

Temperature Control Equipment

Pg. 46



Benchmark™ Hotplates & Stirrers

Pg. 47



myTemp™ Mini Incubators

Pg. 48



SureTemp™
Bi-Convection Incubators

Pg. 49



myTemp™ 65HC Incubator (heating & cooling)

Pg. 50



myTemp™ Mini CO₂ Incubator

Pg. 51



ST-Series & ST-Series PLUS
CO₂ Incubators

Pg. 52-53



myBlock™ and isoBlock™
Dry Baths

Pg. 54



myBlock™ Mini
Heating/Cooling Dry Baths



Pg. 55



myBath™ Water Baths

Pg. 56



SB-12L Shaking Water Bath




Pg. 57




Roto-Therm™ Mini Incubated Rotator

Pg. 58



Incu-Shaker™ Mini Shaking Incubator

Pg. 59



IncuShaker™ 10L Shaking Incubators

Pg. 60



IncuShaker™ Mini CO2 Shaking Incubator

Pg. 61



MultiTherm™ Heating/Cooling Vortexers

Pg. 62



Thermal Cycler Series



Digital Hotplates, Stirrers & Hotplate Stirrers



- + Large, 7 x 7" white ceramic top plate
- + Safety LED indicates hot surface
- + 5L stir capacity
- + Control actual sample temperature (with optional probe)



H3770-H



H3770-S



H3770-HS

Benchmark hotplates, stirrers and hotplate-stirrers feature an exceptionally durable, chemical resistant, white ceramic work surface. The space-efficient design (7.5 X 11.5 in. footprint) makes them ideal for use on crowded benchtops, biological safety cabinets and in bio-hoods. Advanced microprocessor controls allow quick, precise adjustment of speed and temperature. The display provides constant visualization of the speed and temperature while a safety LED indicates when the top plate is above 50°C. In addition, an optional probe is available for applications that require precise temperature control. When connected, the probe provides direct feedback to the microprocessor, which continuously adjusts and maintains the selected temperature *in the sample* within +/- 1°C.

With a square 7 in. work surface, all models are compatible with a wide variety of popular sizes of borosilicate glass beakers, flasks, bottles and other vessels. An optional support rod (H3770-ROD) is available for mounting thermometers, temperature probes, etc.

Technical Data:

Speed Range:	150 to 1500 rpm*
Temp. Range:	Ambient +5°C to 380°C*
Platform:	7 x 7 in. / 17.8 x 17.8 cm
Max Stirring Capacity:	5L
Dimensions: (W x D x H)	7.5 x 11.5 x 4 in. 18 x 27.9 x 10.1 cm
Weight:	8 lbs (3.6 kg)
Electrical:	115V or 230V, 50-60 Hz, 500W
Warranty:	2 Years

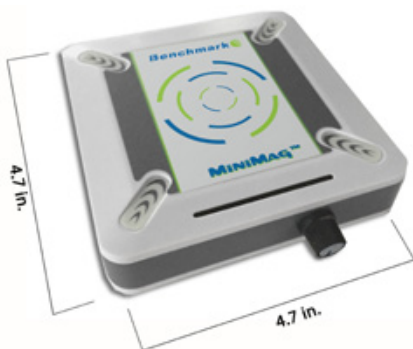
*Speed and temperature adjustments available only on relevant models.

Ordering Information:

Item No.	Description:
H3770-H*	Benchmark Digital Hotplate
H3770-S*	Benchmark Digital Magnetic Stirrer
H3770-HS*	Benchmark Digital Hotplate Stirrer
H3770-ROD	Optional support rod
H3770-TP	Optional temperature probe
H3770-CS	Clamp assembly with support rod and clamps for securing thermometers/probes

*115V with US plug. For 230V (EU plug), please add (-E).

MiniMag™ Mini Magnetic Stirrer



- + Mini sized, less than 5 in. wide
- + Adjustable speed control, 100 to 1500rpm

Technical Data:

Speed Range:	100 to 1500 rpm
Platform:	3.4 x 3.4 in. / 8.5 x 8.5 cm
Max Stirring Capacity:	1.5L
Dimensions: (W x D x H)	4.7 x 4.7 x 1.2 in. / 12 x 12 x 3 cm
Weight:	0.45 lbs (0.2 kg)
Electrical:	Universal Voltage 100V to 240V, 50-60 Hz, 2W
Warranty:	1 Year

Item No.	Description:
S1005*	MiniMag Magnetic Stirrer

*Includes US plug. For EU plug, please add (-E).

myTemp™ Mini Digital Incubators (20L)

myTEMP™ Mini
Digital Incubators



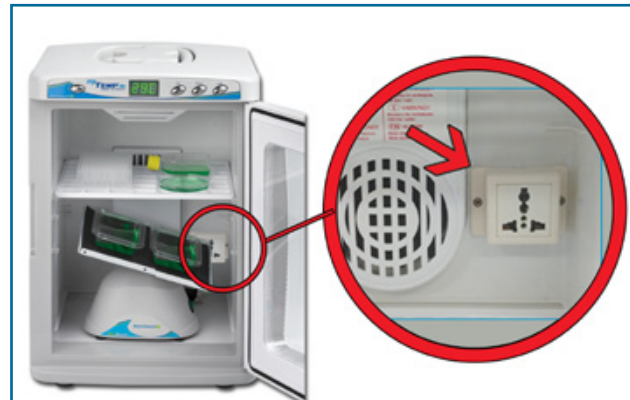
CE

- + Digital temperature control
- + Personal sized, 13 x 14.5 in. footprint
- + Two models
 - Heat only
 - Heat & cool

With digital temperature control, the myTemp incubators provide convenient “set and walk away” operation, eliminating the need for external thermometers and repetitive “fine tuning” of an analog control knob. Simply choose the desired temperature and the incubators quickly begin to heat (or cool in the -HC model only). Throughout the incubation, the chamber temperature is constantly monitored and displayed in real time on the large LED control panel.

Despite a modest footprint of 14.5 x 13”, the myTemp incubators feature large internal chambers, capable of accepting flasks and bottles up to 2 liter. The chamber temperature is accurately maintained with a unique airflow design that utilizes multiple internal fans, resulting in a high level of uniformity.

The incubators include two adjustable/removable shelves for increased capacity. A mini nutating rocker (supplied with both flat and dimpled mats) is also available for agitation of samples during incubation and can plug directly into an included internal power outlet.



myTemp Mini shown with H3D1020
(Rocker plugs directly into the internal power outlet)

Technical Data:

Temp. Range	
H2200-H:	Ambient +5° to 60 °C
H2200-HC:	Ambient -15° to 60 °C
Temp. Accuracy:	± 0.5°C (at 37°C)
Temp. Increments:	1°C
Temp. Uniformity:	± 1.5°C (at 37°C)
Capacity:	20L or 0.8 cu. ft.
Dimensions: (W x D x H)	
Interior:	10.3 x 9.3 x 12.9 in./ 26 x 23.5 x 33 cm
Exterior:	13.2 x 14.5 x 18.7 in. / 33.5 x 37 x 48 cm
Weight:	15 lbs (6.8kg)
Electrical:	Universal Voltage 100 to 240V, 50-60Hz, 50W
Warranty:	2 Years

Ordering Information:

Item No.	Description:
H2200-H*	myTemp Mini Digital Incubator, includes 2 shelves, (heat only, ambient +5 to 60°C)
H2200-HC*	myTemp Mini Digital Incubator, includes 2 shelves, (heat & cool, ambient -15 to 60°C)
H3D-1020	Mini nutating rocker, 6x8” platform, 115V
H3D-1020-E	Mini nutating rocker, 6x8” platform, 230V
H2200-SH	Extra shelf, 10.5 x 8 in. plastic (not autoclavable)

*Includes US plug. For EU plug, please add (-E).

