LABWIT®

ADVANCED SOLUTIONS

FOR SCIENTIFIC DISCOVERY

Product Catalogue

Fourth Version

As a fast growing environmental controlled lab equipment supplier, LABWIT is committed to providing innovative and optimum solutions with quality laboratory equipment to the life science and industrial divisions. We strive incessantly for excellence while catering unique needs of customers, it is this dedication to innovation that differentiate us from the competitions.

New Product:

To continue our success in shaking incubator range, we are proud to introduce the premium compact stackable Shaking incubator, one of the final pieces of the puzzles that we have missed for many years. It features all the classic functions, such as shaking, temperature and LED photosynthetic lighting controls, ideal for microbiology, plant cell, cell biology, cell culture, tissue culture, biochemistry, environmental engineering, soil testing field temperature range from 4°C to 60°C. The unit offers full flexibility, and can be fitted almost everywhere in the lab. No matter benchtop, underbench, or even stacking up, there is always space for it.

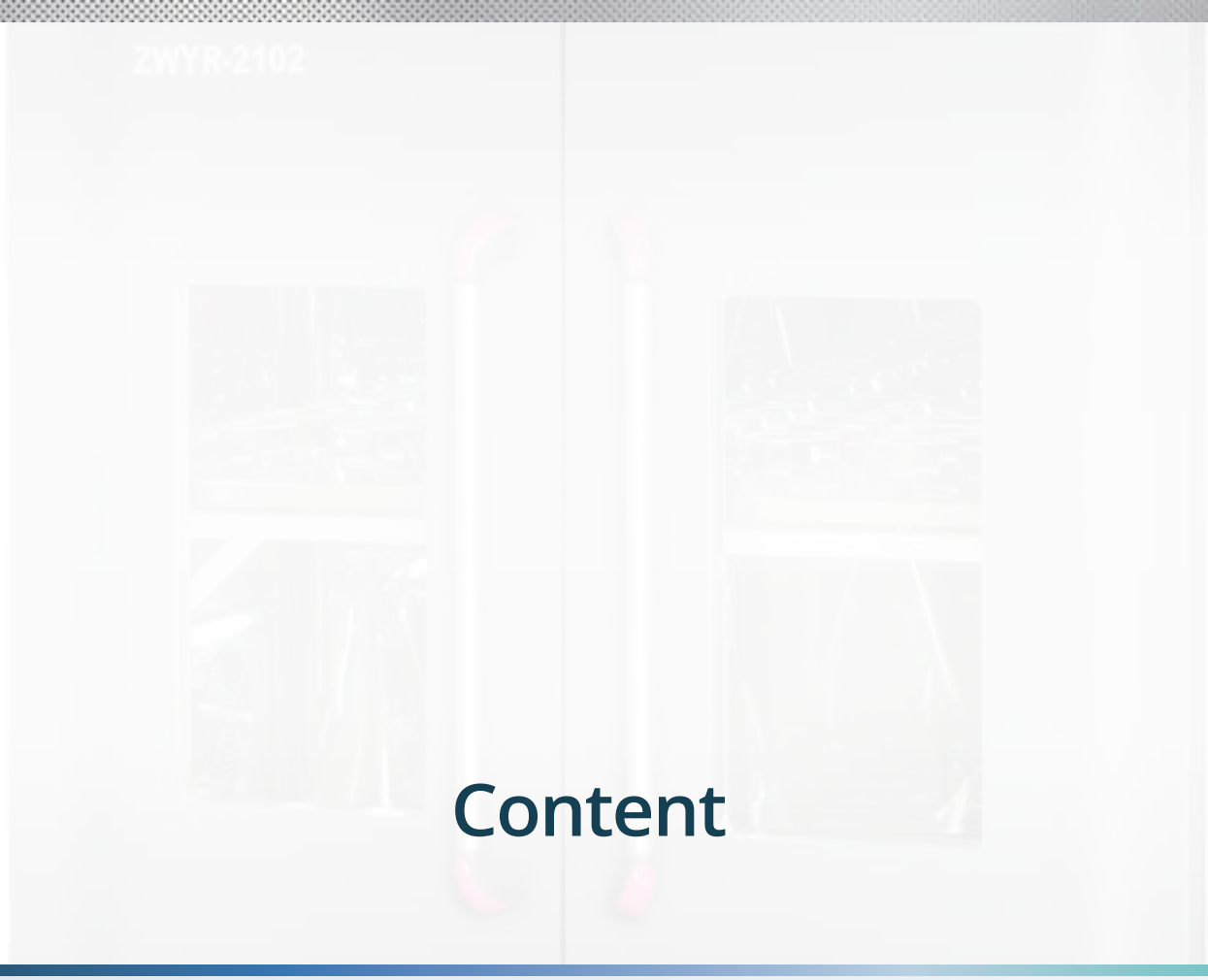
New Features:

- Shaking incubators (benchtop models excluded) are now equipped with UV light as standard, providing proactive contamination controls when needed.

- For ZXSD series BOD cooling incubators, the circulating fan is now 3 steps adjustable, offering more precisely controlled environment for incubations, without concerns of media or samples drying out.
All economic shaking incubators & economic BOD incubators are now equipped with auto-defrosting system, ensuring long-terms non-frosting operation with low temperature setpoints.

- All LABWIT products are designed, manufactured and marketed in an ISO9001:2008 environment. Every step from new product development to after sales service follows documented and traceable procedures. The result is a quality focused culture committed to total customer satisfaction. All electrical products conform to the latest safety directives including CE requirements..

- All the products featured in this catalog are available through a worldwide network of distributors. Technical advice and guidance on product selection is available from our qualified distribution partners. Our aim is to provide the very best laboratory equipment for you, for everyone, for better results.



Content

SHAKING INCUBATORS

As the major product range, LABWIT shaking incubators are renowned as innovative, intuitive and reliable equipment amongst its competition. All shaking incubators have the state-of-art microprocessor detection, setting and PID control of both temperature and shaking speed, together with the extra CO2 and humidification active controlling options on Ultimate-cell range, LABWIT is now able to offer complete solutions for all lab shaking incubation needs. These units can be categorized into 4 ranges, from benchtop, horizontal, double layer to stackable models.
Each model allows for maximum:

Accuracy

The set temperature is accurately reflected in the actual temperature inside the incubator. If it deviates from the setpoint, the energy to the heater is precisely regulated to adjust the actual temperature back to the setpoint without overshoot.

Uniformity

The temperature uniformity is achieved by 3D forced air circulation. A fan continuously moves the air across the incubator in order to create homogeneous conditions.

Reliability

Shaking incubators are generally left on for long periods of time. The microprocessor ensures the actual temperature remains stable, even when ambient temperature varies. The brushless induction motor ensures stable shaking movement for the long-term operation, free of maintenance.

Features		Premium Range	Economic Range
Micro-processor with PID Temperature control		●	●
Self-diagnosed Alarming System		●	●
Display Panel	—LCD Screen with Keypad		●
	—TFT Touch Screen	●	
Cooling System	—Advanced Non-frost Control	●	●
Temperature Control Mode	—Fixed Value Control	●	●
	—Programmable Control	●	
Built-in Printer		●	○
Heating Only Models			●
Humidity Control		○	
Multigas Control		○	

● Standard

○ Optional

ZWYC-290A

ZWYC-290A
Double Stack

ULTIMATE-CELL STACKABLE
Shaking Incubator

Thanks to the ongoing development of both technology and functionality requirements from our industry, LABWIT has been thriving to innovate and is now able to offer our latest and comprehensive solution for microbial, mammalian and plant cell incubation needs, the inspiring ZWYC-290A Ultimate-cell Stackable Shaking Incubator.

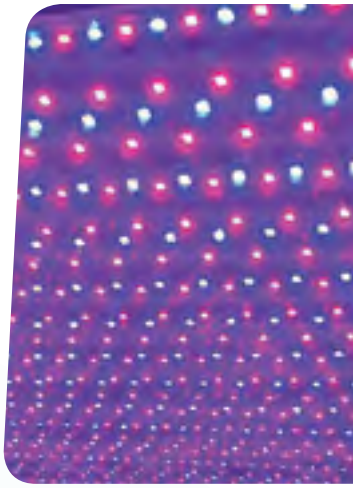
The spaces in the labs are spacious and expensive, The ZWYC-290A can be stacked up to 2-3 units high to offer multiplied incubation capacity on a single unit footprint. Stacking also can be easily managed at a later time. Each compartment unit operates independently with cooling as standard, and can be upgraded with modular controlling options of, active humidity control, CO_2 concentration controls.

Intuitive Touch Screen Panel

Integrated: Comprehensive information available at finger-tips. The screen panel clearly indicates all basic operational parameters, such as temperature, speed and timer; as well as the optional parameters, for example, humidity level, and CO2 concentration just in one page.

User friendly: Graphic user interface, easy to operate with icons and prompts, which makes it easy change the operating parameters settings, even those multi set points under programmable mode intuitively.

Intelligent: Self diagnostic alarm system monitors all functions and parameters and prompts in case of errors, which are clearly indicated in the touch screen panel.



Direct Beltless Driving System

Innovated direct beltless driving system ensures smooth and reliable orbital shaking movement with a speed between 30-300rpm, even when there is imbalanced or maximum loading on the shaking platform. To achieve the maximized flexibility for all applications requiring optimized oxygen transfer rate, the shaking diameter can be steplessly adjusted from 1-50mm. Long life brushless motor provides consistent and no vibration shaking motion, maintenance free and low heat emissions.

Direct Injection Humidification System

Humidity is important for long term cell cultivations with flasks as well as when micro plates are used. Active controlled humidification system can effectively reduce evaporation during cultivation, hence, preventing the samples from drying out.

The humidification system of Ultimate-cell features 140°C steam direct injection into the chamber and active PID control with world class humidity sensor for utmost accuracy of measurement.

Extended Chamber Capacity

The chamber is one of the biggest of its range and can take up to 32 pieces of 500ml Erlenmeyer flasks while the plain shaking tray (#P6023) and sticky mats are used.

Moreover, the traditional predrilled shaking tray (#P6022) with dedicated holes for fixing flask clamps are also available. With extended effective inner height as 425 mm, the unit chamber is always compatible with 5000ml flasks even when the photosynthetic LED lighting is equipped.

The maximum capacity for various Erlenmeyer flask clamps is shown in the table below.

Excellent Temperature Controlling System

New solid polyurethane casing optimizes the insulation of the chamber, Together with the sound air circulation system and PID controller ensures evenly distributed air flow as well as accurate and uniformed temperature control across the chamber.

Sound cooling system with CFC free refrigerant and automatic defrosting system ensures long term stable operation at as low as 4°C, or 20°C lower than ambient.
Microprocessor controller provides unmatched versatility by enabling users to create personalized program (with up to 9 segments, with cycles) to automate changes to function parameters.

Advanced CO_2 controlling with Infrared (IR) sensor

The effective controlling of CO_2 concentration is essential for cultivations of mammalian cells and algae. The CO_2 concentration is well maintained between 0-20% to keep the pH value of the solution media at healthy level.

LABWIT incorporates a world class single beam, dual wavelength IR CO_2 sensor, which guarantees superior performance and accuracy to the situations where temperature and humidity fluctuate rapidly, such as when the door is opened frequently.

Photosynthetic LED Lighting

Ultimate-cell can be equipped with LED lighting panel for the cultivation of those phototrophic organisms, such as plant culture, algae, etc. Light panels available in warm white and blue & red, with light intensity up to 400 µmol/(m2*s). Even light distributions over the shaking tray. Easy programmable for day and night simulations. With height of 10mm, the light panel minimizes the impact on the usable internal height above the shaking tray.

Flask (ml)	P8021 50ml	P8022 100ml	P8023 250ml	P8024 500ml	P8026 1000ml	P8027 2000ml	P8028 3000ml	P8029 5000ml	P8012 96 Well Plate	P8010 Tube Rack
P6023 Tray	98	72	50	32	18	11	8	6	24	8
P6022 Tray	91	70	40	26	15	11	8	5	15	8

Contamination Control

UV Sterilization

The UV sterilization system is isolated from the samples, sterilizes chamber air in the back chamber wall to maintain contamination-free conditions within the chamber.

Easy Cleaning Chamber

The chamber bottom is designed to catch and drain excess water and liquid spills in case of flask breaks through an outlet on the side.

Password Door Lock System

Password screen prevents unauthorized changes of operational parameters as well as access to the valuable samples during long terms cultivation, enhancing the safety and reliability of the applications.

Data Logging

The units are equipped with USB Port as standard, so that operators could save all the operational parameters to the portable USB drive. The controller can save up to 5 days of data internally when USB drive is not connected.
Option: RS-485 interface.

Complete Protection For Cell Culture

This model has been designed to include many features for the comprehensive of the application and the sample safety, hence providing you with added peace of mind.

- Automatic stop shaking motion and heating when the door is opened.
- Sensor failure alarm.
- Over-current and leakage protection.
- Non-volatile memory guarantees data integrity in the event of power interruption.
- Audible and visual alarm when parameter deviates from the set point.
- Independent temperature limit protection against over temperature.

Machine

Outside (WxDxH)	1320x870x590mm (Side Cooling)*
Inside (WxDxH)	940x570x480mm
Volume	257L
Net/Gross Weight (with Cooling)	200kg/275kg
Control Panel	TFT Touch Screen
Illumination	Halogen
Operation Menu in	English
Ambient Temperature	5-35°C
UV Light	≥400 mW/m²
Noise Level	<70 dB (1m above floor)
Power	1150W
Electricity	AC 220-240 Volt, 50/60Hz

Temperature

Control Mode	Fixed Value & Program
Temperature Range	Ambient-15 to 60°C (Min. 4°C) #
Temperature Accuracy	0.1°C
Temperature Uniformity	±0.5°C @37°C
Principle of Sensor	PT100
Air Circulation	360m³/Hour
Recovery (@37°C)	10 mins (30 Seconds Door Opening)

Humidity

Humidity Range	40-80%RH, at 25-55°C
Humidity Accuracy	0.1%RH
Humidity Uniformity	±3%RH
Principle of Sensor	Capacitive
System	Direct Steam Injection
Water Heater	150W
Recovery (@70%RH)	10 mins (30 Seconds Door Opening)

* Or without side cooling compartment, 1080*870*590mm
# Min. Operating Temperature: 15°C when Photosynthetic Lighting option is applied.

Shaking Unit

Drive Type	Direct Beltless Driving System
Tray Size	850x450mm
Maximum Load	25kg
Speed Range	30-300 rpm
Speed Accuracy	±1 rpm
Timer	0-9999 mins
Shaking Mode	Orbital
Shaking Diameter	1-50mm Stepless Adjustment

CO_2

Principle of Sensor	Infared, NDIR
CO2 Range	0-20%
CO2 Accuracy	±0.15 @ 5.0%
Temperature Range	25-55°C
CO2 Recovery (@5%)	5 mins (30 Seconds Door Opening)

Photosynthetic Lighting

Part Number	P5011RB	P5011W
Light Type	LED, 50% Red, 50% Blue	LED, 100% Warm White
Spectrum	Red: 640-660nm, Blue: 430-450nm	4500k:400-700nm
Light Intensity	Up to 700 µmol/(m2*s)	Up to 400 µmol/(m2*s)
Control	Yes, Individually, from 0-100% output	Yes, from 0-100% output
Control Mode	Fixed Value & Programmable	
Dimensions (WxDxH)	890x500x10mm	
Power	300W	

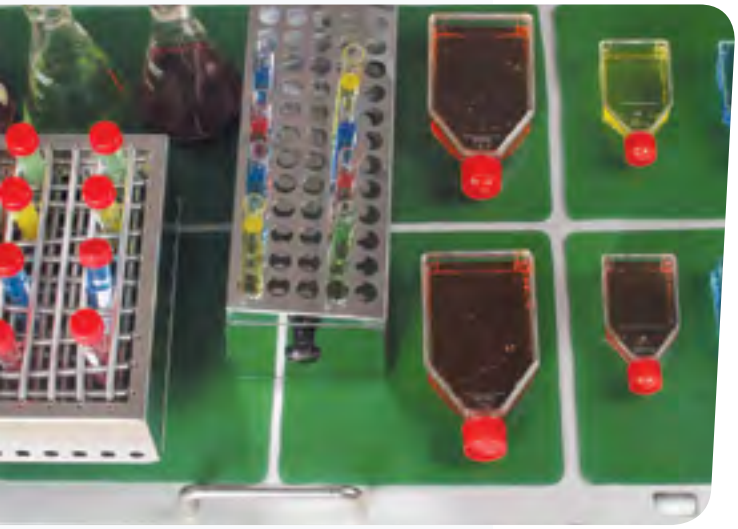
Other Features

- Internal chamber equipped with lighting ensure complete visibility.
- Fully insulated chamber and door with double folded glass window optimize the energy efficiency
- 2pcs of Φ50mm access ports
- One piece of predrilled shaking tray included as standard, clamps excluded.
- Base Options: 35cm cabinet base stand; 50cm Frame base stand

Order Information

ZWYC-290A	ZWYC-290A, 257Lx1, Ultimate-Cell Stackable Shaking Incubator, 4-60, 30-300rpm
P5011W	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, ZWYC-290A, White
P5011RB	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, ZWYC-290A, Red & Blue
P5012-35	Cabinet Base Stand for ZWYC-290A, H35cm
P5012-50	Frame Base Stand for ZWYC-290A, H50cm
P5013	Direct Steam Humidification Kit for ZWYC-290A
P5014	IR CO2 Kit for ZWYC-290A
P5016	RS-485 Interface
P6022	Tray for ZWYC-290A, Predrilled
P6023	Tray for ZWYC-290A, Plain
P7024	Universal Spring Pallet for ZWYC-290A
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8017	Sticky Mat, 20 x 20cm
P8021	O Clamp, S/S, for 50ml Flask, with Spring Retainer
P8022	O Clamp, S/S, for 100ml Flask, with Spring Retainer
P8023	O Clamp, S/S, for 250ml Flask, with Spring Retainer
P8024	O Clamp, S/S, for 500ml Flask, with Spring Retainer
P8025	O Clamp, S/S, for 750ml Flask, with Spring Retainer
P8026	O Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8027	O Clamp, S/S, for 2000ml Flask, with Spring Retainer
P8028	O Clamp, S/S, for 3000ml Flask, with Spring Retainer
P8029	O Clamp, S/S, for 5000ml Flask, with Spring Retainer
P8032	Clamp for 96 Well Plate, S/S

※ S/S: Stainless Stell



SHAKING INCUBATORS

INTRODUCTION OF PREMIUM RANGE

Following the success of the economic shaking incubator range, the upgraded premium shaking incubator range are introduced to offer the excellent basic functions same as the economic range, but with a bunch of advanced upgraded features to enhance the user experience as well as the functionality of this one of the most common type of equipment in modern labs.

- An intuitive LCD TFT touch screen panel achieves easy operation and clear display.
- Sophisticated cooling system ensures long term non-frost operation at low temperature (4°C).
- Under the new programmable control mode, the unit can now be programmed to operate according to personalized "ramp and soak" cycles of both temperature and shaking speed.
- Built-in printer is included as standard to ensure continuous monitor over the operating parameters.
- UV light is equipped as standard, providing proactive contamination controls when needed.

ADJ. SHAKING DIAMETER

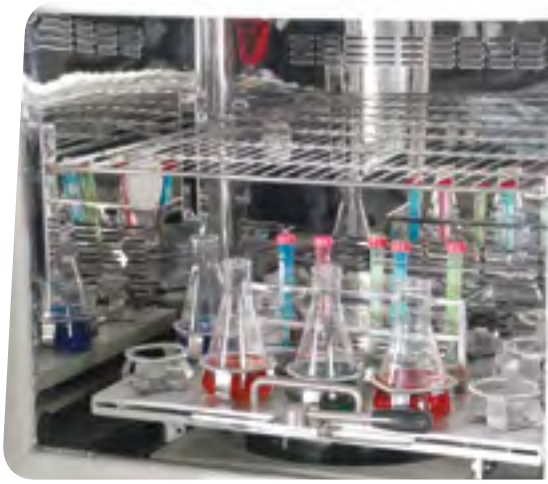
TCS TEMP. CONTROL SYSTEM

5L

TOUCH SCREEN DISPLAY

LED PHOTOSYNTHETIC

UV STERILIZATION



ZWYR-293

PREMIUM COMPACT STACKABLE
Shaking Incubator

As a new member of the premium stackable shaking incubator range, the ZWYR-293 features compact design with smaller footprints, and maximized comfort, reliability and versatility for safe handling and incubation of any cultures or products. It's ideal for any shaking application requiring controlled temperature for microbiology, cell biology, cell culture, tissue culture, biochemistry, environmental engineering, soil testing field temperature range from 4°C to 60°C.

Maximized Capacity with Minimized Footprint

Ideal for benchtop and under-bench, but still up to two ZWYR-293 can be stacked for maximized shaking capacity with minimized floor space. Each unit runs independently. There is no special tools or kits necessary for stacking operation.

Intuitive Operation with Smart Controller

5.6" LCD 640x480 touch screen panel clearly indicates all parameters, and alarm prompts, in one page display and enables all complicated program settings intuitively just with finger tips.

Direct Beltless Driving System

Direct beltless driving system together with brushless DC motor provides quiet and vibration free shaking motion, allows extended speed ranges from 30 to 300 RPM, ±1 RPM, even when unit is operating at top speed with maximum workload.

Stepless Adjustable Shaking Diameter

The shaking diameter can be changed from 1-30mm for optimum oxygenation and nutrient mixing and agitation in from small to large flasks. Larger shaking diameter up to 50mm available upon request.

Extended Chamber Capacity

The predrilled shaking tray (500x420mm) is included as standard accessory, taking up to 9 pcs of 1L Erlenmeyer flasks. One piece of static shelf with adjustable positions (95-195mm from ceiling, 5 levels) included as standard, providing extra flexibility for static incubation.
Plain shaking tray is also available as option for use together with stick mats (Max. 4pcs).
With internal height above the shaking tray of 415mm to the ceiling, the unit is compatible with 5L flasks even when the photosynthetic LED lighting panel is installed.

