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 equipments 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.







PREMIUM STACKABLE Shaking Incubators







ZWYR-D2403

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.
- ▶ 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. (See next page for more information)
- ▶ 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.
- ► For a comfortable working height, the base stands are available in 500mm high.
- ▶ UV light reduces the air burden, keeping the chamber contamination free.



Model Control

Control Mode

Approval

Security Additional CE, ISO

ZWYR-D2401

P.I.D Microprocessor

Fix Value or Program (up to 9 Segments)

Control Panel	LCD Touch Screen	CD Touch Screen								
Air Convection	Forced	rced								
Shaking Mode	Orbit	oit								
Volume/ Compartment (L)	190									
Ambient Temperature(°C)	10-35	-35								
Shaking Speed (rpm)	30-300	-300								
Stroke (mm)	Ø1-50 Stepless Adjustable	I-50 Stepless Adjustable								
Temperature Range (°C)	1-60#									
Temperature Accuracy (°C)	0.1									
Temperature Uniformity (°C)	±1°C@37°C									
Timer	1 to 9999 mins									
Tray (mm) (WxD)	800x430	800x430								
Tray Included	1 2 3									
Inner Dimensions (mm) (WxDxH)	920x532x395	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									

ZWYR-D2402

ZWYR-D2403

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

Over-temperature Protection, Compressor Overload Protection, Electrical Leakage Protection

UV light, Built-in Printer, RS485 COM Kit (Option), LED Lighting Control Kit (Option), Base Stand(Option)

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	Photosy	ynthetic	Lighting
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	, ,							
Light Type	LED, 50% Red, 50% Blue							
Spectrums	Red: 640-660nm, Blue: 430-450nm							
Light Intensity	13,000 Lux (Red: 6500 Lux, Blue: 6500 Lux)							
Control	Yes, Individually, from 0-100% output							
Control Mode	Fixed Value & Programmable							
Dimensions	890x500x10mm							
Power	300W							



	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	Base Stand for ZWYR-D2401, 1300*800*500mm
P5011	LED Lighting Panel and Control Kit, For ZWYR-D2401/D2402/D2403, ZWYC-290A, 890x500mm
P8010	Tube Rack S/S
P8011	Tube Rack ABS Plastic
P8012	Clamp for 96 Well Plate, S/S
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

★ S/S: Stainless Steel







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. This P.I.D microprocessor controlled shakers have a number of advanced features that are really 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 and nutrient mixing and agitation in from small to large flasks.

- ► Quality brushless AC inductive motor supports reliable, quiet and smooth shaking movements up to top speed.
- ▶ 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.
- ▶ Timer up to 9999 mins under fixed value control mode.
- ▶ 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 Adjustm	ent					
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 Pro	tection, Compressor Overload F	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

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					

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





7WYR-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.

- ▶ Quality brushless AC inductive motor supports reliable, quiet and smooth shaking movements up to top speed.
- ▶ 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.
- ▶ Timer up to 9999 mins under fixed value control mode.
- ▶ Predrilled standard tray included, without clamps.
- ▶ UV light reduces the air burden, keeping the chamber contamination free.



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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	on, Compressor Overload Protection	, Electrical Leakage Protection				
Additional	UV light, Built-in Printer, RS	5485 COM Kit (Option)					

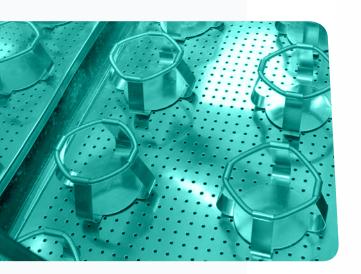
ZWYR-211C	ZWYR-211C, 260L, Premium Horizontal Shaking Incubator 4-60, 30-300rpm
ZWYR-211D	ZWYR-211D, 300L, Premium Horizontal Shaking Incubator 4-60, 30-300rpm
ZWFR-211	ZWFR-211, 275L, Premium Reciprocal Horizontal Shaking Incubator 4-60, 30-240rpm
P6006	Tray for ZWY-111B/211B/111C/211C/ZWYR-211C, S/S *
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

[★] S/S: Stainless Steel

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













PREMIUM DOUBLE LAYER **Shaking Incubators**



ZWYR-2112B



These 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).
- ▶ 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	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)	800x720x1490	1020x825x1605	1500x950x1860	1500x950x1860					
Net/Gross Weight (kg)	195/238	235/272	456/536	486/562					
Power (W)	1000	1050	1600	1600					
Electricity	220-240V 50/60 Hz								
Approval	CE, ISO								
Security	Over-temperature Prote	ction, Compressor Overload Prote	ection, Electrical Leakage Protection	n					
Additional	UV light, Built-in Printer,	RS485 COM Kit (Option)							

Ord	er	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



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			
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.