SureTemp™ Precision Incubators (40L, 70L and 130L)



SURETEMP™

Dual-Convection Incubators with SureCheck™ Data Logging

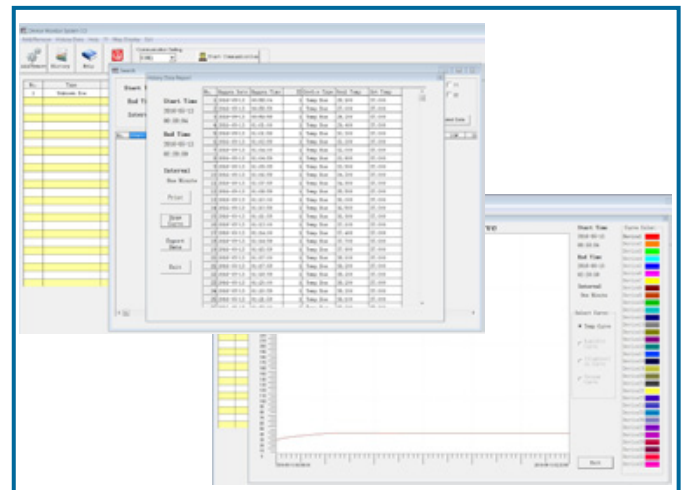
- + Precision temperature control up to 75°C
- + Dual-Convection, user adjustable to gravity or mechanical convection
- + Stainless steel internal chamber
- + Internal power outlet for shakers, mixers, etc.
- + SureCheck™ data logging port and software



The new Sure-Temp Incubator series provides the highest level of temperature control with uniformity and stability levels that are unmatched by competitive models in the same price class.

Each incubator is equipped with the SureCheck™ data logging system for verification of chamber temperature. The SureCheck system records temperature data points as often as every 60 seconds and stores this information on a flash drive. The data can then be viewed and saved using the included the Sure-Check software. The recorded data can also be used to draw a temperature graph or exported to excel for further analysis or manipulation.

Unlike the vast majority of laboratory incubators, the Sure-Temp series offers "Dual-Convection" technology, allowing users to choose between mechanical convection mode (for exceptional uniformity) or gravity convection mode (for longer incubations where drying of plates may be an issue). Heating elements are strategically located on all sides of the chamber and contents can be viewed with the separate inner glass door without disrupting the temperature environment.



Included Sure-Check™ Software: View/save recorded temperatures

Technical Data:

Temp. Range:	Ambient +5°C to 75°C
Temp. Accuracy:	± 0.25°C*
Temp. Uniformity:	± 0.25°C*
Temp. Stability:	± 0.1°C*
Temp. Increments:	0.1°C
Dimensions: (WxDxH)	Exterior
H2505-40	22.4 x 23.3 x 22.8 in. / 57 x 59.2 x 58 cm
H2505-70	26.4 x 23.3 x 26.8 in. / 67 x 59.2 x 68 cm
H2505-130	30.3 x 27.2 x 30.7 in. / 77 x 69.2 x 78 cm
	Interior
H2505-40 (40L)	13.7 x 13.7 x 13.7 in. / 35 x 35 x 35 cm
H2505-70 (70L)	17.7 x 13.7 x 17.7 in. / 45 x 35 x 45 cm
H2505-130 (130L)	21.7 x 17.7 x 21.7 in. / 55 x 45 x 55 cm
Weight:	H2505-40: 42kg, -70: 62kg, -130: 70kg
Electrical:	120V, 60Hz or 230V, 50Hz (420W, 520W, 670W)
Warranty:	2 years

* Specification provided with a set temperature of 37°C



SureCheck data logging port



Internal power outlet

Ordering Information:

Item No.	Description:
H2505-40*	SureTemp Dual-Convection Incubator with SureCheck data logging software, 40L, 115V
H2505-70*	SureTemp Dual-Convection Incubator with SureCheck data logging software, 70L, 115V
H2505-130*	SureTemp Dual-convection Incubator with SureCheck data logging software, 130L, 115V
H2505-40SH	Extra shelf, stainless steel for H2505-40
H2505-70SH	Extra shelf, stainless steel for H2505-70
H2505-130SH	Extra shelf, stainless steel for H2505-130

* 115V with US plug. For 230V (EU plug), please add (-E).

myTemp 65HC™ Heating and Cooling Incubator

myTEMP™ 65HC

Precision, Heating & Cooling Incubator



- + Accurate temperature control from 0°C to 60°C
- + Powerful compressor, maintains 0°C
- + Stainless steel chamber
- + Internal power outlet for shakers, mixers, etc.
- + Sized for floor standing use or on bench-tops less than 32" high



Stainless steel chamber with internal outlet & light

The myTemp 65HC Incubator is designed to provide accurate and uniform temperature control from 0° to 60°C. The broad temperature range of the instrument expands the use of this incubator to both heating and cooling applications.

A large, digital display allows for visualization of the chamber temperature and the remaining incubation time, while an internal light is included for improved visualization of the chamber. In addition, a built in, internal outlet can be used to provide power to small instruments, such as shakers, rockers, etc.

With forced air technology and stainless steel inner construction, uniform heat transfer is ensured throughout the chamber. When set for sub-ambient temperatures, the powerful compressor is activated, quickly cooling the chamber to the desired temperature.

With an exterior height of 39 inches (100cm), the incubator is designed to be floor-standing, yet is also compact enough for bench use. (Not recommended for use on benchtops higher than 32"/81cm). The instrument is supplied with two, adjustable height shelves, while additional shelves can also be purchased separately (item: H2265-SH).

Ordering Information:

Item No.	Description:
H2265-HC*	myTemp 65 Heating and Cooling Incubator, includes two stainless steel shelves
H2265-SH	Extra shelf, stainless steel

*115V with US plug. For 230V (EU plug), please add (-E).

Technical Data:

Temp. Range:	0°C to 60°C (Ambient -25°C to 60°C)
Temp. Accuracy:	0.5°C (at 37°C)
Temp. Uniformity:	+/- 1.0.°C (at 37°C)
Temp. Increments:	0.1°C
Dimensions:	
Exterior:	21.25 x 21 x 39.35 in.
(W x D x H)	54 x 53.34 x 99.85 cm
Interior:	15.75 x 12.75 x 19.75 in.
(W x D x H)	40 x 32.4 x 50.2 cm
Timer:	1 min to 99 hr 59 min.
Capacity:	65L or 2.3 cubic feet
Weight:	117 lbs (53kg)
Electrical:	115V, 60Hz or 230V, 50Hz, 385W
Warranty:	2 years

myTemp™ Mini CO₂ Digital Incubators (20L)

myTEMP Mini CO₂



- + Ideal for cell culture
- + Digital temperature control
- + Personal sized, 13 x 14.5 in. footprint
- + Dual beam IR sensor for fast response time and accurate control over CO₂ percentage

CE



At only 13 inches wide, the myTemp Mini CO₂ is the smallest and most economical incubator for culturing cells in a CO₂ environment. Its small footprint makes the incubator ideal for use inside of biological safety cabinets, isolating sensitive cultures or for any laboratory simply trying to conserve bench space. With a thick layer of high efficiency insulation surrounding the chamber, the incubator is also ideal for transportation of cells. Once power has been disconnected, the incubator maintains temperature levels within 10% of the set parameter for up to 1 hour. In addition each model includes a 12V vehicle power adapter for operating the instrument in a car, boat, etc.

