

## Digital incubating / refrigerating benchtop shakers

Combining a benchtop incubator/refrigerator with a dual-action (orbital and reciprocating) shaker, WS series shakers offer versatility for a variety of biological and biotech applications.

### Shaking Features

- Dual shaking modes: orbital or reciprocating action.
- Speed range: 10 to 300 rpm.
- Programmable shaking motion.
- Timer range: 10 sec to 999 hr 59 min 59 sec.
- Forward & Backward, Pause: 10 sec to 59 min 59 sec.
- Selectable orbit diameter or stroke length: 20, 30, 40mm.

### Operating Features

- Temperature control:
  - +5 above ambient to 60 °C (for WS-300 and WS-600)
  - +15 °C to 60 °C (for WS-300R and WS-600R)
- Microprocessor PID control.
- Simple calibration and auto-tuning functions.
- Digital timer with Delayed ON/OFF function: 1 min to 99 hr 59 min.
- High temperature limit setting and open door alarm.
- Convenient preset function for 3 most commonly used temperature settings.
- Up to 9 temperature steps and maximum 200 cycles of repetition programmable for each profile.
- Adjustable 3-step fan speed with defrosting time and period control.
- Intuitive control panel with bright LED display (0.1 °C resolution) and touch-sensitive keypad.
- RS-232 interface.



### Constructional Features

- Maintenance-free and durable BLDC motor.
- High-velocity fan ensuring uniform temperature distribution and rapid thermal recovery.
- Convenient sample monitoring thanks to the transparent acrylic lid and the fluorescent lamp.
- Gas spring lid supports providing soft closing, smooth motion, and stopping.
- Environment-friendly CFC-free refrigerant.

### Optional Accessories

- Universal / Dedicated Platforms, Rubber Mats, Universal Attachments
- Flask Clamps, Funnel Clamps
- Test Tube Racks, Spring Wire Racks
- Microplate Holders (three styles)
- Lab Sticker

### Specifications

Product Name	WS-300	
Volume(L)	53	
Temperature	Range(°C )	Ambient +5 ~ 60
	Accuracy(°C )	±0.1 (38)
	Stability(°C )	±1.0 (38)
	Controller	Touch Control; Digital Display with PID automatic regulation
	Heater	Heating Plate, 600W
Timer	Start / Stop / Duration setting; 10sec ~999hr 59min 59sec	
Shaker	Controller	PID automatic regulation
	Power Unit	Brushless motor
	Methods	Clockwise, Counter-clockwise, forth-back, interrupted,
	Shaking Throw (mm)	20, 30 (standard), 40
	Speed (rpm)	10 ~ 300
	Stability (rpm)	± 1 (at 150rpm)
Dimensions	Platform (W × D in mm)	350 × 350
	Inside (W × D × H in mm)	410 × 410 × 320
	Outside (W × D × H in mm)	440 × 740 × 625
Net Weight (kg)	74	
Max. Load (kg)	10	
Order No.	23101	