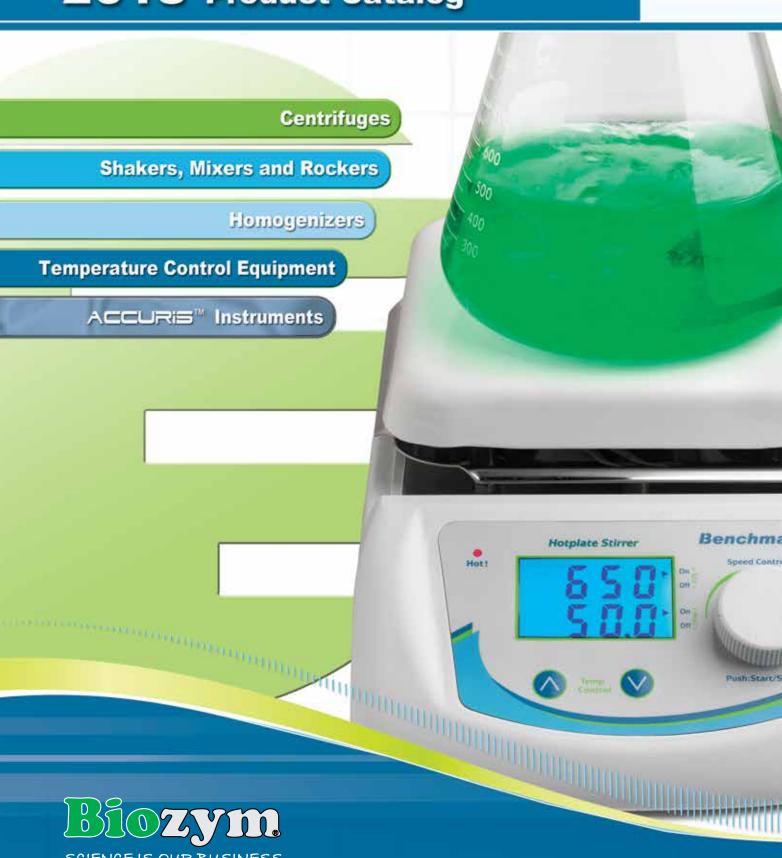


2018 Product Catalog

SCIENCE IS OUR BUSINESS





Benchmark Scientific, Inc. is pleased to present our 2018 research products catalog. Since our inception, we have been providing research laboratories with innovative, cost effective products and solutions designed to improve laboratory efficiency, safety and results

Our emphasis on next generation technology, quality and value has served our customers and our company well. As a result of recent growth, we have expanded our facilities, our staff and our product lines to serve you better. We welcome your questions, suggestions and comments.

Microcentrifuges Pg.3

Eight Position Mini Centrifuge Twelve Position Mini Centrifuge Specialty Mini Centrifuges Mini Plate Centrifuge High Speed Microcentrifuge Compact Lab Centrifuges

Shakers, Mixers & Rockers ... Pg. 10

Vortex Mixers Two Dimensional Rockers Three Dimensional Rockers

Orbital Shakers Rollers and Rotators

Hand-Held Homogenizer (Rotor Stator Type) Bead Beating Homogenizers

Hotplates and Stirrers Incubators & CO2 Incubators Dry Baths (Heat Blocks) Water Baths Shaking Incubators Microtube & PCR Plate Coolers Media Storage Bottles (hybex™ glassware)

Laboratory Balances Aspiration Systems Electrophoresis Gel Systems Electrophoresis Power Supplies



Centrifugation



myFuge™ Mini Microcentrifuge





The myFuge™ Mini centrifuge is a personal centrifuge that virtually fits in the palm of your hand. Ideal for quick spin downs of microtubes and PCR tubes, the myFuge is extremely easy to use. Simply close the lid and the rotor instantly reaches 6,000 rpm. Open the lid, and the improved braking system quickly and smoothly decelerates the rotor to a complete stop in just one second.

An eight-position microtube rotor is included and comes installed. Also included is a second rotor with increased capacity for four 0.2 ml PCR strips (or 32×0.2 ml tubes) which is stored in a convenient compartment on the bottom of the centrifuge. This compartment is also used for securing the included tube adapters for 0.5 ml tubes.

A new **Clik-n-Lok™** rotor attachment system eliminates the requirement for set screws and tools during rotor exchange. Simply remove and attach rotors by hand, pulling or pressing the rotor onto the motor shaft.



- Clik-n-Lok™ Instant rotor attachment
- + Eight position microtube rotor
- Storage compartment for PCR rotor and 0.5ml adapters
- Decelerates in just 1 second
- → Rotor for 4 PCR strips





Storage compartment

Includes both rotors



Available in 5 colors

Technical Data:

Speed:	6,000 rpm / 2,000 xg
Capacity:	8 x 1.5/2.0 ml tubes 32 x 0.2 ml PCR tubes 4 x PCR strips (8 x 0.2 ml)
Dimensions: (W x D x H)	14.5 x 17.8 x 11.4 cm
Weight:	1 kg
Electrical:	Universal Voltage 100-240V, 50-60 Hz, 50W
Warranty:	1 Year

Ordering Information:

Item No.	Description:
55C1008-C-E	MyFuge Mini Microcentrifuge, clear lid
55C1008-B-E	MyFuge Mini Microcentrifuge, blue lid
55C1008-G-E	MyFuge Mini Microcentrifuge, green lid
55C1008-P-E	MyFuge Mini Microcentrifuge, purple lid
55C1008-R-E	MyFuge Mini Microcentrifuge, red lid
55C1008-A5-8	Replacement adapter pack, 0.5 ml 8/pk.
55C1008-A2-8	Replacement adapter pack, 0.2 ml 8/pk.

All models include microtube rotor, PCR rotor and 0.5ml adapters.

myFuge™ 12 Microcentrifuge





- + COMBI-Rotor™ for tubes and strips
- $\overset{ op}{ op}$ Twice the capacity of most mini centrifuges
- $\overset{f +}{}$ Near silent operation
- Starts & stops with closing/opening of the lid







Compact, low profile design

Unlike traditional mini centrifuges, the new myFuge™ 12 eliminates the need to change rotors when switching between microtubes and PCR strips. The included, unique COMBI-Rotor™ is all that is required for running 12 microtubes and/or 4 (eight position) PCR strips.

With a fixed speed that produces 2,000 xg, this centrifuge is perfect for quick spin downs. Simply close the lid and the unit accelerates to 5,500 rpm. Open the lid, and the rotor quickly decelerates for removal of samples.

At just 14 cm wide and less than 11.5 cm tall, the myFuge 12 truly is a personal centrifuge with unmatched capacity and flexibility.

Technical Data:

Speed:	5,500 rpm / 2,000 xg
Capacity:	12 x 1.5/2.0 ml tubes 32 x 0.2 ml PCR tubes 4 x PCR strips (8 x 0.2 ml)
Dimensions: (W x D x H)	14 x 20 x 11.2 cm
Weight:	1 kg
Electrical:	Universal Voltage 100-240V, 50-60 Hz, 50W
Warranty:	1 Year

Item No.	Description:
55C1012-E	myFuge 12 Microcentrifuge with Combi-Rotor
55C1008-A5-6	Adapter pack, 0.5 ml 6/pk.
55C1008-A2-6	Adapter pack, 0.2 ml 6/pk.

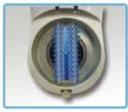
StripSpin[™] 12 **Microcentrifuge**





For technical data, please see model 55C1012-E

For labs using 12 position PCR strips



Holds up to 4 x PCR strips or 48 x 0.2ml tubes

Ordering Information:

Item No.	Description:
55C1248-E	StripSpin 12 Mini Microcentrifuge with 4 x 12 strip rotor
55C1008-ROT	Optional rotor, 8 x 1.5/2.0 ml
55C1008-A5-8	Optional adapter pack for 55C1008-ROT, 0.5 ml, 8/pk.

myFuge™ 5 **Microcentrifuge**







- For quick spin downs of 5 ml centrifuge tubes
- Includes adapters for 5 ml blood tubes
- Starts and stops with closing/opening of the lid
- Optional adapters for centrifuging cryovials

The myFuge™ 5 microcentrifuge includes a four position rotor for compatibilty with a variety of 5ml test tubes, including 5ml snap cap centrifuge tubes. In addition, this combination rotor has four additional slots for centrifuging standard microtubes (1.5/2.0 ml). Simply close the lid and the centrifuge quickly accelerates to the fixed speed of 5,500 rpm. Open the lid, and the rotor decelerates to a stop for removing samples.

The 5ml rotor positions accept 5ml centrifuge tubes directly, while 5 ml blood and culture tubes (12x75 mm) are accepted with the included adapters. The microtube positions are designed to accept 0.5 and 0.2 ml tubes with the use of optional adapters.

Technical Data:

Speed:	5,500 rpm / 2,000 xg	
Capacity:	4 x 5 ml tubes & 4 x 1.5/2.0 ml	
Dimensions: (W x D x H)	14 x 20 x 14 cm	
Weight:	1 kg	
Electrical:	Universal Voltage 100-240V, 50-60 Hz, 50W	
Warranty:	1 Year	

Item No.	Description:
55C1005-E	myFuge 5 Mini Centrifuge with combination rotor , $4x5$ ml $\&4x1.5/2.0$ ml
55C1005-AC2	Adapter pack, for cryovials (0.5 to 2.0 ml) and 1.5/2.0 ml HPLC vials, 4/pk.
55C1008-A5-6	Adapter pack, 0.5 ml, 6/pk.
55C1008-A2-6	Adapter pack, 0.2 ml, 6/pk.



PlateFuge™ MicroPlate Centrifuge





- Quickly spins down droplets in PCR plates
- Unique rotor design prevents sample spillage (Patented)
- Accepts all popular PCR plates (skirted, semi and non) and most microtiter plates
- Less than half the size of traditional centrifuges

Benchmark's PlateFuge™ is the first "mini" sized centrifuge with a swing out rotor for microplates. Centrifugation of plates before PCR ensures all reactants are in the bottom of the wells for optimized concentrations and improved yields.

In spite of its remarkably small footprint (23 x 26 cm), the PlateFuge™ includes a uniquely designed, swing out rotor (patented) capable of securing two microplates. The easily accessible rotor chamber includes two plate carriers that rest at a 75° angle. This allows plates to be inserted confidently without sealing tapes or caps. Upon closing the lid of the centrifuge, the rotor accelerates and the centrifugal force "swings" the plates into a horizontal position. Any droplets on the walls of the plate, quickly concentrate into the well bottoms.



Before & after centrifugation (angled position)



During centrifugation (horizontal position)

With a g-force of 600 xg, most samples can be spun down in less than 20 seconds. To end a run, simply open the lid and the automatic, electronic brake brings the rotor to a quick, smooth stop in about 4 seconds. Plates can then be easily removed from the rotor.

Technical Data:

Speed:	2550 rpm / 600 xg	
Capacity:	2 x 2 PCR plates* 2 x microtiter plates (up to 25 mm) 24 x 0.2 ml PCR strips	
Deceleration:	4 seconds	
Dimensions: (W x D x H)	23 x 26 x 19.7 cm	
Weight:	4.1 kg	
Electrical:	230V, 50-60 Hz, 250W	
Warranty:	2 Years	

^{*}When stacking skirted PCR plates, max. capacity is 4 plates.