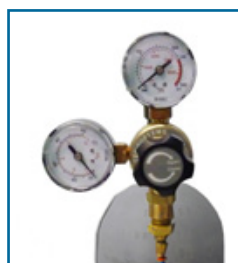
Both temperature and CO₂ percentage are digitally adjustable and displayed in real time on the large LED control panel. This panel also features a "Cal" function, for easy in-lab calibration of the temperature or CO₂. In addition, humidity (up to 80%) can be added to the chamber by inserting the included, stainless steel humidity reservoir.

To protect fragile samples, the CO₂ level is constantly monitored using dual beam infrared sensing technology. In the event of a drop in CO₂, audible and visual alarms are triggered, notifying the user of the error.

Despite its small size, the incubator features a relatively large 20L chamber with the capacity for flasks and bottles up to 2 liters. Two removable, stainless-steel shelves are included. The shelves are perforated to improve airflow within the chamber.

Technical Data:

Temp. Range	Ambient -10° to 55 °C
Temp. Accuracy:	± 0.25 (at 37°C)
Temp. Increments:	0.1°C
Temp. Uniformity:	± 0.25°C (at 37°C)
Capacity:	20L or 0.8 cu. ft.
CO ₂ Range:	0 to 20%
CO ₂ Sensor:	Dual beam IR
CO ₂ Accuracy:	±0.1% at 5%
Humidity:	70 to 80%
Gas Input:	4mm
Dimensions: (W x D x H)	
Interior:	10.3 x 9.3 x 12.9 in. / 26 x 23.5 x 33 cm
Exterior:	13.2 x 14.5 x 18.7 in. / 33.5 x 37 x 48 cm
Weight:	15 lbs (6.8kg)
Electrical:	Universal Voltage 100 to 240V, 50-60Hz, 75W
Warranty:	2 Years



Optional gas regulator



Easy access CO₂ input port

Ordering Information:

Item No.	Description:
H2300-HC2*	myTemp CO ₂ Mini Digital Incubator, includes 2 stainless shelves,
H2300-REG	Optional CO ₂ gas regulator (regulates pressure from the gas cylinder to the incubator)
H2300-SH	Extra shelf, 10.5 x 8 in. stainless steel (autoclavable)

*Includes US plug. For EU plug, please add (-E).


ST-Series & ST-Series PLUS CO₂ Incubators




CE

- + Precision temperature control, six-sided heating
- + Heated door and door frame prevents chamber/door condensation
- + Excellent accuracy and recovery with dual beam IR sensor for measuring CO₂
- + Plus models include:
 - + High heat decontamination
 - + Digital humidity control
 - + Split inner door

Included with PLUS models:



Digital humidity control
For delicate cells prone to desiccation, the PLUS series of CO₂ incubators allows for control over the relative humidity. Humidity can be controlled up to 95 percent utilizing a reservoir to vaporize and inject moisture into the chamber.



High heat decontamination
Contamination of samples can result in a large loss of both time and money. To prevent contamination the PLUS models include a convenient high heat decontamination cycle that exposes the chamber to 125°C for 8 hours.



Split inner door
Each time that the door of a CO₂ incubator is opened, sample contamination is at risk. With the unique design of the Benchmark PLUS models, access to samples can be achieved by opening a small window within the glass door, reducing this risk by up to 80%. 45P: 2 windows / 180P: 6 windows

Technical Data:

Temp. Range:	Ambient +5°C to 60°C
Temp. Accuracy:	± 0.1°C*
Temp. Uniformity:	± 0.4°C*
Temp. Stability:	± 0.1°C*
Temp. Increments:	0.1°C
CO ₂ Range:	0 to 20%
CO ₂ Increment:	0.1°C
CO ₂ Accuracy:	± 0.1°C
CO ₂ Sensor:	Dual Beam IR CO Sensor
Heat Decontamination	125°C (PLUS models only)
Programmable Humidity:	Up to 95% (PLUS models only)
Interior Dimensions:	(WxDxH)
H3550-45	13.2 x 14.2 x 15.4 in. / 33.5 x 36.1 x 39.2 cm
H3550-180	18.7 x 20.8 x 28 in. / 47.3 x 52.8 x 71 cm
H3551-45P	13.2 x 14.2 x 15.4 in. / 33.5 x 36.1 x 39.2 cm
H3551-180P	18.7 x 20.8 x 28 in. / 47.3 x 52.8 x 71 cm
Chamber Volume:	45L & 180L
Split Inner Door:	H3550-45: NA / H3550-180: NA H3551-45P: 2 / H3551-180P: 6
Chamber Material:	Stainless Steel
Exterior Dimensions:	(WxDxH)
H3550-45 (45L)	16.5 x 18.3 x 21.8 in. / 42 x 46.5 x 55.3 cm
H3550-180 (180L)	18.7 x 20.8 x 28 in. / 47.3 x 52.8 x 71 cm
H3551-45P (45L)	16.5 x 18.3 x 21.8 in. / 42 x 46.5 x 55.3 cm
H3551-180P (180L)	18.7 x 20.8 x 28 in. / 47.3 x 52.8 x 71 cm
Weight:	45L: 77 lbs / 35kg, 180L: 172lbs / 78kg
Electrical:	120V or 230V, 50-60Hz (350W)
Warranty:	2 years

Ordering Information:

Item No.	Description:
H3550-45*	ST-45 CO ₂ Incubator, 45L, with 2 shelves
H3550-180*	ST-180 CO ₂ Incubator, 180L, with 2 shelves
H3551-45P*	ST-45 PLUS CO ₂ Incubator, 45L, with 2 shelves Includes: High heat decontamination, humidity control and split inner door with 2 compartments
H3551-180P*	ST-180 PLUS CO ₂ Incubator, 180L, with 3 shelves Includes: High heat decontamination, humidity control and split inner door with 6 compartments
H3550-45-SH	Additional shelf for 45L incubator, 1 each
H3550-180-SH	Additional shelf for 180L incubator, 1 each
H3550-45-SK	Stacking kit for 45L incubator
H3550-180-SK	Stacking kit for 180L incubator (height of top display approximately 135cm)
H2300-REG	Regulator (optional), for connecting to a CO ₂ source

* At a set temperature of 37.0°C

* 115V with US plug. For 230V (EU plug), please add (-E).

myBlock™ Series Digital Dry Baths



myBLOCK™

- + Hinged cover improves uniformity and conserves energy
- + Optional external temperature probe for control of actual sample temperature
- + Unique Quick-Flip™ universal micro-block

Benchmark's myBlock™ series are the first digital dry baths to include advanced microprocessor controls, timed operation and a removable, hinged lid. In addition, an optional external temperature feedback probe can be positioned directly inside a sample tube, providing real-time control and monitoring of *actual* sample temperature.

Both the single and dual block models can be ordered in a configuration that includes our unique Quick-Flip™ blocks. These universal blocks accept tubes from 0.5 to 2.0ml and with just a quick flip to the other side, accommodate 0.2ml tubes, PCR strips or (in the dual block model only) a PCR plate. In addition, a wide variety of blocks are available for tubes up to 50ml.

