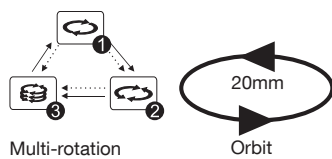


PSU-20i orbital multi-platform shaker

Powerful and efficient microprocessor controlled, multi-functional orbital shaker providing all that is required to mix your samples – rotation, reciprocation and vibration. This enables optimisation of the mixing whether in flasks, beakers, petri dishes or other laboratory vessels.

- **Orbital motion (20 to 250 rpm), reciprocation (20 to 250 rpm) and vibration functions all in one product**
- **Loading capacity - 8 kg**
- **Fully programmable sequence that can use one or all the functions**
- **6 interchangeable platforms for vessels up to 1000ml including a multi-level platform to hold a large number of various microplates, Petri dishes and culture bags.**
- **Reciprocal rotation: 0 to 360° turning angle, in 30 degree steps**
- **Vibration: 0 to 5° turning angle, 1 degree steps**



Powerful, reliable and exceptionally quiet motor – combines an 8 kg loading capacity with consistent even motion and quiet operation

2-line LCD status display of actual and set parameters

Very easy to operate, with simple set-up of multi-segment programs via push buttons

Direct drive system and brushless motor



PSU-20i (VWR 89194-492) fitted with PUP-330 (VWR 89194-500)

Universal detachable platform accommodates vessels of different shapes and sizes for maximum flexibility. A choice of platforms available, **please order separately**. No tools are needed to change the platform

All mixing functions – orbital motion, reciprocation and vibration – can be set for continuous or timed operation, or be linked together in different combinations to establish optimum mixing and ensure accurately repeatable conditions for your application

Low voltage cord easily fits through door gaskets, allowing use in incubators, refrigerators and workstations. Safe and low energy consumption.

Supplied without a platform.

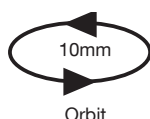
Applications:

- Biomedical and biopharmaceutical laboratories - cultivation of cells, extracting, dissolving slow-reacting samples, extraction of mineral oil of soil, of tissue culture for analytical diagnostics, de-aeration of tested biodegradable materials and samples, rotating closed containers for dialysis, bacterial growth

PSU-10i orbital platform shaker

Microprocessor controlled shaking platform providing smooth and quiet horizontal orbital motion for mixing in bottles, flasks and beakers.

- Variable shaking speed: 50 to 450 rpm
- Reliable direct drive system
- Automatic load balancing system
- Continuous or timed operation with automatic switch-off
- 5 interchangeable platforms for vessels up to 250 ml including an 88 place spring loaded platform for tubes up to 30mm diameter
- Simple to set up and easy to operate
- Loads up to 3 kg



Soft start feature ensures a smooth ramp-up – avoids potential damage to vessel content

Exceptionally quiet motor – consistent and even shaking

2-line LCD display clearly indicates both set and actual shaking speed, plus set and elapsed time.

Works in combination with simple push buttons for easy set-up

Supplied without a platform.



PSU-10i (VWR 89194-490) fitted with PUP-12 (VWR 97025-566) universal platform

Choice of 5 interchangeable platforms to suit different types of vessels – maximum flexibility. Please order platform separately

Low voltage power supply provides for safe cold room operation and low energy consumption

Integral electronic timer with audible alarm and automatic switch-off – accurate repeatability of time sensitive incubations

- Applications:**
- Biotechnology and microbiology - micro-organism cultivation and extraction of biologically active substances
 - Immunology and biochemistry - agglutination and precipitation assay
 - Biochemistry - washing off electrophoresis gel
 - Molecular and cell biology - cultivation of biological liquids

Shakers – models and specifications

(all heights excl. platform)

		Multi platform shaker	Shaking platform
		PSU-20i	PSU-10i
		 h: 130 mm d: 410 mm w: 410 mm weight: 13kg	 h: 90 mm d: 205 mm w: 220 mm weight: 4 kg
VWR catalog number		89194-492	89194-490
Speed (depends on loading)	rpm	20 to 250	50 to 450
Orbit	mm	20	10
Maximum load	kg	8	3
Timer, with automatic switch-off		1 min to 96 hours	
Motion timer (orbital/reciprocal modes)	sec	0 to 250	–
Motion timer (vibration mode)	sec	0 to 5	–
Display		2-line 16 character LCD	
Angle (reciprocal mode)	°	0 to 360	–
Angle (vibration mode)	°	0 to 5	–
Input voltage	V dc	12	
Input current	A	3.2	0.8
Ambient temperature range	°C	4 to 40	

Accessories

VWR 89402-930 (P16-88) NEW! Platform with spring holders for up to 88 tubes up to 30mm diameter		–	●
VWR 97025-544 (P12-100) Platform with clamps for 12 x 100/150ml flasks/beakers. Dimensions: 250 x 190 mm		–	●
VWR 89194-494 (Bio PP-4) Flat platform with non-slip rubber mat. Dimensions: 230 x 230 mm		–	●
VWR 97025-546 (P6-250) Platform with clamps for 6 x 250-300 ml flasks/beakers. Dimensions: 250 x 190 mm		–	●
VWR 97025-566 (PUP-12) Universal platform, with adjustable bars. Dimensions: 270 x 195 mm VWR 89402-914 (HB-200) extra holding bars		–	●
VWR 89194-500 (PUP-330) Adjustable bars and two fixing levels. Dimensions: 345 x 430 x 105 mm VWR 89402-916 (HB-330) extra holding bars		●	–
VWR 89194-496 (PP-20-2) 2 level VWR 89498-168 (PP-20-3) 3 level VWR 89194-498 (PP-20-4) 4 level Flat platform with non-slip rubber mat. Dimensions: 480 x 380 mm Height between levels: 140 mm		●	–
VWR 89194-502 (P30-100) Platform with clamps for 30 x 100-150 ml flasks		●	–
VWR 89194-504 (P16-250) Platform with clamps for 16 x 250-300 ml flasks		●	–
VWR 89194-506 (P9-500) Platform with clamps for 9 x 500 ml flasks		●	–
VWR 89194-508 (P6-1000) Platform with clamps for 6 x 1000 ml flasks		●	–