	P8021 50ml	P8022 100ml	P8023 250ml	P8024 500ml	P8026 1000ml	P8027 2000ml	P8028 3000ml	P8029 5000ml	P8012 96 Well Plate	P8010 Tube Rack
P6029Tray	53	42	23	14	9	6	4	2	12	4
P6028Tray	33	33	23	14	9	6	4	2	12	4

Easy Cleaning Chamber and Contamination Control

▸ The chamber is made of quality stainless steel with coved corners which minimizes the unnecessary chamber surfaces where contamination can hide.
▸ The chamber bottom is designed to catch and drain excess water and liquid spills in case of any breakages through the outlet on the side.
▸ The UV sterilization system is isolated from the samples, sterilizes chamber air in the back chamber wall to maintain contamination-free conditions within the chamber even when chamber is loaded.

Photosynthetic LED Lighting

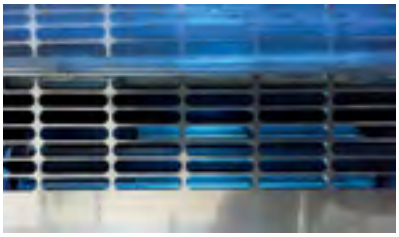
The photosynthetic LED lighting panel can be equipped for the cultivation of those phototrophic organisms, such as plant culture, algae, etc. Light panels available in warm white and blue & red, with light intensity up to 220 μmol/(m2*s). Even light distributions over the shaking tray. Easy programmable for day and night simulations. With height of 10mm, the light panel minimizes the impact on the usable internal height above the shaking tray.

Complete Protection For Cell Culture

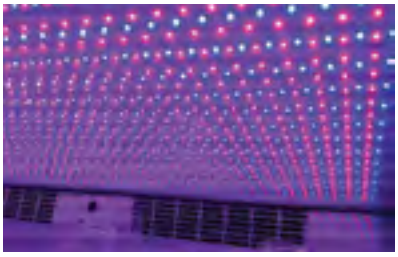
This model has been designed to include many features for the comprehensive of the application and the sample safety, hence providing you with added peace of mind.
▸ Key lock prevents unauthorized access to the valuable samples during cultivation.
▸ Automatic stop shaking motion, heating and cooling control when the door is opened.
▸ Sensor failure alarm.
▸ Over-current and leakage protection.
▸ Non-volatile memory guarantees data integrity in the event of power interruption.
▸ Audible and visual alarm when parameter deviates from the set point.

Data Logging

The units are equipped with USB Port as standard, so that operators could save all the operational parameters to the portable USB drive. The controller can save up to 5 days of data internally when USB drive is not connected.
Option: RS-485 interface, Built-in printer, TCP/IP interface.



UV Light



Photosynthetic Lighting

Other Features

▸ Internal chamber equipped with lighting ensure complete visibility.
▸ Fully insulated chamber and door with double folded glass window optimize the energy efficiency
▸ Φ50mm access port
▸ One piece of predrilled shaking tray included as standard, clamps excluded.

Specifications	
Machine	
Outside (WxDxH)	840 x 764 x 625mm
Inside (WxDxH)	570 x 505 x 418mm
Volume	120L
Net / Gross Weight	120kg/165kg
Control Panel	TFT Touch Screen
Illumination	LED
Language	English
Ambient Temperature(°C)	5-35°C
UV Light	≥400 mW/m2
Noise Level	<55 dB (1m above floor)
Power	765W
Electricity	AC 220-240 Volt, 50/60Hz
Data logging	USB port
Static Shelf	Standard, 1 piece
Base Stand	Standard: H 20cm Options: H 35cm or H 50cm
Key Lock	Yes, standard

Shaking Unit	
Drive Type	P.I.D Microprocessor
Tray Size (WxD)	Fix Value or Program (up to 9 Segments)
Maximum Load	15kg
Speed Range	30-300 rpm
Speed Accuracy	±1 rpm
Timer	0-9999 mins
Shaking Mode	Orbital
Shaking Diameter	1-30mm Stepless Adjustment

Temperature	
Control Mode	Fixed Value & Program
Temperature Range (°C)	Ambient-15 to 60°C (Min. 4°C)#
Temperature Accuracy (°C)	0.1°C
Temperature Uniformity (°C)	±0.5°C @37°C
Principle of Sensor	PT100
Air Circulation	360m3/Hour
Recovery (@37°C)	8 mins (30 Seconds Door Opening)

Photosynthetic Lighting		
Part NO.	P5031RB	P5031W
Light Type	LED, 50% Red, 50% Blue	LED, 100% Warm White
Spectrum	Red: 640-660nm, Blue: 430-450nm	4500k:400-700nm
Light Intensity	Up to 350 μmol/(m2*s)	Up to 220 μmol/(m2*s)
Control	Yes, Individually, from 0-100% output	Yes, from 0-100% output
Power	120W	60W
Control Mode	Fixed Value & Programmable	
Dimensions (WxDxH)	550x430x10mm	
	# Min. 15°C when Photosynthetic Lighting option is applied.	

Order Information

Part Number	Description
ZWYR-293	ZWYR-293, 120L, Premium Compact Shaking Incubator, 4-60, 30-300rpm
P5031RB	LED Lighting Panel and Control Kit, Red & Blue, For ZWYR-293
P5031W	LED Lighting Panel and Contr ol Kit , Warm White , For ZWYR-293
P5032-35	Cabinet Base Stand for ZWYR-293, 840 x 710 x 350mm
P5032-50	Frame Base Stand for ZWYR-293, 840 x 710 x 500mm
P6028	Tray for ZWYR-293, Predrilled
P6029	Tray for ZWYR-293, Plain
P7027	Universal Spring Pallet for ZWYR-293
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8032	O Clamp for 96 Well Plate, S/S
P8017	Sticky Mat, 20 x 20cm

Part Number	Description
P8021	O Clamp, S/S, for 50ml Flask, with Spring Retainer
P8022	O Clamp, S/S, for 100ml Flask, with Spring Retainer
P8023	O Clamp, S/S, for 250ml Flask, with Spring Retainer
P8024	O Clamp, S/S, for 500ml Flask, with Spring Retainer
P8025	O Clamp, S/S, for 750ml Flask, with Spring Retainer
P8026	O Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8027	O Clamp, S/S, for 2000ml Flask, with Spring Retainer
P8028	O Clamp, S/S, for 3000ml Flask, with Spring Retainer
P8029	O Clamp, S/S, for 5000ml Flask, with Spring Retainer
P4003	Built-in Printer
P5016	RS-485 Interface
P5033	TCP/IP interface

ADJ. SHAKING DIAMETER

TEMP. CONTROL SYSTEM

PHOTOSYNTHETIC

TOUCH SCREEN DISPLAY

PRINTER

STERILIZATION

ZWYR-D2402

ZWYR-D2401
with P5010-30

ZWYR-D2401
with P5010-50

ZWYR-D2403
with Upward Door Opening

PREMIUM STACKABLE
Shaking Incubators

This ZWYR-D series shaking incubators can be stacked up to three units high, providing laboratory professionals tripled culture capacity, while still only occupying the same "footprint" of a single shaker. All models feature an insulated, fold-down door with double-layer glass window for high visibility. On all refrigerating models, microprocessor controller provides unmatched versatility by enable users to create personalized program (with up to 9 segments, with cycling) to automate changes to function parameters.

▸ Stackable up to three units for maximum space savings.

▸ 5.6" LCD 640x480 touch screen panel clearly indicates all parameters in one page display and enables all complicated program settings intuitively just with finger tips.

▸ Wide-view fold-down door with door handle, and ergonomic sliding-out shaking platform provide convenient access to your experiment products. Fold-up door option (#P5017) available for ZWYR-D2403 for easy loading on the top unit.

▸ Direct beltless driving system is both durable and economical, maintenance free, allows extended speed ranges from 30 to 300 RPM, ±1 RPM with minimized vibration, even when shakers are stacked of three high. The shaking diameter can be changed from 1-50mm for optimum oxygenation and nutrient mixing and agitation in from small to large flasks.

▸ The top of the casing can be further used as a work area for locating small items of lab equipment etc.

▸ The incubator casing is made of heavy-gauge cold-rolled steel; together with high graded #304 stainless steel inner chambers with coved corners make it easy to clean with mild detergent. Chamber is tall enough to hold 2L Erlenmeyer flasks.

▸ The ceiling of the unit can be upgraded and fitted with LED lighting kit for cultivation of phototrophic organisms. Mono/dual light colors are possible and the intensity of each color can be independently controlled and programmed to simulate day/night cycles, perfect for plant cell culture.

▸ Robust brushless DC motor enables shaking motion quiet and smooth, even when unit is operating at top speed with maximum workload.

▸ Non-volatile memory saves settings during a power outage and automatically restarts the unit after power is restored.

▸ For data recording, the units are equipped with a built-in thermo printer as standard, so that operators could check how the performance parameters vary according to specified process without having to be on site.

▸ Predrilled platform as standard configuration, flask clamps excluded. Plain tray available for use with sticky mats (max. 8 pcs per ZYWR-D2401 unit).

▸ For a comfortable working height, the base stands are available in 35cm cabinet base stand (#P5010-35); 50cm Frame base stand (#P5010-50).

▸ UV light reduces the air burden, keeping the chamber contamination free.

Model	ZWYR-D2401	ZWYR-D2402	ZWYR-D2403
Control	P.I.D Microprocessor		
Control Mode	Fix Value or Program (up to 9 Segments)		
Control Panel	LCD Touch Screen		
Air Convection	Forced		
Shaking Mode	Orbit		
Volume/ Compartment (L)	190		
Ambient Temperature(°C)	10-35		
Shaking Speed (rpm)	30-300		
Stroke (mm)	Ø1-50 Stepless Adjustable		
Temperature Range (°C)	4-60		
Temperature Accuracy (°C)	0.1		
Temperature Uniformity (°C)	±1°C@37°C		
Timer	1 to 9999 mins		
Tray (mm) (WxD)	800x430		
Tray Included	1	2	3
Inner Dimensions (mm) (WxDxH)	920x532x395		
Exterior Dimensions (mm) (WxDxH)	1300x930x735	1300x930x1315	1300x930x1895
Packing Dimensions (mm) (WxDxH)	1420x1050x905	1420x1050x1480	1420x1050x2060
Net/Gross Weight (kg)	250/290	450/540	650/750
Power (W)	1200	2400 (1200*2)	3600 (1200*3)
Electricity	220-240V 50/60 Hz		
Approval	CE, ISO		
Security	Over-temperature Protection, Compressor Overload Protection, Electrical Leakage Protection		
Additional	Built in Printer, RS485 Interface (Option), LED Lighting Control Kit (Option), Base Stand (Option)		

Min. Operating Temperature: 15°C when Photosynthetic Lighting option is applied.

Capacity	50ml	100ml	250ml	500ml	750ml	1000ml	2000ml	Tube Rack S/S	96 Well Plate
ZWYR-D2401	91	50	38	26	15	15	8	8	19
ZWYR-D2402	182	100	76	52	30	30	16	16	38
ZWYR-D2403	273	150	114	78	45	45	24	24	57

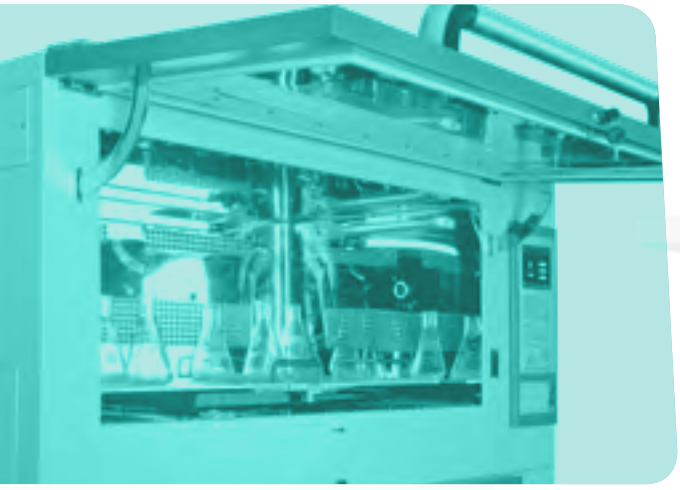
Photosynthetic Lighting

Part Number	P5011RB	P5011W
Light Type	LED, 50% Red, 50% Blue	LED, 100% Warm White
Spectrums	Red: 640-660nm, Blue: 430-450nm	4500k:400-700nm
Light Intensity	Up to 700 μmol/(m2*s)	Up to 400 μmol/(m2*s)
Control	Yes, Individually, from 0-100% output	Yes, from 0-100% output
Control Mode	Fixed Value & Programmable	
Dimensions	890x500x10mm	
Power	300W	
	# Min. Operating Temperature: 15°C when Photosynthetic Lighting option is applied.	

Order Information

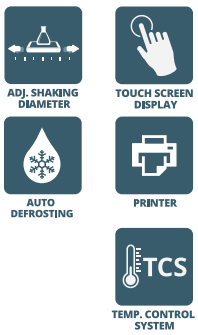
ZWYR-D2401	ZWYR-D2401, 190Lx1, Premium Stackable Shaking Incubator, Single, 4-60, 30-300rpm
ZWYR-D2402	ZWYR-D2402, 190Lx2, Premium Stackable Shaking Incubator, Double, 4-60, 30-300rpm
ZWYR-D2403	ZWYR-D2403, 190Lx3, Premium Stackable Shaking Incubator, Triple, 4-60, 30-300rpm
P5010-35	Cabinet Base Stand for ZWYR-D2401, H35cm
P5010-50	Frame Base Stand for ZWYR-D2401, H50cm
P5011W	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, ZWYC-290A, White
P5011RB	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, ZWYC-290A, Red & Blue
P5016	RS-485 Interface
P5017	Upward Door Opening for ZWYR-D2401/D2402/D2403
P6024	Predrilled Tray for ZWYR-D2401/2402/2403
P6025	Tray for ZWYR-D2401/2402/2403, Plain
P7004	Universal Spring Pallet for ZWYR-D2401
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8017	Sticky Mat, 20 x 20cm
P8021	O Clamp, S/S, for 50ml Flask, with Spring Retainer
P8022	O Clamp, S/S, for 100ml Flask, with Spring Retainer
P8023	O Clamp, S/S, for 250ml Flask, with Spring Retainer
P8024	O Clamp, S/S, for 500ml Flask, with Spring Retainer
P8025	O Clamp, S/S, for 750ml Flask, with Spring Retainer
P8026	O Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8027	O Clamp, S/S, for 2000ml Flask, with Spring Retainer
P8032	Clamp for 96 Well Plate, S/S

※ S/S: Stainless Steel



ZWYR-D2401
with P5010-30

ZWYR-D2401
with P5010-50



ZWYR-240

ZWYR-200D

ZWFR-200

PREMIUM BENCHTOP
Shaking Incubators

This new premium benchtop shaking incubators provided by LABWIT offer conditions of time, broad temperature and orbital or reciprocal agitation capabilities for meeting comprehensive requirement of the growth of biological organisms. The P.I.D microprocessor controlled shakers have a number of advanced features that are unique in bench top models. This unique benchtop model with shaking diameter stepless adjustable from 1-50mm provides unmatched flexibility for meeting comprehensive application requirements. The sophisticated PID controller provides these units with choices of not only constant controlling one fixed temperature and speed, but also programmed controlling with a series of "ramps and soaks" segments on time basis. For data recording, the units are equipped with a built-in thermo printer as standard, so that operators could check how the performance parameters vary according to specified process without having to be on site.

- 4.3" LCD 480x272 touch screen panel clearly indicates all parameters in one page display and makes it easy to change the operating parameters settings, even those multi set points under programmable mode intuitively.
- P.I.D microprocessor controller provides unmatched versatility by enable users to create personalized program (with up to 9 segments, with cycling) to automate changes to function parameters.
- Inner chamber & tray from high graded #304 electro-polished stainless steel.
- Robust single eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation with high shaking speed up to 600rpm.
- The versatility of the driving system allows stroke continuous adjustment from 1 to 50 mm for optimum oxygenation, nutrient mixing and agitation in from small to large flasks.
- Timer up to 9999 mins under fixed value control mode.
- Quality brushless AC inductive motor supports reliable, quiet and smooth shaking movements up to top speed.
- Auto-defrosting system, ensuring long-terms non-frosting operation with low temperature setpoints.
- Non-volatile memory saves settings during a power outage and automatically restarts the unit after power is restored.
- Audible and visual alarms on over temperature and motor overheating, and automatically cut off the power.
- Soft start and smooth acceleration when lid is closed after short opens.
- For data recording, the units are equipped with a built-in thermo printer as standard, so that operators could check how the performance parameters vary according to specified process without having to be on site.
- Predrilled standard tray included, without clamps.

Model	ZWYR-200D	ZWYR-240	ZWFR-200
Control	P.I.D Microprocessor		
Control Mode	Fix Value or Program (up to 9 Segments)		
Control Panel	4.3" LCD Touch Screen		
Volume (L)	69		
Shaking Speed (rpm)	30-600	30-400	30-240
Stroke (mm)	1-50 Stepless Adjustment		
Shaking Mode	Orbital		Reciprocal
Tray (mm) (WxD)	400x370		435x420
Ambient Temperature(°C)	5-25		
Temperature Range (°C)	4-60		
Temperature Accuracy (°C)	0.1		
Temperature Uniformity (°C)	±1°C@37°C		
Timer	1 to 9999 mins		
Inner Dimensions (mm) (WxDxH)	490x470x320	490x470x335	490x470x320
Exterior Dimensions (mm) (WxDxH)	774x740x610		
Packing Dimensions (mm) (WxDxH)	860x850x760		
Net/Gross Weight (kg)	100/132		
Power (W)	700		
Electricity	220-240V 50/60 Hz		
Approval	CE, ISO		
Security	Over-temperature Protection, Compressor Overload Protection, Electrical Leakage Protection		
Additional	Built-in Printer, RS485 COM Kit (Option)		

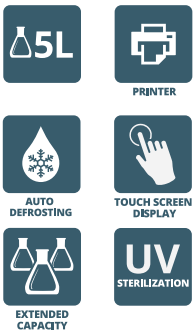
Capacity	50ml	100ml	250ml	500ml	750ml	1000ml	2000ml	Tube Rack S/S	96 Well Plate
ZWYR-200D	23	23	12	9	7	5	-	3	8
ZWYR-240	23	23	12	9	7	5	4	3	8
ZWFR-200	23	23	12	9	7	5	-	3	8

	Order Information
ZWYR-200D	ZWYR-200D,69L, Premium Orbital Shaking Incubator 4-60, 30-600rpm
ZWYR-240	ZWYR-240, 69L, Premium Orbital Shaking Incubator 4-60, 30-400rpm
ZWFR-200	ZWFR-200,69L, Premium Reciprocal Shaking Incubator 4-60, 30-240rpm

P5016	RS-485 Interface
P6004	Tray for ZWYR-240/200D, ZWY-240/200D, S/S※
P6005	Tray for ZWFR-200, ZWF-200, S/S
P7003	Universal Tray for ZWYR-240/200D, ZWY-240/200D
P7005	Universal Tray for ZWFR-200, ZWF-200
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer

P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S
P8017	Sticky Mat, 20 x 20cm

※ S/S: Stainless Steel



ZWYR-211C

ZWFR-211

ZWYR-211D

PREMIUM HORIZONTAL
Shaking Incubators

These new premium horizontal floor shaking incubators are developed for the modern biological engineering departments; large capacity of smaller size flasks, or for large volume flasks up to of 5L. The units are widely used in applications of germ culture, fermentation, hybridization, biochemical research, enzyme and cellular tissues.

▸ 4.3" LCD 480x272 touch screen panel clearly indicates all parameters in one page display and makes it easy to change the operating parameters settings, even those multi set points under programmable mode intuitively.

▸ P.I.D microprocessor controller provides unmatched versatility by enable users to create personalized program (with up to 9 segments, with cycling) to automate changes to function parameters.

▸ Large double fold tempered glass window and fluorescent light provide complete visibility of chamber interior.

▸ ZWYR-211D is equipped with foot pedal for lid opening even when carrying full loads in both hands.

▸ Inner chamber with coved corners of high graded #304 electro-polished stainless steel features excellent durability as well as ease of cleaning.

▸ Robust triple eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation with high shaking speed up to 300rpm.

▸ Timer up to 9999 mins under fixed value control mode.

▸ Quality brushless AC inductive motor supports reliable, quiet and smooth shaking movements up to top speed.

▸ Auto-defrosting system, ensuring long-terms non-frosting operation with low temperature setpoints.

▸ Non-volatile memory saves settings during a power outage and automatically restarts the unit after power is restored.

▸ Audible and visual alarms on over temperature and motor overheating, and automatically cut off the power.

▸ Soft start and smooth acceleration when lid is closed after short opens.

▸ For data recording, the units are equipped with a built-in thermo printer as standard, so that operators could check how the performance parameters vary according to specified process without having to be on site.

▸ Predrilled standard tray included, without clamps.

▸ UV light reduces the air burden, keeping the chamber contamination free.

