Benchmark

ORBi-SHAKER™

Orbital Shaker Series

MAGic CLAMP™
Patent Pending

+ **Four versatile models covering a full range of applications**

+ **Powerful, brushless motor drive systems**

+ **Attach flask clamps in one second with unique MAGic Clamp™ platform**

ORBI-SHAKER™ JR.

- **Perfectly circular 19mm orbit for aeration and mixing**
- **Digital speed control up to 300 rpm**
- **Available with MAGic Clamp™ Platform**

9.5 x 8 in.

The Orbi-Shaker JR. is a space-saving shaker, complete with a 9.5 x 8 in. non slip, rubber coated platform that is ideal for tissue culture flasks, petri dishes and staining trays.

Additional platforms are also available for the Orbi-Shaker JR, including the convenient MAGic Clamp™ platform (patent pending) for use with Erlenmeyer flasks and test tube racks. The unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.

Technical Data:

Speed Range:	**50 to 300 rpm**
Speed Increment:	**10 rpm**
Orbit:	**19mm (3/4 in.)**
Maximum Capacity:	**4 x 1L or 4 kg**
Standard Platform Dims.	**9.5x8 in. / 24x20 cm**
Dimensions (WxDxH):	**11x10.7x5 in. 28x27x13 cm**
Weight:	**12 lbs. / 5.5 kg**
Operating Temp.:	**4 to 65 °C**
Electrical:	**100 - 240V 50-60Hz**

Ordering Information:

BT300*	**Orbi-Shaker JR with non-slip, rubber mat platform (9.5 x 8 in.)**
H1000-MR	MAGic Clamp™ universal platform (9.5x11.5") for flasks & tube racks
H1000-MR-50	Clamp for Magic Clamp platform, 50ml (max. 20)
H1000-MR-125	Clamp for Magic Clamp platform, 125ml (max. 12)
H1000-MR-250	Clamp for Magic Clamp platform, 250ml (max. 8)
H1000-MR-500	Clamp for Magic Clamp platform, 500ml (max. 6)
H1000-MR-1000	Clamp for Magic Clamp platform, 1000ml (max. 4)
H1000-MR-1550	Tube rack for Magic Clamp platform, 12x50 and 21x15 ml conical tubes (max. 2)
BT300-RP	**Rolling bar platform for uncommon vessels**

To order an item in 230V, add (-E) to item number.

ORBI-SHAKER™

MAGic CLAMP
Patent Pending

- **Large platform, up to 24 x 125ml, 14 x 250ml, 9 x 500ml, 5 x 1L or 2 x 2L**
- **Digital speed control up to 300rpm**
- **Available with the MAGic Clamp™ Platform**

The powerful Orbi-Shaker is capable of mixing a 14lb load capacity up to speeds as high as 300 rpm. The standard platform (included) features a non-slip, rubber coated surface, ideal for tissue culture flasks, petri dishes and staining trays.

The convenient MAGic Clamp™ platform (patent pending) is also available for use with Erlenmeyer flasks and test tube racks. The unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.

13 x 12 in.

Technical Data:

Speed Range:	**30 to 300 rpm**
Speed Increment:	**1 rpm**
Orbit:	**19mm (3/4 in.)**
Maximum Capacity:	**2 x 2L or 6 kg**
Standard Platform Dims.	**13x12 in. / 33x30 cm**
Dimensions (WxDxH):	**11 x 13 x 3 in. 28 x 33 x 7.5 cm**
Weight:	**25 lbs. / 11.25 kg**
Operating Temp.:	**4 to 65°C**
Electrical:	**120V or 230V, 50-60Hz**

Ordering Information:

BT3000*	**Orbi-Shaker™ Orbital Shaker with non-slip rubber mat platform (13 x 12 in.)**
BT3000-MR	MAGic Clamp™ universal platform (14x12") for flasks & tube racks
H1000-MR-50	Clamp for MAGic Clamp platform, 50ml (max. 30)
H1000-MR-125	Clamp for MAGic Clamp platform, 125ml (max. 24)
H1000-MR-250	Clamp for MAGic Clamp platform, 250ml (max. 14)
H1000-MR-500	Clamp for MAGic Clamp platform, 500ml (max. 9)
H1000-MR-1000	Clamp for MAGic Clamp platform, 1000ml (max. 5)
H1000-MR-2000	Clamp for MAGic Clamp platform, 2000ml (max. 2)
H1000-MR-1550	Tube rack for MAGic Clamp platform, 12x50 and 21x15 ml conical tubes (max. 2)
H1000-P-MP	Dedicated platform, 4 x microplates (standard or deepwell)
H1000-P-SP	Spring rack platform, for uncommon vessels and containers

To order an item in 230V, add (-E) to item number.