Ordering Information:

Item No.	Description:
BSH5001-1B*	myBlock I single chamber with 1 x BSWCMB
BSH5002-2B*	myBlock II dual chamber with 2 x BSWCMB
BSH5001*	myBlock I single chamber, without blocks
BSH5002*	myBlock II dual chamber, without blocks
BSH-TP1	Optional External temperature sensor
BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0ml, 14 x 0.5ml, 6 x PCR strips / 48 x 0.2ml (& in dual model only) one PCR plate
BSW1500	Block, 24 x 1.5ml
BSW1520	Block, 24 x 1.5/2.0ml
BSW05	Block, 24 x 0.5ml
BSW5MT	Block, 12 x 5.0ml snap cap centrifuge tubes
BSW15	Block, 12 x 15ml**
BSW50	Block, 5 x 50ml**
BSW10	Block, 20 x 10mm (or 20 x 2.0ml)
BSW13	Block, 20 x 13mm (Blood Collection Tubes)**
BSWBCT	Block, 12 x 13mm & 8 x 16mm (Blood Collection Combi-Block)**
BSW1516	Block, 12 x 15-16mm (or 12 x 10ml)
BSW02	Block, 48 x 0.2ml tubes or 6 PCR tube strips
BSWPCR2	Block, 1 x 96-well PCR Plate (2 block model only)
BSWPCR1	Block, 1 x 96-well PCR Plate (1 block model)
BSWMT	Block, 1 x Micro Plate (2 block model only)
BSWHEM	Block, 48 x Hematocrit tubes (1.9mm)
BSW01	Block, solid - for slides or custom machining

*115V with US plug. For 230V (EU plug), please add (-E).

**Tube height may prevent the transparent lid from closing.

Available with: **Quick-Flip™** universal micro-block Patent Pending

All purpose blocks for:

- ✓ 0.5ml tubes
- ✓ 1.5ml tubes
- ✓ 2.0ml tubes
- ✓ 0.2ml tubes
- ✓ 0.2ml strips
- ✓ PCR Plate

Item: BSH5002-2B

Three possible block configurations in dual model:

Side 1 & Side 1	Side 1 & Side 2	Side 2 & Side 2
48 x 1.5/2.0ml 28 x 0.5ml	24 x 1.5/2.0ml 14 x 0.5ml 48 x 0.2ml	96 x 0.2ml or One PCR Plate*

*Single block chamber in myBlock I prevents compatibility with PCR plates.



Video
Demonstration

Technical Data:

Temp. Range:	Ambient +5° to 105°C
Temp. Accuracy:	± 0.25°C
Temp. Increments:	0.1°C
Temp. Uniformity:	± 0.2°C
Timer:	1 min. to 99 hr & 59 min.
Dimensions (W x D x H):	
Single:	7 x 10 x 5 in. / 18 x 25.5 x 13 cm
Dual:	6.3 x 14.5 x 5 in. / 16 x 36.5 x 13 cm
Electrical:	115V or 230V, 50-60 Hz, 120W (single) / 240W (dual)
Warranty:	2 Years

isoBlock™ Digital Dry Bath



ISO BLOCK™
Two independent block chambers

- + Two isolated chambers
- + Independent time & temperature control
- + Hinged cover improves uniformity and conserves energy
- + Unique Quick-Flip™ Universal Micro-Block



Video
Demonstration

The unique IsoBlock™ contains two isolated block chambers. Each chamber is controlled independently, allowing the dry bath to serve as two dry baths in one. The hinged (and removable) lid is designed with a dividing wall. When the lid is closed this dividing wall acts as a barrier, preventing air transfer between chambers.

The control panel features large digital displays of both time and temperature. At any point, either setting of a block can be adjusted, without affecting the settings of the other block.

A wide variety of blocks are available for accommodating nearly all popular tubes sizes. In addition, the unique Quick-Flip™ universal blocks accept tubes from 0.5 to 2.0ml and, with just a quick flip to the other side, accommodates 0.2ml tubes or PCR strips.



IsoBlock shown with lid open

Technical Data:

Temp. Range:	Ambient +5° to 105°C
Temp. Accuracy:	+/- 0.25°C
Temp. Increments:	0.1°C
Temp. Uniformity:	+/- 0.2°C
Timer:	1min. to 99 hr & 59 min.
Dimensions (W x D x H):	6.3 x 14.5 x 5 in. 16 x 37 x 12.7 cm
Electrical:	115V or 230V, 50-60 Hz, 240W
Warranty:	2 Years

Ordering Information:

Item No.	Description:
BSH6000*	IsoBlock Dry Bath with two independent chambers
BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0ml, 14 x 0.5ml and 6 x PCR strips / 48 x 0.2ml
BSW1500	Block, 24 x 1.5ml
BSW1520	Block, 24 x 1.5/2.0ml
BSW05	Block, 24 x 0.5ml
BSW5MT	Block, 12 x 5.0ml centrifuge tubes
BSW15	Block, 12 x 15ml **
BSW50	Block, 5 x 50ml**
BSW10	Block, 20 x 10mm (or 20 x 2.0ml)
BSW13	Block, 20 x 13mm (Blood Collection Tubes)**
BSWBCT	Block, 12 x 13mm & 8 x 16mm (Blood Collection Combi-Block)**
BSW1516	Block, 12 x 15-16mm (or 12 x 10ml)
BSW02	Block, 48 x 0.2ml tubes or 6 PCR tube strips
BSWPCR1	Block, 1 x 96-well PCR Plate
BSWHEM	Block, 48 x Hematocrit tubes (1.9mm)
BSW01	Block, solid - for slides or custom machining

* 115V with US plug. For 230V (EU plug), please add (-E).

** Tube height may prevent lid from closing, temperature accuracy may be affected.

myBlock™ Heating / Cooling Mini Dry Baths

myBLOCK™ Mini



CE

With its compact construction, broad temperature range, and multiple block options, the myBlock Mini is the perfect tool for laboratory incubations. The simple touch pad controls and a digital display provide for “set and walk away” temperature selection and unrivaled accuracy.

While perfect for bench use, the optional 12V adapter expands the utility of the myBlock Mini to field use. At less than 4.3 inches wide, myBlock Mini is truly the first personal heat block.

Technical Data:

Model:	BSH200	BSH300
Temp. Range:	Amb. +5° to 100°C	Amb. -25° to 100°C
Min. Programmable Temperature:	20°C	0°C
Temp. Accuracy:	± 0.5°C	± 0.5°C
Temp. Increments:	0.1°C	0.1°C
Temp. Uniformity:	+/- 0.2°C	+/- 0.2°C
Dimensions: (W x D x H)	4 x 6 x 4.5 in. 10.2 x 15 x 11.5 cm	4.3 x 6.4 x 5.5 in. 11 x 16.2 x 14 cm
Weight:	2lbs (1kg)	2lbs (1kg)
Electrical:	100-240V 50-60 Hz, 50W	100-240V 50-60 Hz, 50W
Warranty:	2 Years	2 Years

- + Compact, fits on any crowded benchtop
- + Available in heat only, or heat & cool versions
- + Exchangeable blocks for 0.2 to 50ml tubes
- + Clear cover improves temperature uniformity
- + Link 2 consecutive temperature steps (cooling model only)



Ordering Information:

Item No.	Description:
BSH200*	myBlock Mini Digital Dry Bath
BSH300*	myBlock Mini Digital Dry Bath with cooling
BSH100-02	Block, 40 x 0.2ml or 5 PCR strips
BSH100-05	Block, 24 x 0.5ml
BSH100-15	Block, 15 x 1.5ml
BSH100-1520	Block, 15 x 1.5 or 2.0ml
BSH100-5MT	Block, 6 x 5ml conical (17mm diameter)**
BSH100-150	Block, 4 x 15ml**
BSH100-500	Block, 2 x 50ml**
BSH100-1232	Block, 15 x 2ml autosampler vials (12 x 32mm)
BSH100-1213	Block, 15 x 12-13mm diameter tubes & vacutainers**
BSH100-CV	Block, 8 x cuvettes
BSH100-CU	Block, solid (for custom machining)
BSH100-A12	12V vehicle power adapter

*Includes US plug. For EU plug, please add (-E)
**Block height may prevent lid from closing.