Capacity	50ml	100ml	250ml	500ml	750ml	1000ml	2000ml	3000ml	5000ml	Tube Rack S/S	96 Well Plate
ZWYR-211C	66	66	41	28	24	15	11	8	6	10	28
ZWYR-211D	77	77	54	36	26	18	15	8	6	12	32
ZWFR-211	66	66	45	28	24	15	8	8	-	10	28

*Glass dimensions may reduce max. capacity

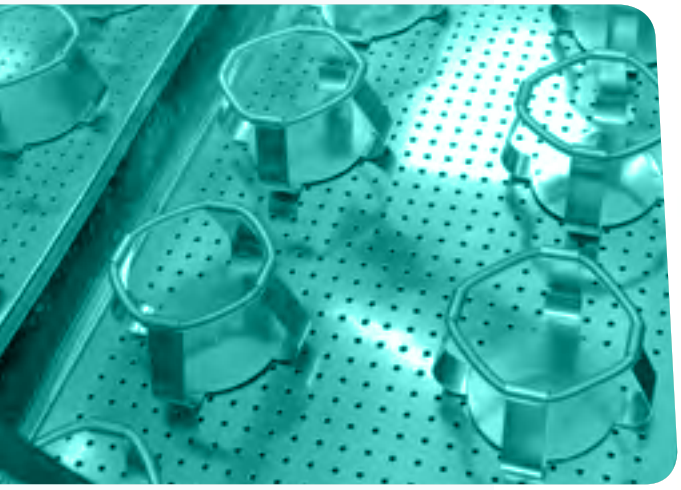
Model	ZWYR-211C	ZWYR-211D	ZWFR-211
Control	P.I.D Microprocessor		
Control Mode	Fix Value or Program (up to 9 Segments)		
Control Panel	4.3" LCD Touch Screen		
Door Opening Mode	Hand Hold	Foot Pedal	Hand Hold
Volume (L)	260	300	275
Working Temperature (°C)	5-25		
Shaking Speed (rpm)	30-300		30-240
Stroke (mm)	Ø26		1-50 Stepless Adjustment
Shaking Mode (°C)	Orbital		Reciprocal
Tray (mm) (WxD)	920x500	940x584	896x530
Temperature Range (°C)	4-60		
Temperature Accuracy (°C)	0.1		
Temperature Uniformity (°C)	±1°C@37°C		
Timer	1 to 9999 mins		
Inner Dimensions (mm) (WxDxH)	975x565x465	1040x655x465	975x565x465
Exterior Dimensions (mm) (WxDxH)	1230x730x1065	1290x820x1065	1230x730x1065
Packing Dimensions (mm) (WxDxH)	1300x840x1225	1360x910x1225	1300x800x1225
Net/Gross Weight (kg)	255/308	263/313	213/252
Power (W)	1150	1800	1150
Electricity	220-240V 50/60 Hz		
Approval	CE, ISO		
Security	Over-temperature Protection, Compressor Overload Protection, Electrical Leakage Protection		
Additional	Built in Printer, RS485 Interface (Option)		

	Order Information
ZWYR-211C	ZWYR-211C, 260L, Premium Horizontal Shaking Incubator 4-60, 30-300rpm
ZWYR-211D	ZWYR-211D, 300L, Premium Horizontal Shaking Incubator 4-60, 30-300rpm
ZWFR-211	ZWFR-211, 275L, Premium Reciprocal Horizontal Shaking Incubator 4-60, 30-240rpm
P6006	Tray for ZWY-111B/211B/111C/211C/ZWYR-211C, S/S※
P6007	Tray for ZWYR-211D, S/S
P6008	Tray for ZWF-111/211/ZWFR-211, S/S
P7007	Universal Tray for ZWY-111B/211B/111C/211C/ZWYR-211C, Ful Pcs
P7008	Universal Tray for ZWYR-211D, Ful Pcs
P7009	Universal Tray for ZWF-111/211, ZWFR-211, Ful Pcs
P7022	Universal Tray for All Horizontal Model, 1/2 Pcs
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P5016	RS-485 Interface

※S/S: Stainless Steel

	Order Information
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8007	T Clamp, Spring S/S, for 2000ml Flask, with Spring Retainer
P8008	T Clamp, Spring S/S, for 3000ml Flask, with Spring Retainer
P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S
P8017	Sticky Mat, 20 x 20cm

※ S/S: Stainless Steel



AUTO DEFROSTING

TCS TEMP. CONTROL SYSTEM

5L

TOUCH SCREEN DISPLAY

UV STERILIZATION

ZWYR-2102C

ZWYR-2102

ZWYR-2112B

PREMIUM DOUBLE LAYER **Shaking Incubators**

The new double layer shaking incubators in a class of their own, are specially developed a cost effective and space- saving solution for the modern biological engineering departments; the units are widely used in the applications of germ culture, hybridization, biochemical research, enzyme and cellular tissues.
These incubators have a smooth compact design, which are very efficient and have an excellent floor space/performance factor. The double layer shaking frame supports two trays above each other, doubles the capacity for smaller flasks, while after removing the top tray (Shaking frame upgrade required).

▸ 4.3"/5.6" LCD touch screen panel clearly indicates all parameters in one page display and makes it easy to change the operating parameters settings, even those multi set points under programmable mode intuitively.

▸ P.I.D microprocessor controller provides unmatched versatility by enable users to create personalized program (with up to 9 segments, with cycling) to automate changes to function parameters.

▸ Large double fold tempered glass window on the front doors together with the fluorescent light provide complete visibility of chamber interior.

▸ Mirror-finished high quality #304 stainless steel for excellent durability of interiors.

▸ Non-volatile memory for set point retention after power interruption.

▸ Robust triple eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation with high shaking speed up to 300rpm even when both layers are fully loaded.

▸ UV light reduces the air burden, keeping the chamber contamination free.

▸ Quality brushless AC inductive motor supports reliable, quiet and smooth shaking movements up to top speed even when fully loaded with 90 pieces of 250ml flasks (ZWYR-2112B, ZWFR-2112).

▸ Auto-defrosting system, ensuring long-terms non-frosting operation with low temperature setpoints.

▸ Non-volatile memory saves settings during a power outage and automatically restarts the unit after power is restored.

▸ Audible and visual alarms on over temperature and motor overheating, and automatically cut off the power. Soft start and smooth acceleration when doors are closed after short opens.

▸ Dedicated single layer shaking frame is available for the ease of using large flasks.

▸ For data recording, the units are equipped with a built-in thermo printer as standard, so that operators could check how the performance parameters vary according to specified process without having to be on site.

▸ Timer up to 9999 mins under fixed value control mode.

▸ Predrilled standard tray included, without clamps.

Capacity	50ml	100ml	250ml	500ml	750ml	1000ml	2000ml	3000ml	5000ml	Tube Rack S/S	96 Well Plate
ZWYR-2102C	56	56	28	22	18	6*	3*	2*	2*	4	9
ZWYR-2102	104	104	56	44	30	24	7*	6*	4*	8	19
ZWYR-2112B	164	164	90	74	52	36	13*	8*	6*	12	30
ZWFR-2112	164	164	90	76	48	44	12*	8*	6*	12	30

* Applies only when single layer shaking frame is equipped.
* Glass dimensions may reduce max. capacity

Model	ZWYR-2102C	ZWYR-2102	ZWYR-2112B	ZWFR-2112
Control	P.I.D Microprocessor			
Control Mode	Fix Value or Program (up to 9 Segments)			
Control Panel	LCD Touch Screen			
Volume (L)	170	330	580	580
Working Temperature (°C)	5-25			
Shaking Speed (rpm)	30-300			30-240
Stroke (mm)	26		35	1 to 50 Stepless Adjustment
Shaking Mode	Orbital			Reciprocal
Temperature (°C)	4 to 60			
Temperature Accuracy	±0.1°C			
Temperature Uniformity	±1°C @ 37°C			
Timer	1 to 9999 mins			
Tray (mm) (WxD)	496x350	734x458	970x560	940x580
Inner dimensions (mm) (WxDxH)	615x450x640	845x530x765	1105x850x664	1105x850x664
Exterior dimensions (mm) (WxDxH)	720x685x1310	950x755x1445	1430x880x1700	1430x880x1700
Packing dimensions (mm) (WxDxH)	800x770x1490	1030x870x1640	1500x950x1860	1500x950x1860
Net/Gross Weight (kg)	195/238	255/320	460/570	486/562
Power (W)	1000	1050	1600	1600
Electricity	220-240V 50/60 Hz			
Approval	CE, ISO			
Security	Over-temperature Protection, Compressor Overload Protection, Electrical Leakage Protection			
Additional	Built in Printer, RS-485 Interface (Option)			

	Order Information
ZWYR-2102C	ZWYR-2102C, 170L, Premium Double Layer Shaking Incubator 4-60, 30-300rpm
ZWYR-2102	ZWYR-2102, 330L, Premium Double Layer Shaking Incubator 4-60, 30-300rpm
ZWYR-2112B	ZWYR-2112B, 580L, Premium Double Layer Shaking Incubator 4-60, 30-300rpm
ZWFR-2112	ZWFR-2112, 580L, Premium Reciprocal Double Layer Shaking Incubator 4-60, 30-240rpm

	Order Information
P5001	Single Layer Shaking Frame for ZWY-1102C/2102C, ZWYR-2102C, Stl S/C
P5002	Single Layer Shaking Frame for ZWY-1102/2102, ZWYR-2102C, Stl S/C
P5003	Single Layer Shaking Frame for ZWY-1112B/2112B, ZWYR-2112B, Stl S/C
P5016	RS-485 Interface
P5019	50mm Shaking Orbit, for ZWY-2112B/1112B, ZWYR-2112B
P6010	Tray for ZWY-1102C/2102C/ZWYR-2102C, S/S ※
P6011	Tray for ZWY-1102/2102/ZWYR-2102, S/S
P6012	Tray for ZWY-1112B/2112B/ZWYR-2112B, S/S
P6013	Tray for ZWF-1112/2112/ZWFR-2112, S/S
P7011	Universal Tray for ZWY-1102C/2102C/ZWYR-2102C
P7012	Universal Tray for ZWY-1102/2102/ZWYR-2102, Ful Pcs
P7013	Universal Tray for ZWY-1112B/2112B/ZWYR-2112B, Ful Pcs
P7014	Universal Tray for ZWF-1112/2112/ZWFR-2112, Ful Pcs
P7023	Universal Tray for All Double Layer Model, 1/2 Pcs

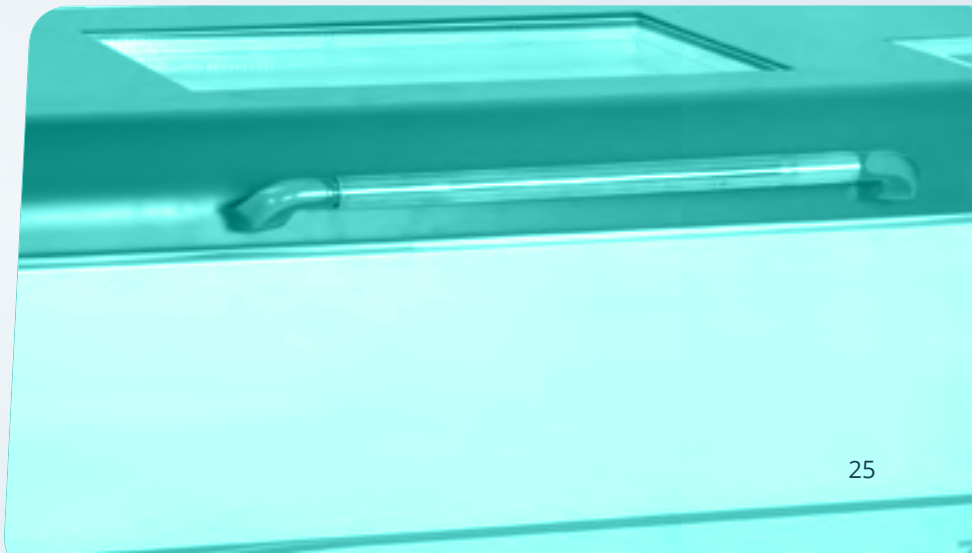
※ S/S: Stainless Steel

P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8007	T Clamp, Spring S/S, for 2000ml Flask, with Spring Retainer
P8008	T Clamp, Spring S/S, for 3000ml Flask, with Spring Retainer
P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well MicroPlate, S/S
P8017	Sticky Mat, 20 x 20cm

SHAKING INCUBATORS

ECONOMIC RANGE

As the classic version of LABWIT shaking incubators, the economic models have been tested and renowned for its quality and the reliable performances in the last decades. LABWIT continues to offer the diversity to its shaking incubator range by providing the solutions for basic daily applications. The robust eccentric counterbalanced shaking mechanisms together with quality heavy duty motors ensure quiet and smooth shaking movement throughout the whole speed range. P.I.D microprocessor controller creates optimum, reproducible incubation conditions for cell cultures of the applications. Moreover, all economic models are now equipped with auto-defrosting system as standard, providing more comprehensive solutions for wider range of applications.



ZWY-103D

ZWY-240

ZWY-100H

ECONOMIC BENCHTOP
Shaking Incubators

The benchtop orbital shaking incubators provided by LABWIT offer for small to medium capacity conditions of time, temperature and orbital agitation for the growth of biological organisms. These microprocessor controlled shakers have a number of advanced features that are really unique in bench top models, such as cooling capacity, stepless shaking diameter adjustment.

LABWIT shaking incubators are lab workhorses and provide “set and forget” programmable operating conditions and precise temperature performance for a variety of molecular biology techniques. The inner chamber is clearly visible from all angles across the room. The audible and visual alarms will alert the operator for set point deviations. The refrigerated models use CFC-free refrigerant, ozone layer friendly.

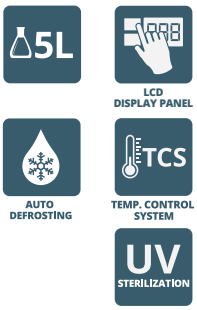
- Various chamber sizes available from 34L, 63L to 69L
- Smooth and easy to clean design with tempered observation glass window.
- Inner chamber and tray from electro-polished stainless steel.
- Special low noise induction motor system enables high rotation speed up to 400rpm or 600rpm.
- Patented driver system allows stroke continuous adjustment from 1 to 50 mm.
- AC inductive motor, brushless and maintenance free.
- Auto defrosting system, ensuring long terms non frosting operation with low temperature setpoints.
- The combination of high speed and small diameter make ZWY-103D, ZWY-100D & ZWY-200D suitable for many applications involving microtitre plates.
- Microprocessor control with large LCD screen, showing set and actual parameters.
- Password protection against unauthorized change of parameters.
- Audible and visual alarms on over temperature and motor overheating.
- Soft start and smooth acceleration after lid opening.
- Timer up to 500 hours and continuous mode.
- Predrilled standard tray included, without clamps.

Model	ZWY-103D	ZWY- 100H	ZWY- 100D	ZWF-100	ZWF-200	ZWY-240	ZWY-200D
Volume (L)	34	63	63	63	69	69	69
Shaking Speed (rpm)	30-600	30-400	30-600	30-240	30-240	30-400	30-600
Stroke	Ø1-50mm Stepless Adjustment			40mm		Ø1-50mm Stepless Adjustment	
Shaking Mode	Orbital			Reciprocal		Orbital	
Tray (mm) (WxD)	280x220	340x370	340x370	346x400	435x420	400x370	400x370
Temperature Range	A+ 5 °C - 60°C				4°C to 60°C		
Temperature Accuracy	± 0.1°C						
Temperature Uniformity	≤ ± 1°C@37°C						
Timer	1 minute to 500 hours						
Flask Configurations	*Glass dimensions may reduce max. capacity						
50 ml	9	18	18	18	25	23	23
100 ml	9	18	18	18	25	23	23
250 ml	5	10	10	10	15	12	12
500 ml	-	9	9	9	10	9	9
750 ml	-	5	5	6	9	7	7
1000 ml	-	4	4	5	5	5	5
Tube Rack S/S	-	3	3	3	3	3	3
96 Well Plate	4	4	4	4	8	8	8
Inner Dimensions (mm) (WxDxH)	340x300x175	410x440x295			490x470x320		
Exterior Dimensions (mm) (WxDxH)	440x410x400	600x580x520			730x740x560		
Packing Dimensions (mm) (WxDxH)	530x520x560	690x680x700			810x850x760		
Net / Gross Weight (kg)	42/54	72/92	72/97	77/97	100/132	100/132	100/132
Power (W)	280	550	550	550	700	700	700
Electricity	220-240V 50/60 Hz						
Approval	CE, ISO						

	Order Information
ZWY-103D	ZWY-103D, 34L, Economic Orbital Shaking Incubator A+5-60, 30-600rpm
ZWY-100H	ZWY-100H, 63L, Economic Orbital Shaking Incubator A+5-60, 30-400rpm
ZWY-100D	ZWY-100D,63L, Economic Orbital Shaking Incubator A+5-60, 30-600rpm
ZWY-240	ZWY-240, 69L, Economic Orbital Shaking Incubator 4-60, 30-400rpm
ZWY-200D	ZWY-200D,69L, Economic Orbital Shaking Incubator 4-60, 30-600rpm
ZWF-100	ZWF-100, 63L, Economic Reciprocal Shaking Incubator, A+5-60, 30-240rpm
ZWF-200	ZWF-200, 69L, Economic Reciprocal Shaking Incubator, 4+60, 30-240rpm

	Order Information
P6001	Tray for ZWY-103D, S/S※
P6002	Tray for ZWY-100H/100D, S/S
P6003	Tray for ZWF-100, S/S
P6004	Tray for ZWYR-240/200D, ZWY-240/200D, S/S*
P6005	Tray for ZWFR-200, ZWF-200, S/S
P7001	Universal Tray for ZWY-103D
P7002	Universal Tray for ZWY-100H/100D
P7003	Universal Tray for ZWYR-240/200D, ZWY-240/200D
P7005	Universal Tray for ZWFR-200, ZWF-200
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S
P8017	Sticky Mat, 20 x 20cm

※ S/S: Stainless Steel



ZWY-211B

ZWY-211C

ECONOMIC HORIZONTAL
Shaking Incubators

These economic horizontal floor shaking incubators are specially developed for the modern biological engineering departments; huge capacity for various sizes of flasks, up to 5L.

LABWIT offers both orbital and reciprocal models, with and without refrigeration to be used in almost all laboratories. All models have large glass viewing windows and gas spring transmission for smooth and convenient lid opening. Temperature uniformity – through a fan driven high velocity circulation system, is ±1.0°C@37°C, while the temperature accuracy is 0.1°C. All models are equipped with an electronic timer up to 500 hours. Heavy duty triple counterbalanced drive system provides a shaking range that can handle virtually any culturing task.

- Various chamber sizes available from 170L, 260L to 300L
- Microprocessor controller with audible and visual alarms maintain precise temperature and speed.
- CFC-free refrigerant which causes no damage to ozone layer.(Applies on ZWY/F-2XX models)
- Large double-fold tempered glass window and fluorescent light, provide complete visibility of chamber interior.
- LCD display presents all actual and preset parameters.
- Electronic timer, from 0 – 500 hours, automatic stop, audio/ visual alarm.
- Password protection against unauthorized change of parameters.
- Audible and visual alarms for motor temperature and set point deviations.
- Non-volatile memory for set point retention after power interruption.
- "Long-Life" brushless AC motor creates smooth, quiet and uniformed shaking motion.
- Auto defrosting system, ensuring long terms non frosting operation with low temperature setpoints.
- Mirror-finished high quality #304 stainless steel for excellent durability of interiors.
- Units delivered with standard stainless steel tray, clamps excluded.
- High capacity for up to 5L flasks (except ZWY-111B/211B, ZWF-111/211)
- UV light reduces the air burden, keeping the chamber contamination free.

Model	ZWY-111B	ZWY-211B	ZWY-111C	ZWY-211C	ZWF-111	ZWF- 211
Volume (L)	170		260		300	
Shaking Mode	Orbital		Orbital		Reciprocal	
Stroke (mm)	Ø26		Ø26		Ø1-50mm Stepless Adjustment	
Temperature Range(°C)	A+5 to 60	4 to 60	A+5 to 60	4 to 60	A+5 to 60	4 to 60
Temperature Accuracy	±0.1°C					
Temperature Uniformity	≤±1°C @ 37°C					
Shaking Speed (rpm)	30-300		30-300		30-240	
Tray Dimension (mm)	920x500		920x500		896x530	
Flask Configuration *	*Glass dimensions may reduce max. capacity					
50ml	64		64		66	
100 ml	64		64		66	
250 ml	40		40		45	
500 ml	28		28		28	
750 ml	23		23		24	
1000 ml	15		15		15	
2000 ml	-		11		11	
3000 ml	-		8		8	
5000 ml	-		6		-	
Tube Rack S/S	10		10		10	
96 Well Plate	28		28		28	
Inner Dimensions (mm) (WxDxH)	975x565x305		975x565x465		975x565x465	
Exterior Dimensions (mm) (WxDxH)	1200x740x820		1230x730x1065		1230x730x1065	
Packing Dimensions (mm) (WxDxH)	1290x840x1000		1300x860x1230		1300x800x1225	
Net/Gross Weight (kg)	159/219	174/233	240/293	255/308	201/280	213/290
Power (W)	800	1050	950	1150	950	1150
Electricity	220-240V 50/60 Hz					
Approval	CE, ISO					

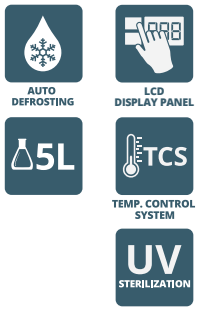
Order Information

ZWY-111B	ZWY-111B, 170L, Economic Horizontal Shaking Incubator A+5-60, 30-300rpm
ZWY-211B	ZWY-211B, 170L, Economic Horizontal Shaking Incubator 4-60, 30-300rpm
ZWY-111C	ZWY-111C, 260L, Economic Horizontal Shaking Incubator A+5-60, 30-300rpm
ZWY-211C	ZWY-211C, 260L, Economic Horizontal Shaking Incubator 4-60, 30-300rpm
ZWF-111	ZWF-111, 300L, Economic Reciprocal Horizontal Shaking Incubator A+5-60, 30-240rpm
ZWF-211	ZWF-211, 300L, Economic Reciprocal Horizontal Shaking Incubator 4-60, 30-240rpm

P6006	Tray for ZWY-111B/211B/111C/211C/ZWYR-211C, S/S※
P6008	Tray for ZWF-111/211/ZWFR-211, S/S
P7007	Universal Tray for ZWY-111B/211B/111C/211C/ZWYR-211C, Ful Pcs
P7009	Universal Tray for ZWF-111/211, ZWFR-211, Full Pcs
P7022	Universal Tray for All Horizontal Model, 1/2 Pcs
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer

P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8007	T Clamp, Spring S/S, for 2000ml Flask, with Spring Retainer
P8008	T Clamp, Spring S/S, for 3000ml Flask, with Spring Retainer
P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Micro Plate, S/S
P8017	Sticky Mat, 20 x 20cm

※S/S: Stainless Steel



ZWY-2112B

ZWY-2102C

ECONOMIC DOUBLE LAYER
Shaking Incubators

These LABWIT double layer shaking incubators are specially developed for the modern biological engineering departments; a big capacity of flasks but with small footprint.

