

ZHICHENG®

Trusted
Manufacturer
of Shaking
Incubators

2018

Catalogue

CE



ZHICHENG® has launched the new shaking incubators to replace the old models. The new products come with plenty of latest technology and features, with a new body and a new name **LABWIT®** that is supposed to change customers' perception of the brand. All our products are rigorously tested by the independent, third party body DNV for complete safety.

Solutions For

- *Cell Cultures*
- *Cell Aeration,*
- *Solubility Studies*
- *Metabolism Studies*
- *Bacteriology*

Benchtop
Shaking
Incubators

Economical Range

Small in Size

Big on Performance

LABWIT®

ZWY-103B

ZWY-103D

ZWY-100H

ZWY-200D

ZWY-100D

ZWY-240





You want it all, you want it small.

Designed for cell culturing, cell aeration, solubility studies, particularly for suspension cell cultures, the new benchtop shaking incubators have gotten sleeker, with a new body and a new name that is supposed to change customers' perception of the brand. A cleverly designed, transparent tempered glass hood allows complete visibility to the samples. All the models are equipped with a universal shaking platform as standard. The shaking incubators have adjustable orbital diameters to accommodate various cell culture applications.

Features of benchtop shaking incubators.

- Powerful AC motor ensures consistent and vibration free shaking motion, it's brushless and nearly maintenance free.
- Heavy duty, triple eccentric counterbalance drive mechanism provides long service life, it features adjustable shaking diameter to accommodate various cell culture applications.
- Precise microprocessor PID (Proportional-Integral-Derivative) controller allows easy digital setting on temperature, speed, timer parameters.
- Wide speed range with a soft acceleration/deceleration motion prevents sudden spill of culturing liquids.
- Automatic shutoff of the shaking action when the door is opened, which ensures user safety.
- Automatic shutoff at end of the timer which is adjustable from 1 minute to 500 hours.
- User-friendly sealed LCD control panel displays a menu of functional readouts on speed, temperature and timer values. Non-volatile memory retains parameters during a power interrupt and restarts shaker automatically.
- Alarms programmed to warn of setpoint deviations and to indicate when timer operation is expired.
- An independent safety thermostat protects the instrument in the event of an exceeded temperature.
- Air is uniformly dispersed throughout the chamber by a gentle air circulation fan.
- Mirror-finished stainless steel interior provides excellent durability and an easy-to-clean surface.
- A universal platform that can fit any flask clamps and test tube racks on it.
- Green sticky mats are available upon order which allows flexible use of the culturing vessels to the universal platform.
- Built-in leveling feet allows even installation of the instrument on the lab ground.
- All products are rigorously tested by third-party independent certification body for complete safety.



User-friendly sealed LCD control panel allows easy digital setting of parameters and displays a menu of functional readouts on speed, temperature and timer values.



Powerful AC motor ensures consistent and vibration free shaking motion.



Counterbalance drive mechanism provides long service life, it features adjustable shaking diameter to accommodate various cell culture applications.