CE

For technical data, please see above (myBlock Mini).

Temp Accuracy: ± 0.3°C

myBLOCK™ HL
With Heated Lid

Prevents evaporation and condensation

Ordering Information:

Item No.	Description:
BSH200-HL*	myBlock HL Mini Digital Dry Bath with heated lid
BSH100-02	Block, 40 x 0.2ml or 5 PCR strips
BSH100-05	Block, 24 x 0.5ml
BSH100-15HL	Block, 15 x 1.5ml

*Includes US plug. For EU plug, please add (-E).

The new myBlock™ HL is the first and only mini heat block featuring a heated lid for protecting samples against unwanted condensation and evaporation. Both the block and lid temperature can be selected independently, making this myBlock the ideal choice for the most temperature sensitive applications, including LAMP assays, immunoassays, enzyme reactions - anywhere reactant concentration is critical.

myBath™ Digital Water Baths



- + Digital accuracy and convenience
- + Seamless, stainless steel chamber
- + Quik-CAL™ user calibration function
- + Hinged lid is also removable



The myBath series water baths are designed to guarantee superior accuracy and performance in a compact footprint. Easy to use controls allow the user to digitally select and monitor settings. Adjustable in 0.1 degree increments, the temperature is shown on a large, 3-digit display. The proprietary Quik-CAL™ feature allows for simple, in-lab calibration. High efficiency insulation maintains temperature stability and uniformity within the bath, while keeping the housing cool to the touch.

All myBath models feature seamless, stainless steel chambers for easy cleaning and long life. The chambers resist rust and have no corners to collect dirt or contamination. The larger 8L and 12L units have drains for hassle-free water changes.

The 4L, 8L, and 12L models include a see-through cover that can be removed, or flipped back on a rear hinge to conserve bench space. The lid's gabled design** will divert condensation to the front and back of the bath, away from samples. Racks are available to accommodate 1.5/2.0ml, 15ml and 50 ml tubes within the 4L, 8L and 12L baths. The myBath 4L is supplied with all three racks.

Ordering Information:

Item No.	Description:
B2000-2*	myBath 2L Digital Water Bath
B2000-4*	myBath 4L Digital Water Bath, includes tube racks for 1.5/2.0, 15 and 50ml tubes
B2000-8*	myBath 8L Digital Water Bath
B2000-12*	myBath 12 L Digital Water Bath

*115V with US plug. For 230V (EU plug), please add (-E).

**The 2L model includes a flat, removable lid and adjustable temperature in increments of 1°C.

Accessory Tube Racks:

Tube racks *included* with myBath 4L!



Item Number	Description:	Rack Capacity	
		4 Liter	8/12 Liter
B2000-4-T5	Tube rack for 40 x 0.5ml tubes	1	2
B2000-4-T1520	Tube rack for 48 x 1.5/2.0ml tubes	1 (Included)	2
B2000-4-T150	Tube rack for 41 x 15ml tubes	1 (Included)	0
B2000-4-T500	Tube rack for 15 x 50ml tubes	1 (Included)	0
B2000-8-T150	Tube rack for 76 x 15ml tubes	0	1
B2000-8-T500	Tube rack for 30 x 50ml tubes	0	1

Technical Data:

	2 Liter	4 Liter	8 Liter	12 Liter
Temperature Range:	Ambient +5° to 100°C			
Temp. Accuracy:	± 0.2°C at 37°C		± 0.5°C at 37°C	
Temp. Uniformity:	± 0.2°C at 37°C			
Exterior (W x D x H):	6.5 x 8 x 6 in.	7.7 x 13.9 x 9 in.	10.5 x 17.5 x 12.4 in.	10.7 x 17.5 x 16.2 in.
Interior (W x D x H):	5.5 x 6 x 4 in.	5.3 x 9.4 x 5.5 in.	10.4 x 12.8 x 5.9 in.	10.4 x 12.8 x 7.9 in.
Weight:	4.5 lbs (2.4 kg)	15 lbs (6.8 kg)	17 lbs (7.7 kg)	17 lbs (7.7 kg)
Electrical:	115 or 230V, 50-60Hz, 250W-700W			
Warranty:	2 Years			



SB-12L Shaking Water Bath



- + Orbital shaking motion
- + Included spring platform accepts tubes, bottles and flasks
- + Compact design, conserves bench space
- + Digital control and display of time, temperature, and speed

This compact shaking water bath utilizes the well proven, beltless motor drive system from the Benchmark Orbi-Shaker™ Series, with the addition of precision temperature control up to 80°C.

The seamless, stainless steel chamber has a 12 liter capacity. The unit is supplied complete with a universal spring platform for securing 15 & 50ml test tubes, as well as Erlenmeyer flasks and media bottles up to 1 liter. A hinged and removable lid is also included to reduce energy waste, prevent splashing and divert condensation away from samples.

Easy to use controls allow the user to digitally select and monitor time, temperature and shaking speed, while a constant feedback system ensures accuracy over each parameter.

Optional test tube racks are available for microtubes, and custom-designed racks can also be made available by request.

Capacity Chart:

	Bottles/Tubes	Flasks
0.5ml	40	N/A
1.5/2.0ml	40	N/A
15ml	63	N/A
50ml	15/30	12
125ml	8	8
250ml	4	3
500ml*	2	2
1000ml*	2	1

*Height of vessel may limit ability to close included lid.

Technical Data:

Temperature Range:	Ambient +5° to 80°C
Temperature Increments:	0.1°C
Temperature Uniformity	± 0.2°C (at 37°C)
Temperature Accuracy:	±0.3°C (at 37°C)
Shaking Speed Range:	30 to 200rpm
Speed Increments:	1rpm
Shaking Orbit:	25mm (1")
Platform Dimensions:	6.5 x 8 in. / 16.5 x 20.5cm
Exterior Dimensions: (W x D x H)	12.2 x 13.25 x 12 in. / 32 x 34 x 30 cm
Capacity:	12 Liter
Timer:	1 min. to 48 hours / continuous
Weight:	31 lbs. (14 kg)
Electrical:	115 or 230V, 50-60Hz, 300W
Warranty:	2 Years



Ordering Information:

Item No.	Description:
SB0012*	SB-12L Shaking Water Bath with universal spring platform for tubes, bottles and flasks
SB0012-T1520	Optional rack for 1.5/2.0ml microtubes
SB0012-T5	Optional rack for 0.5ml microtubes

*115V with US plug. For 230V (EU plug), please add (-E).