These incubators have a smooth compact design. They are very efficient and have an excellent floor space/performance factor. Two trays above each other, double the capacity for smaller flasks, while after removing the top tray, big flasks can also be used on the bottom tray (Shaking frame upgrade required). These units are particularly ideal for fermentation and pharmacy experiments and are widely used where a big amount of liquid needed to be mixed at with constant temperature.

- Microprocessor controller with audible and visual alarms maintains precise temperature and speed control.
- User friendly control panel allows easy digital setting of time, temperature and speed.
- Large LCD display presents all actual and preset parameters.
- Electronic timer, from 0 – 500 hours, automatic stop, audio/ visual alarm.
- Password protection against unauthorized change of parameters.
- Audible and visual alarms for over-temperature and set point deviations.
- Non-volatile memory for set point retention after a power interruption.
- Auto defrosting system, ensuring long terms non frosting operation with low temperature setpoint.
- Large double-fold tempered glass window, together with fluorescent lights provides complete visibility of chamber interior.
- "Long-Life" brushless AC motor creates a smooth, quiet and uniformed shaking motion.
- Mirror-finished high quality #304 stainless steel for excellent durability of interiors.
- Standard shaking frame and standard stainless steel tray included, but without clamps.
- Vertical double trays for big capacity, though small footprint.
- Lockable outer door (on ZWY-1112B/2112B. ZWF-1112/2112) protects the materials against unauthorized access at all times.
- UV light reduces the air burden, keeping the chamber contamination free.

Model	ZWY-1102C	ZWY-2102C	ZWY-1102	ZWY-2102	ZWY-1112B	ZWY-2112B	ZWF-1112	ZWF-2112
Volume (L)	170		330		580		580	
Shaking Mode	Orbital		Orbital		Orbital		Reciprocal	
Temperature (°C)	A +5 to 60	4 to 60	A +5 to 60	4 to 60	A +5 to 60	4 to 60	A +5 to 60	4 to 60
Temperature Accuracy	±0.1°C							
Temp. Uniformity	≤±1°C @ 37°C							
Stroke (mm)	26		26		35		1 to 50 Stepless Adjustment	
Speed (rpm)	30-300		30-300		30-300		30-240	
Tray (mm) (WxD)	496x350		734x458		970x560		940x580	
Capacity	*Glass dimensions may reduce max. capacity							
50 ml	56		104		164		164	
100 ml	56		104		164		164	
250 ml	28		56		90		90	
500 ml	22		44		74		76	
750 ml	18		30		52		48	
1000 ml	6*		24		36		44	
2000 ml	3*		7*		13*		12*	
3000 ml	2*		6*		8*		8*	
5000 ml	2*		4*		6*		6*	
Tube Rack S/S	4		8		12		12	
96 Well Plate	9		19		30		30	
Inner dim. (mm)	615x450x640 (WxDxH)		845x530x765 (WxDxH)		1105x850x664 (WxDxH)		1105x850x664 (WxDxH)	
Exterior dim. (mm)	720x685x1310 (WxDxH)		950x755x1445 (WxDxH)		1430x880x1700 (WxDxH)		1430x880x1700 (WxDxH)	
Packing dim. (mm)	800x770x1490 (WxDxH)		1030x870 x1640 (WxDxH)		1500x950x1860 (WxDxH)		1500x950x1860 (WxDxH)	
Net/Gross Weight (kg)	180/223	195/238	235/305	255/320	445/555	460/570	470/580	486/596
Power (W)	1000	1250	1050	1300	1600	1950	1600	1950
Electricity	220-240V 50/60 Hz							
Approval	CE, ISO							

* Applies only when single layer shaking frame is equipped.

ZWY-1102C	ZWY-1102C, 170L, Economic Double Layer Shaking Incubator A+5-60, 30-300rpm
ZWY-2102C	ZWY-2102C, 170L, Economic Double Layer Shaking Incubator 4-60, 30-300rpm
ZWY-1102	ZWY-1102, 330L, Economic Double Layer Shaking Incubator A+5-60, 30-300rpm
ZWY-2102	ZWY-2102, 330L, Economic Double Layer Shaking Incubator 4-60, 30-300rpm
ZWY-1112B	ZWY-1112B, 580L, Economic Double Layer Shaking Incubator A+5-60, 30-300rpm
ZWY-2112B	ZWY-2112B, 580L, Economic Double Layer Shaking Incubator 4-60, 30-300rpm
ZWF-1112	ZWF-1112, 580L, Economic Reciprocal Double Layer Shaking Incubator A+5-60, 30-240rpm
ZWF-2112	ZWF-2112, 580L, Economic Reciprocal Double Layer Shaking Incubator 4-60, 30-240rpm

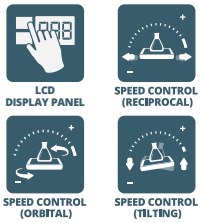
P5001	Frame for ZWY-1102C/2102C, ZWYR-2102C, Stl S/C #
P5002	Frame for ZWY-1102/2102, ZWYR-2102, S/C
P5003	Frame for ZWY-1112B/2112B, ZWYR-2112B, Stl S/C
P5019	50mm Shaking Orbit, for ZWY-2112B/1112B, ZWYR-2112B
P6010	Tray for ZWY-1102C/2102C, ZWYR-2102C, S/S ※
P6011	Tray for ZWY-1102/2102, ZWYR-2102, S/S
P6012	Tray for ZWY-1112B/2112B, ZWYR-2112B, S/S
P6013	Tray for ZWF-1112/2112, ZWFR-2112, S/S
P7011	Universal Tray for ZWY-1102C/2102C, ZWYR-2102C
P7012	Universal Tray for ZWY-1102/2102, ZWYR-2102, Ful Pcs
P7013	Universal Tray for ZWY-1112B/2112B, ZWYR-2112B, Ful Pcs
P7014	Universal Tray for ZWF-1112/2112, ZWFR-2112, Ful Pcs
P7023	Universal Tray for All Double Layer Model, 1/2 Pcs
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer

P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8007	T Clamp, Spring S/S, for 2000ml Flask, with Spring Retainer
P8008	T Clamp, Spring S/S, for 3000ml Flask, with Spring Retainer
P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well MicroPlate, S/S
P8017	Sticky Mat, 20 x 20cm

Stl S/C:Spray Coated Steel, ※ S/S: Stainless Steel

SHAKERS & ROCKERS

Shakers and rockers are ideal for almost any vessels from tubes through petri dishes and microtitre plates to conical flasks. Shakers are available with either an orbital action where the platform moves in a circular orbit or a reciprocal linear movement where the platform moves back and forth horizontally. An orbital action provides a swirling action on the sample, ideal for aeration. A linear shaker is more aggressive making it ideal for applications such as extractions. A see saw rocking action provides a wave motion in the sample, ideal for washing.



ZWF-334

ZWY-304

ZWQ-344

BENCHTOP
Shakers & Rockers

LABWIT offers a comprehensive range of benchtop shakers and rockers, units are available with three actions, orbital, linear and see-saw, and two sizes.

Benchtop Orbital Shaker

▸ The ZWY-304 provides a smooth uniform circular motion with an orbit of 30mm. The shaker can be used in incubators and warm room if the temperature is not higher than 50°C.

▸ The standard cradle platform can turn ZWY-304 unit into a very effective mini platform shaker, which allows for different combinations of vessels offering maximum versatility. Alternatively, the tray is interchangeable with flask clamp tray (ZWF-334) or non-slip mat tray (ZWQ-344).

▸ Speed is variable from 30 to 300rpm, with shaking times can be set to run from 0-500hours, or set for continuous operation. The non-volatile memory restores all settings after power failure.

Benchtop Reciprocal Shaker

▸ The ZWF-334 lab scale platform shaker has a powerful yet quiet shaking mechanism that has been designed for problem free continuous use. This unit provides a versatile linear shaking action with unique 4 level stroke adjustment from 20, 24, 30 to 40mm, ideal for most extracting applications.

▸ Speed is fully variable from 30-300rpm, and is set digitally for consistency. The speed is microprocessor controlled and accurately maintained even over long runs. The built-in timer can be set from 0-500hours. After the timer has counted down, the shaker stops and sounds an alert. The flask clamp tray is fitted as standard, while can be interchanged with non-slip mat tray or cradle platform.

Benchtop See-Saw Rocker

▸ ZWQ-344 has a see-saw rocking action that creates a wave motion within vessels such as culture flask, petri dishes etc. one unique feature of this unit is ZWQ-344 provides 4 level of tilt angles from 5°, 8°, 10° and 12°, ideal for washing.

▸ The speed is microprocessor controlled, variable from 20-80rpm. The model is supplied with a non-slip mat. The large LCD screen with user-friendly digital keypad ensures clear readout and easy operation. Like all other benchtop shakers, all settings of speed and time are encrypted to prevent unauthorized changes.

Model	ZWY-304	ZWF- 334	ZWQ- 344
Action Mode	Orbital	Reciprocal	Rocker
Speed Range (/min)	30-300 rounds	30-300 strokes	20-80 tilts
Speed Variation (/min)	±1 round	±1 stroke	±1 tilt
Stroke	Ø30 mm	20, 24, 30, 40 mm	5°, 8°, 10°, 12°
Tray Dimensions (mm)	330x350	330x350	330x350
Accessory Included	Rubber Bar Tray	Clamp Tray	Tray with non-slip mat
Timer	1 minute to 500 hours		
Maximum Load (kg)	7.5	7.5	4
Overall Dimensions (mm) (WxDxH)	400x350x235	400x350x160	400x360x185
Packing Dimensions (mm) (WxDxH)	490x490x420	480x430x400	480x430x400
Net / Gross Weight (kg)	25/37	21/31	10/20
Safety Features	Non-volatile Memory, Power-off Recovery, Timer		
Power (W)	50		
Electricity	220-240V 50/60 Hz		
Approval	CE, ISO		

Clamp Tray	50ml	100ml	250ml	500ml	750ml	1000ml	2000ml	3000ml	5000ml	Tube Rack S/S	96 Well Plate
P6016	25	16	12	9	7	5	4	1	1	3	6

*Glass dimensions may reduce max. capacity

Order Information

ZWY-304	ZWY-304 Orbital Benchtop Shaker, 30-300rpm
ZWF-334	ZWF-334 Reciprocal Benchtop Shaker, 30-300rpm
ZWQ-344	ZWQ-344 Rocking Benchtop Shaker, 20-80 tpm
P6016*	Tray for ZWY-304/ZWF-334, S/S ※ Clamp Tray
P6017	Tray for ZWY-304/ZWF-334, S/S Bar Trayx1, Rubber Barx4, Knobx8
P6018	Tray for ZWQ-344, Stl S/C# Trayx1, Springx4, Rubber Matx1
P7017	Universal Spring Tray for ZWY-304/ZWF-334
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8007	T Clamp, Spring S/S, for 2000ml Flask, with Spring Retainer
P8008	T Clamp, Spring S/S, for 3000ml Flask, with Spring Retainer
P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S
P8017	Sticky Mat, 20 x 20cm

※S/S: Stainless Steel #Stl S/C:Spray Coated Steel

ZWY-3222B

5L

LCD DISPLAY PANEL

SPEED CONTROL (ORBITAL)

ZWY-322B

ZWY-B3222

FLOOR
Orbital Shakers

LABWIT floor shakers are designed to uniformly shake more than a hundred of samples 24/7 under the extreme environmental conditions, like in warm and in cold room (5 to 50°C non condensation). The powerful drive mechanism guarantees reliable, smooth and quiet orbital shaking without vibration, even on a high speed up to 300rpm. They are ideal for mass production, especially the two platform models ZWY-3222B and ZWY-B3222 are widely used in biochemical, fermentation and pharmaceutical experiments for big volumes or a lot of small flasks.

- Microprocessor controller maintains the precision of speed control.
- Large LCD display presents all actual and set parameters.
- Password protection of all parameters against unauthorized change.
- Operating parameter retention after power failure.
- Electronic timer up to 500 hours or continues operation.
- Soft start and stop function.
- Patented over-speed protection minimizes the risk of uncontrolled shaking.
- Two platform models provide increased capacity; accept 50ml to 1L flasks on lower level, or up to 5L if without the top tray.
- Powerful brushless AC induction motor with quadruple counterbalanced drive system.
- Superior cast iron and stainless steel critical components.

Model	ZWY-322B	ZWY-3222B	ZWY-322C	ZWY-B3222
Action Mode	Orbit			
Stroke (mm)	Ø35		Ø50	
Speed (rpm)	30-300			
Speed Variation (rpm)	±1			
Timer	1 minute to 500 hours			
Number of Trays	1	2	1	2
Tray (mm) (WxD)	940x700			
Flasks Configurations*	*Glass dimensions may reduce max. capacity			
50 ml	86	172	86	172
100 ml	86	172	86	172
250 ml	53	106	53	106
500 ml	37	74	37	74
750 ml	29	58	29	58
1000 ml	22	44	22	44
2000 ml	12	-	12	-
3000 ml	11	-	11	-
5000 ml	7	-	7	-
Tube Rack S/S	13	26	14	28
96 Well Plate	34	68	42	84
Exterior Dimensions (mm) (WxDxH)	1115x840x455	1115x840x815	1115x840x455	1115x840x815
Packing Dimensions (mm) (WxDxH)	1210x920x690	1210x920x1040	1210x920x690	1210x920x1040
Net/Gross Weight (kg)	280/335	310/370	280/335	310/370
Power (W)	300			
Electricity	220-240V 50/60 Hz			
Approval	CE, ISO			

Order Information

ZWY-322B	ZWY-322B, Single Layer, Orbital Floor Shaker, 35mm, 30-300rpm
ZWY-3222B	ZWY-3222B, Double Layer, Orbital Floor Shaker, 35mm, 30-300rpm
ZWY-322C	ZWY-322C, Single Layer, Orbital Floor Shaker, 50mm, 30-300rpm
ZWY-B3222	ZWY-B3222, Double Layer, Orbital Floor Shaker, 50mm, 30-300rpm
P5006	Single Layer Shaking Frame for ZWY-322B/3222B, Stl S/C
P5008	Single Layer Shaking Frame for ZWY-322C/ B3222, Stl S/C
P6020	Tray for ZWY-322B/3222B Stl S/C
P6021	Tray for ZWY-322C/B3222 Stl S/C
P7019	Universal Tray for ZWY-322B/3222B
P7020	Universal Tray for ZWY-322C/B3222
P7022	Universal Tray for All Horizontal Model, 1/2 Pcs
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8007	T Clamp, Spring S/S, for 2000ml Flask, with Spring Retainer
P8008	T Clamp, Spring S/S, for 3000ml Flask, with Spring Retainer
P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retainer
P8010	Tube Rack S/S ※
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S
P8017	Sticky Mat, 20 x 20cm

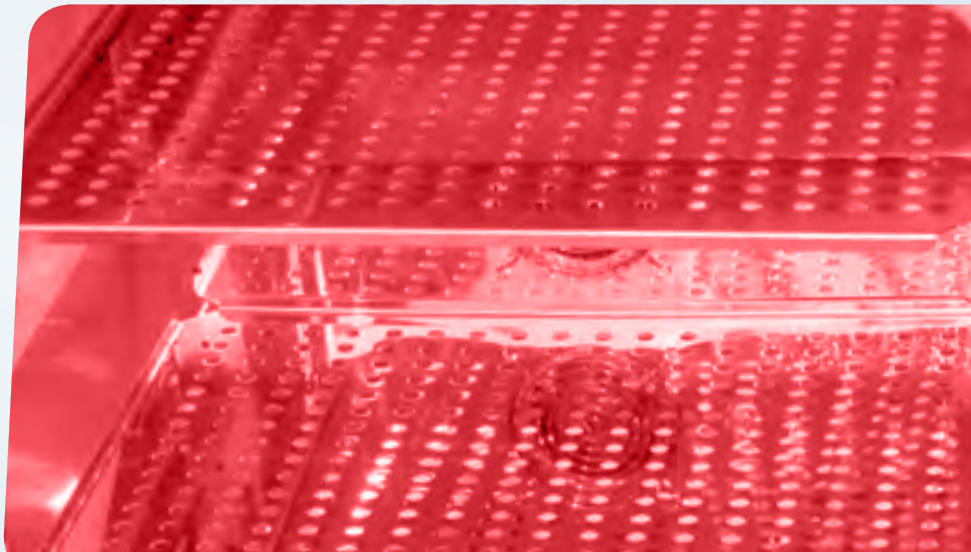
Stl S/C:Spray Coated Steel ※ S/S: Stainless Steel

OVENS & INCUBATORS

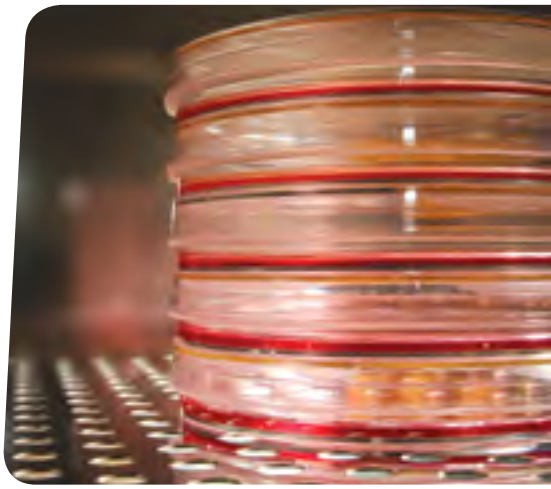
LABWIT range of laboratory incubators and drying ovens are made to the highest standard for exceptional quality, trusted for their consistency in delivering optimum performance and reliability in the lab.

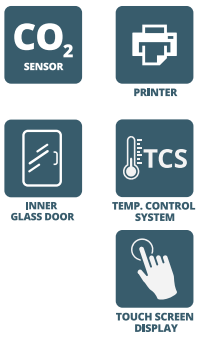
LABWIT's collection of incubators provide precisely controlled environment with wide variety of sizes and types, which literally are suitable for all purposes in a broad range of applications. The general purpose incubators are designed for general lab use and feature direct heating and water jacket models for optimized temperature uniformity across the inner chambers. The direct heating CO_2 incubator has been carefully engineered and proven to provide contamination-free, reliable and easy-to-use environment conditions to protect the samples and optimize cell growth. Besides these, LABWIT also offers incubators with cooling as well as humidity controlling functions, to extend the functionality of our proud product lines.

Moreover, LABWIT drying ovens are available in two types, bottom heating and back heating models. Both types are designed for daily lab or industrial work, from drying sterilization applications to complex controlled heating applications.



ZOCR-1150B





DIRECT HEATING
CO_2 Incubator

LABWIT ZOCR Series CO_2 Incubators have been carefully engineered and proven to provide clean, reliable and easy-to-use environment control to protect your samples and optimize cell growth.

In recent times, CO_2 incubators have become more commonplace in the laboratory for their ability to replicate the growth of mammalian cells and tissues for in vitro fertilization, animal research and the many clinical outcomes and fields of medical research. By controlling three essential variables of constant CO_2 level (%), temperature (°C), and relative humidity (RH%), CO_2 incubator can create a balanced and stable environment for cell to grow and thrive. As a result, a controlled pH level (7.1-7.4), controlled CO_2 level (5%), constant temperature (37°C), and high relative humidity (>95%) are well maintained from there.

Touch Screen Panel

Start your complete access and full control from your fingertips

Integrated
Comprehensive information available at your fingertips

User-friendly
Graphic user interface, easy to operate with icons and prompts

Intelligent
Self diagnostic alarm system monitors all functions and parameters and prompts the user in case of errors

Touch Screen Panel

1. Decon
Start/ stop Decon Cycle

2. Alarm Indicator
Blinks when alarm occurs. Alarms (except for sensor failures) can be muted by pressing this icon, and may ring back in 5 minutes if alarm conditions still persist.

3. Door Ajar
Lights when door is opened.

4. CO_2 Tank Indicator
Lights when indicated CO_2 tank supply is in use
A Tank: Primary
B Tank: Secondary

5. Heating Indicator
Lights when heating elements are working

6. Gas Inject Indicator
Lights when CO_2 gas is injected.

7. Enter set menu

8. Clock display

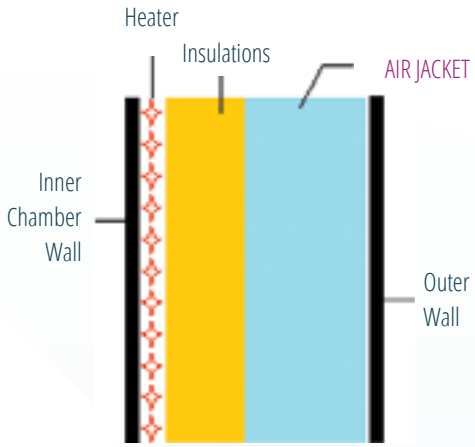
Precise Parameter Controlling System

All-round cares about your cell growth

Direct Heating and Air Jacket System

The chamber design combines direct heating and air jacket elements resulting in efficient thermal isolation of the chamber, rapid temperature recovery and superior protection of samples from ambient temperature fluctuations. Multiple direct heating elements are mounted on each side of the chamber and are controlled independently by the microprocessor to provide outstanding temperature uniformity. One element in the external door and a second within the main unit and adjacent to the perimeter of the glass door, are controlled proportionally to eliminate any of condensation on the glass door.

The unique Air Jacket system creates isolation between insulation and ambient, thereby minimizing the impact of ambient temperature fluctuations on the working chamber, and maintaining more stable temperature control.