Specifications

Model	ZWY-100H	ZWY-103B	ZWY-103D	ZWY-100D
Temperature Range	ambient+5°C to 60°C	ambient+5°C to 60°C	ambient+5°C to 60°C	ambient+5°C to 60°C
Refrigeration	No	No	No	No
Temperature Set Resolution	±0.1°C	±0.1°C	±0.1°C	±0.1°C
Uniformity	±1°C@37°C	±1°C@37°C	±1°C@37°C	±1°C@37°C
Shaking Speed	30~400rpm (±1rpm)	30~400rpm (±1rpm)	30~600rpm (±1rpm)	30~600rpm (±1rpm)
Shaking Throw(mm)	Φ24,32,38,50	Φ0~50	Φ0~50	Φ0~50
Timer	1 minute to 500 hours	1 minute to 500 hours	1 minute to 500 hours	1 minute to 500 hours
Capacity (for standard Erlenmeyer flasks)	50mlx23 or 100mlx23 or 250mlx14 or 500mlx10 or 750mlx7 or 1000mlx5	50mlx14 or 100mlx12 or 250mlx6	50mlx14 or 100mlx12 or 250mlx6	50mlx23 or 100mlx23 or 250mlx14 or 500mlx10 or 750mlx7 or 1000mlx5
Platform Size	340x370mm	280x220 mm	280x220 mm	340x370mm
Volumn	63L	34L	34L	63L
Internal dimension (mm)	445x450x315	360x340x280	360x340x280	445x450x315
Motor Power	540W	280W	280W	540W
Electricity	220-230V 50/60Hz	220-230V 50/60Hz	220-230V 50/60Hz	220-230V 50/60Hz
Weight(Net/Gross)	72/94Kg	31/54Kg	31/54Kg	72/94Kg
Approval	CE, ISO	CE, ISO	CE, ISO	CE, ISO

Models: ZWY-240, ZWY-200D

With Refrigeration



Model	ZWY-240	ZWY-200D
Performance	Heated & Cooled	Heated & Cooled
Temperature Range	4°C to 60°C	4°C to 60°C
Temperature Set Resolution	±0.1°C	±0.1°C
Temperature Uniformity	±1°C@37°C	±1°C@37°C
Shaking Speed	30-400rpm (±1rpm)	30-600rpm (±1rpm)
Shaking Diameter (mm)	Φ0~50	Φ0~50
Timer	1 minute to 500 hours	1 minute to 500 hours
Capacity (for standard Erlenmeyer flasks)	50mlx28 or 100mlx28 250mlx17 or 500mlx10 750mlx9 or 1000mlx7	50mlx28 or 100mlx28 250mlx17 or 500mlx10 750mlx9 or 1000mlx7
Platform Size	400x370 mm	400x370 mm
Volumn	69L	69L
Motor Power	700W	700W
Electricity	220-230V 50/60Hz	220-230V 50/60Hz
Weight (Net/Gross)	100/132Kg	100/132Kg
Approval	CE, ISO	CE, ISO

Benchtop Shakers

Models: ZWY-304, ZWF-334, ZWQ-344



Item	Benchtop Shaker
Model	ZWY-304
Control	P.I.D microprocessor
Shaking Speed	30-300 rpm (± 1 rpm)
Shaking Motion	Orbital
Timer	0-500 hours
Setting	Digital
Display	LCD
Maximum Capacity	7.5Kg
Platform Size	330x350 mm
Exterior Dimension	400x350x235 mm
Voltage	AC 220V 50/60Hz
Power	25W
Weight (Net/Gross)	25.2/43Kg
Accessory included	Rubber Roller Platform



ZWF-334



ZWQ-344

Item	Benchtop Shaker	Benchtop Shaker
Model	ZWF-334	ZWQ-344
Control	P.I.D microprocessor	P.I.D microprocessor
Shaking Speed	30-300 rpm (± 1 rpm)	20-80 rpm (± 1 rpm)
Shaking Motion	Reciprocating	Tilting (Rocking)
Timer	0-500 hours	0-500 hours
Setting	Digital	Digital
Display	LCD	LCD
Non-volatile memory	Yes	Yes
Capacity	50mlx4 100mlx4 250mlx3	4kg
Platform Size	330x350 mm	330x350 mm
Exterior Dimension	400x350x150 mm	400x350x160 mm
Voltage	220V 50/60Hz	220V 50/60Hz
Power	25W	25W
Included accessory	1 platform with flask clamps	1 platform with rubber mat and spring coils.
Weight (Net/Gross)	13.2/29Kg	9.5/25Kg
Approval	CE, ISO	CE, ISO

Shaking Water Bath

Models: ZWF-110X30 (30L)
ZWF-110X50 (50L)



