 1000ml×9
Max. Capacity(Plastic cement clamps)	(One layer) 250ml×25 or 500ml×16 or 1000ml×9
Timer Range	0-999.9 hrs.
Platform Size (L×W)	(One layer) 485mm×485mm
Standard Platform	Each layer500ml×16 (optional in other sizes clamps)
Power Source	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	760mm×680mm×1280mm
Weight	204kg
Noise Level	<55dB

Horizontal Lighting Shaking Incubator

Model: ZQWY-200GE

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily. Keyboard blocking prohibits miss operation.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Forced air circulation via low noise fan ensures a homogenous air mixture.
4. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
6. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Incubator shakers with a powerful lighting system guarantee excellent homogenous parameters for testing and growth conditions.
2. Stepless adjustable LED Lighting System which is long service life, energy saving and highly efficient. Maximum lighting intensity can be reached 18000LX.
3. Timing frost-removing function, the timing range is 1to 89minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
4. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
5. With adjustable support foot and roller for easy movement.
6. Special designed vent satisfy the oxygen need of sample.
7. The plastic molding clamps make it easily to put and take flasks with one hand.
8. Product can be updated to LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Setting rotation direction is positive or reverse.
 - c. Setting circulation fan opens normally or automatically.
 - d. The data easily transfer through the USB interface.



■ Tech. parameters

Product Name	Horizontal Lighting Shaking Incubator
Model	ZQWY-200GE
Lighting intensity	0~16000LX Stepless adjustable (standard) 0~30000LX Stepless adjustable (optional)
Shaking Range	10-300rpm
Shaking Control	±1rpm
Orbit (Diameter)	φ 26mm (φ 50mm is optional)
Temp. Range	4~60℃ (at 23℃~25℃)
Temp. Accuracy	±0.1℃
Temp. Uniformity	±1℃(at 37℃)
Display	LCD
Air circulation	Forced air circulation
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×60 or 500ml×40 or 1000ml×24 or 2000ml×15
Max. Capacity (Plastic cement clamps)	250ml×60 or 500ml×40 or 1000ml×23 or 2000ml×15
Timer Range	0-999.9 hrs.
Platform Size (L×W)	905mm×530mm
Power Source	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	1340mm×780mm×840mm
Weight	248kg
Noise Level	<55dB

Stackable Lighting Shaking Incubator

Model: ZQZY-CGS8E

■ Product Overview

1. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
2. Forced air circulation via low noise fan ensures a homogenous air mixture.
3. Audible and Visible Alarms alert the user and automatic power-off under abnormal conditions.
4. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.
5. Streamlined shape, backing finish outer cover and stainless interior chamber with rounded corners easy to clean and protect bacteria breeding.
6. Glides up door and slide-out platform provide easy access to all samples.
7. High quality and low noise imported CFC free compressors ensure refrigeration effect and stable.
8. The EMC (Electromagnetic Interference) design makes machine more accurate and stable.
9. Open-Door Cutout Switch stops agitation when chamber is open providing a more favorable work environment.
10. With ultraviolet sterilization function.

■ Specifications

1. Stack up to three units high, space-saving and high-capacity. Incubator shakers with a powerful lighting system guarantee excellent homogenous parameters for testing and growth conditions.
2. Special LED Lighting System which is long service life, energy saving and highly efficient. The lighting intensity is 1%-100% adjustable with 1% step.
3. Insulating and tempered door glass as well as the stainless steel frames with heating function avoid condensation effectively, also provides good view of incubating state without opening lids.
4. Seamless welding inner chamber, its bottom can be washed thoroughly.
5. Timing frost-removing function, the timing range is 1 to 89 minutes and the defrost interval is 30-600 minutes adjustable, ensures machine working long time in low temperature without ice block.
6. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
7. LCD Touch Screen that making parameters setting and viewing easily.
Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.





8. The right side of the door is a whole molding design, the top 7 inch touch screen, the central board design, under the transparent box which registration card can be placed.
9. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. parameters

Product Name	Stackable Lighting Shaking Incubator		
Model	ZQZY-AGS8E(1 unit)	ZQZY-BGS8E(2 units)	ZQZY-CGS8E(3 units)
Lighting intensity	1%-100% adjustable with 1% step		
Shaking Range	10-300rpm		
Shaking Control	±1rpm		
Orbit (diameter)	φ 26mm(φ 50mm is optional)		
Temp. Range	4°C~ 60°C(at 23°C~25 °C)		
Temp. Accuracy	±0.1°C		
Temp. Uniformity	±0.8°C(at 37 °C)		
Display	LCD (Touch Screen)		
Air circulation	Forced air circulation		
Parameter Control	P.I.D Mic roprocessor		
Max. Capacity (Stainless steel clamps)	(1 unit) 250ml×66 or 500ml×45 or 1000ml×28or 2000ml×15		
Max. Capacity (Plastic cement clamps)	(1 unit) 250ml×66 or 500ml×40 or 1000ml×23 or 2000ml×15		
Timer Range	0-999.9 hrs.		
Platform Size (L×W)	(1 unit) 928mm×530mm		
Power Source	AC220±10% 50 ~ 60Hz		
Overall Dimensions (L×W×H)	1360mm×845mm×630mm	1360mm×845mm×1185mm	1360mm×845mm×1740mm
Weight	266kg	486kg	685kg
Noise Level	<55dB		



Water Bath Shaker

Catalogue of 2021

Model: ZHSY-50E

ZHSY-50WE

Shanghai Zhichu Instrument Co., Ltd.