Item No.	Description:	
55C2000-E	PlateFuge Microplate Centrifuge with rotor and plate carriers	
55C2000-A02	Tube adapter, holds 96 x 0.2 ml or 8 and 12 position PCR strips, 2/pk.	
55C2000-DWMP	Optional rotor with carriers for deep well plates up to 35 mm tall (speed: 1500 rpm)	

MC-12[™] High Speed Microcentrifuge





Benchmark's MC-12 is the first and only compact microcentrifuge capable of achieving centrifugal speeds up to the critical threshold of 16,000 xg, often held as the standard for many molecular biology/DNA protocols. A brushless, maintenance free drive system makes it powerful, yet compact enough to allow each work station to be fully equipped with a personal centrifuge.



- Less than 22 cm wide
- → Large LCD with rcf conversion
- Whisper quiet operation
- Decelerates in just 10 seconds
- 12 tube capacity (1.5/2.0 ml)



High speed range



Large LCD controls

The MC-12 defines a new class of microcentrifuge: compact, quick, powerful and affordable. All aspects of microcentrifuge performance were taken into consideration and no compromises were made. In addition to its unsurpassed speed, the MC-12 also delivers shortened acceleration/deceleration times, whisper quiet operation and a computer-designed airflow pattern to minimize sample temperature increases during longer runs at high speeds.

All operating parameters are set using a single, conveniently located control knob. The large, bright LCD provides a clear indication of time and rpm or g-force. A separate momentary spin button permits instant spin downs, without setting or disturbing any preset parameters. The aircraft grade aluminum rotor accepts 1.5 to 2.0 ml tubes directly, as well as 0.5 and 0.2 ml tubes with optional adapters. For applications requiring sub-ambient temperatures, the MC-12 is cold room safe.

Technical Data:

Speed Range:	200 to15,500 rpm (up to16,100xg)
Capacity:	12 x 1.5/2.0 ml
Deceleration:	10 seconds
Acceleration:	12 seconds
Speed Increment:	100 rpm or 100 rcf
Timer:	20 sec. to 99 min. / cont.
Momentary:	Yes
Dimensions: (W x D x H)	22 x 27 x 15 cm
Weight:	4.8 kg
Electrical:	230V, 50-60 Hz, 100W
Warranty:	2 years

Item No.	Description:
55C1612-E	MC-12 High Speed Microcentrifuge with 12 position rotor
55C1008-A5-6	Optional adapter pack, 0.5 ml 6/pk.
55C1008-A2-6	Optional adapter pack, 0.2 ml 6/pk.



LC-8[™] Series **Centrifuges**





- Digital speed control with rcf conversion
- Safety lid-lock prevents opening the lid until the rotor stops
- Unique air flow design limits increase in sample temperature
- Eight position rotor accepts tubes ranging from 5 ml to 15 ml
- Ideal for PPP and PRP blood separations



15 ml Conical Centrifuge Tubes



15 ml Blood Collection Tubes



10 ml Blood Collection Tubes



5-7 ml Blood Collection Tubes (requires adapter)

Benchmark's LC-8 Series of laboratory centrifuges are uniquely designed to meet a wide range of applications in both the clinical and research laboratory. An eight position rotor is included and designed to directly accept 10 ml and 15 ml test-tubes (conical or round bottom), while optional adapters are also available for use with all popular sizes of blood collection and culture tubes. Unlike most compact centrifuges in this class, the rotor can be easily removed from the chamber for cleaning.

The back-lit, liquid crystal display provides full control over the set run time and rotational speed. The rotational speed can be set/viewed in rpm or rcf and acceleration/deceleration levels can be easily adjusted in the advanced settings mode.

To ensure safety, the digital microprocessor ensures that the lid has been closed and that the safety lid lock is engaged prior to starting a centrifugation cycle. In addition, an advanced imbalance detection system constantly monitors the balance and vibration, automatically bringing the rotor to a stop if an imbalance is detected.

Technical Data:

	LC-8	LC-8 Plus
Speed Range:	400 - 3,500 rpm (1500xg)	400 - 5,000 rpm (3070xg)
Capacity:	8 x 15 ml	8 x 15 ml
Accel/Decel:	9 sec. / 25 sec.	19 sec. / 39 sec.
Increment:	100 rpm increments	
Timer:	20 sec. to 99 min. Yes 29.5 x 36.5 x 21 cm	
Momentary:		
Dimensions: (W x D x H)		
Weight:	6.8 kg	
Electrical:	230V, 50-60 Hz, 150W 2 years	
Warranty:		

Item No.	Description:
55C3100-E	LC-8 Centrifuge with 8 x 15 ml rotor (maximum speed: 3,500 rpm / 1,500 xg)
55C3200-E	LC-8 Plus Centrifuge with 8 x 15 ml rotor (maximum speed: 5,000 rpm / 3,070 xg)
55C3201-ADP	Optional adapters for 5 ml & 7 ml blood collection/culture tubes, 8/pk
55C2570	Optional adapters for 5 ml centrifuge tubes, 4/pk

Shakers, Mixers and Rockers



NEW! www.BenchMotion.com















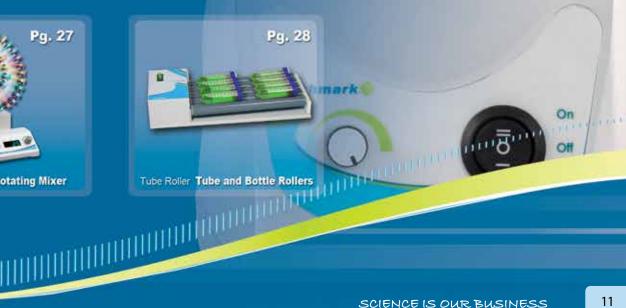


















- → Powerful vortexing, for tubes up to 50 ml
- ↓ Insta-Touch™ pressure activated operation
- ↓ "Mini" sized, less than 9 cm wide





Insta-Touch™ pressure activation

Extremely compact

Powerful is the best word to describe this *mini* vortexer. With a 4 mm orbit and fixed speed of 2,800 rpm, the Vornado instantly vortexes even the largest samples, including nearly full 50 ml tubes. Despite its powerful motor, the Vornado has a footprint of less than 10x10 cm, allowing it to fit on even the most crowded bench.

Insta-Touch operation means that the motor is automatically activated with slight pressure on the center of the cup head. Operation is smooth, quiet and efficient. When pressure is removed, operation of the motor ceases.

The Vornado's unique head design prevents liquids from entering the housing, prolonging motor life. The unit is available with five different cup head colors.

Technical Data:

Speed:	2,800 rpm (fixed)
Motor Activation:	Touch
Orbit:	4mm
Dimensions: (W x D x H)	9.4 x 9.9 x 6.6 cm
Operating Temp. Range:	+4 °C to +45 °C
Weight:	0.4 kg
Electrical:	Universal Voltage 100 to 240V, 50-60Hz, 50W
Warranty:	2 Years

Item No.	Description:
55BV101-E	Vornado Miniature Vortex Mixer, gray cup head
55BV101-B-E	Vornado Miniature Vortex Mixer, blue cup head
55BV101-G-E	Vornado Miniature Vortex Mixer, green cup head
55BV101-P-E	Vornado Miniature Vortex Mixer, purple cup head
55BV101-R-E	Vornado Miniature Vortex Mixer, red cup head









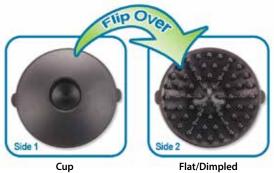






BenchMixer™****

- Reversible Top: Use "Cup" or "Flat/Dimpled" Surface
- Powerful motor for INSTANT vortexing
- Q-Drive™ dynamic balancing system
- Variable speed with touch or continuous operation





Flat/Dimpled

The BenchMixer™ V2 utilizes a smooth and powerful mixing technology similar to the original BenchMixer, with the advantage of a uniquely designed reversible rubber head that can be attached to the mixer in two orientations. For the vortexing of single tubes, the cupped surface would generally be preferred. However, for applications requiring a flat/dimpled surface for mixing uniquely shaped vessels (or a handful of multiple test-tubes), the head can easily be flipped over and reattached in reverse orientation.

Like the original BenchMixer, the drive system is balanced with Q-Drive™ technology, providing a smooth vortexing action, while minimizing noise and excessive vibration. This results in quieter, more efficient and longer lasting operation. With a maximum speed up to 3,200 rpm, the mixer provides an instant vortex of even the largest sample sizes, including full 50 ml tubes.

Available Accessories:











55BV1000-COMBO

55BV1003-T150

55BV1003-T500

55BV1000-H15

55BV1000-H150

55BV1000-H500

Ordering Information:





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Item No.	Description:
55BV1003-E	BenchMixer V2 Vortexer (with reversible head)
55BV1000-E	BenchMixer Vortexer (original) with standard cup head
55BV1000-FLAT	Optional 7.6 cm flat head attachment (for 55BV1000-E only)
55BV1000-COMBO	Optional combination head for tubes and microplates $(38 \times 1.5/2.0 \text{ ml } \& 28 \times 0.5 \text{ ml or one microplate})$
55BV1003-T150	Optional head for 12 x 15 ml tubes (55BV1003-E only)
55BV1005-T500	Optional head for 5 x 50 ml tubes (55BV1003-E only)
55BV1000-H15	Optional head for 12 x 1.5/2.0 ml, horizontal
55BV1000-H150	Optional head for 4 x 15 ml tubes, horizontal
55BV1000-H500	Optional head for 2 x 50 ml tubes, horizontal
55BV1000-COMBO 55BV1003-T150 55BV1005-T500 55BV1000-H15 55BV1000-H150	Optional combination head for tubes and microplates (38 x 1.5/2.0 ml & 28 x 0.5 ml or one microplate) Optional head for 12 x 15 ml tubes (55BV1003-E only) Optional head for 5 x 50 ml tubes (55BV1003-E only) Optional head for 12 x 1.5/2.0 ml, horizontal Optional head for 4 x 15 ml tubes, horizontal

Speed Range:	200 to 3,200 rpm
Operating Modes:	Touch or continuous
Orbit:	3 mm
Operating Temp. Range:	+4° C to +45°C
Dimensions: (WxDxH)	13 x 16 x 17 cm
Weight:	3.8 kg
Electrical:	230V, 50Hz/60Hz, 180W
Warranty:	2 Years

^{*}Dimensions of 55BV1000-E model: 13 x 17 x 17 cm







- → The only vortexer available with Multi-Head™
- Powerful motor for INSTANT vortexing
- Q-Drive™ dynamic balancing system
- → Variable speed from 200 to 3,200 rpm





Unique Multi-Head allows for standard vortexing, PLUS holds up to 8 microtubes

The Mortexer™ is MORE than your standard vortex mixer. The unique design of the Multi-Head™ (included) features a traditional cup head for general purpose mixing, plus holds up to eight microcentrifuge tubes. The drive system is balanced with Q-Drive™ technology, providing a smooth vortexing action, while minimizing noise and excessive vibration. This results in quieter, more efficient and longer lasting operation.

Other features include: "no-walk" suction feet, cold room/incubator compatibility and spill-proof electronic controls.