Designed for a wide variety of applications such as hybridization, fermentation, bacterial culturing, enzymatic experiments, solubility or metabolism studies, warming of reagents, melting of substrates, thawing of blood plasma, etc. The ZWF-110X Reciprocating Water Bath Shaker combines unmatched reliability and durability. It delivers superior temperature control and uniformity with a smooth shaking motion. Bath temperature is controlled to an accuracy of $\pm 0.1^{\circ}\text{C}$ by a P.I.D microprocessor controller for optimum, reproducible bath conditions. Dual thermostats provide optimum protection for your sample and water bath itself. The steeply gabled stainless steel cover and inward-sloped tank rim allow condensate to drain neatly back into the bath, preventing condensate from dripping onto samples.

Features:

- Powerful drive mechanism provides uniform agitation and enables continuous 24-hour operation.
- Low noise and vibration free shaking motion provides a user-friendly work environment in your lab.
- Water bath temperature is monitored and controlled over the entire range with a resolution of $\pm 0.1^{\circ}\text{C}$ by a P.I.D microprocessor controller.
- Large LCD display control panel helps easy digital setting on temperature, timer, speed values.
- Non-volatile memory retains previously setting parameters during a power failure and restarts unit automatically after the power is restored.
- Heat loss and evaporation is minimized with the use of stainless steel gabled cover.
- Independent Overtemperature Thermostat provides complete safety to your samples.
- Mirror-finished stainless steel interior allows easy cleaning and decontamination to the tank surface.

Specifications:

Model	ZWF-110X30	ZWF-110X50
Volume	30L	50L
Shaking Mode	Reciprocating	Reciprocating
Motor Power	1600W	2300W
Shaking Speed	20-180 rpm (± 1 rpm)	20-180 rpm (± 1 rpm)
Shaking Throw	16mm	16mm
Temperature Range	Ambient $+5^{\circ}\text{C}$ to 99.9°C	Ambient $+5^{\circ}\text{C}$ to 99.9°C
Temperature Set Resolution	$\pm 0.1^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$
Temperature Uniformity	$\pm 0.2^{\circ}\text{C}@37^{\circ}\text{C}$, 100rpm/minute	$\pm 0.2^{\circ}\text{C}@37^{\circ}\text{C}$, 100rpm/minute
Setting	Digital	Digital
Display	LCD	LCD
Control	P.I.D Microprocessor	P.I.D Microprocessor
Timer	1 minute to 500 hours	1 minute to 500 hours
Tank Size	508x300x198 mm	568x360x250 mm
Platform Size	434x256 mm	494x316 mm
Standard Capacity	250mlx11	250mlx15
Max. Capacity	250mlx11 500mlx6 50mlx15 100mlx15	250mlx15 500mlx11 100mlx24 1000mlx6
Weight (net/gross)	18Kg /24Kg	23Kg /30Kg
External Dimension	732x348x342mm	792x408x392mm
Electricity	AC220V 50/60Hz	AC220V 50/60Hz
Certification	ISO, CE	ISO, CE

The Legend Ones

Floor Model Shaking Incubators

ZWY-211B, ZWY-211C, ZWF-211
with Refrigeration

ZWY-111B, ZWY-111C, ZWF-111
without Refrigeration



The floor model shaking incubators provide large capacity loading for flasks up to 5 liters. The ruggedly built drive mechanism guarantees smooth and quiet shaking without vibration. A comfortable height allows easy access to setpoints control in terms of speed, temperature and timer. An efficient air circulation system disperses air uniformly throughout the entire chamber, which ensures that all samples are exposed to the optimum temperature regardless of sample locations.

Features:

- A PID microprocessor controller maintains precise temperature and shaking speed control.
- User-friendly sealed LCD control panel allows easy digital setting on timer, speed and temperature values.
- Automatic shutoff at end of study via electronic timer, adjustable from 1 minute to 500 hours.
- Automatic shutoff of shaker when door is opened which ensures user safety.
- Non-volatile memory retains parameters during a power interrupt and restarts shaker automatically.
- Alarms programmed to warn of setpoint deviations and to indicate when timer operation is expired.
- Air is uniformly dispersed throughout the entire chamber by an efficient air circulation system.
- Large see-through door window provides complete visibility to the chamber interior and samples.