Floor2, 2nd building, No.3609 South Hongmei Road, Minhang District, Shanghai

Tel: 86-021-34531721 Fax:86-021-34531722

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

Water Bath Shaker

Model :ZHSY-50E

■ Product Overview

1. Large backlighting LCD display that making parameters setting and viewing easily.
Keyboard blocking prohibits miss operation.
2. Triple-eccentric drive is precisely counterbalanced to impart smooth, uniform motion to all flasks regardless of their position on the platform.
3. Stainless steel interior chamber, platform, spring and flask clamps.
The user friendly design is equipped with water drain valve.
4. Audible and Visible Alarms alert the user and shuts off heaters to setpoint deviation.
5. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.



■ Specifications

1. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
2. The temperature of the water bath can be precisely controlled within $\pm 0.2^{\circ}\text{C}$.
3. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Water Bath Shaker
Model	ZHSY-50E
Shaking Range	10-280rpm
Shaking Control	$\pm 1\text{rpm}$
Orbit (Diameter)	$\phi 26\text{mm}$
Temp. Range	Ambient Temp.— 99.9°C
Temp. Accuracy	$\pm 0.1^{\circ}\text{C}$
Temp. Uniformity	$\pm 0.2^{\circ}\text{C}$ (at 37°C)
Display	LCD
Parameter Control	P.I.D Microprocessor
Max. Capacity(Stainless steel clamps)	250ml $\times$ 12 or 500ml $\times$ 8 or 1000ml $\times$ 4
Max. Capacity(Plastic cement clamps)	250ml $\times$ 12 or 500ml $\times$ 8 or 1000ml $\times$ 4
Timer Range	0-999.9 hrs.
Platform Size (L $\times$ W)	411mm $\times$ 321mm
Power Source	AC220 $\pm$ 10% 50~60Hz
Overall Dimensions (L $\times$ W $\times$ H)	691mm $\times$ 553mm $\times$ 522mm
Weight	62kg
Noise Level	<55dB
Internal Height	246 mm

Water Bath Shaker(Reciprocating)

Model: ZHSY-50WE

■ Product Overview

1. Stainless steel interior chamber, platform, spring and flask clamps. The user friendly design is equipped with water drain valve.
2. Audible and Visible Alarms alert the user and shuts off heaters to setpoint deviation.
3. Automatic restart after power interrupt with Non-Volatile Memory keeps studies running smoothly.



■ Specifications

1. LCD Touch Screen that making parameters setting and viewing easily. Such as:
 - a. The setting temperature, speed, time and the real temperature, speed, remaining time are shown simultaneously.
 - b. Keyboard blocking prohibits miss operation.
 - c. Setting rotation direction is positive or reverse.
 - d. Setting circulation fan opens normally or automatically.
 - e. Data memory function can check the history record within 3 months.
 - f. Such data curves as temperature and speed can be displayed.
 - g. The data easily transfer through the USB interface.
2. Servo-motor makes speed control precisely and ensures high-speed performance and stability.
3. The temperature of the water bath can be precisely controlled within $\pm 0.2^{\circ}\text{C}$.
4. The plastic molding clamps make it easily to put and take flasks with one hand.

■ Tech. Parameters

Product Name	Water Bath Shaker (Reciprocating)
Model	ZHSY-50WE
Shaking Range	10-180rpm
Shaking Control	±1rpm
Length of reciprocating motion	φ 10mm
Temp. Range	Ambient Temp.~99.9℃
Temp. Accuracy	±0.1℃
Temp. Uniformity	±0.2℃ (at 37℃)
Display	LCD
Parameter Control	P.I.D Microprocessor
Max. Capacity (Stainless steel clamps)	250ml×15 or 500ml×11 or 1000ml×6
Max. Capacity (Plastic cement clamps)	250ml×12 or 500ml×8 or 1000ml×6
Timer Range	0-999.9 hrs.
Platform Size (L×W)	455mm×303mm
Power Source	AC220±10% 50~60Hz
Overall Dimensions (L×W×H)	782mm×430mm×390mm
Weight	44kg
Noise Level	<55dB
Internal Height	271mm

(New)Attached Cell culture equipment

Model: ZGP-9

■ Product Overview

1. Stackable: 1~3 layers can be stacked and combined to provide users with the largest use space with the smallest footprint.
2. Use high-performance motors and conveyor belts to ensure stable and durable operation of the equipment.
3. Large space: Up to 2*2000ml and 1*1000ml culture bottles can be placed on the top layer and the other layers can be filled with 1000ml culture bottles at the same time.
4. Data protection: It has the function of automatic power-off under abnormal conditions, and can be restored after power-off to avoid data loss.
5. 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.
6. 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.



Product Name	Attached Cell culture equipment	
Model	ZGP-9	
Shaking Range	2~50rpm	
Shaking control	±1rpm	
Display	LCD	
Timer Range	0-999.9h	
Size (L×W)	400mm×270mm	
Power Source	AC220±10 %	50~60Hz
Overall Dimensions(L×W×H)	500mm×315mm×410mm	
Weight	30kg	
Noise Level	<55dB	