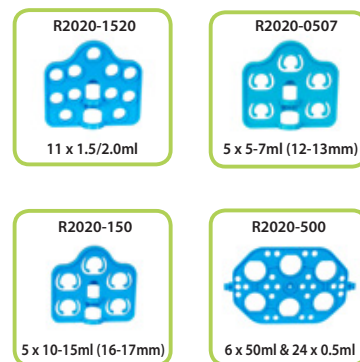


Roto-Therm™ Incubated Rotator

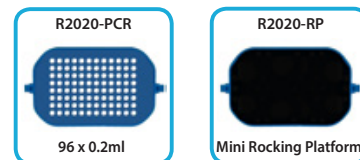


- + Rotated mixing with temperature control
- + Includes tube holders for common tube sizes
- + Available with variable speed control and advanced shaking/mixing modes:
 - + Mix (oscillating)
 - + Pause
 - + Rock

Included Tube Holders:



Optional Tube Holders:



Benchmark's new Roto-Therm series of rotating mixers provide a wide range of mixing capabilities. Suitable for an array of laboratory applications including resuspension, protein binding, nucleic acid purification, histochemistry, hybridization, etc, the mixers include interchangeable tube holders for accommodating all common tube sizes from 0.5ml to 50ml. The motion can be adjusted from vertical (end over end) mixing, to horizontal (rolling or hybridization style) mixing.

For applications requiring temperature control, the Roto-Therm series can be digitally programmed to maintain chamber temperatures of ambient +5°C to 60°C and include an "in-lab" calibration function for ensuring accurate temperature control. For applications where temperature control is not required, the economical Roto-Mini models are available (pg. 30).

Roto-Therm rotators are available in the "Plus" configuration. The Plus models provide the following additional features:

- Variable speed: 5 to 70rpm
- "Mix" function: Rotating in combination w/ oscillations (increased mixing)
- "Pause" function: Rotating with intermittent "stops" during rotation
- "Rock" function: Back and forth, gentle rocking motion (see-saw)

The Plus models also offer an additional rocking platform (4.5 x 3 in.), as well as a 96 x 0.2ml tube/strip/plate holder for mixing PCR vessels in the "Mix" (oscillating) mode

Technical Data:

Speed Range: H2020:	24rpm
H2024:	5 to 70rpm
Mixing Modes: H2020:	N/A
H2024:	Mix, Pause & Rock
Temperature:	Ambient +5° to 60°C
Max Capacity:	1.5ml/2.0ml: 44 15ml:16 50ml: 6
Dimensions:	11.6 x 8.5 x 9 in / 29.5 x 21.6 x 22.9 cm
Weight:	9 lbs / 4 kg (H2020) / 10 lbs / 4.5kg (H2024)
Electrical: H2020 H2024	115 or 230V, 50-60Hz, 0.5A Universal Voltage 100 to 240V, 50-60Hz, 0.5A
Warranty:	2 Years

Ordering Information:

Item No.	Description:
H2020*	Roto-Therm Incubated Rotator with tube holders
H2024*	Roto-Therm Plus Incubated Rotator (variable speed) with tube holders
Tube Holder Accessories	
R2020-1520	Tube holder, 11 x 1.5/2.0ml, 2/pk (1 pack included)
R2020-0507	Tube holder, 5 x 5-7ml, 2/pk (1 pack included)
R2020-150	Tube holder, 4 x 10-15ml, 2/pk (1 pack included)
R2020-500	Tube holder, 6 x 50ml, 1 each (included)
R2020-PCR	Tube holder, 96 x 0.2ml, 12 x PCR strips or one PCR plate**
R2020-RP	Mini rocking platform with rubber mat, 4.5 x 3 in. **

*115V with US plug. For 230V (EU plug), please add (-E).

**Accessories are recommended for "Plus" models (H2024) only

Incu-Shaker™ Mini Shaking Incubator



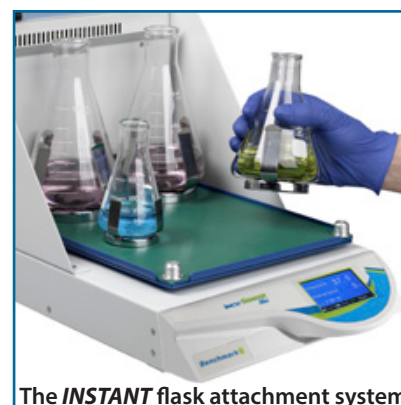
CE

INCUSHAKER™ Mini

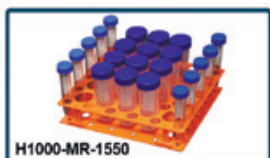
- ✦ Domed lid accepts flasks up to 1L
- ✦ Touch screen control panel
- ✦ Extremely compact: just 11" wide
- ✦ Exchange flask clamps in one second with MAGIC Clamp™ magnetic system

The Incu-Shaker™ Mini is the most compact shaking incubator in its class. While this shaking incubator has a remarkably small footprint, the interior is spacious enough to accept a 9.5 x 11" platform as well as clamps for a variety of flasks, tubes and other common vessels. The standard platform (included) features a non-slip, rubber coated surface, ideal for tissue culture flasks, Petri dishes and staining trays.

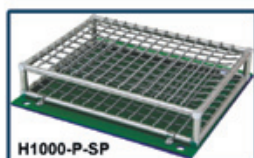
The convenient MAGIC Clamp™ platform is also available for use with Erlenmeyer flasks and test tube racks. This unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.



The *INSTANT* flask attachment system



H1000-MR-1550



H1000-P-SP



Video Demonstration



Technical Data:

Temperature Range:	Ambient +5° to 70°C
Temperature Increments:	0.1°C
Temperature Uniformity	± 0.25 °C
Temperature Accuracy:	±0.1 °C
Shaking Speed Range:	30 to 300rpm
Speed Increments:	1rpm
Shaking Orbit:	19mm (3/4")
Platform Dimensions:	9.5 x 11.5 in. / 23.5 x 29 cm
Exterior Dimensions (W x D x H):	11 x 16.2 x 13 in. / 28 x 41 x 33 cm
Height with Lid Open:	25 in. / 63 cm
Timer:	1 min. to 48 hours / continuous
Weight:	25 lbs. (11.5 kg)
Electrical:	115 or 230V, 50-60Hz, 300W
Warranty:	2 Years

Ordering Information:

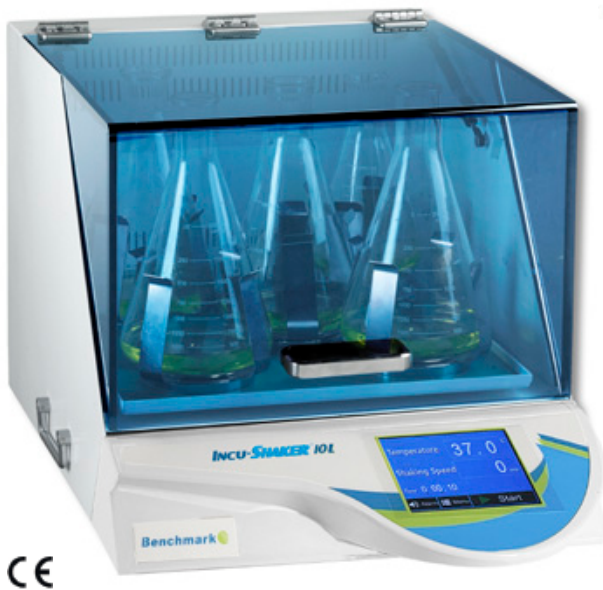
Item No.	Description:
H1001-M*	Incu-Shaker Mini with non-slip rubber mat
H1000-MR	MAGic Clamp universal platform (for flasks/tubes)
H1000-P-MP	4 x microplate platform (standard or deepwell)
H1000-P-SP	Spring rack platform, for uncommon vessels
Accessories for H1000-MR MAGIC Clamp Platform	
H1000-MR-CMB	NEW! Adjustable flask clamp for MAGIC clamp platform, accepts 125ml (max. 12), 250ml (max. 8) or 500ml (max. 5)
H1000-MR-1000	Flask clamp for MAGIC clamp platform, 1000ml (max. 2)
H1000-MR-500	Flask clamp for MAGIC clamp platform, 500ml (max. 5)
H1000-MR-250	Flask clamp for MAGIC Clamp platform, 250ml (max. 8)
H1000-MR-125	Flask clamp for MAGIC Clamp platform, 125ml (max. 12)
H1000-MR-50	Flask clamp for MAGIC Clamp platform, 50ml (max. 20)
H1000-MR-MP	MAGic clamp for 1 x microplate (max. 4)
H1000-MR-1550	Tube Rack, 30x15 & 20x50ml (max. 1)
H1000-MR-T15	Tube Rack, 32 x 15ml (max. 2)
H1000-MR-T50	Tube Rack, 15 x 50ml (max. 2)
H1000-MR-TSR	Angled tube rack holder, adjustable tilt (max. 1)