User-friendly sealed LCD control panel allows easy digital setting on timer, speed and temperature values (above photo).

A universal shaking platform provides large capacity loading for flasks up to 5 liters. (left photo)

Specifications

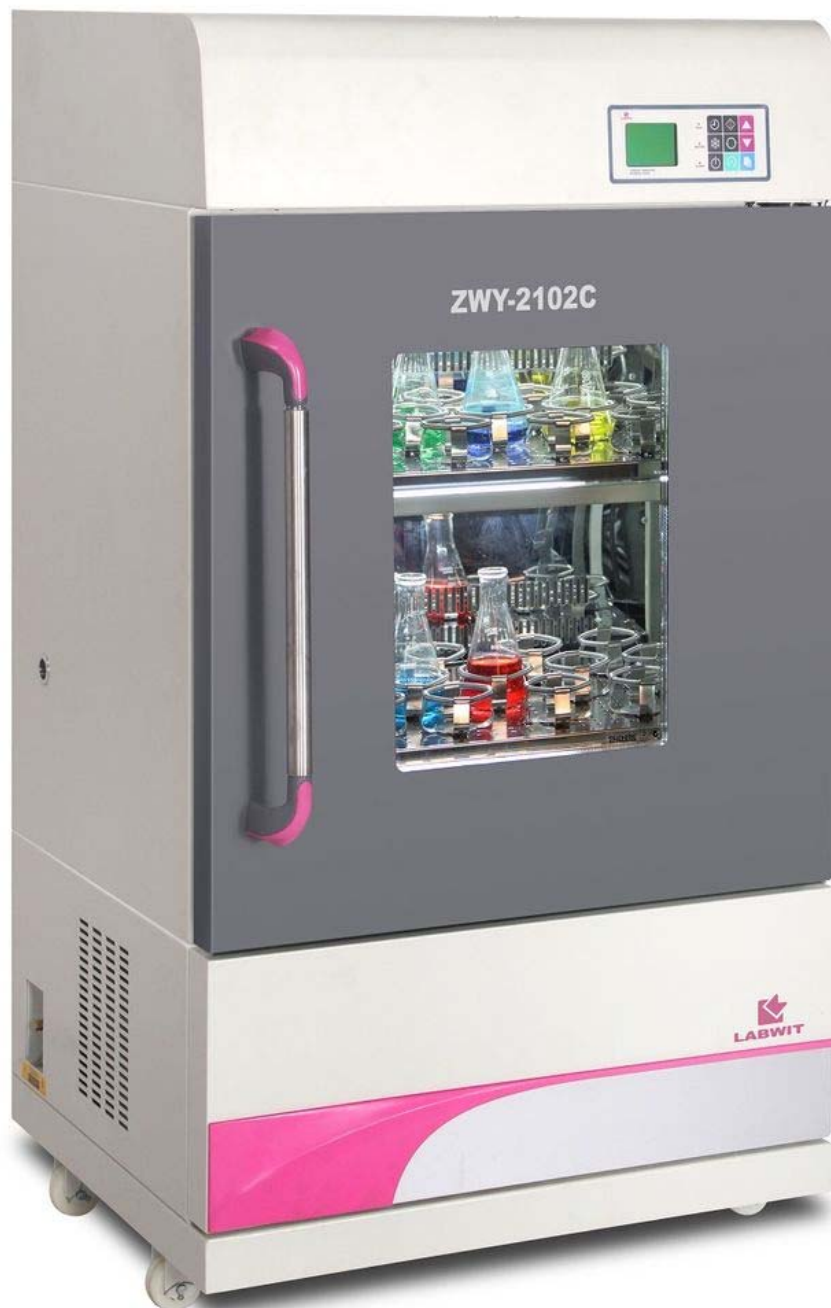
Model	ZWY-211B orbital	ZWY-111B orbital
Performance	Heated and Cooled	Heated Only
Controller	PID Microprocessor	PID Microprocessor
Setting	Digital	Digital
Display	LCD	LCD
Temperature Range	4°C to 60°C	ambient+5°C to 60°C
Temperature Set Resolution	±0.1°C	±0.1°C
Temperature Uniformity	±1°C@37°C	±1°C@37°C
Temperature Distribution	Forced-air Circulation Fan	Forced-air Circulation Fan
Diameter of Orbit	26mm	26mm
Shaking Speed	30-300 rpm (±1rpm)	30-300 rpm (±1rpm)
Capacity	50mlx82 or 100mlx82 250mlx50 or 500mlx37 750mlx28 or 1000mlx22	50mlx82 or 100mlx82 250mlx50 or 500mlx37 750mlx28 or 1000mlx22
Timer	1 minute to 500 hours	1 minute to 500 hours
Platform Size	920x500 mm	920x500 mm
Platform included	1 piece	1 piece
Internal Size	975x565x305mm	975x565x305mm
Volumn	168L	168L
External Dimension	1200x740x800mm	1200x740x800mm
Motor Power	940W	680W
Electrical Requirement	220~230V 50/60Hz	220~230V 50/60Hz
Weight (Net/Gross)	174/214Kg	159/200Kg
Approval	CE, ISO	CE, ISO