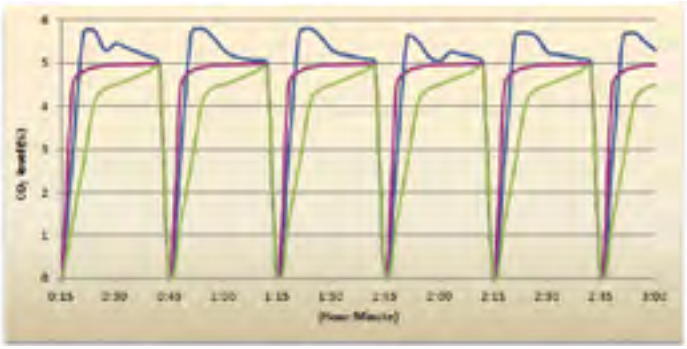


World Class Infrared (IR) CO2 Sensor

LABWIT incorporates a single beam, dual wavelength IR CO_2 sensor, providing the most accurate measurement of CO_2 concentrations available to the market. The superior performance and accuracy of the IR sensor are the most noticeable when applied to situations where temperature and humidity fluctuate rapidly, such as when the door is opened frequently.

IR sensor is located out of the chamber; meaning removal is not required when performing the high temperature decontamination cycle.

IR sensor is drift-free, auto-zero automatically adjusts baseline for optimum accuracy, no need to calibrate by the users.



- Company A's Model: Slow recovery (Typical TC Sensor)
- Company B's Model: Overshoot
- LABWIT ZOCR Model: Fast Recovery, non-overshoot (IR Sensor)

Superior Contamination Controlling Features

Maximizing the safety for where your cells will be thriving

In-Line HEPA Filter

Protects cultures by removing potential contamination sources before CO_2 gas is injected into the chamber. In-line filter should be checked and replaced regularly.

Inner Chamber HEPA Filter

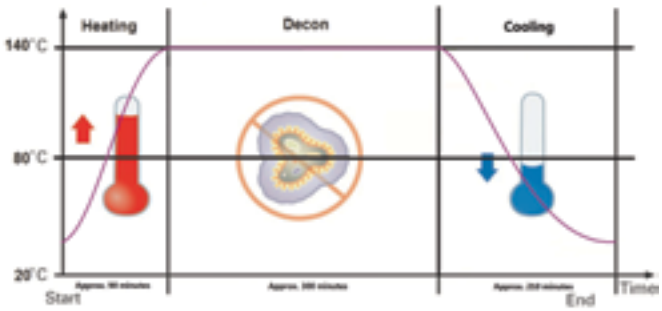
If door openings expose your culture samples to airborne particulates from your room, the inner chamber HEPA filter will dramatically improve air quality (up to 99.97% efficiency in capturing 0.3 micron particles), while maintaining the atmosphere of the still air culture environment avoiding high speed airflow.

Seamless Chamber & Coved Corners

The entire inner chamber is made of high grade electro-polished easy-to-clean stainless steel. All coved corners minimizes the unnecessary chamber surfaces where contaminants can hide.

140°C Decontamination Cycle

The ZOCR Series uses time-ed decontamination cycle. The high temperature decontamination cycle uses 140°C dry heating cycles, effective and maintenance free method to ensure the contaminating agents are eradicated. The incubator can be fully sterilized and ready for a new application after an 10-hour overnight, maintenance free Decon Cycle.



Safety Features

▸ Non-volatile memory guarantees data integrity in the event of power interruption.

▸ Over-temperature protections unit: alarms when temperature deviation is detected, and heaters are cut off when the temperature is overshot by 3°C.

▸ CO_2 deviation alarm protects the pH value of the culture media.

▸ CO_2 supply is interrupted upon door opening to avoid unnecessary gas waste.

▸ Audio and visual alarm reminds of low supply of CO2 gas.

▸ Alarms provide optimum protections over all sensor failures.

▸ Over-current and leakage protection.

▸ Lockable outdoor protects biohazard samples from unauthorized access.

▸ CO_2 tank backup system(Optional): integrated gas tank switcher allows the connection of two CO_2 gas supplies. When low gas supply in the primary tank is detected, the controller switches automatically to the secondary supply.

Order Information

ZOCR-1150B	ZOCR-1150B, 150L, Premium DH CO_2 Incubator, IR Sensor, A+5-60, 0-20%
P4001	WiseKonect™ Data Connection Kit
P4002	Right Hinged Door
P4003	Built-in Printer
P4004	Gas Tank Backup Kit
P9033	Perforated Shelf Plate for ZOCR-1150B

Other Features

▸ Outer Door
Right or Left Hinge Reversible.
Heated for preventing condensations.

Lockable outer door protects your samples against unauthorized access, especially when biologically hazardous material is involved.

▸ Humidity Sensor
Ensures continuous monitoring over the humidity level, resolution of display: 1% Passive humidity read-out. Easy to dismantle for high temperature Decon Cycle.

▸ Stacking Locator
Corners are pressed for easy locating during stacking.

▸ Shelving
SUS304 electro-polished stainless steel.
Anti-tip, easy to dismantle without tools.
Perforated, for improving uniformity.

▸ Water Pan
Autoclavable stainless steel water pan heated by controlled base heater to manage humidity and assist humidity recovery.

▸ Access Port
Makes validation easy and provide the user convenience for connecting instrumentation. A rubber stopper is included as standard.

▸ Glass Inner Door
Tempered glass door allows observations without interference to the inner chamber environment.

WiseKonect™

A wireless data logging, alarming, monitoring system

LABWIT WiseKonect™ uses 2.4GHz ISM band, the most globally accepted unlicensed portion of the RF spectrum, to connect individual LABWIT equipment to PC for remote alarm control and monitoring over data performance.

Compared with RS-232 and RS-485 connections, 2.4GHz is totally cable-free, provides high speed, stable and interference-free data transmission. Up to over hundred of equipment units can be interfaced to a single PC unit.

Model	ZOCR-1150B
	Temperature
Heating Mode	Direct Heat & Air Jacket
Control Method	P.I.D Microprocessor
Temperature Range (°C)	Ambient+5 to 60
Temperature Uniformity (°C)	≤±0.2 @37°C
Temperature Accuracy (°C)	≤±0.2
Ambient Temperature Range (°C)	10-35
	CO_2
CO_2 Control Method	P.I.D Microprocessor
CO_2 Range (% CO2)	0-20
CO_2 Accuracy (% CO2)	≤±0.2
CO_2 Sensor	IR, Single-Beam, Dual Wavelength, Auto-zeroing
	Humidity
Humidification Method	Water Pan
Humidity Range (RH)	Up to 95% @37°C
Humidity Display Resolution (RH)	1%
	Contamination Control
Contamination Control Methods	High Temperature 140°C Decon Cycle
	0.3 Micron In-line HEPA Filter for CO_2 Injection;Inner Chamber HEPA Filter
	Controlling system
Control Panel	5.6" TFT Touch Screen
Alarms	Low & Over temperature, Low & Over CO_2 Deviation, Door Ajar, Low Gas Supply, All Sensor Failures, Printer Failure
CO2 Tank Backup System	Option, with Low Gas Supply Alarm, Auto Switch
Printer	Option, Built-in
WiseKonectTM	Option
	Capacity
Internal Volume (L)	150
Internal Dimensions (WxDxH)(mm)	603x488x650
Exterior Dimensions (WxDxH)(mm)	720x710x930
Packing Dimensions (WxDxH)(mm)	840x830x1100
Net/Gross Weight (Kg)	120/140
Door Type	Left/Right Reversible
Number of Shelves (Std/Max)	3/10
Max. Load per Shelf (Kg)	10
Shelves Size (WxD) (mm)	530x400
Power (W)	220/240 Volt 50/60 Hz
Electricity	1200W
Approval	CE, ISO

ZXDP-B2080

INNER GLASS DOOR

TCS

TEMP. CONTROL SYSTEM

LCD DISPLAY PANEL

DIRECT HEATING
Incubators

ZXDP-series direct heating incubators offer an economical incubation method to a variety of micro-organism cultures. As a standard feature, all incubators have a high-tech microprocessor controller that maintains accurate temperature control (PID) of the chamber in the range of ambient +5°C to 65°C. With an accuracy of ±0.1°C, a user-friendly sealed control panel allows easy digital setting and fast readout of time and temperature as well as an alarm signal if there is a deviation from set point parameters. The processor of our incubators can store up to 9 programs-18 steps-into a non-volatile memory. Programs can be used for running multiple "ramp and soak" cycles up to 99 times. Of course the incubators can also be used as a constant (one) temperature incubator.

- P.I.D. microprocessor ensures the precision of temperature control under both fixed value mode and program mode.
- Fully programmable through the keyboard (9 programs/18 steps).
- Forced-air circulation provides uniformity of ±0.5°C@37°C.
- Audible and visible alarm on over temperature.
- Password protection against unauthorized access to all settings.
- Non-volatile memory retains preset parameters after an accidental power interruption.
- Large LCD display for easy parameters setting and fast readout.
- Inner glass door provides complete visibility to the chamber.
- Standard 2 grids included

Model	ZXDP-B2050	ZXDP-B2080	ZXDP-B2160	ZXDP-B2270
Heat Mode	Direct Heat (With Gentle Circulation)			
Volume (L)	50	80	160	270
Temperature	Ambient+ 5 to 65°C			
Temperature Accuracy	± 0.1°C.	± 0.1°C.	± 0.1°C.	± 0.1°C.
Temperature Uniformity	±0.5°C@37°C	±0.5°C@37°C	±0.5°C@37°C	±0.5°C@37°C
Alarm	Enabled	Enabled	Enabled	Enabled
Timer	0-999 minutes	0-999 minutes	0-999 minutes	0-999 minutes
Setting	Digital	Digital	Digital	Digital
Display	LCD	LCD	LCD	LCD
Grid Included	2 (max 4)	2 (max 4)	2 (max 4)	2 (max 4)
Grid Size(mm) (WxD)	330x345	380x395	480x495	530x595
Distance Between Grids (mm)	80	100	130	160
Inner Dimensions (mm) (WxDxH)	350x350x410	400x400x500	500x500x650	600x550x820
Exterior Dimensions (mm) (WxDxH)	470x520x785	520x570x880	620x670x1030	740x740x1280
Packing Dimensions (mm) (WxDxH)	540x590x945	590x640x1040	690x740x1190	810x810x1440
Net Weight (kg)	33/57	40/73	63/94	90/130
Power (W)	200	250	380	550
Electricity	220-240V 50/60 Hz			
Approval	CE, ISO			

Order Information

ZXDP-B2050	ZXDP-B2050,50L, Direct Heat Incubator, A+5-65°C
ZXDP-B2080	ZXDP-B2080,80L, Direct Heat Incubator, A+5-65°C
ZXDP-B2160	ZXDP-B2160,160L, Direct Heat Incubator, A+5-65°C
ZXDP-B2270	ZXDP-B2270,270L, Direct Heat Incubator, A+5-65°C

P9001	Grid Plate for ZXDP-B2050, S/S ※
P9002	Grid Plate for ZXDP-B2080, S/S
P9004	Grid Plate for ZXDP-B2160, S/S
P9005	Grid Plate for ZXDP-B2270, S/S

※ S/S: Stainless Steel

WATER JACKET Incubators

ZXGP-B2160

INNER GLASS DOOR

TEMP. CONTROL SYSTEM

LCD DISPLAY PANEL

ZXGP incubators offer an economical incubation method to a variety of micro-organism cultures with high uniformed temperature control. The processor of our incubators can store up to 9 programs-18 steps-into a “non-volatile” memory. Programs can be used for running multiple “ramp and soak” cycles up to 99 times. Of course the incubators can also be used as a constant (one) temperature incubator. With a triple wall construction and large volume of water, ZXGP-series water jacketed incubators provide unsurpassed temperature stability and protection against heat loss. The water jacket technology holds the temperature for extended periods of time, which is critical during power failures. Under test conditions, the temperature initially drops at only 1°C per hour, and just 8.5°C in 10 hours, by contrast, on most direct heating models, which comes with 3.4°C and more than 15°C dropping instead.

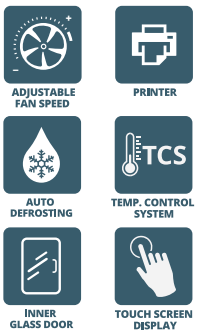
Model	ZXGP-B2080	ZXGP-B2160	ZXGP-B2270
Heat Mode	Water Jacket (With Gentle Circulation)		
Volume (L)	80	160	270
Temperature	Ambient+ 5 to 65°C		
Temperature Accuracy	± 0.1°C.	± 0.1°C.	± 0.1°C.
Temperature Uniformity	±0.5°C@37°C	±0.5°C@37°C	±0.5°C@37°C
Alarm	Enabled	Enabled	Enabled
Timer	0-999 minutes	0-999 minutes	0-999 minutes
Setting	Digital	Digital	Digital
Display	LCD	LCD	LCD
Grid Included	2 (max 3)	2 (max 4)	2 (max 4)
Grid Size(mm) (WxD)	380x395	480x495	580×595
Distance Between Grids (mm)	110	126	150
Inner Dimensions (mm) (WxDxH)	400x400x500	500x500x650	600x600x750
Exterior Dimensions (mm) (WxDxH)	560x525x870	660x625x1020	760x725x1120
Packing Dimensions (mm) (WxDxH)	680x645x1040	780x745x1190	880x845x1290
Net/Gross Weight (kg)	45/69	78/105	115/145
Power (W)	640	1140	1740
Electricity	220-240V 50/60 Hz		
Approval	CE, ISO		

Order Information

ZXGP-B2080	ZXGP-B2080,80L, Water Jacket Incubator, A+5-65°C
ZXGP-B2160	ZXGP-B2160,160L, Water Jacket Incubator, A+5-65°C
ZXGP-B2270	ZXGP-B2270,270L, Water Jacket Incubator, A+5-65°C

P9007	Grid Plate for ZXGP-B2080, S/S
P9008	Grid Plate for ZXGP-B2160, S/S
P9009	Grid Plate for ZXGP-B2270, S/S

ZXSD-R1270



PREMIUM BOD
Incubators

The premium BOD incubators of the ZXSD-R series from LABWIT are designed to meet a variety of advanced experimental needs, ranging from BOD determination to incubation of micro-organism cultures, preservation of samples, Drosophila incubation and determination of enzymatic activities, to any applications that need incubation at close to ambient temperature or lower. It features a 4.3" TFT touch screen panel, which ensures clear indication as well as easy operations. Each of the four models has a wide temperature range from ambient -18 °C (minimum 4°C) to 65 °C and can be operated at a single user defined temperature, but can also be programmed with up to 9 different temperature segments within a time frame (18 steps). The (cooling) compressor runs continuously and the control is done through a solenoid valve for more precise temperature control if lower than ambient temperatures are required.

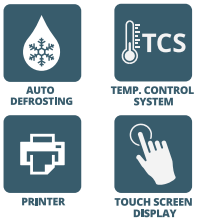
- P.I.D. microprocessor ensures the precision of temperature control under both fixed value mode and programmable mode.
- 4.3" TFT touch screen panel displays all parameters, easy operation and readout for all control modes.
- Three-dimensional airflow system ensures fast response, and high uniformity of ±1.0°C@37°C.
- Sound cooling system with CFC free refrigerant, ozone layer friendly.
- Automatic defrosting: only minimal ice formation and very low heat discharge into working area occurs the unit can continue operating when defrosting.
- Real-time electronic timer from 0 to 9999 minutes.
- 3 steps adjustable fan speed, offering more precisely controlled environment of incubation, without concerns of media or samples drying out.
- Non-volatile memory retains pre-set parameters in case of power interruption.
- Triple safety protections for samples, incubator and environment.
- Independent device for over temperature, high current flow and electric leakage.
- Standard configurations; a double layer tempered glass observe window in outer door, an inner glass door, forced air circulation, a fluorescent lamp, 50 mm test port and 2 grids, built-in printer.
- Optional UV Lamp, RS-232, RS-485 interface available.

Model	ZXSD-R1090	ZXSD-R1160	ZXSD-R1270	ZXSD-R1430
Volume (L)	90	160	270	430
Door Type	Outer door with observation window, and heat resistance glass inner door			
Temperature Range (°C)	4 to 65			
Temperature Accuracy (°C)	0.1			
Temperature Uniformity (°C)	±1.0 @37°C			
Alarm	Enabled			
Timer (min)	0-9999			
Settings	Digital			
Display	4.3" TFT Touch Screen			
Grids Included	2 (Max 11)	2 (Max 15)	2 (Max 18)	2 (Max 25)
Grid Size (mm) (WxD)	310x356	410x456	513x556	555x656
Inner Dimensions (mm) (WxDxH)	400x410x550	500x500x650	600x600x750	700x645x950
Exterior Dimensions (mm) (WxDxH)	550x620x1280	630x740x1380	750x840x1480	840x880x1680
Packing Dimensions (mm) (WxDxH)	620x690x1440	700x810x1540	820x910x1640	910x950x1840
Net/Gross Weight (kg)	68/108	98/145	153/203	180/220
Power (W)	710	860	950	1350
Electricity	220-240V 50/60 Hz			
Approval	CE, ISO			

Order Information

ZXSD-R1090	ZXSD-R1090, 90L, Premium Cooled BOD Incubator, 4-65°C
ZXSD-R1160	ZXSD-R1160,160L, Premium Cooled BOD Incubator, 4-65°C
ZXSD-R1270	ZXSD-R1270,270L, Premium Cooled BOD Incubator, 4-65°C
ZXSD-R1430	ZXSD-R1430,430L, Premium Cooled BOD Incubator, 4-65°C
P5016	RS-485 Interface
P5021	RS-232 Interface
P5022	UV Lighting, 8W, for ZXSD/ZXSP Series
P9010	Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S ※
P9011	Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S
P9012	Grid Plate for ZXSD-B1270, ZXSD-R1270, S/S
P9013	Grid Plate for ZXSD-B1430, ZXSD-R1430, S/S

※ S/S: Stainless Steel



ZXSP-R0270

PREMIUM LOW TEMPERATURE **Incubators**

These premium incubators of the ZXSP-R series features advanced cooling system as well as more engineered structure design which make it possible to cool down as low as -10°C.
Both the interior and exterior are made of robust materials for lifetime operations. The inner chamber is made of high quality #304 stainless steel sheets, with 4 round coved corners. All exposed edges are de-burred to insure no sharp edges. The exterior is cold rolled steel finished with powder coated polyurethane finish, which is resistant to most chemicals and easily cleaned with mild household detergents.

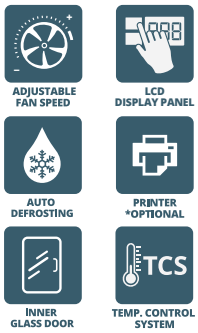
- Gas tight and high density insulated outer door without glass window ensures excellent chamber insulation even when running at minus temperatures.
- P.I.D. microprocessor ensures the precision of temperature control under both fixed value mode and program mode.
- 4.3" TFT touch screen panel displays all parameters, easy operation and readout for all control modes.
- Three-dimensional heating system ensures fast response, and high uniformity of ±1.0°C@37°C.
- Air tight outer door design ensures optimized insulation, achieving the best temperature controlling performance under low temperature setpoint.
- Optional UV Lamp, RS-232, RS-485 interface available.
- Sound cooling system with CFC free refrigerant and automatic defrosting system ensure long term operation at low temperature setpoint without frosting issue.
- Real-time electronic timer from 0 to 9999 minutes.
- Non-volatile memory retains pre-set parameters in case of power interruption.
- Triple safety protections for samples, incubator and environment.
- Independent device for over temperature, high current flow and electric leakage.
- Standard configurations; forced air circulation, a fluorescent lamp, 50 mm test port and 2 grids, built-in printer.
- No inner glass door is included.

Model	ZXSP-R0160	ZXSP-R0270	ZXSP-R0430
Volume (L)	160	270	430
Door Type	Single door with high-density insulation		
Temperature Range (°C)	-10 to 65		
Temperature Accuracy (°C)	0.1		
Temperature Uniformity (°C)	±1.0 @37°C		
Alarm	Enabled		
Timer (min)	0-9999		
Settings	Digital		
Display	4.3" TFT Touch Screen		
Grid size (mm) (WxD)	380x456	477x556	513x656
Grids No.	2 (Max.15)	2 (Max. 18)	2 (Max. 25)
Inner dimensions (mm) (WxDxH)	500x500x650	600x600x750	700x645x950
Exterior dimensions (mm) (WxDxH)	650x680x1380	750x780x1480	850x820x1680
Packing dimensions (mm) (WxDxH)	700x810x1540	820x910x1640	920x950x1840
Net/Gross Weight (kg)	98/145	153/203	180/220
Power (W)	860	950	1350
Electricity	220/240 Volt 50/60 Hz		
Approval	CE, ISO		

Order Information

ZXSP-R0160	ZXSP-R0160,160L, Premium Low Temperature BOD Incubator, -10-65°C
ZXSP-R0270	ZXSP-R0270,270L, Premium Low Temperature BOD Incubator, -10-65°C
ZXSP-R0430	ZXSP-R0430,430L, Premium Low Temperature BOD Incubator, -10-65°C
P5016	RS-485 Interface
P5021	RS-232 Interface
P5022	UV Lighting, 8W, for ZXSD/ZXSP Series
P9030	Grid Plate for ZXSP-R0160, S/S
P9031	Grid Plate for ZXSP-R0270, S/S
P9032	Grid Plate for ZXSP-R0430, S/S

※S/S: Stainless Steel



ZXSD-B1160

ECONOMIC
BOD Incubators

The BOD incubators of the ZXSD-series from LABWIT are designed to meet a variety of advanced experimental needs, ranging from BOD determination to incubation of micro-organism cultures, preservation of samples, Drosophila incubation and determination of enzymatic activities. All these applications require precise and constant temperature control. Each of the four models has a wide temperature range from ambient -18 °C (minimum 4°C) to 65 °C and can be operated at a single user defined temperature, but can also be programmed with up to 9 different temperature segments within a time frame. (18 steps). The (cooling) compressor runs continuously and the control are done through a solenoid valve for more precise temperature control if lower than ambient temperatures are required.

ZXSD-series BOD incubators also feature a back-up program in case of power failures, the stored parameters remain in the memory of the microprocessor. Your experiment therefore resumes under the same conditions even when interrupted by an interruption of power.