*115V with US plug. For 230V (EU plug), please add (-E).



Incu-Shaker™ 10L Shaking Incubators

INCUSHAKER™ 10L



- + Two models, heat only & heat/cool
- + Exceptional temperature uniformity
- + High capacity, up to 5 x 2L
- + Exchange flask clamps in one second with MAGic Clamp™ magnetic system
- + Optional shelf for Petri dishes, microplates, etc.

MAGIC CLAMP™



Video Demonstration



Incu-Shaker™ 10L is a heavy-duty performer, designed for high capacity loads and continuous use. Its outstanding temperature accuracy and uniformity are supported by proprietary heat distribution technology that ensures precisely maintained temperatures throughout the chamber. Inconsistencies due to stratification are reduced to negligible levels and the selected temperature is precisely maintained within 0.25%, even in the corners. In the Incu-Shaker 10LR model, a powerful compressor provides cooling as low as 15 degrees below ambient.

The powerful brushless induction 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 motor isolation system. Like other Incu-Shaker models, the 10L is built to last. 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.

Technical Data:

Temperature Range:	
H1010:	Ambient +5° to 60°C
H1012:	Ambient -15° to 60°C
Temperature Increments:	0.1°C
Temperature Uniformity:	± 0.25%
Temperature Accuracy:	±0.1°C
Shaking Speed Range:	30 to 300rpm
Speed Increments:	1rpm
Shaking Orbit:	19mm (3/4")
Platform Dimensions:	17.8 x 17.8 in. / 45 x 45 cm
Exterior Dimensions:	
H1010 (W x D x H):	20 x 26 x 19 in. / 51 x 65 x 47 cm
H1012 (W x D x H):	20 x 31 x 22 in. / 51 x 79 x 56 cm
Height (lid open):	38 in. / 96.5 cm
Timer	1 min. to 48 hours or continuous
Weight (H2010):	120 lbs (55 kg)
Weight (H1012):	170 lbs (78 kg)
Electrical (H2010):	120 or 230V, 50-60Hz, 450W
Electrical (H1012):	120 or 230V, 50-60Hz, 950W
Warranty:	2 Years

Ordering Information:

Item No.	Description:
H2010*	Incu-Shaker 10L with non-slip rubber mat
H2012*	Incu-Shaker 10LR (refrigerated) w/ non-slip rubber mat
H1010-MR	MAGic Clamp Universal platform (for flasks/tubes)
H1010-P-SP	Spring rack platform, for uncommon vessels
H1010-SH	Shelf, 14 x 5.5" for Petri dishes, microplates, etc.
Accessories for H1010-MR MAGic Clamp Platform	
H1000-MR-CMB	NEW! Adjustable flask clamp for MAGic clamp platform, accepts 125ml (max. 36), 250ml (max. 25) or 500ml (max. 16)
H1000-MR-3000	Flask clamp for MAGic clamp platform, 3L (max. 4)
H1000-MR-2000	Flask clamp for MAGic clamp platform, 2L (max. 5)
H1000-MR-1000	Flask clamp for MAGic clamp platform, 1L (max. 9)
H1000-MR-500	Flask clamp for MAGic clamp platform, 500ml (max. 16)
H1000-MR-250	Flask clamp for MAGic Clamp platform, 250ml (max. 25)
H1000-MR-125	Flask clamp for MAGic Clamp platform, 125ml (max. 36)
H1000-MR-50	Flask clamp for MAGic clamp platform, 50ml (max. 49)
H1000-MR-MP	Clamp, 1 x microplate, for MAGic Clamp platform (max.. 8)
H1000-MR-1550	Tube Rack, 30x15 & 20x50ml (max. 4)
H1000-MR-T15	Tube Rack, 32 x 15ml (max. 8)
H1000-MR-T50	Tube Rack, 15 x 50ml (max. 8)
H1000-MR-T600	Tube/Bottle Rack, 4 x 500/600ml conical bottle (max. 4)
H1000-MR-TSR	Angled tube rack holder, adjustable tilt (max. 1)

*115V with US plug. For 230V (EU plug), please add (-E).

Incu-Shaker™ Mini CO₂ Shaking Incubator



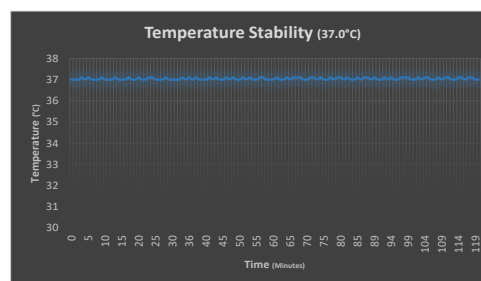
CE

INCUSHAKER CO₂ Mini

Heat • Shake • CO₂

The **ONLY** CO₂ Incubator with a **MAGic Clamp™** Shaker

- + Integral orbital shaker, ideal for suspension cell culture
- + Six side direct heating, provides uniform temperature
- + Stainless steel chamber (SS316), with round corners for easy cleaning
- + Dual beam IR sensor, fast response time for precise control over CO₂%



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



MAGic Clamp™ Platform

Optional MAGic Clamp accessories (Patented) are available for attaching erlenmeyer flasks, microplates, 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 temperature 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 (Increments: 0.1°C)
Temperature Accuracy / Uniformity / Stability	±0.5°C / ±0.5°C / 0.1°C (at 37°C)
Speed Range:	30 to 300 rpm (Increments: 1rpm)
Mixing Orbit:	19mm (3/4 in.)
CO ₂ Range:	0 to 20% (Increment: 0.1%)
CO ₂ Accuracy:	±0.1%
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 (46L)
Exterior Dimensions:	16.5 x 18.3 x 21.8 in. / 42 x 46.5 x 55.3 cm
Weight:	90 lbs (40.1kg)
Electrical:	120V or 230V, 50-60Hz, 350W
Warranty:	2 Years

Maximum Capacity:

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

Ordering Information:

Item No.	Description:
H3501*	Incu-Shaker CO₂ Mini, with non-slip rubber mat platform
H2300-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	Slanted Rack Holder, holds tube racks at an adjustable angle

*115V with US plug. For 230V (EU plug), please add (-E).



