

## Orbital Shaker PSU-20i

### Description

Multi-functional shaker PSU-20i provides three motion types: orbital, reciprocal and vibrating, which can be performed separately, pairwise and sequentially in repeated cycles.

The shaker runs silently and reliably. Thanks to the direct drive system and the brushless motor with up to 35,000 hours of service life, it offers stable continuous mixing for up to seven days.

With a wide range of platforms, PSU-20i offers the possibility to perform various processes and techniques. One highlight is the multi-level platform. This allows the accommodation of a large number of different microtitre plates, Petri dishes and other low containers.

The unit is designed for operation in cold rooms, incubators (excluding CO<sub>2</sub> incubators) and closed laboratory rooms.

Suitable for an 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.



PSU-20i with platform UP-330



Example platform P-30/100

Motion type	Description	Speed range	Turning angle	Timer*	Time setting
Orbital	Orbital motion with an option of shifting direction	20 – 250 rpm	–	0 – 250 s	1 min–96 h (increment 1 min) or non-stop
Reciprocal	Orbital motion with shifting direction of rotation	20 – 250 rpm	0 – 360° (increment 30°)	0 – 250 s	
Vibrating	High speed, low amplitude motion	–	0 – 5° (increment 1°)	0 – 5 s	

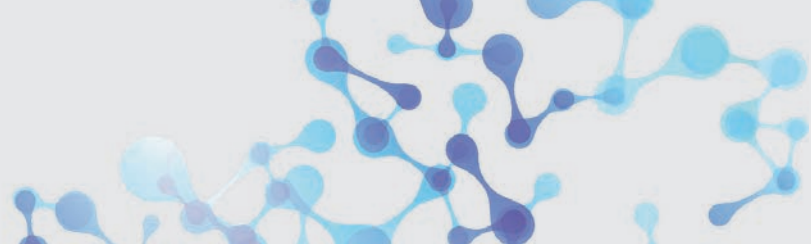
\*for switching to the next motion in the cycle

## Orbital Shaker PSU-20i



### Technical Data

Speed control range	20 – 250* rpm (increment 5 rpm) *max. speed depends on the load and vessels' shape
Digital time setting	1 min – 96 hrs / non-stop (increment 1 min)
Digital speed control	Yes
Timer sound signal	Yes
Maximum continuous operation time	168 h
Orbit	20 mm
Maximum load	8 kg
Ambient temperature	+4°C to +40°C
Overall dimensions (WxDxH)	410 x 410 x 130 mm
Weight	11.7 kg
Input current/ power consumption	12V, 3.2 A / 40 W
External power supply	Input AC 100 - 240 V; 50/60 Hz; Output DC 12 V
Order No. Basic unit without platform	105.1206



# Orbital Shaker PSU-20i

## Optional Platforms



**Universal Platform UP-330**  
Platform with adjustable bars for various laboratory glassware including silicone mat.  
Working area:  
300 x 400 x 80 mm



**Platform P-30/100**  
Platform with clamps for 30 flasks.  
Working area:  
360 x 400 mm  
Flask volume:  
100 - 150 ml



**Platform P-16/250**  
Platform with clamps for 16 flasks.  
Working area:  
360 x 400 mm  
Flask volume:  
250 - 300 ml



**Platform P-6/1000**  
Platform with clamps for 6 flasks.  
Working area:  
360 x 400 mm  
Flask volume:  
1000 ml



**Platform P-9/500**  
Platform with clamps for 9 flasks.  
Working area:  
360 x 400 mm  
Flask volume:  
500 ml



PSU-20i with platform PP-20/4



**One-level platform PP-20**  
Flat platform with non-slip rubber mat for various low profile containers.  
Platform size:  
380 x 480 mm  
Working area:  
355 x 455 mm



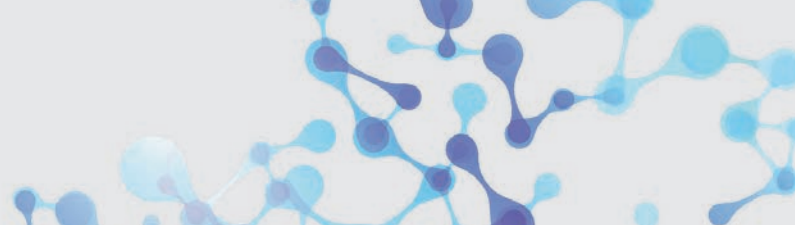
**Two-level platform PP-20/2**  
Flat platform with non-slip rubber mat for various low profile containers.  
Platform size:  
380 x 480 mm x 2  
Working area:  
355 x 455 mm x 2



**Three-level platform PP-20/3**  
Flat platform with non-slip rubber mat for various low profile containers.  
Plattformgröße:  
380 x 480 mm x 3  
Arbeitsfläche:  
355 x 455 mm x 3



**Four-level platform PP-20/4**  
Flat platform with non-slip rubber mat for various low profile containers.  
Platform size:  
380 x 480 mm x 4  
Working area:  
355 x 455 mm x 4



# Orbital Shaker PSU-20i

## Optional Clamps for Platform UP-168



### Universal Platform UP-168

Can accommodate flasks or bottles of different volume sizes. Clamps are not included with platform. Please order separately.

Max. number of clamps	
2000 ml	= 4
1000 ml	= 6
500 ml	= 9
250 ml	= 13
100 ml	= 23



### Clamp FC-50

For flasks with a volume of 50 ml and a diameter of up to 50 mm



### Clamp FC-100

For flasks with a volume of 100 ml and a diameter of up to 65 mm



### Clamp FC-250

For flasks with a volume of 250 ml and a diameter of up to 85 mm



### Clamp FC-500

For flasks with a volume of 500 ml and a diameter of up to 105 mm



### Clamp FC-1000

For flasks with a volume of 1000 ml and a diameter of up to 130 mm



### Clamp FC-2000

For flasks with a volume of 2000 ml and a diameter of up to 165 mm



### Adhesive Mat SPML

Double-sided adhesive PET mat as an alternative to bottle clips.

Suitable for universal platform UP-168

Shaking speed:

0 – 400 rpm

Size: 390 x 80 x 3 mm



### TR-44/15

Adjustable angle test tube rack for UP-168

Tube volume: 15 ml

Number of tubes: 44



### TR-21/50

Adjustable angle test tube rack for UP-168

Tube volume: 50 ml

Number of tubes: 21