INCU-SHAKER CO_2 Mini

Heat • Shake • CO_2

The ONLY CO_2 Incubator with a MAGic Clamp™ Shaker

MAGic CLAMP™ PATENTED

- Six side direct heating for excellent uniformity and recovery
- Integral, MAGic Clamp orbital shaker, ideal for suspension cell culture
- Dual beam infrared sensor, for precise CO_2 control

Ideal for the culturing cells, the Incu-Shaker CO_2 Mini combines a precision CO_2 incubation chamber with an integral orbital shaker, providing the optimum conditions for suspension cell culture.

With our unique and proprietary heat distribution technology, the incubator provides the highest levels of temperature accuracy with minimal fluctuation (within 0.1°C). The six-side heating system in combination with a low speed internal fan uniformly spreads air throughout the stainless steel chamber (without air exchange from the external environment). For applications requiring solely gravity convection, this internal fan can be disabled, significantly reducing the concern of sample to sample contamination.

A beltless motor drive provides a horizontally circular shaking motion at a consistent 19mm orbit. The included platform (9.5 x 11.5 in.) can be used for low speed shaking of a variety of laboratory vessels, including Erlenmeyer flasks, culture plates and media bottles. For higher speed mixing, a patented MAGic Clamp platform is available for magnetic attachment of flask clamps and tube racks.

Benchmark Scientific

MAGic Clamp™ Platform

Optional MAGic Clamp accessories (Patented) are available for attaching erlenmeyer flasks, micro-plates, test tube racks and other vessels to the shaking platform. This patented design allows for instant, magnetic attachment of clamps without the use of tools, screws and other hardware.

Sealed Inner Glass Door

The inner glass door is transparent, allowing visualization of samples without fully exposing the chamber to the ambient environment, improving performance and reducing energy waste.

Heated Door

The six sided, direct heating design provides the highest level of temperaure uniformity (±0.5). In addition, the heated door prevents the forming of condensation on the inner glass door, for improved sample visualization.

Adjustable, pull out shelf

An included stainless steel shelf allows shaking of suspended cells while simultaneously incubating adherent cells. This static shelf can be pulled outward for easy loading/unloading and can be adjusted or (removed) for shaking taller vessels.

Technical Data:

Temperature Range:	**Ambient +5 to 60°C**
Temperature Accuracy:	**±0.5°C***
Temperature Uniformity:	**±0.5°C***
Temperature Increment:	**0.1°C**
Temperature Stability:	**0.1°C***
Speed Range:	**30 to 300 rpm**
Speed Increment:	**1 rpm**
Mixing Orbit:	**19mm (3/4 in.)**
CO2 Range:	**0 to 20%**
CO2 Increment:	**0.1%**
CO2 Accuracy:	**±0.1%**
CO2 Sensor:	**Dual Beam IR**
Time Range:	**1 min. to 48 hours (or continuous)**
Platform Dimensions:	**9.5 x 11.5 in. (23.5 x 29 cm)**
Chamber Dimensions:	**13.2 x 10.25 x 15.4 in. (33.5 x 26 x 39.2 cm)**
Chamber Volume:	**46L**
Chamber Material:	**Stainless Steel**
Extrerior Dimensions:	**16.5 x 18.3 x 21.8 in. (42 x 46.5 x 55.3 cm)**
Weight:	**90 lbs / 40.1 kg**
Electrical:	**120V or 230V, 50-60Hz (350W)**

* At a set tempertaure of 37.0°C

Maximum Capacity Chart:

50ml Flasks	125ml Flasks	250ml Flasks	500ml Flasks	1000ml Flasks	Micro-plates	15ml Tubes	50ml Tubes
20	**12**	**8**	**5**	**4**	**4**	**64**	**30**