MultiTherm™ Heating/Cooling Vortexer



The MultiTherm™ shaker is a temperature controlled vortexer, useful for a variety of molecular biology applications, including:

- Denaturation of DNA, RNA & proteins
- Lipid extractions
- Yeast and bacteria cultivation
- Restriction digests
- Reverse transcription
- DNA/plasmid isolation
- Gentle thawing of biological materials

Technical Data:

Temp. Range (HC):	Ambient -20° to 100°C
Temp. Range (H):	Ambient +5° to 100°C
Heating Ramp Rate:	5.0°C / min.
Cooling Ramp Rate:	2.5°C / min. (HC only)
Temp. Accuracy:	± 1.0°C
Speed Range:	200 to 1500 rpm, or "off"
Motion / Orbit:	Orbital / 3mm
Capacity:	Per selected block
Dimensions: (W x D x H)	8.25 x 11.5 x 8.25 in. 21 x 29 x 21 cm
Weight:	18lb. (8kg)
Electrical:	115V or 230V, 50-60Hz, 500W
Warranty:	2 Years

MULTI-THERM™
COOL - HEAT - SHAKE

- + Temperature control from 0° to 100°C
- + Exchangeable blocks, for tube sizes 0.2ml to 50ml
- + Precision contoured wells for uniform thermal transfer
- + Two models: Heat/Cool or Heat only
- + Sequence link function for linking or repeating programs (HC model only)

Despite its modest footprint, the MultiTherm accommodates all common laboratory tubes and plates, including as many as 6x50ml tubes. Speed, temperature and time are set digitally and current as well as set values are continuously shown on the LCD. A heat only model, as well as a heat and cool model are available. The HC model includes a sequence link function for linking together temperature profiles. An integral over-temperature control ensures long life, safety and sample integrity. Blocks are sold separately.

Ordering Information:

Item No.	Description:
H5000-HC*	MultiTherm Shaker with heating and cooling
H5000-H*	MultiTherm Shaker with heating only
H5000-02	Block, 96 x 0.2ml or 1 PCR plate
H5000-05	Block, 54 x 0.5ml
H5000-CMB	Block, combination, 15x0.5ml & 20x1.5ml
H5000-15	Block, 35 x 1.5ml
H5000-20	Block, 35 x 2.0ml
H5000-12	Block 24 x 12mm (200-1200rpm / Amb.-10° to 100°C)
H5000-150	Block, 12 x 15ml (200-750rpm / Amb.-10° to 100°C)
H5000-500	Block, 6 x 50ml (200-750rpm / Amb.-10° to 100°C)
H5000-MP	Block, 1 x microplate (Amb. -10 to 60°C)
H5000-1232	Block, 24 x 2ml HPLC / Autosampler vials (12x32mm)
H5000-5MT	Block, 12 x 5ml centrifuge tubes (conical)
H5000-DWMP	Block, 1 x deep well microplate (max. height, 54mm)
H5000-CU	Block, custom drilled, for tubes/vials up to 40mm tall
H5000-WB	Block, for liquids, beads, etc. (chamber: 4 x 2.6 x 1")

*115V with US plug. For 230V (EU plug), please add (-E).

INCU-MIXER™ MP

HEATED MICROPLATE VORTEXER



- + Heated lid prevents condensation
- + Accepts a variety of microplates
- + Available in two-plate or four-plate format
- + Temperature control up to 70°C

**Vortex mixing motion,
up to 1200rpm**

Ordering Information:

Item No.	Description:
H6002*	Incu-Mixer MP2, 2 position incubated plate vortexer
H6004*	Incu-Mixer MP4, 4 position incubated plate vortexer
BT1500-A1520	Optional adapter, 20 x 1.5/2.0ml for microplate shakers
BT1500-A05	Optional adapter, 20 x 0.5ml for microplate shakers

*115V with US plug. For 230V (EU plug), please add (-E).

Benchmark TC-32 and TC-9639 Thermal Cyclers



- + Intuitive touchscreen control
- + Program wizard for quick & easy protocol entry
- + Fast, reliable results
- + Fully adjustable heated lid
- + Full sized model with gradient option
- + Mini version for low throughput labs

Fast, reliable cycling and ease of use make the Benchmark thermal cyclers the ideal choice for medium to high throughput laboratories as well as teaching facilities or those looking for a personal sized cycler.

Both the full-sized TC-9639 and mini TC-32 feature large, full color touchscreens with icon driven menus. A program wizard guides users through quick and easy entry of protocols with on board storage for over 100 typical programs. The TC-9639 has been upgraded with a gradient option for quick optimization or protocols.

The unique format of the block in the TC-9639 accepts 0.2ml tubes, strips and PCR plates as well as 0.5ml tubes. Wells in the block of the TC-32 are arranged in a 4x8 format compatible with 0.2ml tubes or strips. The blocks have a low thermal mass, allowing for exceptionally fast heating and cooling. This process is tightly controlled to maintain precision, accuracy, and uniformity both in the block and the samples. Heated lids maintain reactant concentrations. The height of the heated platen in the lid of the TC-9639 can be adjusted to fit snugly against the tops of tubes and plates.

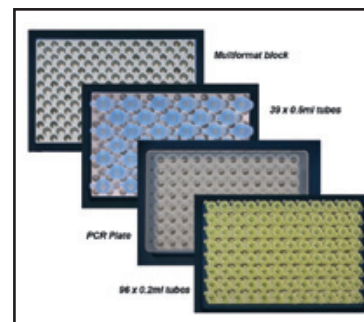
While the TC-32 has a smaller footprint and lower capacity than the TC-9639, it still maintains many of the same programming features including time and temperature increments/decrements, auto pause, auto restart after a power failure and the ability of maintain samples at 4°C after a run.

Technical Data:

Capacity, TC-32 Mini:	32 x 0.2ml or 4 PCR Strips
Capacity, TC-9639 Multifomat Block:	96 x 0.2ml tubes/strip tubes or 39 x 0.5ml tubes or 1 nonskirted 96 well plate
384 Well Block:	1 x 384 well plate (TC-9639 only)
In-situ Adapter:	4 slides (fits multifomat block)
Temp. Control Range:	0° to 100°C
Temperature Control:	Simulated sample or block
Accuracy/Uniformity:	±0.2°C/±0.2°C (TC-9639) ±0.25°C/±0.25°C (TC-32)
Max. Ramp Rate: (Heat/Cool):	5°C per sec. / 4°C per sec.
Lid Temperature:	30° to 112°C, user adjustable
Gradient Range/Differential:	30°-105°C left to right/ 1°-30°C (TC-9639)
Program Memory:	Up to 100 programs (TC-9639 offers unlimited storage with a USB flash drive)
Increments/decrements:	Yes, time and temperature
Power Failure Restart:	Yes
Dimensions (TC-9639):	10.2 x 14.2 x 9.9 in. / 26 x 36 x 25cm
Dimensions (TC-32):	9.1 x 7.1 x 6.2 in / 23 x 18 x 15.7 cm
Weight:	16 lbs. (7.3kg) / 7 lbs (3.2kg)
Electrical:	Universal Voltage 100 to 240V, 50-60 Hz
Warranty:	2 Years



Touchscreen control



Unique block format (TC-9639)

Ordering Information:

Item No.	Description:
T5005-3205*	TC-32 Mini Thermal Cycler, 32 x 0.2ml block
T5000-96*	TC-9639 Thermal Cycler, multifomat block (Accepts 1 PCR plate, 96 x 0.2ml tubes or 39 x 0.5ml tubes)
T5000-384*	TC-9639 Thermal Cycler, 384 well block
T5000-A-IS	In-situ adapter for 4 slides, fits T5000-96

*Includes US plug. For EU plug, please add (-E).