

PSU-10i, Orbital Shaker

DESCRIPTION

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.

Premium
Product Class



Ø10 mm
Orbit

PSU-20i, Orbital Shaker

DESCRIPTION

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.

Premium
Product Class



Ø20 mm
Orbit



Multi-rotation

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

| | 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 |