Available Accessories:











Technical Data:

Speed Range:	200 to 3,200 rpm
Operating Modes:	Touch or continuous
Orbit:	3 mm
Operating Temp. Range:	+4°C to +45°C
Dimensions: (W x D x H)	13 x 16 x 17 cm
Weight:	3.8 kg
Electrical:	230V, 50Hz*, 180W
Warranty:	2 Years

^{*230}V, 60Hz available upon request

Item No.	Description:
55BV1005-E	Mortexer Vortex Mixer (with Multi-Head)
55BV1000-FLAT	Optional 7.6 cm flat head attachment
55BV1000-COMBO	Optional combination head for tubes and microplates (38x1.5/2.0 ml & 28 x 0.5 ml or one microplate)
55BV1000-H15	Optional head for 12 x 1.5/2.0 ml, horizontal
55BV1000-H150	Optional head for 4 x 15 ml tubes, horizontal
55BV1000-H500	Optional head for 2 x 50 ml tubes, horizontal



BenchMixer™ XL Multi-Tube Vortex Mixer



BENCHMIXER XL

- Hands free, high capacity vortexing
- Up to 2,500 rpm, a true vortex in every tube
- Pulsing function for interval vortexing
- Wide assortment of accessories for a variety of tubes and plates

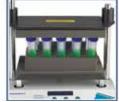
The BenchMixer™ XL is a heavy duty vortex mixer designed for hands-free mixing in tubes, flasks, vials or cylinders. It is ideal for the QuEChERS pesticide analysis method and is instantly adaptable to an exceptionally broad range of vessels, racks and applications (horizontal or vertical). The precisely balanced drive system includes an oversized motor that delivers accurate, reproducible speeds up to 2,500 rpm with rattle-free operation and minimal vibration. The programmable pulsing function allows for time specific interval mixing, increasing agitation.

The 30 x17.8 cm platform accommodates a wide variety of standard, pre-drilled tube racks (a complete listing can be found in the ordering information section below). Additionally, BenchMixer XL can easily be adapted to almost any type of vessel commonly found in the laboratory. Using BenchMixer XL is easy; after loading the sample rack and tightening the locking knobs, select the desired speed and run time on the large digital control panel. Then, simply press "Start" and the BenchMixer XL will perform unattended mixing for up to 100 hours.

BenchMixer XL's large capacity and adaptability make it an ideal choice for the medium to high throughput laboratory.

Available Accessories:











50 x 1.5/2.0ml 15 x 50ml

50 x 5 or7ml

3 x microplates

9 x 50ml Horizontal QuEChERS

Ordering Information:

Item No.	Description:
55BV1010-E	BenchMixer XL Multi-Tube Vortexer, includes 50 x 12 mm tube rack
55BV1010-05	Tube Rack (PP*), 96 x 0.5 ml (Ø 8 mm)
55BV1010-1520	Tube Rack (EVA*), 50 x 1.5/2.0 ml (Ø10 mm)
55BV1010-12	Tube Rack (EVA*), 50 x 12 mm (included)
55BV1010-13	Tube Rack (EVA*), 50 x 13 mm
55BV1010-150	Tube Rack (EVA*), 50 x 15 ml (Ø 16.5 mm)
55BV1010-500	Tube Rack (EVA*), 15 x 50 ml (Ø 29 mm)
55BV1010-25	Tube Rack (EVA*), 15 x 25 mm
55BV1010-50H	Tube Rack (PP*), 9 x 50 ml Horizontal (QuEChERS)
55BV1010-MP	Rack (PP*) for up to 3 plates or 96 well microtube racks
BV1010-MP02	Carrier for above, 96 x 0.2 ml tubes or strips (3pk.)

^{*}EVA: Ethyl Vinyl Acetate / PP: Polypropylene

Speed Range:	500 to 2,500 rpm
Orbit:	3.6 mm
Timer	1 min. to 99 hr 59 min.
Platform Dimensions:	30 x 17.8 cm
Dimensions (W x D x H)	38.5 x 23.5 x 42 cm
Weight:	13 kg
Electrical:	Universal Voltage 100 to 240V, 50-60Hz, 60W
Warranty:	2 Years

TubeRocker™ **Fixed Speed Rocker (2D)**





- → Ideal for tube sizes 1.5 ml to 50 ml
- Grooved mat properly secures tubes without the need for any tools, clamps or hardware









Technical Data:

Speed Range:	Fixed, 24 rpm (230V: 20 rpm)
Tilt Angle:	±30°
Platform Size:	30 x 11.4 cm
Load Capacity:	2.3 kg
Operating Temp. Range:	+4 °C to +45 °C
Dimensions: (W x D x H)	33.6 x 13.5 x 10 cm
Weight:	1.8 kg
Electrical:	230V, 50-60Hz, 50W
Warranty:	2 Years

Ordering Information:

Item No.	Description:
55M2100-E	TubeRocker with grooved mat

BenchBlotter™ **Fixed Speed Rocker (2D)**





55BR1000-E with 55BR1000-STACK

Ordering Information:

Item No.	Description:
55BR1000-E	BenchBlotter Platform Rocker with flat mat
55BR1000-STACK	Optional stacking platform with flat mat
55BR1000-DIMPLED	Optional dimpled mat
55B0718	Bungee cord, used for securing vessels, pack of 4

- igd+ Gentle mixing for blot washing and gel staining
- Optional dual platform doubles work surface

Speed Range:	Fixed, 12 rpm Fixed, 10 rpm (230V)
Tilt Angle:	±8°
Platform Size:	30 x 30 cm
Load Capacity:	2.3 kg
Operating Temp. Range:	+4 °C to +45 °C
Dimensions (W x D x H):	34 x 30 x 12 cm
Stacking Clearance:	7.6 cm
Weight:	3 kg
Electrical:	230V, 50-60Hz, 50W
Warranty:	2 Years



BenchRocker™ 2D Variable Speed Rocker (2D)



- Adjustable tilt & speed for a wide range of applications
- Large 35 x 30 cm work surface
- Safe for incubator or cold room use

The BenchRocker 2D is designed to provide the precise speeds and tilt angles required for a broad range of molecular and biological mixing applications. The user can adjust both parameters to match the vessel size and the volume of liquid being mixed, yielding optimum results.

Technical Data:

Speed Range:	Variable, 2 to 30 rpm
Tilt Angle:	Variable, 0° to ± 30°
Platform Size:	35 x 30 cm
Load Capacity:	3.6 kg
Operating Temp. Range:	+4 °C to +45 °C
Dimensions: (W x D x H)	35 x 30 x 20 cm
Stacking Clearance:	7.6 cm
Weight:	3.4 kg
Electrical:	230V, 50-60Hz, 50W
Warranty:	2 Years

Ordering Information:

Item No.	Description:
55BR2000-E	BenchRocker [™] 2D Rocker with flat mat
55BR2000-STACK	Optional stacking platform (7.6 cm) with flat mat
55BR1000-DIMPLED	Optional dimpled mat
55B0718	Bungee cord, used for securing vessels, pack of 4
55BR2000-SP	STACK-PLUS Extender set, adds 3,2 cm clearance to stacking platform



Everlast[™] 247 **Heavy Duty - Variable Speed Rocker (2D)**



- Everlast™ 5 year warranty
- Extra-large, stainless steel 41 x 31 cm surface
- $\overset{ ext{+}}{ ext{-}}$ 5.4 kg load capacity
- Safe for incubator or cold room use

With an unprecedented 5 year limited warranty, Benchmark's Everlast 247 Rocker is built to last. Twenty four hours a day, seven days a week... No problem!

The powerful motor and heavy duty drive system remain reliable and consistent, even under constant usage in a cold room (min. 0 °C) or incubator (max. 65 °C).

Technical Data:

Speed Range:	Variable, 3 to 80 rpm
Tilt Angle:	Variable, 0° to ± 20°
Platform Size:	40.5 x 30 cm
Load Capacity:	5.45 kg
Operating Temp. Range:	+0 °C to +65 °C
Dimensions: (W x D x H)	40.5 x 33 x 15.25 cm
Stacking Clearance:	8.9 cm
Weight:	9 kg
Electrical:	230V, 50-60Hz, 50W
Warranty:	5 Years

•	
Item No.	Description:
55BR5000-E	Everlast™ 247 Rocker with flat mat
55BR5000-STACK	Optional stacking platform with flat mat with 8.9 cm clearance
55B0718	Bungee cord, used for securing vessels, pack of 4

BlotBoy™ Low Speed Gyratory Rockers (3D)





Optimized speed & tilt for blotting, washing and staining

Tri-directional motion for thorough, gentle mixing

lacksquare Cold room and incubator safe

Modeled after our popular BioMixer™ series of "nutating" shakers, these platform rockers provide the perfect 3-dimensional motion for all blot related applications. Their tilt angle and speed have been optimally set for gentle, but thorough mixing in gel trays, boxes and other flat vessels.

Technical Data:

Speed Range:	Fixed, 10 rpm
Tilt Angle:	Fixed, ±8°
Platform Size (55B3D1008-E):	27 x 19 cm
Platform Size (55B3D1308)-E:	30 x 30 cm
Load Capacity:	1.8 kg
Operating Temp. Range:	+4°C to +65°C
Dimensions: (W x D x H)	27 x 19 x 20 cm 30 x 30 x 20 cm
Weight:	2 kg
Electrical:	230V, 50-60Hz, 50W
Warranty:	2 Years

Ordering Information:

Item No.	Description:
55B3D1008-E	Mini BlotBoy with flat mat (27 x 19 cm)
55B3D1308-E	BlotBoy with flat mat (30 x 30 cm)
55B3D-DIMPLED	Dimpled mat (27 x 19 cm) for 55B3D1008-E
55BR1000-DIMPLED	Dimpled mat (30 x 30 cm) for 55B3D1308-E
55B0718	Bungee cord, used for securing vessels, pack of 4

BioMixer™ **Nutating Mixer (3D)**



Includes dimpled mat; perfect for mixing blood & centrifuge tubes

These multi-functional shakers provide a 3-dimensional "nutating" motion for thorough, foam-free mixing in blood and centrifuge tubes, as well as in a variety of flat vessels.

Fixed, 20 rpm

Tri-directional motion for thorough, uniform mixing



Technical Data:

Speed Range:

ion:	Tilt Angle:	Fixed, ± 20°
	Platform Size: (B3D1020):	27 x 19 cm
ription:	Platform Size: (B3D1320):	30 x 30 cm
BioMixer with dimpled mat (27 x 19 cm)	Load Capacity:	1.8 kg
xer with dimpled mat (30 x 30 cm)	Operating Temp. Range:	+4°Cto+65°C
at (27 x 19 cm) for 55B3D1020-E	Dimensions (WxDxH)	27 - 10 - 20
at (30 x 30 cm) for 55B3D1320-E	Mini BioMixer BioMixer	27 x 19 x 20 cm 30 x 30 x 20 cm
ee cord, used for securing vessels, pack of 4	Weight:	2 kg
	Electrical:	230V, 50-60Hz, 50W
	\A/a	2 Voores

3	
Item No.	Description:
55B3D1020-E	Mini BioMixer with dimpled mat (27 x 19 cm)
55B3D1320-E	BioMixer with dimpled mat (30 x 30 cm)
55B3D-FLAT	Flat mat (27 x 19 cm) for 55B3D1020-E
55BR1000-FLAT	Flat mat (30 x 30 cm) for 55B3D1320-E
55B0718	Bungee cord, used for securing vessels, pack of 4



BenchRocker™ 3D **Gyratory Rocker (3D)**





- Adjustable speed & tilt for a wide range of applications
- → Large 30 x 30 cm work surface
- Insta-TILT™ technology for instant adjustment of tilt angle
- igspace Cold room and incubator safe

The BenchRocker 3D is designed to provide the precise speeds and tilt angles required for a broad range of molecular and biological mixing applications. The user can adjust both parameters to match the vessel size and the volume of liquid being mixed, yielding optimum results. Proprietary Insta-Tilt™ technology means no tools, no disassembly.