Model	ZWF-211 Reciprocating	ZWF-111 Reciprocating
Performance	Heated and Cooled	Heated Only
Controller	PID Microprocessor	PID Microprocessor
Setting	Digital	Digital
Display	LCD	LCD
Temperature Range	4°C to 60°C	ambient+5°C to 60°C
Temperature Set Resolution	±0.1°C	±0.1°C
Temperature Uniformity	±1°C@37°C	±1°C@37°C
Temperature Distribution	Forced-air Circulation Fan	Forced-air Circulation Fan
Shaking Throw	0~50mm	0~50mm
Shaking Speed	30-240 rpm (±1rpm)	30-240 rpm (±1rpm)
Capacity	50mlx82 or 100mlx82 250mlx50 or 500mlx37 750mlx28 or 1000mlx22 2000mlx14 or 3000mlx8 5000mlx6	50mlx82 or 100mlx82 250mlx50 or 500mlx37 750mlx28 or 1000mlx22 2000mlx14 or 3000mlx8 5000mlx6
Timer	1 minute to 500 hours	1 minute to 500 hours
Platform Size	896x530 mm	896x530 mm
Platform included	1 piece	1 piece
Internal Size	975x565x515mm	975x565x515mm
Volumn	284L	284L
External Dimension	1200x740x1070mm	1200x740x1070mm
Motor Power	1380W	1100W
Electrical Requirement	220~230V 50/60Hz	220~230V 50/60Hz
Weight (Net/Gross)	213/252Kg	201/242Kg
Approval	CE, ISO	CE, ISO