ZWY-103B ZWY-240

ZWY-100H

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.
- ▶ The combination of high speed and small diameter make ZWY-103D, ZWY-100D & ZWY-200D suitable for many applications involving microtitre plates.

- ▶ AC inductive motor, brushless and maintenance free.
- ► 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-103B	ZWY-103D	ZWY- 100H	ZWY- 100D	ZWF-100	ZWF-200	ZWY-240	ZWY-200D
Volume (L)	34	34	63	63	63	69	69	69
Shaking Speed (rpm)	30-400	30-600	30-400	30-600	30-240	30-240	30-400	30-600
Stroke	Ø24,32,38,50	Ø1-50mm Step	less Adjustment		40mm	nm Ø1-50mm Stepless Adjust		
Shaking Mode	Orbital	pital			Reciprocal	Reciprocal Orbital		
Tray (mm) (WxD)	280x220	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 dimension	ns may reduce ma	ax. capacity					
50 ml	9	9	18	18	18	25	23	23
100 ml	9	9	18	18	18	25	23	23
250 ml	5	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	4	8	8	8
Inner Dimensions (mm) (WxDxH)	340x300x175		410x440x295	410x440x295		490x470x320		
Exterior Dimensions (mm) (WxDxH)	440x410x400		600x580x520		730x740x560			
Packing Dimensions (mm) (WxDxH)	530x520x560		680x690x700	.690x700		800x810x720		
Net / Gross Weight (kg)	43/54	43/54	72/94	72/94	72/94	100/132	100/132	100/132
Power (W)	280	280	550	550	550	700	700	700
Electricity	220-240V 50/60	Hz						
Approval	CE, ISO							

Order Information

ZWY-103B	ZWY-103B, 34L, Economic Orbital Shaking Incubator A+5-60, 30-400rpm
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-103B/D, 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-103B/103D
P7002	Universal Tray for ZWY-100H/100D
P7003	Universal Tray for ZWYR-240/200D, ZWY-240/200D
P7004	Universal Tray for ZWF-100
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







ECONOMIC HORIZONTAL Shaking Incubators

ZWY-211C



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 $\pm 1.0^{\circ}$ 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.
- ▶ 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	Orbital		Reciprocal	
Stroke (mm)	Ø26		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	±0.1°C					
Temperature Uniformity	≤±1°C @ 37°C	1°C @ 37°C					
Shaking Speed (rpm)	30-300		30-300	30-300		30-240	
Tray Dimension (mm)	920x500		920x500	920x500		896x530	
Flask Configuration *	*Glass dimensio	ns may reduce max.	capacity				
50ml	64		64	· · ·			
100 ml	64		64	64			
250 ml	40		40	40		45	
500 ml	28		28	28		28	
750 ml	23	23		23		24	
1000 ml	15	15		15		15	
2000 ml	-		11	11		11	
3000 ml	-		8		8		
5000 ml	-		6	6			
Tube Rack S/S	10	10		10		10	
96 Well Plate	28	28		28		28	
Inner Dimensions (mm) (WxDxH)	975x565x305		975x565x465	975x565x465		975x565x465	
Exterior Dimensions (mm) (WxDxH)	1200x740x820		1230x730x1065	1230x730x1065		1230x730x1065	
Packing Dimensions (mm) (WxDxH)	1290x840x1000		1300x840x1225		1300x800x1225		
Net/Gross Weight (kg)	159/219	174/233	240/293	255/308	201/242	213/252	
Power (W)	800	1050	950	1150	950	1150	
Electricity	220-240V 50/60	Hz				·	
Approval	CE, ISO						
	Order Inform	ation					
ZWY-111B	ZWY-111B, 170L,	Economic Horizonta	l Shaking Incubator A	+5-60, 30-300rpm			
ZWY-211B	ZWY-211B, 170L, Economic Horizontal Shaking Incubator 4-60, 30-300rpm						

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 unit are particularly ideal for fermentation and pharmacy experiments. While they are also 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.
- ▶ 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		580	
Shaking Mode	Orbital		Orbital	Orbital		Orbital			
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	30-300		30-240	
Tray (mm) (WxD)	496x350		734x458		970x560	970x560		940x580	
Capacity	*Glass dimension	*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)	800x720x149 (WxDxH)		1020x825x1605 (WxDxH)		1500x950x1860 (WxDxH)		1500x950x1860	(WxDxH)	
Net/Gross Weight (kg)	180/223	195/238	225/265	235/272	425/505	456/536	455/535	486/562	
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
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
	# Stl S/C:Spray Coated Steel, * S/S: Stainless Steel

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