Simply grip the platform with two hands and move to the desired position.

This model includes both flat and dimpled (autoclavable) mats for mixing a wide variety of tubes and other vessels. A stacking platform can be purchased as an accessory, effectively doubling the usable surface area.

BenchRocker 3D features a maintenance free, brushless motor, capable of loads up to 2.3 kg and is safe for use in cold rooms and incubators.

Technical Data:

Speed Range:	Variable, 2 to 30 rpm
Tilt Angle:	Variable, 0 to \pm 30°
Platform Size:	30 x 30 cm
Load Capacity:	2.3 kg
Operating Temp. Range:	+4 °C to +45 °C
Dimensions (W x D x H):	30 x 30 x 20 cm
Stacking Clearance:	7.6 cm
Weight:	3.4 kg
Electrical:	230V, 50-60Hz, 50W
Warranty:	2 Years

Item No.	Description:
55B3D2300-E	BenchRocker 3D with flat and dimpled mats (30 x 30 cm)
55BR1000-STACK	Stacking platform (7.6 cm clearance) with flat mat (30 x 30 cm)
55BR1000-STACK-D	Stacking platform (7.6 cm clearance) with dimpled mat (30 x 30 cm)
55B0718	Bungee cord, used for securing vessels, pack of 4
55BR2000-SP	STACK-PLUS Extender set, adds 3.2 cm clearance to stacking platform

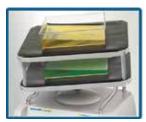
BenchWaver™ **Undulating Rocker (3D)**





BENCH WAVER"

- Undulating, 3-dimensional motion
- ightharpoonup Adjustable speed and tilt
- Large, 34 cm platform
- Ideal for staining, washing and general mixing





55B3D5000-E with 55B3D5000-STK

55B3D5000-E with 55B3D5000-DIMP

The BenchWaver™ combines the basic rocking motion of traditional platform rockers with the circular motion of an orbital shaker. This combination is ideal for generating the optimum 3-dimensional "undulating" motion commonly preferred for molecular biology applications.

The tilt angle is instantly adjustable (no tools or disassembly required) from 0 to 10° and the mixing speed can be adjusted from 5 to 105 rpm, using the large, user-friendly LCD control panel. Combined control of both parameters (tilt and speed) makes the BenchWaver a versatile workhorse that can provide anything from gentle, slow moving waves to a rapid, more vigorous motion. Additionally, time of operation can be selected from1minute up to 99 hours or for continuous operation.

The large 34×33 cm platform is supplied complete with a non-slip rubber mat. An optional stacking platform is available for users requiring additional mixing capacity. BenchWaver is a reliable and versatile instrument and can be used in refrigerated or incubated environments from 2° to $60 \, ^{\circ}$ C.

Ordering Information:

Item No.	Description:
55B3D5000-E	BenchWaver with platform and flat mat
55B3D5000-STK	Optional stacking platform (11.4 clearance) with flat mat (34 x 33 cm)
55B3D5000-DIMP	Optional dimpled mat (34 x 33 cm)

Speed Range:	Variable, 5 to 105 rpm
Tilt Angle:	Variable, 0 to $\pm 10^{\circ}$
Platform Size:	34 x 33 cm
Load Capacity:	9 kg
Operating Temp. Range:	+4 °C to +60 °C
Dimensions: (W x D x H):	33 x 34 x 24.75 cm
Stacking Clearance:	7.6 cm
Weight:	5.5 kg
Electrical:	Universal Voltage:
	100 to 240V, 50-60Hz, 50W
Warranty:	2 Years



Orbi-Blotter™ Low Speed Orbital Shaker



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 35 x 30 cm work surface is included along with a non-slip rubber mat for holding trays, dishes, plates and other flat vessels.

An optional stacking platform can be purchased as an accessory, effectively doubling the usable work surface. The maintenance free, brushless motor is capable of loads up to 4 kg and is safe for use in cold rooms and incubators.

Ordering Information:

Item No.	Description:
55BT30-E	Orbi-Blotter™ Low Speed Orbital Shaker
55BR2000-STACK	Stacking platform with 35 x 30 cm flat mat (7.6 cm clearance)
55BR2000-SP	STACK-PLUS Extender set, adds 3.2 cm clearance to stacking platform

Technical Data:

Speed Range:	Variable, 3 to 70 rpm
Motion / Orbit:	Orbital / 19 mm
Load Capacity:	3 x 2 l or 4 kg
Platform Size:	35 x 30 cm
Operating Temp. Range:	+4 °C to +45 °C
Dimensions: (WxDxH)	35.5 x 30.5 x 20 cm
Stacking Clearance:	7.6 cm
Weight:	3.4 kg
Electrical:	230V, 50-60Hz, 50W
Warranty:	2 Years

See Pg. 44-45

Shaking Incubators



INCU-SHAKER Series

Exceptional temperature uniformity

Three models, Incu-Shaker Mini: Up to 5 x 500 ml (or 2 x 1 l) Incu-Shaker 10 L: Up to 5 x 2 l Incu-Shaker 10 LR: Up to 5 x 2 l (with cooling)

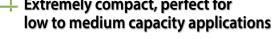
Exchange flask clamps in one second with MAGic Clamp™ magnetic system

Orbi-Shaker™ JR. **Orbital Shaker**



WITH





↓ Instantly exchange flask clamps with MAGic Clamp™ accessories



Ordering Information:

Item No.	Description:
55BT300-E	Orbi-Shaker JR. with flat mat platform (24 x 20 cm)
55H1000-MR**	MAGic Clamp™ universal platform for flasks and tubes
55BT300-RP	Adjustable spring bar platform for unique vessel types

^{**}Flask clamps and tube racks sold separately, see pg. 25 for a complete listing.

Technical Data:

Speed Range:	Variable, 50 to 300 rpm
Speed Increment:	10 rpm
Motion / Orbit:	Orbital / 19 mm
Load Capacity:	4x1lor4kg
Platform Size:	
Standard (included):	24 x 20 cm
MAGic Clamp (universal):	29 x 24 cm
Operating Temp. Range:	+4°C to +65°C
Timer:	1 min. to 99 hr 59 min. / continuous
Dimensions:: (W x D x H)	33.3 x 29.8 x 12 cm
Weight:	5.5 kg
Electrical:	Universal Voltage 100 - 240V, 50-60Hz, 250W
Warranty:	2 Years

Orbi-Shaker™ **Orbital Shaker**







- → High capacity, 9 x 500 ml, 5 x 1 l or 2 x 2 l
- Circular 19 mm orbit for aeration and mixing
- Instantly exchange flask clamps with MAGic Clamp™ accessories

Ordering Information:

Item No.	Description:
55BT3000-E	Orbi-Shaker with flat mat platform (33 x 30 cm)
55BT3000-MR**	MAGic Clamp™ universal platform for flasks and tubes
55H1000-P-SP	Universal spring platform for unique vessel types
55H1000-P-MP	Dedicated platform for 4 x microplates

^{**}Flask clamps and tube racks sold separately, see pg. 25 for a complete listing.

Speed Range:	Variable, 30 to 300 rpm
Speed Increment:	1 rpm
Motion / Orbit:	Orbital / 19 mm
Load Capacity:	5x1lor6.4kg
Timer:	1 min. to 48 hr / continuous
Platform Size: (W x D x H)	
Standard (included):	33 x 30 cm
MAGic Clamp (universal):	35 x 30 cm
Operating Temp. Range:	+4 °C to +65 °C
Dimensions: (W x D x H)	28 x 33 x 7.5 cm
Weight:	11.5 kg
Electrical:	230V, 50-60Hz, 600W
Warranty:	2 Years



Orbi-Shaker™ XL **High Capacity Orbital Shaker**



Ordering Information:

Item No.	Description:
55BT1010-E	Orbi-Shaker XL with flat mat platform (47 x 54 cm)
55H1010-MR**	MAGic Clamp [™] platform for flasks & tubes (47 x 54 cm)
55H1010-P-SP	Universal spring platform for unique vessel types
55H1010-P-MP	Dedicated platform for 6 x microplates

**Flask clamps and tube racks sold separately, see pg. 25 for a complete listing.

- High capacity, benchtop model
- Circular 19 mm orbit for aeration and mixing
- Instantly exchange flask clamps with MAGic Clamp™ accessories

Technical Data:

Speed Range:	Variable, 30 to 300 rpm
Speed Increment:	1 rpm
Motion/Orbit:	Orbital / 19 mm
Load Capacity:	5 x 2 l or 9 x 1 l / (30 kg)
Platform Size:	45 x 45 cm
Timer:	1 min. to 48 hr/continuous
Operating Temp. Range:	+4 °C to +65 °C
Dimensions:(WxDxH):	147 x 54 x 12.5 cm
Weight:	29 kg
Electrical:	230V, 50-60Hz
Warranty:	2 Years



Orbi-Shaker™ MP **Microplate Shaker**



- → Digital speed control up to 1,500rpm
- 3mm orbit for thorough mixing in microplates
- Includes platform for up to four microplates
- → Mix up to 80 microtubes with optional adapter

Technical Data:

Speed Range:	200 to 1,500 rpm
Orbit:	3 mm
Max. Capacity:	Up to 4 microplates
Operating Temp. Range:	+4 °C to +65 °C
Dimensions (WxDxH):	33.3 x 29.8 x 12 cm
Timer:	1 min. to 99 hour / continuous
Weight:	5.5 kg
Electrical:	Universal Voltage 100-240V, 50-60Hz, 250W
Warranty:	2 Years

Item No.	Description:
55BT1502-E	Orbi-Shaker™ MP microplate shaker, includes platform for 4 microplates
55BT1500-A1520	Optional adapter, 20 x 1.5/2.0 ml for microplate shakers
55BT1500-A05	Optional adapter, 20 x 0.5 ml for microplate shakers

Orbi-Shaker™ CO₂ All Environment Shakers





ORBI-SHAKER CO2
Remote Controlled, All Environment Shakers

- Designed to fit and maximize capacity in most CO₂ incubators and chambers
- Remote controlled, adjust settings
- → without disturbing the CO₂ environment Instantly exchange flask clamps with MAGic Clamp™ accessories



Remote controller adjusts shaker settings from outside of the chamber and magnetically attaches to most incubators

The new Orbi-Shaker CO_2 series is designed for shaking, mixing & aeration applications in extreme environments, including CO_2 incubators. It can withstand temperatures from 0 to 65 °C and humidity levels up to 100%.

To avoid contamination, unintentional release of gas or deviations from protocol, all settings are adjusted via the included remote control module. This module can be stored outside of the chamber and connects to the shaker via a flat (1mm thickness) cable, that easily passes through a port or underneath an incubator door without compromising the seal. This allows for user adjustment of run time or mixing speed without opening the chamber door(s).

The instrument is supplied with a non-slip rubber mat platform. In addition, convenient MAGic Clamp™ platforms (of multiple sizes) are also available for use with Erlenmeyer flasks and test tube racks. The unique magnetic attachment method has been widely recognized as the easiest way to instantly change between flask clamps of different sizes.

