



# INCU-SHAKER ZOL/LR STACKABLE SHAKING INCUBATORS





Stackable design for high throughput culturing



Stainless steel chamber delivers precise temperature uniformity



MAGic-Clamp™ accessories for instant flask exchange





# INCU-SHAKER ZOL/LR STACKABLE SHAKING INCUBATOR



#### Convenient stacking

The included stacking brackets provide secure and easy mounting for stacking the Incu-Shaker 20L or 20LR, up to two units high. When stacked, the Incu-Shaker 20L and 20LR are still rated for continuous use with full flask capacity.



New to the Incu-Shaker series is the addition of a high grade stainless-steel chamber. The chamber is precision-engineered with consistent, repeatable culture growth in mind, and provides excellent temperature uniformity throughout the chamber.





### Adjustable shelf

An included pull-out, stainless steel shelf allows for static incubation in addition to shaking incubation. Perfect for Petri dishes and other cell culture plates, the shelf can be adjusted for height as needed for additional capacity or flask height clearance.

#### Touch-screen controls

Shaking speed, time, and temperature can all be displayed and controlled on the full-color touch screen. The software also allows for more advanced programmming options, including calibration, alarm deviations and the linking of consecutive programs.





#### **Technical Data:**

100	
Temperature Range (20L):	Ambient +5 to 60°C
Temperature Range (20LR):	4°C to 60°C
Temperature Accuracy:	±0.1°C at 37°C
Temperature Uniformity:	±0.5°C at 37°C
Temperature Increment:	0.1°C
Speed Range:	30 to 300 rpm
Speed Increment:	1 rpm
Mixing Orbit:	19mm (3/4 in.)
Time Range:	1 min. to 48 hours (or continuous)
Platform Dimensions:	18 x 18 in. (45 x 45 cm)
Chamber Dimensions: (W x D x H)	20 x 19.9 x 22.7 in. (51 x 50.5 x 57.7 cm)
Chamber Volume:	149L
Chamber Material:	Stainless Steel, 304
Extrerior Dimensions: (W x D x H)	23.6 x 34.3 x 28.7 in. (60 x 87 x 73 cm)
Weight:	304 lbs / 138 kg
Electrical:	120V or 230V, 50-60Hz

#### **Maximum Capacity Chart:**

125ml	250ml	500ml	1000ml	2000ml	2.8L	3000ml	5000ml
Flasks	Flasks	Flasks	Flasks	Flasks	Fernbach	Flasks	Flasks
36	25	16	9	5	5	4	4



MAGic Clamp Platform H1010-MR with Adjustable MAGic Clamp (H1000-MR-CMB)



The Benchmark Incu-Shaker $^{\text{TM}}$  20L and 20LR Stackable Shaking Incubators offer the highest capacity in the Incu-Shaker line. With a large shaking platform and a +22 inch chamber height, the 20L series is capable of high-throughput culture growth in flask sizes up to 5/6 liters. These shakers can be stacked (up to two units high), increasing the capacity while maximizing floor-space in the laboratory.

The internal chambers are constructed of high grade stainless-steel (304) and when combined with our proprietary heat distribution technology, the temperature is precisely maintained throughout the chamber. The powerful brushless induction motor drive is designed for years of trouble-free service, even under continuous use conditions with heavy loads. Noise and vibration are minimized by an advanced, computer designed motor isolation system that results in minimal vibration at all speed levels.

A convenient access port is included on the left side of both units, allowing for external temperature monitoring, or for power cables to run into the chamber without compromising the integrity of the environment. Additionally, each shaker includes an adjustable shelf that allows for static incubations to be performed simultaneously above the shaking platform.

A standard, rubber mat platform is included and is ideal for use with tissue culture flasks, Petri dishes, staining trays and other flat vessels. The convenient MAGic Clamp™ platform 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.

<b>Ordering Inf</b>	ormation:	
H3020*	Incu-Shaker 20L with 18 x 18" non-slip rubber mat platform, 115V	35
H3022*	Incu-Shaker 20LR with 18 x 18" non-slip rubber mat platform, 115V	H1000-MR-CM
	MAGic Clamp Accessories	
H1010-MR	MAGic Clamp Universal Platform, 18 x 18 inch	
H1000-MR-CMB	MAGic Clamp <b>Adjustable</b> Flask Clamp, for <b>125, 250 &amp; 500ml</b> Erlenmeyer flasks	
H1000-MR-50	Magic Clamp Flask Clamp, for 50ml Erlenmeyer flask (max. 49)	
H1000-MR-125	Magic Clamp Flask Clamp, for 125ml Erlenmeyer flask (max. 36)	H1000-MR-1550
H1000-MR-250	Magic Clamp Flask Clamp, for 250ml Erlenmeyer flask (max. 25)	4
H1000-MR-500	Magic Clamp Flask Clamp, for 500ml Erlenmeyer flask (max. 16)	1
H1000-MR-1000	Magic Clamp Flask Clamp, for 1L Erlenmeyer flask (max. 9)	
H1000-MR-2000	Magic Clamp Flask Clamp, for 2L EErlenmeyer flask (max. 5)	H1000-MR-MF
H1000-MR-3000	Magic Clamp Flask Clamp, for 3L Erlenmeyer flask or 2.8L Fernbach (max. 4)	111000 1/111
H1000-MR-5000	Magic Clamp Flask Clamp, for 5L Erlenmeyer/Fernbach flask (max. 4)	100
H1000-MR-MP	Magic Clamp Microplate Clamp, for 1 microplate or deep-well plate	
H1000-MR-T15	Magic Clamp Tube Rack, 32 x 15ml	<b>E</b>
H1000-MR-T50	Magic Clamp Tube Rack, 15 x 50 ml	H1000-MR-T60
H1000-MR-1550	Magic Clamp Tube Rack combination rack, 20 x 50 ml and 30 x 15 ml	A
H1000-MR-T600	Magic Clamp Tube Rack, 4 x 500/600ml bottles	
H1000-MR-TSR	Magic Clamp Slanted Tube Rack Holder, adjustable angle	
		H1000-MR-TS

\*115V with USA Plug. For 230V with EU plug, add (-E)



Ordering Information (Flasks):		
F4060-F	125 ml Erlenmeyer flask, PETG, flat base, disposable, qty 24	
F4061-F	250 ml Erlenmeyer flask, PETG, flat base, disposable, qty 12	
F4062-F	500 ml Erlenmeyer flask, PETG, flat base, disposable, qty 12	
F4063-F	1000 ml Erlenmeyer flask, PETG, flat base, disposable, qty 6	
F4060-B	125 ml Erlenmeyer flask, PC, baffled base, autoclavable/reusable, qty 24	
F4061-B	250 ml Erlenmeyer flask, PC, baffled base, autoclavable/reusable, qty 12	
F4062-B	500 ml Erlenmeyer flask, PC, baffled base, autoclavable/reusable, qty 12	
F4063-B	1000 ml Erlenmeyer flask, PC, baffled base, autoclavable/reusable, qty 6	
F4086	2.8L Jumbo Fernbach flask, styrene/butadiene, baffled base, qty 6	
F4087	51 Jumbo Fernbach flask, styrene/butadiene, baffled base, gtv 4	



## Also Available:





Compact footprint with exceptional performance and reliability





Compact CO2 incubator with integrated shaker