ORBi-SHAKER™ MP

- ⊥ **3mm orbit, optimized for thorough mixing in microplates**
- ⊥ **Digital speed control up to 1500 rpm**
- ⊥ **Holds up to four microplates**

Technical Data:

Speed Range:	200 to 1500 rpm
Speed Increment:	10 rpm
Orbit:	3mm
Maximum Capacity:	4 microplates
Dimensions (WxDxH):	11.5x10.7x4.5 in.
	29x27x11.5 cm
Weight:	12 lbs. / 5.5 kg
Operating Temp.:	4 to 65°C
Electrical:	100-240V, 50-60 Hz

This vortexer is designed with a 3mm mixing orbit, providing thorough mixing of microplates and/or PCR plates. Up to four plates (standard or deepwell) can be placed on the included platform and they are instantly secured without the use of any springs, clamps or tools.

A digital microprocessor ensures accurate speed control over the brushless, maintenance free motor drive and both speed and time can be viewed simultaneously on the large LED display.

Ordering Information:

BT1500* **Orbi-Shaker MP with platform for 4 microplates**

*To order an item in 230V, add (-E) to item number.

ORBi-BLOTTER™

- ⊥ **Low speed, 3 to 70rpm**
- ⊥ **Gentle, orbital motion for sensitive gels/blots**
- ⊥ **Incubator and cold room safe**

The Orbi-Blotter features a gentle orbital motion with speed control down to as little as 3 rpm, making it the ideal orbital choice for low speed applications, such as blotting, washing, staining/destaining, etc. A large 14x12 in. platform is included along with a non-slip rubber mat for holding trays, dishes, plates, flasks and other flat bottomed vessels. An optional stacking platform is also available for protocols requiring an increased work surface.

Technical Data:

Speed Range:	3 to 70 rpm
Orbit:	19mm (3/4 in.)
Platform Dims.:	14x12 in. / 35x30 cm
Dimensions (WxDxH):	14 x 12 x 8 in.
	35 x 30 x 20 cm
Weight:	12 lbs. / 5.5 kg
Operating Temp.:	4°C to 65°C
Electrical:	120V or 230V, 50-60Hz

Ordering Information:

BT30* **Orbi-Blotter™ low speed Orbital Shaker with non-slip rubber mat**
BR2000-STACK **Stacking Platform, 14 x 12 in. (clearance 2.75 in.)**
STACK-PLUS **Platform extension set, increase platrom clearance by 1.25 in.**

*To order an item in 230V, add (-E) to item number.

ORBI-SHAKER™ Selection Guide

Model:	Orbi-Shaker JR	Orbi-Shaker	Orbi-Shaker MP	Orbi-Blotter
Max. Speed	300 rpm	300 rpm	1500 rpm	70 rpm
Min. Speed	50 rpm	30 rpm	200 rpm	3 rpm
Orbit Size	19mm	19 mm	3 mm	19 mm
Flask Capacity (125ml)	12	24	N/A	24*
Flask Capacity (250ml)	8	14	N/A	14*
Flask Capacity (500ml)	6	9	N/A	9*
Flask Capacity (1L)	4	5	N/A	5*
Flask Capacity (2L)	N/A	2	N/A	3*
Microplate Capacity	N/A	4	4	N/A
Control	Digital	Digital	Digital	Analog

*For low speed applications (not requiring clamps) only.

Also Available from Benchmark

INCU-SHAKER™ Mini
Orbital Shaking Incubator

- Exceptional temperature uniformity
- Extremely compact, just 11" wide
- Exchange flask clamps in one second with the new MAGic Clamp magnetic system

Only 11" wide

MULTI-THERM™
COOL – HEAT – SHAKE
Temperature Controlled Vortexer

- Temperature control from 0 to 100°C
- Exchangeable blocks, for tubes 0.2 to 50ml
- Two models: Heat only or Heat & Cool