Compatibility Chart:	Thermo®	HeraCell™ 240		answick** Galary@170	Shel Lab® 142L & 167L	Nuaire TM 4750, 4850, 4950, 5800	Fisher® IsoTemp™ 184	VWR® Sy 5.3A	mphony ^{tw} 8.5A	N/A	Not Com
Orbi-Shaker CO ₂ (35.5 x 30.5 cm platform)				•	•	0	0	0	0		Com
Orbi-Shaker CO ₂ XL (40.6 x 41.9 cm platform)		0	N/A	0	0	0		0			COIII
Orbi-Shaker CO ₂ XL (45.7 x 45.7 cm platform)	N/A	0	N/A	N/A	0	0		N/A	0		Com Maxir

Ordering Information:

Item No.	Description:
55BT4000-E	Orbi-Shaker CO ₂ w/ flat mat platform (33 x 30 cm)
55BT4010-E	Orbi-Shaker CO ₂ XL w/ flat mat platform (40.6 x 41.9 cm)
MAGic [™] Clamp I	Universal Platforms for flask clamps & tube racks**
55BT3000-MR	MAGic Clamp™ platform (35.5 x 30.5 cm) for 55BT4000-E
55BT4010-MR	MAGic Clamp™ platform (40.6 x 41.9 cm) for 55BT4010-E
55H1010-MR	MAGic Clamp™ platform (45.7 x 45.7 cm) for 55BT4010-E
Additional Platfo	orms:
55H1000-P-SP	Universal spring platform for unique vessel types
55H1000-P-MP	Dedicated platform for 4 x microplates

^{**}Flask clamps and tube racks sold separately, see page 25 for a complete listing.

Speed Range:	Variable, 30 to 300 rpm
Speed Increment:	1 rpm
Motion / Orbit:	Orbital / 19 mm
Max. Capacity (55BT4000-E):	1x2lor5x1l
Max. Capacity (55BT4010-E):	5x2lor9x1l
Timer:	1 min. to 48 hr / continuous
Platform Dimensions:	
55BT4000-E (included):	33 x 30 cm
55BT4010-E (included):	40 x 42.5 cm
Operating Temp. Range:	0°C to +65°C
Dimensions:WxDxH	
BT4000 Shaker:	30 x 34 x 9 cm
BT4010 Shaker:	43 x 45.75 x 12.7 cm
Weight (55BT4000-E)	11.5 kg
Weight (55BT4010-E):	23 kg
Cord Length:	154 cm
Electrical:	230V, 50-60Hz, 600W
Warranty:	2 Years

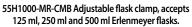
Orbi-Shaker[™] Series **MAGic Clamp[™] Accessories**





Video Demonstration





(For a video demonstration, scan the QR code above.)



Maximum Flask Capacity with MAGic Clamp Platforms

Item No.	Description: Platform 55H1000-MR		Platform 55BT3000-MR	Platform 55H1010-MR
		Available For Orbi-Shaker JR.	Available For Models Orbi-Shaker & Orbi-Shaker CO ₂	Available For Orbi-Shaker XL (CO ₂)
55H1000-MR-CMB	NEW! Adjustable flask clamp, accepts 125, 250 & 500 ml Erlenmeyer flasks	12/8/5	20/14/9	36/25/16
55H1000-MR-50	Flask clamp, 50 ml Erlenmeyer flask	20	30	49
55H1000-MR-125	Flask clamp, 125 ml Erlenmeyer flask	12	20	36
55H1000-MR-250	Flask clamp, 250 ml Erlenmeyer flask	8	14	25
55H1000-MR-500	Flask clamp, 500 ml Erlenmeyer flask	5	9	16
55H1000-MR-1000	Flask clamp, 1 Erlenmeyer flask	4	5	9
55H1000-MR-2000	Flask clamp, 2 Erlenmeyer flask	1	2	5
55H1000-MR-3000	Flask clamp, 3 I (or 2.8 I) Fernbach flask	N/A	1	4

Maximum Capacity for MAGic Clamp Platforms (Test Tube / Microplate Racks)

Item No.	Description:	Platform 55H1000-MR	Platform 55BT3000-MR	Platform 55H1010-MR
		Available For Orbi-Shaker JR.	Available For Models Orbi-Shaker & Orbi-Shaker CO ₂	Available For Orbi-Shaker XL (CO ₂)
55H1000-MR-T15	Tube Rack, 15 ml conical tubes, 32 x 15 ml	2	3	8
55H1000-MR-T50	Tube Rack, 50 ml conical tubes, 15 x 50 ml	2	3	8
55H1000-MR-1550	Combi-Tube Rack, 30 x 15 ml & 20 x 50 ml tubes	2	2	4
55H1000-MR-T600	Tube/Bottle Rack, 4 x 500/600 ml conical bottles	1	2	4
55H1000-MR-T15H	Tube rack, 12 x 1.5/2.0 ml tubes, horizontal	2	4	6
55H1000-MR-T150H	Tube rack, 4 x 15 ml tubes, horizontal	4	6	8
55H1000-MR-T500H	Tube rack, 2 x 50 ml tubes, horizontal	4	6	8
55H1000-MR-MP	Plate rack, holds one microplate	4	6	8
55H1000-MR-TSR	Angled tube rack holder (with adjustable tilt)	2	6	8

Roto-Bot™ **Programmable Rotating Mixers**







- Advanced programming with a wide variety of rotational modes
- Set for full 360° rotation, or interrupt rotation with pausing and mixing intervals
- Slow rotating to vigorous mixing
- Accepts tubes from 1.5 to 50 ml
- Optional rocking platform



The Roto-Bot™ Rotating Mixers feature advanced programming options that far surpass that of the traditional laboratory rotator. With digital speed control and more than 10 operating modes, the RotoBot can be selected to perform a wide variety of rotating, mixing and vibrating actions. In addition, these actions can be combined in succession using the C1 and C2 "Custom Modes", providing the user with a nearly infinite level of programming.

The Roto-Bot and Roto-Bot Mini each inlcude an assortment of vertical tube holders. The Mini model is supplied with holders for 12×1.5 ml tubes, 2×15 ml & 2×50 ml tubes; the standard model, $30 \times 1.5/2.0$ ml, 8×15 ml & 2×50 ml tubes. For higher capacity applications, more of these holders can be purchased as accessories. The unique, sliding attachment allows for quick and easy changing of tube holders. For rocking applications, a platform with a non-slip mat is available. Once attached, simply select the "PP" mode to activate the rocking mode.

Tube Holder Capacity & Ordering Information:			71		
Item Number:	55R4040-1520	55R4040-150	55R4040-500	55R4040-HZ15	55R4040-HZ50
Description:	6 x 1.5 ml	1 x 15 ml	1 x 50 ml	6 x 15 ml	6 x 50 ml
Tube Diameter:	10 to 13 mm	16 to 17 mm	28 to 30 mm	16 to 17 mm	28 to 30 mm
Orientation:	Dual*	Vertical	Vertical	Horizontal	Horizontal
Holder Capacity (Mini/Standard):	10 / 16	10 / 22	6/12	1/2	1/2
Tube Capacity (Mini/Standard):	60 / 96	10 / 22	6/12	6/12	6/12
Package Unit:	Pack of 2	Pack of 2	Pack of 2	1 ea.	1 ea.

^{*}The unique, dual attachment points of the 6 x 1.5ml holder allow for mixing in both the vertical and horizontal orientation.

Ordering Information:

Item No.	Description:
55R4040-E	Roto-Bot Mini with tube holder starter set Includes 6 x 1.5 ml holders (2ea.), 1 x 1.5 ml holder (2 ea.) & 1 x 50 ml holder (2 ea.)
55R4045-E	Roto-Bot with tube holder starter set Includes 6 x 1.5 ml holders (5 ea.),1 x 15 ml holder (8 ea.) & 1 x 50 ml holder (2 ea.)
55R4040-RP	Rocking Platform (w/ flat mat) for 55R4040-E, 15.2 x 14 cm
55R4045-RP2	Rocking Platform (w/ flat mat) for 55R4040-E, 15.2 x 25.4 cm

Speed Range:	1 to 80 rpm
Capacity (55R4040-E):	6 x 50 ml, 10 x 15 ml or 60 x 1.5 ml
Capacity (55R4045-E):	12 x 50 ml, 22 x 15 ml or 84 x 1.5 ml
Timer:	1 sec. to 99 hours 59 min. / continuous
Dimensions: (55R4040-E)	29 x 13.7 x 19.9 cm
W x D x H: (55R4045-E)	41 x 13.7 x 19.9 cm
Operating Temp. Range:	+2 °C to +70 °C
Weight:	1.8 kg (55R4040-E) / 2.27 kg (55R4045-E)
Electrical:	Universal Voltage: 100 to 240V, 50-60Hz, 3A
Warranty:	2 Years



Benchmark™ **Rotating Mixer**



- Adjustable speed and tilt
- Reversing mode for increased agitation
- Cold room and incubator safe
- Includes three rotisseries for all common tube sizes

Included Rotisseries:







48 x 1.5/2.0 ml (48 x 10-14 Ø mm tubes)

20 x 15 ml (20 x 15-20 Ø mm tubes)

12 x 50 ml (12 x 25-35 Ø mm tubes)

The Benchmark Rotating Mixer provides gentle to vigorous mixing of laboratory samples up to 50 ml. With adjustable speed control and tilt angle, the Rotating Mixer is ideal for a variety of applications, from mixing blood samples to the preparation of homogenous dispersions.

Three rotisserie tube holders are included for mixing all common laboratory sample tubes and each individual tube holder is constructed of rubber coated steel to provide a secure grip, preventing any "wobble" or loosening during mixing at high speeds.

A unique reversing mode is selectable for more intense mixing. In reversing mode, the mixer rotates for up to 360° then stops and rotates in the reverse direction. This back and forth motion occurs repeatedly until the set time has expired.

With included accessories and unique mixing options, Benchmark's Rotating Mixer offers increased flexibility that is not commonly found with traditional laboratory rotators.

Ordering Information:

Item No.	Description:
55R5010-E	Benchmark Rotating Mixer, Includes three rotisserie tube holders for 1.5/2.0, 15 and 50 ml tubes

recrimedi Data.	
Speed:	1 to 40 rpm
Tilt Angle:	0 to 90° (vertical to horizontal)
Capacity:	12 x 50 ml, 20 x 15 ml or 48 x 2.0 ml
Timer:	1 sec. to 9 hrs or continuous
Exterior Dimensions (W x D x H):	21 x 27 x 32 cm
Operating Temp. Range:	+4° to +65 °C
Weight:	3.2 kg
Electrical:	Universal Voltage
Electrical:	100 to 240V, 50-60Hz, 25W
Warranty:	2 Years

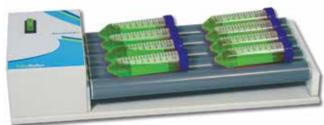
TubeRoller Tilting Tube & Bottle Roller



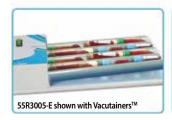


- Gentle rolling motion
- Smooth 5° tilting motion
- Accepts tubes and bottles from 8 mm to 200 mm





55R3005-E





Benchmark TubeRollers are designed for the gentle, thorough mixing of a variety of containers, including Vacutainers™, bottles, test tubes, centrifuge tubes and roller bottles. Both models (5 roller and 10 roller) operate at a constant 38rpm, chosen as the optimum speed for the broadest range of mixing requirements.

As the roller mechanism rotates through each complete revolution, the right side of each roller is gently elevated approximately 13 mm and returns to the horizontal starting position. This additional, gentle up/down motion provides a "wave" effect and guarantees that the entire sample is subjected to complete, thorough mixing, end to end. This built in tilt feature provides a level of homogeneous mixing uniformity that can not be matched by any stationary roller apparatus.