- P.I.D. microprocessor ensures the precision of temperature control under both fixed value mode and program mode.
- Large blue LCD display for temperature diagram, easy readout for program control.
- Three-dimensional heating system ensures fast response, and high uniformity of ±1.0°C@37°C.
- Sound cooling system with CFC free refrigerant.
- Automatic defrosting: only minimal ice formation and very low heat discharge into working area occurs the unit can continue operating when defrosting.
- 3 steps adjustable fan speed, offering more precisely controlled environment of incubation, without concerns of media or samples drying out.
- Real-time electronic timer from 0 to 999 minutes.
- Password protection of all parameters against unauthorized access.
- Non-volatile memory retains pre-set parameters in case of power interruption.
- Triple safety protections for samples, incubator and environment.
- Independent device for over temperature, high current flow and electric leakage.
- Standard configurations; a double layer tempered glass observe window in outer door, an inner glass door, forced air circulation, a fluorescent lamp, 50 mm test port and 2 grids.
- Optional built-in printer, UV Lamp, RS-232 interface available.

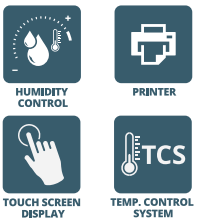
Model	ZXSD-B1090	ZXSD-B1160	ZXSD-B1270	ZXSD-B1430
Volume (L)	90	160	270	430
Door Type	Outer door with observation window, and heat resistance glass inner door			
Temperature Range (°C)	4 to 65			
Temperature Accuracy (°C)	0.1			
Temperature Uniformity (°C)	±1.0 @ 37°C			
Alarm	Enabled			
Timer (min)	0-999			
Settings	Digital			
Display	LCD			
Grids Included	2 (Max 11)	2 (Max 15)	2 (Max 18)	2 (Max 25)
Grid Size (mm) (WxD)	310x356	410x456	513x556	555x656
Inner Dimensions (mm) (WxDxH)	400x410x550	500x500x650	600x600x750	700x645x950
Exterior Dimensions (mm) (WxDxH)	550x555x1280	630x740x1380	750x840x1480	840x880x1680
Packing Dimensions (mm) (WxDxH)	620x625x1440	700x810x1540	820x810x1640	910x950x1840
Net/Gross Weight (kg)	68/108	98/145	153/203	180/220
Power (W)	710	860	950	1350
Electricity	220-240V 50/60 Hz			
Approval	CE, ISO			

Order Information

ZXSD-B1090	ZXSD-B1090,90L, Economic Cooled BOD Incubator, 4-65°C
ZXSD-B1160	ZXSD-B1160,160L, Economic Cooled BOD Incubator, 4-65°C
ZXSD-B1270	ZXSD-B1270,270L, Economic Cooled BOD Incubator, 4-65°C
ZXSD-B1430	ZXSD-B1430,430L, Economic Cooled BOD Incubator, 4-65°C
P5016	RS-485 Interface
P5021	RS-232 Interface
P5022	UV Lighting, 8W, for ZXSD/ZXSP Series
P9010	Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S ※
P9011	Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S
P9012	Grid Plate for ZXSD-B1270, ZXSD-R1270, S/S
P9013	Grid Plate for ZXSD-B1430, ZXSD-R1430, S/S

※ S/S: Stainless Steel

ZXMP-R1230



PREMIUM HUMIDITY **Incubators**

Like all LABWIT equipment, the premium humidity incubators have been designed to provide one of the highest quality standards of performance with matching microprocessor technology, precise temperature control and humidity control system combining state-of-the-art technology with years of design, quality and manufacturing experience. The ZXMP-series humidity incubators are specialized in a variety of critical experiments, such as analysis of water, BOD tests, incubation of tissue cell, germs and other micro-organism, and so on. To achieve this, the LABWIT control electronics is in place to service the precise control requirements of the chamber's environment, providing optimum programmable conditions for culture growth.

Each model has a wide temperature range from 4 to 65 °C, with relative humidity control from 40 to 90% RH, which can be operated at a single user defined temperature and relative humidity, but can also be programmed with up to 9 different temperature/ humidity segments within a time frame. (18 steps)

- P.I.D. microprocessor ensures the precision of temperature and humidity control under both fixed value mode and temperature control under programmable mode.
- 4.3" TFT touch screen panel displays all parameters, easy operation and readout for all control modes.
- The humidification system features 140°C steam direct injection into the chamber with quality humidity sensor. Maintenance of the water tank can be easily performed from the side and back . The water level in the tank can be checked by looking through the central viewing window.
- Tempered inner glass window provides a clear view of samples in the chamber.
- Three dimensional heating system ensures fast response, and high uniformity of ± 1.0°C @ 37°C
- Sound cooling system with CFC free refrigerant and automatic defrosting system.
- Real time electronic timer from 0 to 9999 minutes.
- Non-volatile memory retains pre-set parameters in case of power interruption.
- All shelves, shelf supports and guide rails are easily removable and can be autoclaved to remove contamination.
- Independent device for over temperature, high current flow and electric leakage.
- Standard 2 grids & built-in printer included, optional RS-485 interface available.

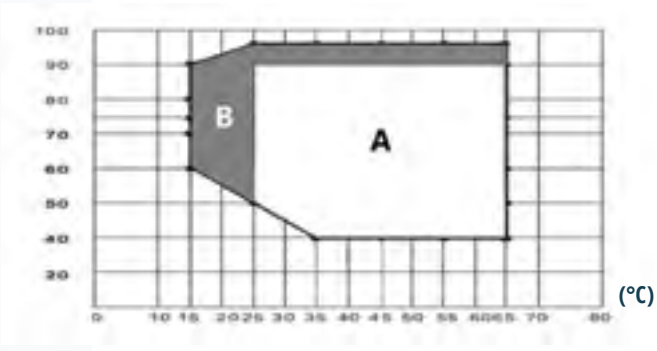
Model	ZXMP-R1150	ZXMP-R1230	ZXMP-R1430
Volume (L)	150	230	430
Temperature Range (°C)	4 to 65		
Temperature Accuracy (°C)	0.1		
Temperature Uniformity (°C)	±1.0 @37°C		
Humidity Range (%RH)	40-90		
Humidity Accuracy (%RH)	0.1		
Humidity Uniformity (%RH)	±5		
Alarm	Enabled		
Timer (min)	0-9999		
Settings	Digital		
Display	LCD		
Grids Included	2 (Max 13)	2 (Max 15)	2 (Max 23)
Grid size (mm) (WxD)	360x456	465x556	528x658
Inner dimensions (mm) (WxDxH)	500x450x650	600x550x700	700x618x950
Exterior dimensions (mm) (WxDxH)	628x728x1380	728x828x1480	828x895x1682
Packing dimensions (mm) (WxDxH)	710x810x1550	810x910x1650	910x970x1850
Net/Gross Weight (kg)	105/145	130/180	175/220
Power (W)	1500	1600	2500
Electricity	220-240V 50/60 Hz		
Approval	CE, ISO		

Order Information

ZXMP-R1150	ZXMP-R1150,150L, Premium Humidity Incubator, 4-65°C, 40-90%RH
ZXMP-R1230	ZXMP-R1230,230L, Premium Humidity Incubator, 4-65°C, 40-90%RH
ZXMP-R1430	ZXMP-R1430, 430L, Premium Humidity Incubator, 4-65°C, 40-90%RH
P9014	Grid Plate for ZXMP-R1150, S/S ※
P9015	Grid Plate for ZXMP-R1230, S/S
P9016	Grid Plate for ZXMP-R1430, S/S

※ S/S: Stainless Steel

Temperature & Humidity Control Range (%RH)



A: Guaranteed working range

B: Recommended Time-limited operation (max. 24 hours)

LCD DISPLAY PANEL

TCS

TEMP. CONTROL SYSTEM

ZXFD-B5140

ZXRD-B5110

DRYING **Oven**

The LABWIT forced air drying ovens are engineered for your daily work, from routing simple glassware drying sterilization applications up to 200°C or 300°C, to the complex, controlled heating applications, for example, aging, bonding, curing, heat treat annealing, stress relieving, burn-in, hardening test purposes.

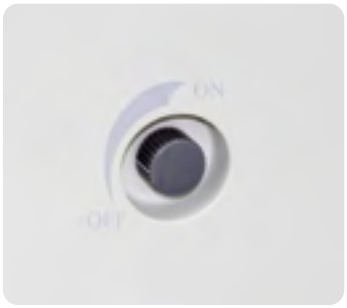
LABWIT provide ovens with two optional heating modes, ZXRD-series back heating, and ZXFD-series bottom heating. Both of them are designed to provide accurate temperature uniformity, with minimized temperature overshoot. For all 200°C models, the ovens are equipped with LCD control panel and can be programmed to run up to 9 different programs with 18 steps of temperatures and time segments.

- Forced-air convection and three-dimensional heating systems ensure air circulation and heat distribution.
- Options of back or bottom heating models, up to 200°C and 300°C.
- PID Microprocessor controller with 9 segments and 18 steps, only on 200°C models.
- Large LCD display on 200°C models, and LED display on 300°C models.
- Argon-filled multiple glazed tempered safety glass window, 2 glazing for 200°C models and 3 glazing for 300°C models, optimizes sample monitoring as well as minimize heat losses.
- Electro-polished stainless steel inner chambers and round corners for easy cleaning and better air circulation.
- Safe protections: over-temperature limit protection, separate over-current fuses, trip switching protection over electric leakage.
- Non-volatile memory retains pre-set parameters in case of power interruption.
- Standard wheel casters available on all models of 210L and above in volume.
- Adjustable electro-polished stainless steel shelving provides air flow around samples for uniformed tempering and allow for easy cleaning.
- 2 grids included as standard.

Air Tight Door

▸ Hermetic door closure system for optimal air tightness and minimal heat loss.

▸ "Push & Catch" design, easy to grip and operate.



Adjustable Air Vent

▸ Adjustable air vent for discharge of humidity evaporation.

▸ Adjusting knob located on side wall for easy access.

▸ Air vent located on the back wall.

Convenient Working Environment

▸ Complete stainless steel inner chamber.

▸ Low heat dissipation due to 50mm high density insulation.

▸ 2 shelves included as standard.

Specifications of ZXRD (Back Heating)

Model	ZXRD-B5030	ZXRD-B5055	ZXRD-B5110	ZXRD-B5210	ZXRD-7080	ZXRD-7140	ZXRD-7230
Volume (L)	30	55	110	210	80	140	230
Heating Mode	Back Heating						
Programmable Control (9Segment/18 steps)	Standard						
Temperature Range (°C)	Ambient+5 to 200				Ambient+5 to 300		
Temperature Accuracy (°C)	0.1						
Temp. Uniformity (%)	< ± 2.5% (@max temperature)						
Display	LCD				LED		
Alarm	Enabled						
Timer (min)	1-999						
Settings	Digital						
Grids Included	2 (max 7)	2 (max 10)	2 (max 16)	2 (max 19)	2 (max 13)	2 (max 17)	2 (max 21)
Grid Size (mm) (WxD)	235x255	285x295	335x375	455x485	319x330	385x405	475x485
Distance Between Grids (mm)	30						
Chamber Dimensions (mm) (WxDxH)	300x285x340	330x345x450	420x385x650	500x535x750	375x365x550	450x440x685	520x540x800
Exterior Dimensions (mm) (WxDxH)	490x470x750	520x525x860	610x565x1060	690x720x1240	565x495x960	640x570x1095	720x670x1290
Packing Dimensions (mm) (WxDxH)	570x550x920	600x610x1020	690x665x1230	770x820x1400	650x590x1130	720x670x1255	800x720x1450
Net/Gross Weight (kg)	40/64	50/71	61/104	98/143	58/98	70/104	104/150
Power (W)	900	1300	2100	2500	2100	2300	2700
Electricity	220-240V 50/60 Hz						
Approval	CE, ISO						

Specifications of ZXFD (Bottom Heating)

Model	ZXFD-B5090	ZXFD-B5140	ZXFD-B5250	ZXFD-B5430	ZXFD-B5600
Volume (L)	90	140	250	430	600
Heating Mode	Bottom Heating				
Programmable Control (9Segment/18 steps)	Yes, Standard				
Temperature Range (°C)	A+5 to 200				
Temperature Accuracy (°C)	0.1				
Temperature Uniformity (%)	< ± 2.5% (@max temperature)				
Display	LCD				
Alarm	Enabled				
Timer (min)	1-999				
Settings	Digital				
Grids Included	2 (Max 4)	2 (Max 5)	2 (Max 6)	2 (Max 8)	2 (Max 8)
Grid Size (mm) (WxD)	389×393	413×493	493×595	596x694	725×789
Distance Between Grids (mm)	90	95	105	105	110
Chamber Dimensions (mm) (WxDxH)	400x430x485	500x455x600	600x535x750	700x635x950	800x766x1000
Exterior Dimensions (mm) (WxDxH)	585x610x895	685x635x1010	790x720x1240	890x820x1440	990x950x1495
Packing Dimensions (mm) (WxDxH)	655x680x1055	755x705x1170	860x790x1400	960x890x1600	1060x1020x1655
Net/Gross Weight (kg)	55/81	80/115	108/145	170/210	210/255
Power (W)	1500	2100	2500	2700	2900
Electricity	220-240V 50/60 Hz				
Approval	CE, ISO				

Order Information

ZXRD-B5030	ZXRD-B5030,30L, Back Heating Oven, A+5-200°C
ZXRD-B5055	ZXRD-B5055,55L, Back Heating Oven, A+5-200°C
ZXRD-B5110	ZXRD-B5110,110L, Back Heating Oven, A+5-200°C
ZXRD-B5210	ZXRD-B5210,210L, Back Heating Oven, A+5-200°C
ZXRD-7080	ZXRD-7080,80L, Back Heating Oven, A+5-300°C
ZXRD-7140	ZXRD-7140,140L, Back Heating Oven, A+5-300°C
ZXRD-7230	ZXRD-7230,230L, Back Heating Oven, A+5-300°C
ZXFD-B5090	ZXFD-B5090,90L, Bottom Heating Oven, A+5-200°C
ZXFD-B5140	ZXFD-B5140,140L, Bottom Heating Oven, A+5-200°C
ZXFD-B5250	ZXFD-B5250,250L, Bottom Heating Oven, A+5-200°C
ZXFD-B5430	ZXFD-B5430,430L, Bottom Heating Oven, A+5-200°C
ZXFD-B5600	ZXFD-B5600,600L, Bottom Heating Oven, A+5-200°C

※ S/S: Stainless Steel

P9017	Grid Plate for ZXRD-B5030, S/S ※
P9018	Grid Plate for ZXRD-B5055, S/S
P9019	Grid Plate for ZXRD-B5110, S/S
P9020	Grid Plate for ZXRD-B5210, S/S
P9021	Grid Plate for ZXRD-7080, S/S
P9022	Grid Plate for ZXRD-7140, S/S
P9023	Grid Plate for ZXRD-7230, S/S
P9025	Grid Plate for ZXFD-B5090, S/S
P9026	Grid Plate for ZXFD-B5140, S/S
P9027	Grid Plate for ZXFD-B5250, S/S
P9028	Grid Plate for ZXFD-B5430, S/S
P9029	Grid Plate for ZXFD-B5600, S/S

WATER BATHS

& SHAKERS

General water baths and water bath shakers are diffusely useful in chemical industry, biology, pharmacy, environmental protection, hygiene and disease control, academies and other science research and producing areas.

The LABWIT offers comprehensive range of water baths & shakers which combine unmatched reliability and durability for your laboratory applications. It delivers superior temperature control and uniformity. Bath temperature is controlled to an accuracy of ±0.1℃ by a P.I.D microprocessor controller for optimum, reproducible bath conditions.

LCD DISPLAY PANEL

TCS
TEMP. CONTROL SYSTEM

ZSXH-618

ZSQ-3

WATER Baths

LABWIT offers a comprehensive range of water bath choices, units are categorized by capability of circulation and various sizes.

Circulating Water Bath

LABWIT circulating water baths are ideal for applications where temperature uniformity and control are crucial, such as enzymes and serology. These high performance baths range in capacity 18 and 25 liters and include a stainless steel diffuser shelf and a hinged gable cover as standard equipment.

▸ Water bath temperature is monitored and controlled over the entire range of ambient up to 99.9℃ with an accuracy of ±0.1℃ with P.I.D temperature controller.

▸ Circulating pump direct water flows around bath perimeter for fast heating and better uniformed temperature control, ±0.2℃@37℃.

▸ Easy-to-maintain stainless-steel interior chamber and powder-coated exterior resist most corrosion and chemical damages.

▸ Easy-to-read LED digital display provides a user-friendly interface which helps minimize errors in establishing running conditions.

▸ Non-volatile memory retains preset parameters during a power failure and restarts unit automatically after the power is restored.

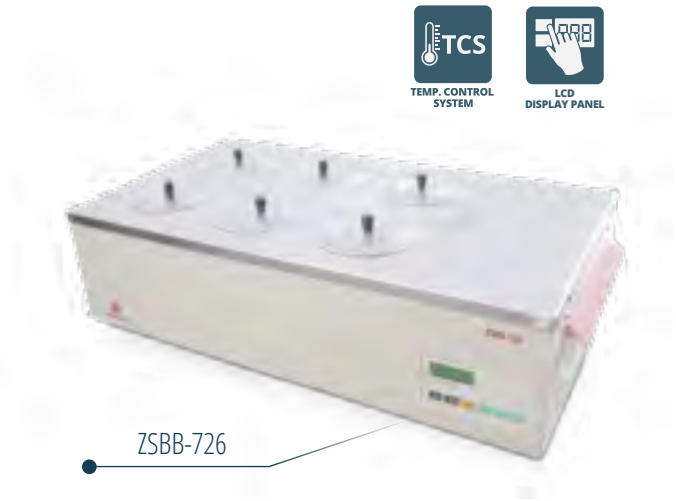
▸ Electro-polished SUS304 stainless steel hinged gable lid to prevent dust penetration, uncontrolled heat dissipation as well as water evaporation.

▸ Low water level alarm.

▸ Anti-drying function.

▸ Fitted with drain valve.

Non Circulating Water Baths



▸ Available in four different models, range in numbers of well compartment from 2 to 8 including a stainless steel diffuser shelf.

▸ Precise temperature control up to 99.9°C.

▸ Water bath temperature is monitored and controlled over the entire range with an accuracy of ±0.1°C with P.I.D temperature controller.

▸ Easy-to-maintain stainless-steel interior chamber and powder-coated exterior resist most corrosion and chemical damages.

▸ Easy-to-read LED digital display provides a user-friendly interface which helps minimize errors in establishing running conditions.

▸ Non-volatile memory retains preset parameters during a power failure and restarts unit automatically after the power is restored.

▸ Standard ring set to prevent dust penetration, uncontrolled heat dissipation as well as water absorption.

▸ Low water level alarm.

▸ Anti-drying function.

▸ Fitted with drain valve.

Personal Mini Water Baths

▸ Personal sized tank of 5.5 L.

▸ Stainless steel interior tank and powder coated corrosion resistant exterior case.

▸ Easy-to-read LED digital display provides a user-friendly interface which helps minimize errors in establishing running conditions.

▸ High precision temperature sensor probe.

▸ Precise temperature control with P.I.D microprocessor controller.

▸ High-density insulation minimizes heat losses.

▸ Electro-polished perforated diffuser made of SUS304 stainless steel as standard.

Model	ZSQ-3	ZSBB-712	ZSBB-724	ZSBB-726	ZSBB-728	ZSXH-618	ZSXH-625
Volume(L)	5.5	8	16	24	32	18	25
Temperature	Ambient-99.9°C						
Control	P.I.D Microprocessor						
Temperature Accuracy	±0.1°C						
Circulation Pump	No					Yes	
Temperature Uniformity	±0.5°C@37°C					±0.2°C@37°C	
Lid	None	Ring Set				Gable Lid	
Compartments	1	2x1	2x2	3x2	4x2	1	
Timer	1 minute to 500 hours						
Setting	Digital						
Display	LED						
Power (W)	500	500	1000	1500	2000	1500	2000
Tank Dimensions (mm) (WxDxH)*	Ø220x150	320x160x160	320x320x160	480x320x160	640x320x160	350x300x225	400x320x250
Exterior Dimensions (mm) (WxDxH)*	320x260x300	575x225x235	575x385x235	735x385x235	895x385x235	735x365x385	785x385x420
Packing dimensions (mm) (WxDxH)	420x350x420	645x295x395	645x455x395	805x455x395	965x455x395	840x430x540	890x450x575
Net/Gross Weight (kg)	6/13	8/13	14/21	20/29	22/33	22/32	28/40
Electricity	220/24 Volt - 50/60 Hz						
Approval	CE, ISO						

* Tank height includes perforated diffuser height of 50mm.

	Order Information
ZSQ-3	ZSQ-3, 5L Water Bath, 1, A-99.9°C
ZSBB-712	ZSBB-712, 8L Water Bath, 2x1, A-99.9°C
ZSBB-724	ZSBB-724, 16L Water Bath, 2x2, A-99.9°C
ZSBB-726	ZSBB-726, 24L Water Bath, 3x2, A-99.9°C
ZSBB-728	ZSBB-728, 32L Water Bath, 4x2, A-99.9°C
ZSXH-618	ZSXH-618, 18L Water Bath, With Pump&Gable Lid , A-99.9°C
ZSXH-625	ZSXH-625, 25L Water Bath, With Pump&Gable Lid, A-99.9°C
P4011	Gable Lid for ZSBB-712, S/S
P4012	Gable Lid for ZSBB-724, S/S
P4013	Gable Lid for ZSBB-726, S/S
P4014	Gable Lid for ZSBB-728, S/S

ZWY-110X30

LCD DISPLAY PANEL

TCS
TEMP. CONTROL SYSTEM

RECIPROCAL SHAKING
Water Baths

The latest ZWY-110X series reciprocal 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 ±0.1°C by a P.I.D microprocessor controller for optimum reproducible bath conditions. Dual thermostats provide optimum protection for your work and water bath. The steeply gabled lid and inward-sloped tank rim allow condensate to drain neatly back into the bath, preventing condensate from dripping onto the samples.