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

Ordering Information:	
H3501*	**Incu-Shaker CO_2 Mini, with non-slip rubber mat platform (9.5 x 11.5in.)**
H3501-REG	Optional CO_2 gas regulator
	MAGic Clamp Accessories
H1000-MR	MAGic Clamp Universal Platform, 9.5 x 11.5 inch
H1000-MR-CMB	MAGic Clamp ***Adjustable*** Flask Clamp, for ***125, 250 & 500ml*** Erlenmeyer flasks (max. 12 x 125ml, 8 x 250ml or 5 x 500ml)
H1000-MR-50	Magic Clamp Flask Clamp, for 50ml Erlenmeyer flask (max. 20)
H1000-MR-125	Magic Clamp Flask Clamp, for 125ml Erlenmeyer flask (max. 12)
H1000-MR-250	Magic Clamp Flask Clamp, for 250ml Erlenmeyer flask (max. 8)
H1000-MR-500	Magic Clamp Flask Clamp, for 500ml Erlenmeyer flask (max. 5)
H1000-MR-1000	Magic Clamp Flask Clamp, for 1L Erlenmeyer flask (max. 4)
H1000-MR-MP	Magic Clamp Flask Clamp, for microplates (max. 4)
H1000-MR-T15	Magic Clamp Tube Rack, 32 x 15ml (max. 2)
H1000-MR-T50	Magic Clamp Tube Rack, 15 x 50ml (max. 2)
H1000-MR-1550	Magic Clamp Tube Rack, 32 x 15ml (max. 1)
H1000-MR-T600	Magic Clamp Tube Rack, 4 x 500/600ml bottles
H1000-MR-TSR	Magic Clamp Slanted Tube Rack Holder, holds tube racks at an adjustable angle
	Additional Accessories
H1000-P-MP	Dedicated Platform, 4 x microplates
H1000-P-SP	Universal Spring Platform
	*115V with USA Plug. For 230V with EU plug, add (-E)

H1000-MR-CMB

H1000-MR-1550

H1000-MR-MP

H1000-MR-T600

H1000-P-SP

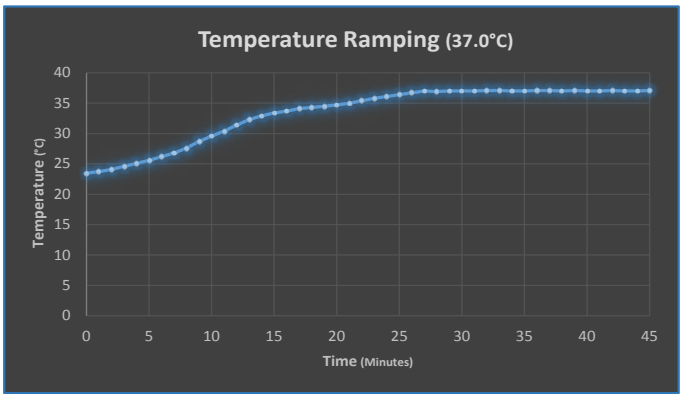

Fig. 1. Temperature Ramping Chart: Chamber temperature progression from room temperature to a set temperature of 37.0°C. Shows the set temperature reached in under 30 minutes and holds steady within 0.1C of 37.0C throughout the duration.

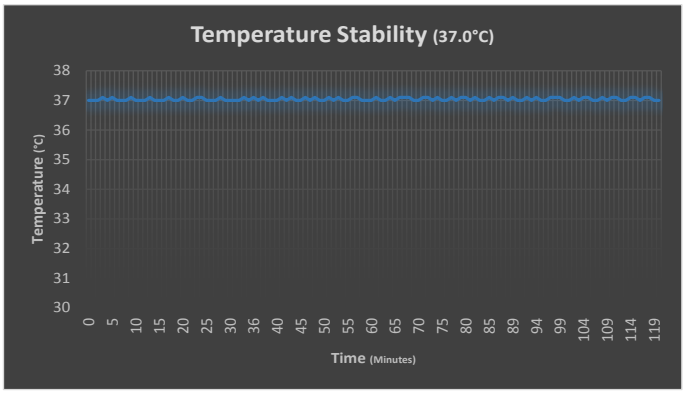

Fig. 2. Temperature Stability Chart: Chamber temperature for a two hour duration following stabilization (within 0.1°C) at 37.0°C.