From blood collection tubes to roller bottles, Benchmark TubeRollers are the ideal choice for research, clinical laboratories and doctors' offices.

Technical Data:

Speed:	Fixed, 38 rpm (±10%)
Motion:	Simultaneous roll &	tilt (±5°)
Operating Temp:	4 °C to 40 °C	
Individual Roller Dims:	3 x 32 cm	
Vessels Accepted:	8 mm to 200 mm dia	meter
Roller Spacing:	5 mm, on 35 mm cen	ters
Electrical:	230V, 50-60Hz, 50W	,
Warranty:	2 Years	
	55R3005-E	55R3010-E
Number of Rollers:	5	10
Dimensions (WxDxH):	45 x 18 x 9 cm	45 x 36 x 9 cm
Weight:	5 kg	8 kg

Typical Sample Load Capacity:

<u>Vessel</u>	<u>55R3005-E</u>	<u>55R3010-E</u>
12 x 75 mm tubes	12	26
16 x 100 mm tubes	8	18
16 x 125 mm tubes	8	18
15 ml screw cap tubes	8	18
50 ml screw cap tubes	8	18
850 cm ² roller bottles	1	2

Item No.	Description:
55R3005-E	TubeRoller with 5 rollers
55R3010-E	TubeRoller with 10 rollers

Homogenizers



D1000 Homogenizer



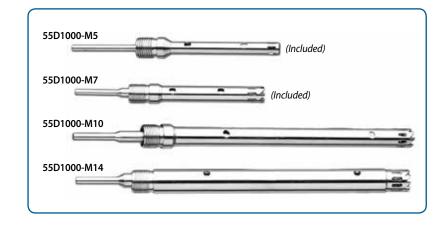
- Quickly homogenizes samples (in under 30 seconds)
- For volumes 100 μl to 250 ml
- Supplied with two generator probes (5 mm and 7 mm)

Benchmark's new handheld homogenizer, the D1000, is designed to rapidly homogenize, emulsify, suspend and disrupt biological samples. Ideal for use with microtubes, the homogenizer works well with samples from 0.1 ml to 250 ml (depending upon the generator probe used).

The D1000 is a rotor stator homogenizer which works by drawing the sample, in liquid, into the generator probe with the variable speed rotor, and then forcing it out through the slots in the stator. This achieves mechanical shearing of the sample. As the sample is repeatedly drawn up and forced through the stator, additional shearing takes place.

A powerful, 130W motor drives the rotor at speeds from 8,500 to 30,000 rpm. Speed is adjustable in six steps to meet sample processing needs. A separate on/off switch allows the homogenizer to be left at the appropriate setting.

Generator probes are available in four sizes. The 5 mm and 7 mm diameter have a 50 mm length for use with samples in microbtubes. The 10 mm x 115 mm is ideal for use with 15 and 50 ml tubes and 14 mm x 130 mm, for 50 ml tubes and vessels up to 250 ml. The unit is supplied with one each of the 5 mm and 7 mm generator probes. All the generator probes are made of stainless steel and can be sterilized by autoclaving.



Technical Data:

Speed Range:	8,500 to 30,000 rpm
Capacity:	0.1 to 250 ml
Noise Level:	<70 db
Dimensions: (W x D x H): (without probe)	4.5 x 5.8 x 22.5 cm
Weight:	0.6 kg
Electrical:	230V, 50-60Hz, 130W
	2 Years

Item No.	Description:
55D1000-E	D1000 Hand-Held Homogenizer Includes one 5 mm (flat-bottom) generator probe and one 7 mm (saw tooth) generator probe
Optional genera	tor probes:
55D1000-M10	10 mm x 115 mm saw tooth, for 15 and 50 ml tubes
55D1000-M14	14 mm x 130 mm saw tooth, for 50 ml - 250 ml vessels
55D1000-M5	5 x 50 mm for microtubes, 5 pk.
55D1000-M7	7×50 mm for microtubes, 5pk.
55D1000-ST	Stand for D1000 Homogenizer

BeadBug[™] 3 & 6 Microtube Homogenizers









BeadBug 6, accepts 6 x 2.0 ml

BEAD BUG

- Extremely powerful mixing action for lysis, grinding or homogenization
- Eliminates the cross contamination associated with hand-held homogenizers
- Faster & more effective than tissue grinders
- Processes multiple tubes simultaneously

The BeadBugs™ are high energy benchtop homogenizers that set the performance standard for personal sized cell disruption and lysis instruments. Simultaneous homogenization of up to 6 samples takes place (often within 45 seconds) inside the disposable 2 ml screw cap microtubes. The optimized mixing motion causes rapid cell disruption through constant high velocity impact from the hardened micro-beads chosen specifically for your sample type.

Developed for samples too tough to be homogenized in a common lab vortexer, the BeadBugs provide a convenient and economical alternative to larger and more expensive homogenizers on the market today. With compact footrpints (as small as 17×21 cm, in the 3 position model), the Beadbugs are the the ideal homogenizing instruments for low to medium throughput laboratories.



Benchmark offers a wide range of homogenization beads (including glass, zirconium, stainless steel, etc.)

Ordering Information:

Item No.	Description:
55D1030-E	BeadBug [™] 3, Three Position Microtube Homogenizer
55D1036-E	BeadBug [™] 6, Six Position Microtube Homogenizer
55D1036-A5	Optional tube holder 2 x 5ml screw cap tubes (for 55D1036-E only)
Prefilled Tube Kits:	Include 2.0ml non-skirted screw cap tubes with caps, sealing rings and beads as specified below:
55D1031-01	Standard glass beads, Ø 0.1 mm, 50pk.
55D1031-05	Standard glass beads, Ø 0.5 mm, 50pk.
55D1031-10	Standard glass beads, Ø 1.0 mm, 50pk.
55D1032-01	Triple-Pure [™] , high impact zirconium beads, Ø 0.1 mm, 50 pk.
55D1032-05	Triple-Pure, [™] high impact zirconium beads, Ø 0.5 mm, 50 pk.
55D1032-10	Triple-Pure™, high impact zirconium beads, Ø 1.0 mm, 50 pk.
55D1032-15	Triple-Pure [™] , high impact zirconium beads, Ø 1.5 mm, 50 pk.
55D1032-30	Triple-Pure [™] , high impact zirconium beads, Ø 3.0 mm, 50 pk.
55D1032-60	One ceria zirconium oxide satellite, Ø 6.0 mm, 50 pk.
55D1032-SK	Starter Kit, 10 ea. of Ø 0.1, 0.5, 1.0, 1.5 & 3.0 Triple-Pure™ zirconium
55D1033-28	Stainless steel beads, Ø 2.8 mm, 50 pk.
55D1031-T20	Empty tubes (2.0 ml) pack of 1000
55D1031-RF	Reinforced empty tubes (2.0 ml) pack of 500
55D1033-30G	Garnet shards with 1 zirconium bead Ø 6.0 mm, 50 pk.
55D1034-MX	Mixed format, 0.1 mm silica, 1.4 mm zirconium, 4 mm silica, 50 pk

Additional bead types are also available (in both bulk and prefilled kits). Please contact us for a complete listing.

Speed Range:	2,800 to 4,000 rpm (55D1030-E) 2,500 to 4,350 rpm (55D1036-E)
Max. Capacity:	3 x 2.0 ml (non-skirted) 6 x 2.0 ml (skirted or non-skirted) or 2 x 5 ml
Timer:	3 sec. to 3 min. (55D1030-E) 1 sec. to 90 sec. with up to 10 cycles (55D1036-E)
Operating Temp.	+4° C to +45° C (ambient temp.)
Dimensions: (WxDxH)	17 x 21 x 13.5 cm (55D1030-E) 22 x 35.5 x 20.5 cm (55D1036-E)
Weight:	2.2 kg / 9 kg
Electrical:	230V, 50-60Hz, 50W (55D1030-E) 100 to 240V, 50-60Hz, 145W (55D1036-E)
Warranty:	2 Years

BeadBlaster™ 24 Microtube Homogenizer





Stainless steel, 24 position tube carrier

- + Fast, efficient homogenization, usually in 35 seconds or less
- + For all sample types, from soft tissue to bone
- High throughput, up to 24 samples
- Sealed 2.0 ml tubes, no cross contamination

The BeadBlaster™ 24 completely lyses, grinds and homogenizes a broad variety of biological samples. Even the most difficult and resistant samples are fully homogenized, often in 35 seconds or less. The stainless steel tube carrier subjects up to 24 samples to an optimized, high speed, 3D motion, producing high energy impacts between the samples and micro-beads to release cellular contents. To protect heat sensitive samples, the unit can be digitally programmed to operate in shortened consecutive cycles with a rest period in between.



Benchmark offers an assortment of prefilled tube kits for a variety of sample types. The popular Triple-Pure™ kits include acid washed, heat treated, zirconium beads. The beads are tested to be free of nucleases, making them ideal for molecular biology applications. A convenient starter kit (55D1032-SK) is available to accommodate a broad range of samples and optimize applications.





Technical Data:

Speed:	4.00 to 7.00 m/s
Speed Increments:	0.05 m/s
Capacity:	24 x 2.0 ml tubes or 6 x 5 ml
Cycle Time:	1 to 90 sec. (1 sec. increments)
Pause Between Cycles:	0 to 2 min. (1 sec. increments)
Max Cycles per program:	10
Program Memory:	50
Accel/Decel:	<2 sec. / <2 sec.
Noise Level:	<68 db
Operating Temp. Range:	+4 °C to +65 °C (ambient temp.)
Dimensions: (WxDxH)	28 x 36 x 38.5 cm
Weight:	25 kg
Electrical:	Universal Voltage 100V to 240V, 50-60Hz, 600W
Warranty:	2 Years

Additional bead types are also available (in both bulk and prefilled kits). Please contact us for a complete listing.