Model	ZWY-211C orbital	ZWY-111C orbital
Performance	Heated and Cooled	Heated Only
Controller	PID Microprocessor	PID Microprocessor
Setting	Digital	Digital
Display	LCD	LCD
Temperature Range	4°C to 60°C	ambient+5°C to 60°C
Temperature Set Resolution	±0.1°C	±0.1°C
Temperature Uniformity	±1°C@37°C	±1°C@37°C
Temperature Distribution	Forced-air Circulation Fan	Forced-air Circulation Fan
Diameter of Orbit	26mm	26mm
Shaking Speed	30-300 rpm (±1rpm)	30-300 rpm (±1rpm)
Capacity	50mlx82 or 100mlx82 250mlx50 or 500mlx37 750mlx28 or 1000mlx22 2000mlx14 or 3000mlx8 5000mlx6	50mlx82 or 100mlx82 250mlx50 or 500mlx37 750mlx28 or 1000mlx22 2000mlx14 or 3000mlx8 5000mlx6
Timer	1 minute to 500 hours	1 minute to 500 hours
Platform Size	920x500 mm	920x500 mm
Platform included	1 piece	1 piece
Internal Size	975x565x465mm	975x565x465mm
Volumn	256L	256L
External Dimension	1200x740x1000mm	1200x740x1000mm
Motor Power	1120W	830W
Electrical Requirement	220~230V 50/60Hz	220~230V 50/60Hz
Weight (Net/Gross)	183/228Kg	168/213Kg
Approval	CE, ISO	CE, ISO

Double Layers Incubator Shakers
ZWY-2102C with Refrigeration
ZWY-1102C without Refrigeration



Specifications:

Model	ZWY-2102C	ZWY-1102C
Performance	Heated & Cooled	Heated only
Controller	PID Microprocessor	PID Microprocessor
Setting/Display	Digital/LCD	Digital/LCD
Temperature Range	4°C to 60°C	ambient+5°C to 60°C
Temperature Set Resolution	±0.1°C	±0.1°C
Temperature Uniformity	±1°C@37°C	±1°C@37°C
Shaking Motion	Orbital	Orbital
Diameter of Orbit	26mm	26mm
Shaking Speed	30-300 rpm (±1rpm)	30-300 rpm (±1rpm)
Timer	1 minute to 500 hours	1 minute to 500 hours
Capacity for Erlenmeyer flasks	50mlx56 or 100mlx56 250mlx36 or 500mlx24 750mlx20	50mlx56 or 100mlx56 250mlx36 or 500mlx24 750mlx20
Platform Size	496x350 mm	496x350 mm
Platform included	2	2
Illumination light	Yes	Yes
Internal Dimension	615x440x640mm	615x440x640mm
Volumn	173L	173L
Exterior Dimension	720x630x1275 mm	720x630x1275 mm
Motor Power	950W	600W
Electrical Requirement	220~230V 50/60Hz	220~230V 50/60Hz
Net Weight	165Kg	150Kg
Gross Weight	190Kg	175Kg
Approval	CE, ISO	CE, ISO

Model	ZWY-2112B	ZWY-1112B
Performance	Heated & Cooled	Heated only
Controller	PID Microprocessor	PID Microprocessor
Setting/Display	Digital/LCD	Digital/LCD
Temperature Range	4°C to 60°C	ambient+5°C to 60°C
Temperature Set Resolution	±0.1°C	±0.1°C
Temperature Uniformity	±1°C@37°C	±1°C@37°C
Diameter of Orbit	35mm	35mm
Shaking Speed	30-300 rpm(±1 rpm)	30-300 rpm(±1 rpm)
Timer	0-500 hours	0-500 hours
Capacity for Erlenmeyer flasks	50mlx178 or 100mlx178 250mlx132 or 500mlx88 750mlx64 or 1000mlx52	50mlx178 or 100mlx178 250mlx132 or 500mlx88 750mlx64 or 1000mlx52
Platform Size	970x560mm	970x560mm
Platform included	2	2
Door Numbers	2	2
Internal Dimension	1095x625x850mm	1095x625x850mm
Volumn	582L	582L
Exterior Dimension	1200x820x1600 mm	1200x820x1600 mm
Motor Power	1420W	1150W
Voltage	220~230V 50/60Hz	220~230V 50/60Hz
Weight (Net/Gross)	456/536Kg	425/505Kg
Approval	ISO, CE	ISO, CE

The Ultimate Pros

Model: ZWY-2112B



**Double Doors, Double Layer Platforms,
Heavy Duty, Highest Capacity.**

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Thank you very much for your interest and support.