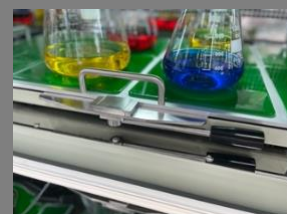# Premium Stackable Shaking Incubators

LABWIT®

ZWYR-D2402

Description:

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.

ZWYR-D2401 With P5010-50

ZWYR-D2403 with P5017

Features:

- Stackable up to three units for maximum space savings.
- 7'' LCD 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.
- Password protection before entering the "SET" page, and preventing unauthorized changes of critical settings.
- 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 cool white, or Red & Blue 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.
- Internal UV light as standard provides proactive contamination control when needed.
- 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)

Flask (ml)	50ml	100ml	250ml	500ml	750ml	1000ml	2L	3L	P8010	P8012
ZWYR-D2401	91	67	38	26	15	15	11	8	8	19
ZWYR-D2402	182	134	76	52	30	30	22	16	16	38
ZWYR-D2403	273	201	114	78	45	45	33	24	24	57

ZWYR-D2401 With P5010-35

Advanced Solutions for Scientific Discovery!

Specifications:

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(ºC)	10-35		
Shaking Speed (rpm)	30-300		
Stroke (mm)	Ø1-50 Stepless Adjustable		
Temperature Range (ºC)	Ambient-20 to 60°C (Min. 4°C)#		
Temperature Accuracy (ºC)	0.1		
Temperature Uniformity (ºC)	±1.0ºC@37℃		
Timer	0 to 9999 mins		
Tray (mm) (WxD)	810x430		
Tray Included	1	2	3
Inner Dimensions (mm) (WxDxH)	920x532x395		
Exterior Dimensions (mm) (WxDxH)	1300x930x735	1300x930x1315	1300x930x1895
Packing Dimensions (mm) (WxDxH)	1390x1000x920	1390x1000x1490	1390x1000x2100
Net/Gross Weight (kg)	250/290	450/540	650/750
Power (W)	1200	2400	3600
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)		

Lighting Control Kit	P5011RB	P5011WW
Light Source	LED	
Light Color*	50% Red, 50% Blue	100% Warm White
Spectrum	Red: 640-660nm, Blue: 430-450nm	4000k:400-700nm
Light Intensity	Up to 600 µmol/(m2*s)	Up to 300 µmol/(m2*s)
Control Range	Individually, from 0-100% output	
Control Mode	Fixed Value & Programmable	
Panel Dimensions	890x500x10mm	
Power	300W	

P5011RB: (50% Red, 50% Blue)

P5011WW: (100% Warm White)

*Fully customized color combinations are available, contact Labwit representatives for more information.

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

Ordering Information:

Part Number	Descriptions	Part Number	Descriptions
ZWYR-D2401	190Lx1, Premium Stackable Shaking Incubator, Single, 4-60℃, 30-300rpm	P8010	Tube Rack S/S
ZWYR-D2402	190Lx2, Premium Stackable Shaking Incubator, Double, 4-60℃, 30-300rpm	P8012	Clamp for 96 Well Plate, S/S
ZWYR-D2403	190Lx3, Premium Stackable Shaking Incubator, Triple, 4-60℃, 30-300rpm	P8017	Sticky Mat, 20 x 20cm
P5010-35	Cabinet Base Stand for ZWYR-D2401, H35cm	P8021	O Clamp, S/S, for 50ml Flask, with Spring Retainer
P5010-50	Frame Base Stand for ZWYR-D2401, H50cm	P8024	O Clamp, S/S, for 500ml Flask, with Spring Retainer
P5011RB	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, 3RFC-1504, Red & Blue	P8022	O Clamp, S/S, for 100ml Flask, with Spring Retainer
P5011WW	LED Lighting Panel, For ZWYR-D2401/D2402/D2403, 3RFC-1504, Warm White	P8023	O Clamp, S/S, for 250ml Flask, with Spring Retainer
P5016	RS-485 Interface	P8024	O Clamp, S/S, for 500ml Flask, with Spring Retainer
P5017	Upward Door Opening for ZWYR-D2401/D2402/D2403	P8025	O Clamp, S/S, for 750ml Flask, with Spring Retainer
P6024	Predrilled Tray for ZWYR-D2401/2402/2403	P8026	O Clamp, S/S, for 1000ml Flask, with Spring Retainer
P6025	Tray for ZWYR-D2401/2402/2403, Plain	P8027	O Clamp, S/S, for 2000ml Flask, with Spring Retainer

O Clamps

P8017 Sticky Mat

P8010 Test Tube Rack