- Solid electric drive mechanism provides uniform and quiet agitation and enables continuous 24 hour operation.
- Water bath temperature is monitored and controlled over the entire range with an accuracy of ±0.1°C with P.I.D temperature controller.
- Easy-to-read LCD digital display provides a user-friendly interface which helps minimize errors in establishing running conditions.
- Non-volatile memory retains preset parameters during a power failure and restarts unit automatically after the power is restored.
- Heat loss and evaporation is minimized with the use of finely electro-polished stainless steel gabled lid cover, standard on ZWY series units.
- High quality #304 stainless steel for excellent durability of interiors and its parts.
- Standard stainless steel tray, without clamps.

Model	ZWY-110X30	ZWY-110X50
Volume (L)	30	50
Gable Lid Included	Yes	Yes
Shaking Mode	Reciprocal	
Temperature Range (°C)	Ambient-99.9	
Temperature Accuracy	±0.1°C	
Temperature Uniformity	±0.2°C@37°C 100rpm	
Timer	1 minute to 500 hours	
Stroke (mm)	16 (Default setting), 24	
Speed Range(rpm)	20-180	
Tray (mm) (WxD)	434x256	494x316
Capacity *	*Glass dimensions may reduce max. capacity	
50 ml	15	24
100 ml	15	24
250 ml	11	15
500 ml	6	11
1000 ml	-	6
Inner Dimensions (mm) (WxDxH)	508x300x200	568x360x250
Exterior Dimensions (mm) (WxDxH)	795x360x380	855x420x430
Packing Dimensions (mm) (WxDxH)	865x430x520	925x490x590
Net/Gross Weight (kg)	29/40	33/49
Power (W)	1600	2000
Electricity	220-240V 50/60 Hz	
Approval	CE, ISO	

Order Information

ZWY-110X30	ZWY-110X30, 30L, Reciprocal Water Bath Shaker, A-99.9, 20-180rpm, with lid
ZWY-110X50	ZWY-110X50, 50L, Reciprocal Water Bath Shaker, A-99.9, 20-180rpm, with lid

P6014	Tray for ZWY-110X30, S/S ※
P6015	Tray for ZWY-110X50, S/S
P7015	Universal Tray for ZWY-110X30
P7016	Universal Tray for ZWY-110X50
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer

P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S
P8015	Gable Lid for ZWY-110X30
P8016	Gable Lid for ZWY-110X50

※ S/S: Stainless Steel

LAMINAR FLOW

CLEAN BENCHES

LABWIT laminar flow clean benches offers a series of high efficiency products designed to protect equipment and other contents of the work zone from particulates, for applications sensitive to such contamination. It is ideally suited for use with non-hazardous contaminants and when flexible access to the equipment in the work zone is desired.

These laminar flow clean benches are available in premium and economic ranges, each range with airflow pattern options (vertical and horizontal), working surface width options (from 900-1800mm) and working sides options (single and double-sided working surface).

Premium VS Economic

While the economic range features all basic functions of classic type of laminar flow clean bench, the premium range has renowned for its patented HEPA filter monitoring system, which monitors the status of the HEPA filter every time before each operation, and alarms the user in case it's broken, expiring or overloaded. Therefore, the integrity of the key component of the clean bench is well under control and the security of experiment and samples involved are assured.

Refer to the table for more information of the Premium and Economic ranges.

LABWIT Laminar Flow Cabinet	Premium Range (ZHJH-CxxxxC)	Economic Range (ZHJH-CxxxxB)
Filter Monitoring System	Yes. Auto self-validation running, with alarms against filter breakage and invalidations	No
Control panel type	LCD	LED
Velocity adjustment	Stepless	7 Steps
Velocity display	Yes	No
Velocity sensor	Yes, standard	No
Time clock	Yes	No
Constant velocity control	Yes	No
Filter pressure differential Display	Yes	No
UV light type	Quartz High-efficiency	High-efficiency

Vertical Flow VS Horizontal Flow

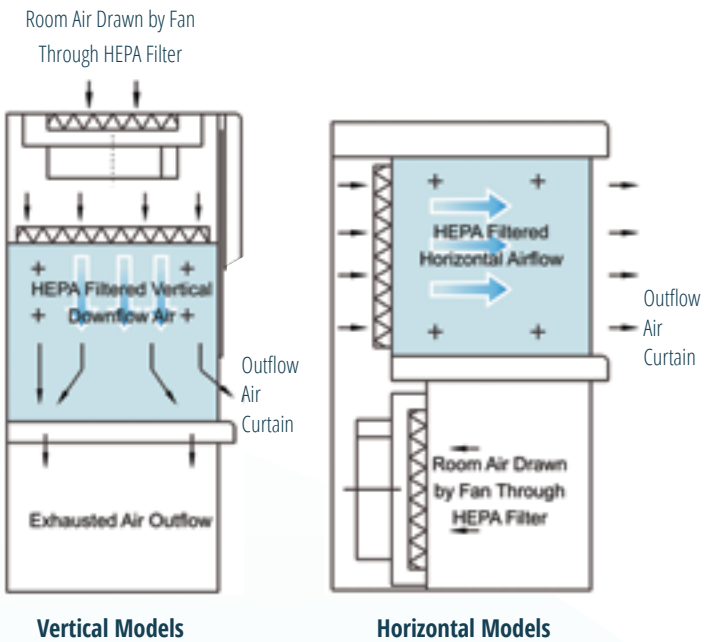
▸ In all models, air is taken in through a pre-filter and then passed through a HEPA filter.

▸ In horizontal flow models, filtered air is passed through the main chamber, and finally exhausted through the back of the working chamber with horizontal air flow . In vertical flow models, filtered air is drawn out from the ceiling of the working chamber, and creates the vertical air down flow across the chamber area.

▸ On the horizontal flow models, air flow creates less turbulence at the work surface compared to vertical flow models, as the airflow smoothly pass across the chamber area rather than directly impinge upon the working surface.

▸ Airflow in a horizontal flow clean bench is blown directly towards the user, whereas the airflow in a vertical flow clean bench strikes the working surface first and exits towards the user indirectly. Herein, it should be noted, neither laminar flow type of clean benches offers any operator protection.

▸ Large or tall equipment in a horizontal flow clean bench will interrupt the airflow more than in a vertical flow model. This may create more turbulence and "dead" spots where airflow is lower than elsewhere. While vertical flow clean benches are not so impacted by large equipment.



Vertical Models **Horizontal Models**

Clean Bench Model Summary

Model & Features		ZHJH-C1106B	ZHJH-C1109B	ZHJH-C1112B	ZHJH-C1115B	ZHJH-C1118B	ZHJH-C1209B	ZHJH-C1214B	ZHJH-C2109B	ZHJH-C2112B	ZHJH-C1109C	ZHJH-C1112C	ZHJH-C1115C	ZHJH-C1118C	ZHJH-C1209C	ZHJH-C1214C	ZHJH-C2109C	ZHJH-C2112C
		Economic Range									Premium Range							
Work Surface Width (mm)	600	•																
	900		•				•		•		•				•		•	
	1200			•						•		•						•
	1400							•								•		
	1500				•								•					
	1800					•								•				
Vertical Flow		•	•	•	•	•	•	•			•	•	•	•	•	•		
Horizontal Flow									•	•							•	•
Single Sided		•	•	•	•	•			•	•	•	•	•	•			•	•
Double Sided							•	•							•	•		
LCD Display											•	•	•	•	•	•	•	•
LED Display		•	•	•	•	•	•	•	•	•								
HEPA Filter Invalidation Alarm											•	•	•	•	•	•	•	•
HEPA Filter Breakage Alarm											•	•	•	•	•	•	•	•
Velocity Stepless Setting											•	•	•	•	•	•	•	•
Velocity Display											•	•	•	•	•	•	•	•
Constant Velocity Control											•	•	•	•	•	•	•	•
Velocity Level Display		•	•	•	•	•	•	•	•	•								
Pressure Differential Display											•	•	•	•	•	•	•	•
Timer											•	•	•	•	•	•	•	•
Time Clock											•	•	•	•	•	•	•	•
Window Sash		•	•	•	•	•	•	•			•	•	•	•	•	•	•	•
UV Lamp		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fluorescent Lamp		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

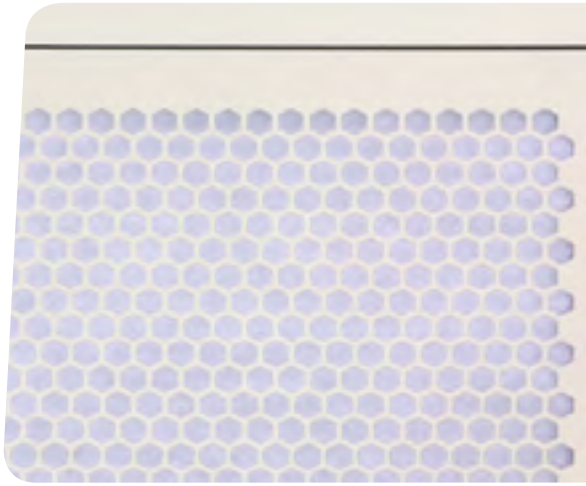
ZHJH-C1109C

ADJUSTABLE FAN SPEED

LCD DISPLAY PANEL

GLASS WINDOW

UV STERILIZATION



PREMIUM LAMINAR FLOW
Clean Benches

ZHJH-C1112C

ZHJH-C1118C

LABWIT premium vertical flow clean bench is a series of high air purifying equipment with an intellectualized control system to ensure a clean working environment. These units are designed for a particle-free, bacteria-free clean-air environment which is used for laboratory work, testing, manufacturing, inspection or pharmaceutical procedures under ISO Class 5 conditions to prevent airborne contamination. They are economical lightweight and are available in a variety of sizes. The patented HEPA filter monitoring system features an automatic filter integrity test, called “Self Validation Test”, making sure the HEPA filter is integral and valid, hence the working room is properly protected every time before operation is started.

During operation, room air is drawn through a pre-filter in the top of the cabinet to trap large particles. Air flows through a HEPA filter and is blown vertically over the work area. The positive pressure laminar airflow provides product protection within the work area. The HEPA-filtered air prevents contaminants from entering the work area and provides a particulate-free work environment that minimizes cross contamination.

- Automatic HEPA filter integrity test monitors and alarms against HEPA filter breakage and overloading.
- LCD screen displays the actual speed, differential pressure, flow volume and HEPA status.
- A pre-filter traps large particles to extend the life of the HEPA filter.
- A quiet and with stepless adjustable speed internal blower provides air velocity.
- Glare free fluorescent lamp.
- Operation mode choices of automatic and manual.
- Standard with high efficiency quartz UV-light.
- Stainless steel work surface.
- Combined base stand with castors.
- Front sash window easy for random positioning.
- Glass windows on left/right side.
- An extra power point is included as standard.
- Time clock display.

Model	ZHJH-C1109C	ZHJH-C1112C	ZHJH-C1115C	ZHJH-C1118C	ZHJH-C1209C	ZHJH-C1214C	ZHJH-C2109C	ZHJH-C2112C
Airflow Mode	Vertical Flow						Horizontal Flow	
Work Side (mm)	Single	Single	Single	Single	Double	Double	Double	Double
Work Area Width (mm)	900	1200	1500	1800	900	1400	900	1200
Filter Monitoring System	Yes. Automatic running before every operation starts.							
Filter Efficiency	Fed Std 209E Class100 ISO 5							
Workroom Air Velocity	0.3-0.6 m/s (stepless)							
Velocity Precision	±0.05 m/s							
Illumination	Fluorescent light ≥ 300Lx							
UV-light	Standard							
HEPA Differential Pressure	0-500 Pa							
Work Area Dimensions (mm) (WxDxH)	900x625 x645	1200x625 x645	1500x625 x645	1800x625 x645	900x650 x645	1400x650 x645	900x590 x570	1200x590 x570
Exterior Dimensions (mm) (WxDxH)	1020x750 x1700	1320x750 x1700	1620x750 x1700	1920x750 x1700	1020x810 x1700	1520x810 x1700	1020x840 x1530	1320x840 x1530
Packing Dimensions (mm) (WxDxH)	1100x840 x1890	1440x840 x1890	1700x870 x1890	2000x840 x1890	1100x930 x1890	1600x930 x1890	1140x960 x1700	1440x960 x1700
Shipping Volume (m3)	1.75	2.24	2.70	3.18	1.93	2.81	1.86	2.35
Net Weight (kg)	153	215	250	310	162	225	170	210
Power (W)	380	680	680	680	380	680	380	680
Electricity	220/240 Volt, 50/60 Hz							
Approval	CE, ISO							

	Order Information
ZHJH-C1109C	90cm, Premium Single Sided, Vertical Flow Clean Bench
ZHJH-C1112C	120cm, Premium Single Sided, Vertical Flow Clean Bench
ZHJH-C1115C	150cm, Premium Single Sided, Vertical Flow Clean Bench
ZHJH-C1118C	180cm, Premium Single Sided, Vertical Flow Clean Bench
ZHJH-C1209C	90cm, Premium Double sided, Vertical Flow Clean Bench
ZHJH-C1214C	140cm, Premium Double sided, Vertical Flow Clean Bench
ZHJH-C2109C	90cm, Premium Single sided, Horizontal Flow Clean Bench
ZHJH-C2112C	120cm, Premium Single sided, Horizontal Flow Clean Bench

ADJUSTABLE FAN SPEED

GLASS WINDOW

UV STERILIZATION

ZHJH-C1109B

ECONOMIC LAMINAR FLOW **Clean Benches**

ZHJH-C2109B

ZHJH-C2112B

LABWIT economic laminar flow clean bench is the basic models of the premium units, which are designed for a particle-free, bacteria-free clean-air environment which is used for laboratory work, testing, manufacturing, inspection or pharmaceutical procedures under ISO Class 5 conditions to prevent airborne contamination. These benches are economical lightweight and are available in a variety of sizes.

During operation, room air is drawn through a disposable pre-filter in the top of the cabinet to trap large particles. Air flows through a HEPA filter and is projected vertically/horizontally over the work area. The positive pressure laminar airflow provides product protection within the work area. The HEPA-filtered air prevents contaminants from entering the work area and provides a particulate-free work environment that minimizes cross contamination.

- LED digital indicator with touch pad controller.
- HEPA filter tested to a typical efficiency of >99.97% for contaminants at 0.3 microns in size.
- Class 100 ISO 5 air cleanliness within the work zone as per Fed Std 209E.
- A disposable pre-filter traps large particles to extend the life of the HEPA filter.
- A quiet and with 7 steps adjustable speed internal blower provides air velocity control.
- Glare free fluorescent lamp.
- Standard with UV-light.
- Stainless steel work surface.
- Combined base stand with castors.
- Glass windows on left/right side.
- Front sash window easy for random positioning (unavailable on horizontal models ZHJH-C2109B, ZHJH-C2112B).

Model	ZHJH-C1109B	ZHJH-C1112B	ZHJH-C1115B	ZHJH-C1118B	ZHJH-C1209B	ZHJH-C1214B	ZHJH-C2109B	ZHJH-C2112B
Airflow Mode	Vertical Flow						Horizontal Flow	
Work Side (mm)	Single	Single	Single	Single	Double	Double	Single	Single
Work Area Width (mm)	900	1200	1500	1800	900	1400	900	1200
Filter Monitoring System	No							
Filter Efficiency	Fed Std 209E Class100 ISO 5							
Workroom Air Velocity	0.3-0.6 m/s (7 steps adjustable)							
Velocity Precision	±0.05 m/s							
Illumination	Fluorescent light ≥ 300Lx							
UV-light	Standard							
HEPA Differential Pressure	0-500 Pa							
Work Area Dim. (mm) (WxDxH)	900x625x645	1200x625x645	1500x625x645	1800x625x645	900x650x645	1400x650x645	900x590x570	1200x590x570
Exterior Dim. (mm) (WxDxH)	1020x740x1700	1320x740x1700	1620x740x1700	1920x740x1700	1020x790x1700	1520x790x1700	980x790x1440	1280x790x1440
Packing Dim. (mm) (WxDxH)	1100x840x1890	1400x840x1890	1700x840x1890	2000x840x1890	1100x930x1890	1600x930x1890	1100x910x1610	1400x910x1610
Shipping Volume (m3)	1.75	2.22	2.70	3.18	1.93	2.81	1.61	2.05
Net Weight (kg)	153	215	250	310	162	225	150	185
Power (W)	380	680	680	680	380	680	380	680
Electricity	220/240 Volt, 50/60 Hz							
Approval	CE, ISO							

Order Information

ZHJH-C1109B	90cm, Economic Single Sided, Vertical Flow Clean Bench
ZHJH-C1112B	120cm, Economic Single Sided, Vertical Flow Clean Bench
ZHJH-C1115B	150cm, Economic Single Sided, Vertical Flow Clean Bench
ZHJH-C1118B	180cm, Economic Single Sided, Vertical Flow Clean Bench
ZHJH-C1209B	90cm, Economic Double sided, Vertical Flow Clean Bench
ZHJH-C1214B	140cm, Economic Double sided, Vertical Flow Clean Bench
ZHJH-C2109B	90cm, Eco Single sided, Horizontal Flow Clean Bench
ZHJH-C2112B	120cm, Eco Single sided, Horizontal Flow Clean Bench

ZSB-1500IIA2

ZSB-1500IIB2

BIOLOGICAL
Safety Cabinets

ZSB Series Class II cabinet provides entire protection (of the samples, personnel and of the environment) by preventing the diffusion of toxic and contaminated particulates during the operation, since makeup air is also HEPA-filtered. The air being drawn in through front grille acts as a curtain barrier to lock potentially contaminated air inside the working zone, hence protect the operator from exposure to biohazard. A motor fan mounted in the top of the cabinet draws filtered unidirectional laminar airflow over the working zone, to avoid possible cross contamination between the products being handled. The contaminated air is discharged to the environment after passing through the exhaust HEPA filter, ensuring the environment is also protected. This type of cabinet is widely used in clinical, hospital, life science, research and pharmaceutical laboratories, where biological safety is paramount.

LABWIT biological safety cabinets are classified into Class II Type A2 and Class II Type B2 ranges, and each of them are supplied in four different sizes respectively (0.9m, 1.2m, 1.5m, 1.8m). These cabinets provide the highest safety for the operators and the environment with some unique safety features:

Constant Velocity Control

The automatic tracing and adjusting function effectively monitors the fluctuation of power supply and balances the negative pressure fluctuation caused by change of ULPA/HEPA resistance , hence, avoids gas leak.

Independent Low Velocity Alarm

An independent audio and visual alarm will be activated as additional protection when main circuit malfunction occurs and the failed to activate the major alarming systems.

Pre-warning and Alarm for ULPA/HEPA Invalidation

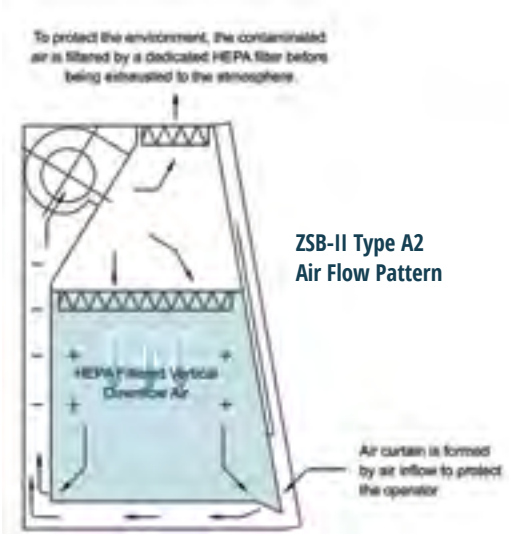
When ULPA/HEPA is almost or already overloaded, the audio, visual and text pre-warning or alarm of invalidation will automatically start.

ULPA/HEPA Breakage Alarm

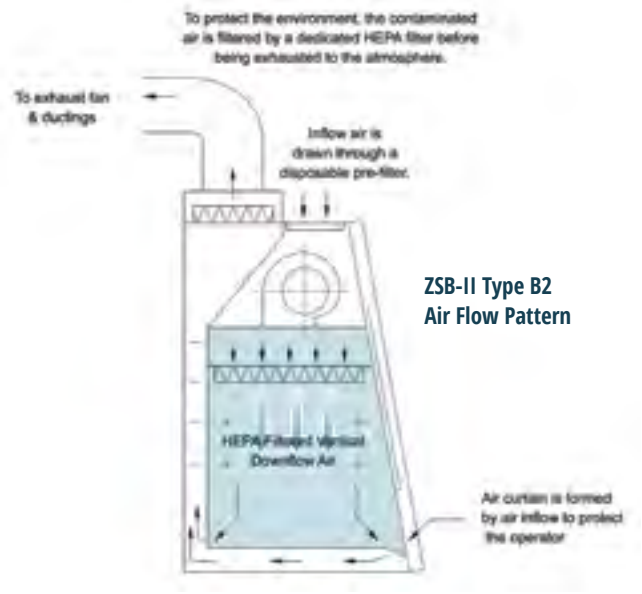
When breakage of ULPA/HEPA occurs as a result of increasing resistance, the audio, visual and text breakage alarm will automatically start.

Comprehensive Multiparameter Monitoring

The sophisticated alarming system provide complete protections and pre-warnings against abnormal conditions that may cause severe biohazard, including velocity, differential pressure, airflow volume, running status of ULPA/HEPA and run time parameter and so on.



ZSB-II Type A2
Air Flow Pattern



ZSB-II Type B2
Air Flow Pattern

Features:

▸ The constant velocity technology can avoid the risk of gas leaking due to low velocity or low negative pressure as a result of voltage fluctuation or increasing resistance of HEPA (ULPA) filters.

▸ ULPA filter tested to a typical efficiency of >99.999% for contaminants between 0.1-0.2 microns in size.

▸ With the comprehensive multi-parameter monitoring technology, the LCD fully displays various real parameters such as velocity, differential pressure, air quantity and HEPA (ULPA) running status, etc.

▸ With the innovative internal negative pressure design, any leaking airflow will be captured by the negative pressure system.

▸ LABWIT unique gas tight design ensures no air leaking at all times.

▸ Self-testing on ULPA/HEPA filters running status.

