

# **Premium Double Layer Shaking Incubators**







ZWYR-2112B ZWYR-2102C ZWYR-2102

### **Description:**

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 is required).

#### **Features:**

- 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.
- Quality brushless AC inductive motor supports reliable, quiet and smooth shaking movements up to top speed even when fully loaded with 110 pieces of 250ml flasks (ZWYR-2112B).
- 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.
- WewUV light reduces the air burden, keeping the chamber contamination free.
- Predrilled standard tray included, without clamps.



Double Layer Shaking Frame



Flask (ml)	50ml	100ml	250ml	500ml	750ml	1000ml	2000ml	3000ml	5000ml	P8010	P8012
ZWYR-2102C	78	56	36	24	18	6*	4*	3*	2*	8	18
ZWYR-2102	118	104	64	54	30	30	8*	7*	4*	16	38
ZWYR-2112B	262	200	110	76	52	44	15*	10*	8*	22	60
ZWFR-2112	252	190	118	80	48	40	15*	10*	7*	20	64

 $<sup>\</sup>ensuremath{^{*}}$  Applies only when single layer shaking frame is equipped.

## **Specifications:**

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)		30-240					
Stroke (mm)	2	26	35	1 to 50 Stepless			
				Adjustable			
Shaking Mode		Reciprocal					
Temperature (°C)	Ambient-20 to 60°C (Min. 4°C)						
Temperature Accuracy	±0.1°C						
Temperature Uniformity	±0.5°C @37°C						
Timer	0 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	1540x1000x1910	1500x950x1860			
Net/Gross Weight (kg)	195/238	255/330	460/590	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						
Additional	I	Built-in Printer, RS48	5 Interface Kit (Option	n)			

## **Ordering Information:**

Part NO.	Description		Description		
ZWYR-2102C	ZWYR-2102C, 170L, Premium Double Layer Shaking Incubator 4-60, 30-300rpm		T Clamp, S/S, for 50ml Flask, with Spring Retainer		
ZWYR-2102	ZWYR-2102, 330L, Premium Double Layer Shaking Incubator 4-60, 30-300rpm		T Clamp, S/S, for 100ml Flask, with Spring Retainer		
ZWYR-2112B	ZWYR-2112B, 580L, Premium Double Layer Shaking Incubator 4-60, 30-300rpm		T Clamp, S/S, for 150ml Flask, with Spring Retainer		
ZWFR-2112	ZWFR-2112, 580L, Premium Reciprocal Double Layer Shaking Incubator 4-60, 30-240rpm		T Clamp, S/S, for 250ml Flask, with Spring Retainer		
P5001	Single Layer Shaking Frame for ZWY-1102C/2102C, ZWYR-2102C, Stl S/C#		T Clamp, S/S, for 300ml Flask, with Spring Retainer		
P5002	Single Layer Shaking Frame for ZWY-1102/2102, ZWYR-2102C, Stl S/C		T Clamp, S/S, for 500ml Flask, with Spring Retainer		
P5003	Single Layer Shaking Frame for ZWY-1112B/2112B, ZWYR-2112B, Stl S/C		T Clamp, S/S, for 750ml Flask, with Spring Retainer		
P5016	RS-485 Interface		T Clamp, S/S, for 1000ml Flask, with Spring Retainer		
P6010	Tray for ZWY-1102C/2102C/ZWYR-2102C, S/S※		T Clamp, Spring S/S, for 2000ml Flask, with Spring Retainer		
P6011	Tray for ZWY-1102/2102/ZWYR-2102, S/S		T Clamp, Spring S/S, for 3000ml Flask, with Spring Retain		
P6012	Tray for ZWY-1112B/2112B/ZWYR-2112B, S/S	P8009	T Clamp, Spring S/S, for 5000ml Flask, with Spring Retaine		
P6013	Tray for ZWF-1112/2112/ZWFR-2112, S/S		Tube Rack S/S		
P7011	Universal Tray for ZWY-1102C/2102C/ZWYR-2102C		Tube Rack ABS Plastic		
P7012	Universal Tray for ZWY-1102/2102/ZWYR-2102, Ful Pcs		Clamp for 96 Well Plate, S/S		
P7013	Universal Tray for ZWY-1112B/2112B/ZWYR-2112B, Ful Pcs	P8017	Sticky Mat, 20 x 20cm		
P7014	Universal Tray for ZWF-1112/2112/ZWFR-2112, Ful Pcs		# Stl S/C:Spray Coated Steel, ※ S/S: Stainless Steel		

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