Item No.	Description:
55D2400-E	BeadBlaster™ 24 Microtube Homogenizer*
	with 24 x 2.0 ml tube holder
55D2400-R5	Optional tube holder, 6 x 5ml
<u>Prefilled Tube</u>	Include 2.0ml non-skirted screw cap tubes
Kits:	with caps, sealing rings and beads as specified below:
55D1031-01	Standard glass beads, Ø 0.1 mm, 50 pk.
55D1031-05	Standard glass beads, Ø 0.5 mm, 50 pk.
55D1031-10	Standard glass beads, Ø 1.0 mm, 50 pk.
55D1032-01	Triple-Pure, high impact zirconium beads, Ø 0.1 mm, 50 pk.
55D1032-05	Triple-Pure, high impact zirconium beads, Ø 0.5 mm, 50 pk.
55D1032-10	Triple-Pure, high impact zirconium beads, Ø 1.0 mm, 50 pk.
55D1032-15	Triple-Pure, high impact zirconium beads, Ø 1.5 mm, 50 pk.
55D1032-30	Triple-Pure, high impact zirconium beads, Ø 3.0mm, 50 pk.
55D1032-SK	Starter Kit, 10 ea. of Ø 0.1, 0.5, 1.0, 1.5 & 3.0 Triple-Pure, high impact Zirconium
55D1032-60	One ceria zirconium oxide satellite, <dia> 6.0 mm, 50 pk.</dia>
55D1033-28	Stainless steel beads, Ø 2.8 mm, 50 pk.
55D1033-30G	Garnet shards with 1 zirconium bead Ø 6.0 mm, 50 pk.
55D1034-MX	Mixed format, 0.1 mm silica, 1.4 mm zirconium, 4 mm silica, 50 pk
55D1031-T20	Empty tubes (2.0 ml) pack of 1000
55D1031-RF	Reinforced empty tubes (2.0 ml) pack of 500
55D1034-28	5ml tubes (snap cap) with stainless beads, Ø 2.8 mm, 50 pk

Temperature Control Equipment













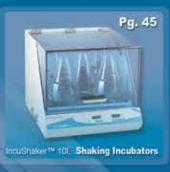






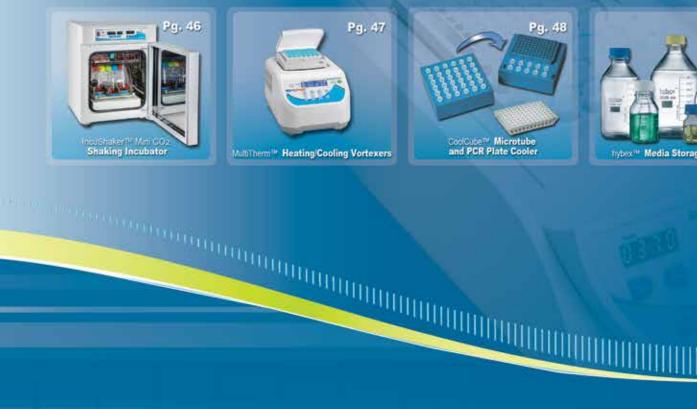














Digital Hotplates, Stirrers & Hotplate Stirrers



- Large, backlit LCD display
- Safety LED indicates hot surface
- → White ceramic top plate
- Control actual <u>sample</u> temperature (with optional probe)







55H3760-H-E

55H3760-S-E

55H3760-HS-E

Benchmark hotplates, stirrers and hotplate-stirrers feature an exceptionally durable, chemical resistant, white ceramic work surface. The space-efficient design (18 x 27 cm 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 large, backlit LCD 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 16.5 cm 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 (55H3760-ROD) is available for mounting thermometers, temperature probes, etc.

Technical Data:

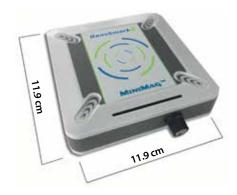
200 to 1,500 rpm*
Ambient +5 °C to 380 °C*
16.5 x 16.5 cm
2.5
18 x 26.7 x 10.1 cm
1.8 kg
230V, 50-60 Hz, 500W
2 Years

^{*}Speed and temperature adjustments available only on relevant models.

Ordering Information:

Item No.	Description:
55H3760-H-E	Benchmark Digital Hotplate
55H3760-S-E	Benchmark Digital Magnetic Stirrer
55H3760-HS-E	Benchmark Digital Hotplate Stirrer
55H3670-ROD	Optional support rod
55H3760-TP	Optional temperature probe
55H3760-CS	Clamp assembly with support rod and clamps for securing thermometers/probes

MiniMag™ **Mini Magnetic Stirrer**



Ordering Information:

Item No.	Description:
55\$1005-F	MiniMag Magnetic Stirrer

- + Mini sized, less than 12 cm wide
- Adjustable speed control, 100 to 1500 rpm

Speed Range:	100 to 1,500 rpm
Platform:	8.5 x 8.5 cm
Max Stirring Capacity:	1.5
Dimensions: (WxDxH)	12 x 12 x 3 cm
Weight:	0.2 kg
Electrical:	Universal Voltage 100V to 240V, 50-60 Hz, 2W
Warranty:	1 Year

myTemp™ Mini Digital Incubators (20 I)





- iglup Digital temperature control
- Personal sized 33.5 x 37 cm 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 33,5 x 37 cm, 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.

Technical Data:

Temp. Range	
55H2200-H-E:	Ambient +5° to 60 °C
55H2200-HC-E:	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:	20 I
Dimensions: (W x D x H)	
Interior:	26 x 23.5 x 33 cm
Exterior:	33.5 x 37 x 48 cm
Weight:	6.8 kg
EL 12.1	Universal Voltage
Electrical:	100 to 240V, 50-60Hz, 50W
Warranty:	2 Years

Item No.	Description:
55H2200-H-E	myTemp Mini Digital Incubator, includes 2 shelves, (heat only, ambient +5 to 60 °C)
55H2200-HC-E	myTemp Mini Digital Incubator, includes 2 shelves, (heat & cool, ambient -15 to 60 °C)
55H3D-1020-E	Mini nutating rocker, 26.7 x 20.3 cm platform, 230 V
55H2200-SH	Extra shelf, 15.2 cm x 20.3 cm plastic (not autoclavable)

myTemp™ Mini CO₂ Digital Incubators (20 I)





- → Ideal for cell culture
- Digital temperature control
- Personal sized, 33.5 x 37 cm footprint
- Dual beam IR sensor for fast response time and accurate control over CO₂ percentage

At only 33.5 cm wide, the myTemp Mini CO_2 is the smallest and most economical incubator for culturing cells in a CO_2 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.

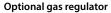


Both temperature and CO_2 percentage are digitally adjustable and displayed in real time on the large LED control panel. This panel also features a "Cal" function, for easy in-lab calibration of the temperature or CO_2 . In addition, humidity (up to 80%) can be added to the chamber by inserting the included, stainless steel humidity reservoir.

To protect fragile samples, the CO_2 level is constantly monitored using dual beam infrared sensing technology. In the event of a drop in CO_2 , audible and visual alarms are triggered, notifying the user of the error.

Despite its small size, the incubator features a relatively large 20 I 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.







Easy access CO₂ input port

Technical Data:

Temp. Range	Ambient -10° to 55 °C
Temp. Accuracy:	± 0.25 (at 37 °C)
Temp. Increments:	0.1 ℃
Temp. Uniformity:	± 0.25 °C (at 37 °C)
Capacity:	201
CO ₂ Range:	0 to 20%
CO ₂ Sensor:	Dual beam IR
CO ₂ Accuracy:	± 0.1% at 5%
Humidity:	70 to 80%
Dimensions: (W x D x H)	
Interior:	26 x 23.5 x 33 cm
Exterior:	33.5 x 37 x 48 cm
Weight:	6.8 kg
Electrical:	Universal Voltage
	100 to 240V, 50-60Hz, 75W
Warranty:	2 Years

Item No.	Description:
55H2300-HC2-E	myTemp CO ₂ Mini Digital Incubator, includes 2 stainless shelves
55H2300-REG	Optional CO ₂ gas regulator (regulates pressure from the gas cylinder to the incubator)
55H2300-SH	Extra shelf. 26.7 x 20.3 cm stainless steel (autoclavable)

myTemp 65HC™ **Heating and 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 81 cm 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 100 cm, the incubator is designed to be floor-standing, yet is also compact enough for bench-use. (Not recommended for use on benchtops higher than 81 cm). The instrument is supplied with two adjustable height shelves, while additional shelves can also be purchased separately (item: 55H2265-SH).

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 (W x D x H):	54 x 53.34 x 99.85 cm
Interior (W x D x H):	40 x 32.4 x 50.2 cm
Timer:	1 min to 99 hr 59 min.
Capacity:	65 l
Weight:	53 kg
Electrical:	230V, 50Hz, 385W
Warranty:	2 years

Item No.	Description:
55H2265-HC-E	myTemp 65 Heating and Cooling Incubator, includes two stainless steel shelves
55H2265-SH	Extra shelf, stainless steel

SureTemp[™] Precision Incubators (40 I / 70 I / 130 I)



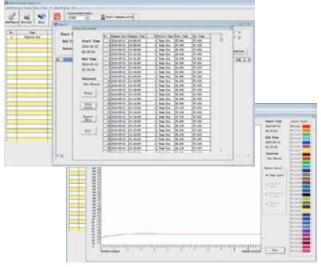


- Precision temperature control up to 75 °C
- Dual-Convection, user adjustable to gravity or mechanical convection
- Stainless steel internal chamber
- Internal power outlet for shakers, mixers, etc.
- → SureCheck™ data logging port and software

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.

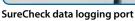
Each incubator is equipped with the SureCheck™ data logging system for verification of chamber temperature. The SureCheck system records temperature data points as often as every 60 seconds and stores this information on a flash drive. The data can then be viewed and saved using the included SureCheck 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 use 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







Internal power outlet

Ordering Information:

Ordering information.		
Item No.	Description:	
55H2505-40-E	SureTemp Dual-Convection Incubator with SureCheck data logging software, 40 I	
55H2505-70-E	SureTemp Dual-Convection Incubator with SureCheck data logging software, 70 I	
55H2505-130-E	SureTemp Dual-convection Incubator with SureCheck data logging software, 130 l	
55H2505-40SH	Extra shelf, stainless steel for 55H2505-40-E	
55H2505-70SH	Extra shelf, stainless steel for 55H2505-70-E	
55H2505-130SH	Extra shelf, stainless steel fo 55H2505-130-E	

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	Interior
55H2505-40-E (40 I) 55H2505-70-E (70 I) 55H2505-130-E (130 I)	57 x 59.2 x 58 cm 67 x 59.2 x 68 cm 77 x 69.2 x 78 cm	35 x 35 x 35 cm 45 x 35 x 45 cm 55 x 45 x 55 cm
Weight:		
55H2505-40-E (40 I) 55H2505-70-E (70 I) 55H2505-130-E (130 I)	42 kg 62 kg 70 kg	
Electrical:	230V, 50Hz (420W, 520W, 670W)	
Warranty:	2 Years	

^{*} Specification provided with a set temperature of 37 °C

myBlock™ Heating / Cooling Mini Dry Baths





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





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 11 cm wide, myBlock Mini is truly the first personal heat block.

Ordering Information:

Description:			
myBlock Mini Digital Dry Bath			
myBlock Mini Digital Dry Bath with cooling			
Block, 40 x 0.2 ml or 5 PCR strips			
Block, 24 x 0.5 ml			
Block, 15 x 1.5 ml			
Block, 15 x 1.5 or 2.0 ml			
Block, 6 x 5 ml conical (17mm diameter)**			
Block, 4 x 15 ml**			
Block, 2 x 50 ml**			
Block, 15 x 2 ml autosampler vials (12 x 32 mm)			
Block, 15 x 12-13 mm diameter tubes & vacutainers**			
Block, 8 x cuvettes			
Block, solid (for custom machining)			
12V vehicle power adapter			

^{**}Block height may prevent lid from closing.

Technical Data:

Model:	55BSH200-E	55BSH300-E
Temp. Range:	Amb. +5 ° to 100 °C	Amb25 ° 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 ℃
Temp. Uniformity:	+/- 0.2 °C	+/- 0.2 °C
Dimensions: (W x D x H)	10.2 x 15 x 11.5 cm	11 x 16.2 x 14 cm
Weight:	1 kg	1 kg
Electrical:	100-240V 50-60 Hz, 50W	100-240V 50-60 Hz, 50W
Warranty:	2 Years	2 Years



For technical data, please see above (myBlock Mini). Temp Accuracy: \pm 0.3 $^{\circ}\text{C}$

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.

Item No.	Description:
55BSH200-HL-E	myBlock Mini Digital Dry Bath with heated lid
55BSH100-02	Block, 40 x 0.2 ml or 5 PCR strips
55BSH100-05	Block, 24 x 0.5 ml
55BSH100-15HL	Block, 15 x 1.5 ml

myBlock™ Series **Digital Dry Baths**





- 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 2.0 ml and with just a quick flip to the other side, accommodate 0.2 ml 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 50 ml.