▸ ULPA/HEPA invalidation pre-warning and alarming system.

▸ ULPA/HEPA breakage alarming system.

▸ Double alarming system consists of independent low velocity alarm and main circuit controlled alarms.

▸ Audio and visual alarm is activated when sash safety height is exceeded.

▸ UV disinfection reservation enhances working efficiency.

▸ Linkage design between sash and UV lamp protect operator from unexpected ultraviolet radiation.

▸ With human engineered design, the large front sash window is designed with an incline angle of 10° to minimize the possible glare, ensure the comfort of operator.

▸ Double film coated and tempered sash window minimize the UV radiations and minimize the possibility of glass explosive accident.

▸ Special seamless sealed working chamber and one piece formed, detachable stainless steel working platform are solid, durable but easy for cleaning.

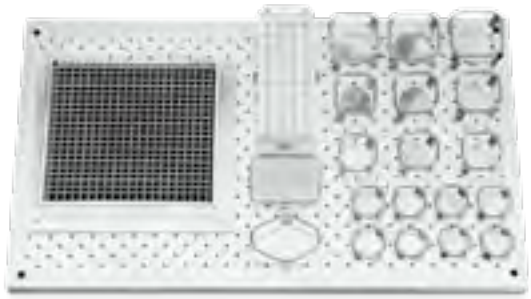
▸ Waterproof outlet and standard water and air valve fittings.

▸ Fluorescent lamp, installed out of the work area, makes it easy to fix and free of pollution.

▸ The contaminated air can be exhausted into the room or out through ducts.

▸ LABWIT provides all duct fittings.

Model	ZSB-900IIA2	ZSB-1200IIA2	ZSB-1500IIA2	ZSB-1800IIA2	ZSB-900IIB2	ZSB-1200IIB2	ZSB-1500IIB2	ZSB-1800IIB2
Display Mode	LCD							
Airflow Mode	70% Re-circulated, 30% Exhausted				100% Exhausted			
Main (Inflow) Filter	HEPA							
Exhaust Filter	HEPA							
Sterilizing Light	Quartz Ultraviolet Sterilizing Light							
Ambient Temperature (°C)	5-35							
Ambient Humidity (RH)	≤80% @ 31°C							
Main Filter Efficiency (%)	≥99.999 (Particle of 0.1-0.2 Microns)							
Exhaust Filter Efficiency (%)	≥99.99 (Particle of 0.3 Microns)							
Average Air Inflow Velocity	0.53m/s							
Average Air Downflow Velocity	0.35m/s							
Downflow Velocity Deviation	±0.015m/s							
Air Velocity Accuracy	0.01m/s							
Pressure Differential Display Range (Pa)	0-500							
Pressure Differential Accuracy	±1%							
Noise Level (db) (A)	67							
Vibration Half Peak Value	≤5μm							
Illumination Intensity (Lux)	≥650							
HEPA Filter Self-checking	OK							
HEPA Filter Invalidation Pre-warning	OK							
HEPA Filter Invalidation Alarm	OK							
HEPA Filter Breakage Alarm	OK							
Optional Manual or Automatic Control	OK							
Pressure Differential Display	OK							
Air Volume Display	OK							
Mute Function	OK							
Sterilization Reservation	OK							
Time Clock Display	OK							
Workroom Dimensions (WxDxH) (mm)	930x635x655	1230x635x655	1540x635x655	1840x635x655	930x635x655	1230x635x655	1540x635x655	1840x635x655
Exterior Dimensions (WxDxH) (mm)	1200x820x2270	1500x820x2270	1800x820x2270	2100x820x2305	1200x820x2370	1500x820x2370	1800x820x2370	2100x820x2370
Packing Dimensions (WxDxH) (mm)	1320x940x2440	1620x940x2440	1920x940x2440	2220x940x2475	1320x940x254 0	1620x940x2540	1920x940x2540	2220x940x2540
Shipping Volume (m3)	3.03	3.72	4.40	5.15	3.15	3.87	4.58	5.3
Net Weight (Kg)	205	250	295	350	220	280	330	390
Power (W)	550	660	1000	1100	1100	1150	1400	1800
Voltage	220-240 Volt, 50/60Hz							
Approval	CE, ISO							



PARTS & ACCESSORIES

We offer a broad range of parts and accessories to lift your experience with LABWIT equipment. Whether it is shaking trays, flask clamps, or spring pallets, we let you keep it real with LABWIT genuine parts.

Standard Shaking Trays

(For Shaking Incubators)

▸ As a basic platform for all shaking equipment, shaking tray/s are included with the main units. Two trays are included with all double layer units. Extra shaking trays can be ordered separately if necessary.

▸ All shaking trays are made of high quality materials, for example, the spray coated steel trays of floor shakers, and SUS304 stainless steel trays of all shaking incubators.

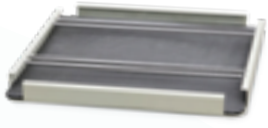
▸ All shaking trays (except for stackable models) are made of SUS 304 stainless steel, and carefully perforated with standard holes distance intervals, which offers 100% flexibility for any attachment combinations on the shaking tray, for example, flask clamps, test tube racks, or 96 well plates, etc.

▸ The shaking trays of all stackable shaking incubators are made of SUS304 stainless steel corrosion resistant anodized aluminium, featuring threaded screw holes to fit with the specialized flask clamps with countersink screws.

	Order Information
P6001	Tray for ZWY-103B/D, S/S
P6002	Tray for ZWY-100H/100D, S/S
P6004	Tray for ZWY-240/200D, ZWYR-240/200D, S/S
P6006	Tray for ZWY-111B/211B/111C/211C, ZWYR-211C, S/S
P6007	Tray for ZWYR-211D, S/S
P6008	Tray for ZWF-111/211, ZWFR-211, S/S
P6010	Tray for ZWY-1102C/2102C, ZWYR-2102C, S/S
P6011	Tray for ZWY-1102/2102, ZWYR-2102, S/S
P6012	Tray for ZWY-1112B/2112B, ZWYR-2112B, S/S
P6013	Tray for ZWF-1112/2112, ZWFR-2112, S/S
P6014	Tray for ZWY-110X30, S/S
P6015	Tray for ZWY-110X50, S/S
P6016	Tray for ZWY-304/ZWF-334, S/S Clamp Tray
P6017	Tray for ZWY-304/ZWF-334, S/S Bar Trayx1, Rubber Barx4, Knobx8
P6018	Tray for ZWQ-344, Stl S/C Trayx1, with springx4, Rubber Matx1
P6020	Tray for ZWY-322B/3222B Stl S/C
P6021	Tray for ZWY-322C/B3222 Stl S/C
P6022	Tray for ZWYC-290A, Predrilled
P6023	Tray for ZWYC-290A, Plain
P6024	Predrilled Tray for ZWYR-D2401/2402/2403
P6025	Tray for ZWYR-D2401/2402/2403, Plain
P6028	Tray for ZWYR-293, Predrilled
P6029	Tray for ZWYR-293, Plain

P6016

P6017



P6018

Universal spring pallets

▸ Universal spring pallet is designed to offer most flexibility for holding uncommon vessels and containers by using springs to divide the pallet area into a number of small sections.

▸ Each full size universal spring pallet has the same width and depth of the standard shaking tray of each model respectively.

▸ Available for most shakers, rockers and shaking incubators.

▸ Full size universal spring pallets can only be installed after the standard shaking tray is removed.

P7003

Order Information	
P7001	Universal Tray for ZWY-103B/103D
P7002	Universal Tray for ZWY-100H/100D
P7003	Universal Tray for ZWY-240/200D, ZWYR-240/200D
P7004	Universal Tray for ZWYR-D2401
P7007	Universal Tray for ZWY-111B/211B/111C/211C, ZWYR-211C, Ful Pcs
P7008	Universal Tray for ZWYR-211D, Ful Pcs
P7009	Universal Tray for ZWF-111/211, ZWFR-211, Ful Pcs
P7011	Universal Tray for ZWY-1102C/2102C, ZWYR-2102C
P7012	Universal Tray for ZWY-1102/2102, ZWYR-2102, Ful Pcs
P7013	Universal Tray for ZWY-1112B/2112B, ZWYR-2112B, Ful Pcs
P7014	Universal Tray for ZWF-1112/2112, ZWFR-2112, Ful Pcs
P7015	Universal Tray for ZWY-110X30
P7016	Universal Tray for ZWY-110X50
P7017	Universal Tray for ZWY-304/ZWF-334
P7019	Universal Tray for ZWY-322B/3222B
P7020	Universal Tray for ZWY-322C/B3222
P7022	Universal Tray for All Hrzntl Model, 1/2 Pcs
P7023	Universal Tray for All Dbl Lyr Model, 1/2 Pcs
P7027	Universal Spring Pallet for ZWYR-293

Flask Clamps

▸ All flask clamp attachments are designed for various Erlenmeyer flasks, made of high-quality stainless steels. They are available in two types, one specific type designed for the shaking trays of stackable shaking incubators, known as "**O Clamp**", and the general type for all other shakers and rockers, known as "**T Clamp**".

▸ **O Clamps** features countersink holes on the bottom and individual countersink screws supplied. This type of clamps can be easily fixed securely onto the shaking trays of stackable shaking incubators by screwing into the threaded holes with a general Philip's screwdriver.

▸ The traditional **T Clamps** have screw pins on the bottom of the clamps. Individual nuts are used to fix the clamps onto the standard trays through the predrilled holes.

▸ Clamps of 750ml in size and below are equipped with 1 screw pin/countersink hole per unit. While 4 screw pins/countersink holes on each clamp of 1L in size and above for more security.

▸ Clamps of 2L size and above are made of premium quality spring stainless steel for better security and grip.

▸ We offer customization services of clamps designing for Schott glass bottles, Fernbach flasks, or your individual requests. Contact us or your local distributor to discuss your requirements.

	T Type Clamps (All models, except Stackable Shaking Incubators)
P8001	T Clamp, S/S, for 50ml Flask, with Spring Retainer
P8002	T Clamp, S/S, for 100ml Flask, with Spring Retainer
P8003	T Clamp, S/S, for 250ml Flask, with Spring Retainer
P8004	T Clamp, S/S, for 500ml Flask, with Spring Retainer
P8005	T Clamp, S/S, for 750ml Flask, with Spring Retainer
P8006	T Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8007	T Clamp, Spring S/S , for 2000ml Flask, with Spring Retainer
P8008	T Clamp, Spring S/S, for 3000ml Flask, with Spring Retainer
P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retainer
P8013	T Clamp, S/S, for 150ml Flask, with Spring Retainer
P8014	T Clamp, S/S, for 300ml Flask, with Spring Retainer

	O Type Clamps (Stackable Shaking Incubators Only)
P8021	O Clamp, S/S, for 50ml Flask, with Spring Retainer
P8022	O Clamp, S/S, for 100ml Flask, with Spring Retainer
P8023	O Clamp, S/S, for 250ml Flask, with Spring Retainer
P8024	O Clamp, S/S, for 500ml Flask, with Spring Retainer
P8025	O Clamp, S/S, for 750ml Flask, with Spring Retainer
P8026	O Clamp, S/S, for 1000ml Flask, with Spring Retainer
P8027	O Clamp, S/S, for 2000ml Flask, with Spring Retainer
P8028	O Clamp, S/S, for 3000ml Flask, with Spring Retainer
P8029	O Clamp, S/S, for 5000ml Flask, with Spring Retainer

"O" Clamps

"T" Clamps

P8010

Tube Racks & 96 Well Plate Clamp

▸ Tube racks are available in stainless steel and ABS plastic.

▸ P8010 stainless steel tube rack set contains one clamp holder and one stainless steel rack. With two adjusting knobs, the rack itself can be randomly fixed at 0-90 degree angles. It is available with different sizes of holes for various sizes of test tubes.
While every tube rack has the same overall dimension, as 30x11x11cm. It is available with different sizes of holes for various sizes of test tubes.
For example:
* P8010 18 : Tube Rack S/S, Φ18.5x52; For 15ml Falcon Tubes
* P80 10 30: Tube Rack S/S, Φ30x20; For 50ml Falcon Tubes
Refer to the below detailed list for available sizes of tube racks.

▸ P8011 ABS plastic tube rack set include a stainless steel clamp and an ABS plastic tube rack.

P8011

P8012

P8010-14	Tube Rack S/S, Φ14.5x60
P8010-15	Tube Rack S/S, Φ15x60
P8010-16	Tube Rack S/S, Φ16x60
P8010-17	Tube Rack S/S, Φ17.5x55
P8010-18	Tube Rack S/S, Φ18.5x52
P8010-20	Tube Rack S/S, Φ20x36
P8010-21	Tube Rack S/S, Φ21x36

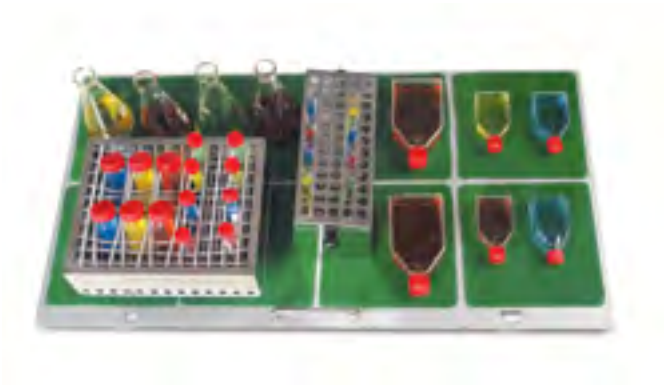
P8010-22	Tube Rack S/S, Φ22.5x36
P8010-25	Tube Rack S/S, Φ25x24
P8010-30	Tube Rack S/S, Φ30x20
P8010-32	Tube Rack S/S, Φ32x17
P8010-35	Tube Rack S/S, Φ35x15
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S, 128 x 86mm
P8032	O Clamp for 96 Well Plate, S/S, 128 x 86mm

Sticky Mat

▸ The LABWIT Sticky Mat is designed for attaching culture vessels, such as flasks, bottles, dishes etc onto the shaking platforms for all shaking equipment, for example, shakers, rockers as well as shaking incubators. It can be used to cover the shaking platforms replacing the traditional flask clamps.

▸ The Sticky Mat can be easily removed and repositioned by simply peeling off the shaking tray surface.

▸ With proper care, the Sticky Mat can be durable and last for several years.



P8017	Sticky Mat, 20 x 20cm

▸ Universal Choice for Vessels and Shaking Trays

The Sticky Mat is suitable for use on any shaking trays/platforms, including those with predrilled or threaded holes, to fix various types of vessels onto the shaking trays.

▸ Wide Temperature Range

The mat is proven to be safe to use over a wide range of temperature from 15-60°C.

▸ High Shaking Speed

With strong stickiness, the Sticky Mat can be used for fastening the vessels with shaking speed up to 300rpm. (See specifications table for more details)

▸ Handy Shape and Size

The size of 20 x 20cm in square shape makes it easy to place small vessels, and handy to be removed.

▸ Handy to Install and Clean

Simply apply the Sticky Mat firmly without air bubble while it's wet. Rinse the mat under running water, or use mild soapy water if necessary.

▸ Easy to Remove the Vessels

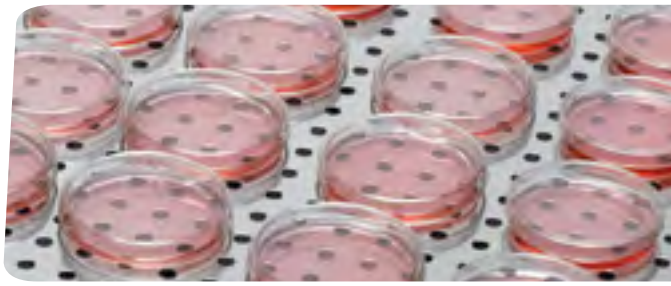
Gently pull the vessel and hold for a while, the vessel will be removed effortlessly.

Specifications:

Only apply to flasks with filling volume 20%. Both flasks and Sticky Mat must be completely intact, clean, dry and free of grease. All information supplied without liability.
Only valid for standard glass Erlenmeyer Flasks. For vessels made of other materials, the maximum speed varies upon the shape and size of the vessel's bottoms.

Flask Size	Max Speed @ Shaking Diameter 25-50mm	Max Speed @ Shaking Diameter <25mm
50-750ml	250rpm Max	250rpm Max
1000ml	250rpm Max	300rpm Max
2000ml	250rpm Max	300rpm Max
3000ml	300rpm Max	300rpm Max
5000ml	250rpm Max	300rpm Max

Grid Plates



- For Incubators & Drying Ovens.
- Anti-tilt design with high quality stainless steel.

Order Information	
P9001	Grid Plate for ZXDP-B2050, S/S
P9002	Grid Plate for ZXDP-B2080, S/S
P9003	Grid Plate for ZXDP-B2120, S/S
P9004	Grid Plate for ZXDP-B2160, S/S
P9005	Grid Plate for ZXDP-B2270, S/S
P9006	Grid Plate for ZXGP-B2050, S/S
P9007	Grid Plate for ZXGP-B2080, S/S
P9008	Grid Plate for ZXGP-B2160, S/S
P9009	Grid Plate for ZXGP-B2270, S/S
P9010	Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S
P9011	Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S
P9012	Grid Plate for ZXSD-B1270, ZXSD-R1270, S/S
P9013	Grid Plate for ZXSD-B1430, ZXSD-R1430, S/S
P9014	Grid Plate for ZXMP-R1150, S/S
P9015	Grid Plate for ZXMP-R1230, S/S
P9016	Grid Plate for ZXMP-R1430, S/S
P9017	Grid Plate for ZXRD-B5030, S/S
P9018	Grid Plate for ZXRD-B5055, S/S
P9019	Grid Plate for ZXRD-B5110, S/S
P9020	Grid Plate for ZXRD-B5210, S/S
P9021	Grid Plate for ZXRD-7080, S/S
P9022	Grid Plate for ZXRD-7140, S/S
P9023	Grid Plate for ZXRD-7230, S/S
P9025	Grid Plate for ZXFD-B5090, S/S
P9026	Grid Plate for ZXFD-B5140, S/S
P9027	Grid Plate for ZXFD-B5250, S/S
P9028	Grid Plate for ZXFD-B5430, S/S
P9029	Grid Plate for ZXFD-B5600, S/S
P9030	Grid Plate for ZXSP-R0160, S/S
P9031	Grid Plate for ZXSP-R0270, S/S
P9032	Grid Plate for ZXSP-R0430, S/S
P9033	Perforated Shelf Plate for ZOCR-1150B

S/S: Stainless Steel

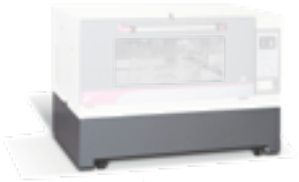
Shaking Frames & Other

Gabel Lids for Water Baths	
P4011	Gable lid for ZSBB-712, S/S
P4012	Gable lid for ZSBB-724, S/S
P4013	Gable lid for ZSBB-726, S/S
P4014	Gable lid for ZSBB-728, S/S

S/S: Stainless Steel

	Shaking Frames for Double Layer Models
P5001	Single Layer Shaking Frame for ZWY-1102C/2102C, ZWYR-2102C, Stl S/C
P5002	Single Layer Shaking Frame for ZWY-1102/2102, ZWYR-2102C, Stl S/C
P5003	Single Layer Shaking Frame for ZWY-1112B/2112B, ZWYR-2112B, Stl S/C
P5006	Single Layer Shaking Frame for ZWY-322B/3222B, Stl S/C
P5008	Single Layer Shaking Frame for ZWY-322C/ B3222, Stl S/C
P5024	Double Layer Shaking Frame for ZWY-1102C/2102C, ZWYR-2102C, Stl S/C
P5025	Double Layer Shaking Frame for ZWY-1102/2102, ZWYR-2102, Stl S/C
P5026	Double Layer Shaking Frame for ZWY-1112B/2112B, ZWYR-2112B, Stl S/C
P5027	Double Layer Shaking Frame for ZWY-322B/3222B, Stl S/C
P5028	Double Layer Frame for ZWY-322C/ B3222, Stl S/C

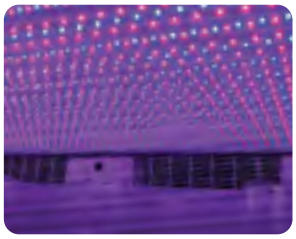
	Base Stands for Stackable Shaking Incubators
P5010-35	Cabinet Base Stand for ZWYR-D2401, H35cm
P5010-50	Frame Base Stand for ZWYR-D2401, H50cm
P5012-35	Cabinet Base Stand for ZWYC-290A, H35cm
P5012-50	Frame Base Stand for ZWYC-290A, H50cm
P5032-35	Cabinet Base Stand for ZWYR-293, 840x710x350mm
P5032-50	Frame Base Stand for ZWYR-293, 840x710x500mm



P5010-35

P5010-50

	LED Lighting Panels
P5011W	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, ZWYC-290A, White
P5011RB	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, ZWYC-290A, Red & Blue
P5031W	LED Lighting Panel and Control Kit, Warm White, For ZWYR-293
P5031RB	LED Lighting Panel and Control Kit, Red & Blue, For ZWYR-293



P5011RB

	Others
P4002	Right Hinged Door, ZOCR-1150B
P4003	Built-in Printer
P4004	Gas Tank Autoswitching Kit
P4015	Printer Paper Roll, 10 pcs
P5013	Direct Steam Humidification Kit for ZWYC-290A
P5014	IR CO2 Kit for ZWYC-290A
P5016	RS-485 Interface
P5019	50mm Shaking Orbit, for ZWY-2112B/1112B, ZWYR-2112B
P5021	RS-232 Interface
P5033	TCP/IP interface
P5018	Static Perforated Shelf for ZWY-1102/2102, ZWYR-2102C, H15cm
P5029	Static Perforated Shelf for ZWYC-290A, H15cm
P5017	Upward Door Opening for ZWYR-D2401/D2402/D2403
P5022	UV Lighting, 8W, for ZXSD/ZXSP Series
P5030	Flourescent Light for ZWYR-240/200D, ZWY-240/200D

P4003

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