

DESCRIPTION

PSU-10i, Orbital Shaker

Shaker **PSU-10i** provides regulated orbital motion of the platform and is designed for use both in small specialized biotechnological laboratories and in large multidisciplinary laboratories: a choice of five (5) interchangeable platforms provides the possibility of performing various procedures and techniques.

Shaker **PSU-10i** incorporates a direct drive system, a brushless motor with a guaranteed service life up to 35,000 hours and an automatic loading balancing system. These innovations allow for continuous mixing up to 7 days, ensure reliable, trouble-free operation for more than 2 years and significantly expand the range of the device performance in both high and low limits.

The unit is designed for operation in cold rooms, incubators (excluding CO₂ incubators) and closed laboratory rooms at ambient temperature from +4°C to +40°C in a non-condensing atmosphere and maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.



Product video is available on the website

DESCRIPTION

PSU-20i, Orbital Shaker

Shaker **PSU-20i** provides three motion types: orbital, reciprocal and vibrating, which can be performed separately, pairwise and sequentially in repeated cycles. Shaker is designed for applications both in small specialized laboratories and in large multidisciplinary laboratories. **PSU-20i** is an ideal instrument for laboratories conducting research in biopharmaceutics and biomedicine.

Shaker **PSU-20i** is noiseless and reliable in operation, incorporates a direct drive system and brushless motor with a guaranteed service life up to 35,000 working hours. The use of direct drive and brushless motor allows for continuous mixing up to 7 days and ensures reliable operation for more than 2 years.

A choice of nine (9) different interchangeable platforms provides possibility of performing various procedures and techniques. Special attention should be paid to a multilevel platform, which allows accommodation of a large number of various microplates, Petri dishes, cultural bags and other low containers.

The unit is designed for operation in cold rooms, incubators (excluding CO₂ incubators) and closed laboratory rooms at ambient temperature from +4°C to +40°C in a non-condensing atmosphere and maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.



Multi-rotation

PSU-10i and PSU-20i, Orbital Shakers

SPECIFICATIONS

	PSU-10i	PSU-20i
Speed control range *	50-450* rpm (increment 10 rpm)	20-250* rpm (increment 5 rpm)
Digital speed control	+	
Max. continuous operation time	168 hrs.	
Orbit	10 mm	20 mm
Digital time setting	1 min. -96 hrs./non-stop	
Maximum load	3 kg	8 kg
Overall dimensions (W×D×H)	220×205×90 mm	410×410×130 mm
Weight	3.4 kg	11.7 kg
Input current/power consumption	12 V, 800 mA/9.6 W	12 V, 3.2 A/40 W
External power supply	Input AC 100-240 V, 50/60 Hz; Output DC 12 V	

* — max. speed depends on the load and vessels' shape

Platform Bio PP-4 for PSU-10i



Platform Bio PP-4 for PSU-10i



Platform for PSU-20i PP-20/4



Platform P-6/250 for PSU-10i



ORDERING INFORMATION:

Cat. number



PSU-10i, shaker without platform

BS-010144-AAN

PSU-20i, shaker without platform

BS-010145-ACI


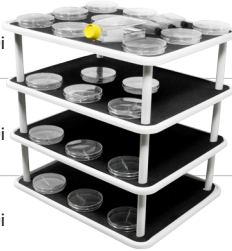

PSU-20i motion types	Description	Speed range	Turning angle	Motion timer*	Digital time setting
① Orbital	Orbital motion with an option of shifting direction	20-250 rpm	—	0-250 sec	1 min.-96 hrs. (increment 1 min.) or non-stop
② Reciprocal	Orbital motion with shifting direction of rotation	20-250 rpm	0-360° (30° increment)	0-250 sec	
③ Vibrating	High speed, low amplitude motion	—	0-5° (1° increment)	0-5 sec	

* — for switching to the next motion in the cycle

Platforms for PSU-10i and ES-20

Platform	Description	Dimensions	Working Area	Cat. Number
1 UP-12 Used on PSU-10i, ES-20 	Universal platform with adjustable bars for different types of flasks, bottles and beakers with silicone mat	285 × 220 × 40 mm	270 × 195 × 40 mm	BS-010108-AK
2 Bio PP-4 Used on PSU-10i 	Flat platform with silicone mat for Petri dishes, culture flasks, agglutination cards	255 × 255 mm	230 × 230 mm	BS-010116-AK
3 PP-4 Used on ES-20 	Metallic flat platform with silicone mat for Petri dishes, culture flasks, agglutination cards	220 × 220 mm	215 × 215 mm	BS-010108-BK
4 P-12/100 Used on PSU-10i, ES-20 	Platform with clamps for flasks, 100–150 ml (12 places)	250 × 190 mm	250 × 190 mm	BS-010108-EK
5 P-6/250 Used on PSU-10i, ES-20 	Platform with clamps for flasks, 250–300 ml (6 places)	250 × 190 mm	250 × 190 mm	BS-010108-DK
6 P-16/88 Used on PSU-10i, ES-20 	Platform with spring holders for up to 88 tubes up to 30 mm diameter (e. g. 10 ml, 15 ml, 50 ml tubes)	275 × 205 × 75 mm	275 × 205 × 75 mm	BS-010116-BK

Platforms for PSU-20i and ES-20/60

Platform	Description	Dimensions	Working Area	Cat. number
1 UP-330 Used on PSU-20i 	Universal platform with adjustable bars for different types of flasks, beakers	345 × 430 × 105 mm	300 × 400 × 80 mm	BS-010145-AK
2 P-30/100 Used on PSU-20i, ES-20/60 	Platform with 30 clamps for 100-150 ml flasks	360 × 400 mm	360 × 400 mm	BS-010135-BK
3 P-16/250 Used on PSU-20i, ES-20/60 	Platform with 16 clamps for 250-300 ml flasks	360 × 400 mm	360 × 400 mm	BS-010135-CK
4 P-9/500 Used on PSU-20i, ES-20/60 	Platform with 9 clamps for 500 ml flasks	360 × 400 mm	360 × 400 mm	BS-010135-AK
5 P-6/1000 Used on PSU-20i, ES-20/60 	Platform with 6 clamps for 1000 ml flasks	360 × 400 mm	360 × 400 mm	BS-010135-DK
6 PP-400 Used on ES-20/60 	Flat platform with non-slip silicone mat	360 × 400 mm	400 × 360 mm	BS-010135-FK
7 UP-168 Used on PSU-20i, ES-20/60 	Universal platform for different flasks (Clamps ordered separately)	360 × 400 mm	360 × 400 mm	BS-010135-JK
7.1 FC-100 7.2 FC-250 7.3 FC-500 7.4 FC-1000 	Clamp for 100, 250, 500, 1000 ml flask (for UP-168)	Ø 65mm Ø 85mm Ø 105mm Ø 130mm		BS-010126-HK BS-010126-JK BS-010126-LK BS-010126-UK
8.4 PP-20/4 Used on PSU-20i 	Four-level flat platform with non-slip rubber mat	380 × 480 × 510 mm	365 × 465 × 510 mm	BS-010126-EK
8.3 PP-20/3 Used on PSU-20i 	Three-level flat platform with non-slip rubber mat	380 × 480 × 340 mm	365 × 465 × 340 mm	BS-010126-DK
8.2 PP-20/2 Used on PSU-20i 	Two-level flat platform with non-slip rubber mat	380 × 480 × 170 mm	365 × 465 × 170 mm	BS-010126-CK
8.1 PP-20 Used on PSU-20i 	One-level flat platform with non-slip rubber mat	380 × 480 mm	365 × 465 mm	BS-010126-BK