Ordering Information:

Item No.	Description:		
55BSH5001-1B-E	myBlock I single chamber with 1 x 55BSWCMB		
55BSH5002-2B-E	myBlock II dual chamber with 2 x 55BSWCMB		
55BSH5001-E	myBlock I single chamber, without blocks		
55BSH5002-E	myBlock II dual chamber, without blocks		
55BSH-TP1	Optional External temperature sensor		
55BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0 ml, 14 x 0.5 ml, 6 x PCR strips / 48 x 0.2 ml (& in dual model only) one PCR plate		
55BSW1500	Block, 24 x 1.5 ml		
55BSW1520	Block, 24 x 1.5/2.0 ml		
55BSW05	Block, 24 x 0.5 ml		
55BSW5MT	Block, 12 x 5.0 ml snap cap centrifuge tubes		
55BSW15	Block, 12 x 15 ml**		
55BSW50	Block, 5 x 50 ml**		
55BSW10	Block, 20 x 10 mm (or 20 x 2.0 ml)		
55BSW13	Block, 20 x 13 mm**		
55BSW1516	Block, 12 x 15-16 mm (or 12 x 10 ml)**		
55BSW02	Block, 48 x 0.2 ml tubes or 6 PCR tube strips		
55BSWPCR2	Block, 1 x 96-well PCR Plate (2 block model only)		
55BSWPCR1	Block, 1 x 96-well PCR Plate (1 block model)		
55BSWMT	Block, 1 x Micro Plate (2 block model only)		
55BSWHEM	Block, 48 x Hematocrit tubes (1.9 mm)		
55BSW01	Block, solid - for slides or custom machining		

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



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

isoBlock™ **Digital Dry Bath**





- → Two isolated chambers
- → Independent time & temperature control
- Hinged cover improves uniformity and conserves energy
- Unique Quick-Flip™ Universal micro-block

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 2.0 ml and, with just a quick flip to the other side, accomodates 0.2 ml tubes or PCR strips.





Ordering Information:

Item No.	Description:
55BSH6000-E	IsoBlock Dry Bath with two independent chambers
55BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0 ml, 14 x 0.5 ml and 6 x PCR strips / 48 x 0.2 ml
55BSW1500	Block, 24 x 1.5 ml
55BSW1520	Block, 24 x 1.5/2.0 ml
55BSW05	Block, 24 x 0.5 ml
55BSW5MT	Block, 12 x 5.0 ml centrifuge tubes
55BSW15	Block, 12 x 15 ml
55BSW50	Block, 5 x 50 ml
55BSW10	Block, 20 x 10 mm (or 20 x 2.0 ml)
55BSW13	Block, 20 x 13 mm
55BSW1516	Block, 12 x 15-16 mm (or 12 x 10 ml)**
55BSW02	Block, 48 x 0.2 ml tubes or 6 PCR tube strips
55BSWPCR1	Block, 1 x 96-well PCR Plate
55BSWHEM	Block, 48 x Hematocrit tubes (1.9 mm)
55BSW01	Block, solid - for slides or custom machining

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

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

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 1.5/2.0 ml, 15 ml and 50 ml tubes within the 4 L, 8 L and 12 L baths. The myBath 4 L is supplied with all three racks.

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):	16.5 x 20.3 x 15,2 cm	19.6 x 35.3 x 22.9 cm	44.4 x 26.7 x 31.5 cm	45.7 x 26.7 x 41.2 cm
Interior (W x D x H):	14 x 15.3 x 10.3 cm	13.5 x 23.9 x 14 cm	32.5 x 26.4 x 15 cm	32.5 x 26.4 x 20 cm
Weight:	2.4 kg	6.8 kg	7.7 kg	7.7 kg
Electrical:	230V, 50-60Hz, 250W-700W			
Warranty:	2 Years			

Ordering Information:

•		
	Item No.	Description:
	55B2000-2-E	myBath 2 Digital Water Bath
	55B2000-4-E	myBath 4 Digital Water Bath, includes tube racks for 1.5, 2.0, 15 and 50 ml tubes
	55B2000-8-E	myBath 8 Digital Water Bath
	55B2000-12-E	myBath 12 Digital Water Bath

Accessory Tube Racks:

Cat. Number	Description:	Rack Capacity	
		4 Liter	8/12 Liter
55B2000-4-T5	Tube rack for 40 x 0.5 ml tubes	1	2
55B2000-4-T1520	Tube rack for 40 x 1.5/2.0 ml tubes	1 (Included)	2
55B2000-4-T150	Tube rack for 41 x 15 ml tubes	1 (Included)	0
55B2000-4-T500	Tube rack for 15 x 50 ml tubes	1 (Included)	0
55B2000-8-T150	Tube rack for 76 x 15 ml tubes	0	1
55B2000-8-T500	Tube rack for 30 x 50 ml tubes	0	1

40 x 1.5/2.0 ml

Tube racks <u>included</u> with myBath 41!





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







Capacity Chart:

	Bottles/Tubes	Flasks
0.5 ml	40	N/A
1.5/2.0 ml	40	N/A
15 ml	63	N/A
50 ml	15/30	12
125 ml	8	8
250 ml	4	3
500 ml*	2	2
1000 ml*	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 ℃		
Temperature Uniformity	± 0.2 °C (at 37 °C)		
Temperature Accuracy:	± 0.3 °C (at 37 °C)		
Shaking Speed Range:	30 to 200 rpm		
Speed Increments:	1 rpm		
Shaking Orbit:	25 mm		
Platform Dimensions:	16.5 x 20.5 cm		
Exterior Dimensions: (W x D x H)	32 x 34 x 30 cm		
Capacity:	12 liter		
Timer:	1 min. to 48 hours / continuous		
Weight:	14 kg		
Electrical:	230V, 50-60Hz, 300W		
Warranty:	2 Years		

- 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 & 50 ml 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 customdesigned racks can also be made available by request.



SB-12L with 15 ml conical tubes



SB-12L with 50 ml conical tubes

Item No.	Description:
55SB0012-E	SB-12L Shaking Water Bath with universal spring platform for tubes, bottles and flasks
55SB0012-T1520	Optional rack for 1.5/2.0 ml microtubes
55SB0012-T5	Optional rack for 0.5 ml microtubes

Incu-Shaker™ Mini **Shaking Incubator**



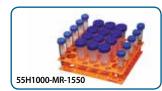


INCU-SHAKER" Mini

- Domed lid accepts flasks up to 1 l (NEW!)
- **—** Exceptional temperature uniformity
- Extremely compact: just 28 cm 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 23,5 x 29 cm 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.











Ordering Information:

Item No.	Description:				
55H1000-M-E	Incu-Shaker Mini with non-slip rubber mat				
55H1000-MR	MAGic Clamp universal platform (for flasks/tubes)				
55H1000-P-MP	4 x microplate platform (standard or deepwell)				
55H1000-P-SP	Spring rack platform, for uncommon vessels				
Accessories for H100	00-MR MAGic Clamp Platform				
55H1000-MR-CMB	NEW! Adjustable flask clamp for MAGic clamp platform, accepts 125 ml (max. 12), 250 ml (max. 8) or 500 ml (max. 5)				
55H1000-MR-1000	Flask clamp for MAGic clamp platform, 1000 ml (max. 2)				
55H1000-MR-500	Flask clamp for MAGic clamp platform, 500 ml (max. 5)				
55H1000-MR-250	Flask clamp for MAGic Clamp platform, 250 ml (max. 8)				
55H1000-MR-125	Flask clamp for MAGic Clamp platform, 125 ml (max. 12)				
55H1000-MR-50	Flask clamp for MAGic Clamp platform, 50 ml (max. 20)				
55H1000-MR-MP	MAGic clamp for 1 x microplate (max. 4)				
55H1000-MR-1550	Tube Rack, 30x15 & 20x50 ml (max. 1)				
55H1000-MR-T15	Tube Rack, 32 x 15 ml (max. 2)				
55H1000-MR-T50	Tube Rack, 15 x 50 ml (max. 2)				
55H1000-MR-TSR	Angled tube rack holder, adjustable tilt (max. 1)				

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 300 rpm
Speed Increments:	1 rpm
Shaking Orbit:	19 mm
Platform Dimensions:	23.5 x 29 cm
Exterior Dimensions (W x D x H):	28 x 41 x 33 cm
Height with Lid Open:	63 cm
Timer:	1 min. to 48 hours / continuous
Weight:	11.5 kg
Electrical:	230V, 50-60Hz, 300W
Warranty:	2 Years



Incu-Shaker™ 10L **Shaking Incubators**



INCU-SHAKER" IOL

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

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







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:

15 degrees below ambient.

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

ordering information.					
Item No.	Description:				
55H1010-E	Incu-Shaker 10L with non-slip rubber mat				
55H1012-E	Incu-Shaker 10LR (refrigerated) w/ non-slip rubber mat				
55H1010-MR	MAGic Clamp Universal platform (for flasks/tubes)				
55H1010-P-SP	Spring rack platform, for uncommon vessels				
55H1010-SH	Shelf, 36 x 14 cm for Petri dishes, microplates, etc.				
Accessories for H1010	Accessories for H1010-MR MAGic Clamp Platform				
55H1000-MR-CMB	NEW! Adjustable flask clamp for MAGic clamp platform, accepts 125ml (max. 36), 250 ml (max. 25) or 500 ml (max. 16)				
55H1000-MR-3000	Flask clamp for MAGic clamp platform, 3 I (max. 4)				
55H1000-MR-2000	Flask clamp for MAGic clamp platform, 21 (max. 5)				
55H1000-MR-1000	Flask clamp for MAGic clamp platform, 1 I (max. 9)				
55H1000-MR-500	Flask clamp for MAGic clamp platform, 500 ml (max. 16)				
55H1000-MR-250	Flask clamp for MAGic Clamp platform, 250 ml (max. 25)				
55H1000-MR-125	Flask clamp for MAGic Clamp platform, 125 ml (max. 36)				
55H1000-MR-50	Flask clamp for MAGic clamp platform, 50 ml (max. 49)				
55H1000-MR-MP	Clamp, 1 x microplate, for MAGic Clamp platform (max. 8)				
55H1000-MR-1550	Tube Rack, 30 x 15 & 20 x 50 ml (max. 4)				
55H1000-MR-T15	Tube Rack, 32 x 15 ml (max. 8)				
55H1000-MR-T50	Tube Rack, 15 x 50 ml (max. 8)				
55H1000-MR-T600	Tube/Bottle Rack, 4 x 500/600 ml conical bottle (max. 4)				
55H1000-MR-TSR	Angled tube rack holder, adjustable tilt (max. 1)				

Incu-Shaker™ Mini CO2 **Shaking Incubator**

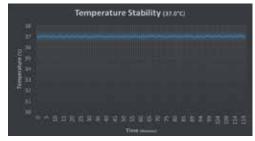


Heat · Shake · CO₂

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 $^{\circ}$ C) at 37.0 $^{\circ}$ C.



MAGic Clamp™ Platform
Optional MAGic Clamp accessories (Patented) are available for attaching erfenmeyer flasks, microes, test tube racks and other vessels to the shaking form. This patented design allows for instant, netic attachment of clamps without the use of



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.

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.



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 / Stabiilty	\pm 0.5 °C / \pm 0.5 °C / 0.1 °C (at 37 °C)
Speed Range:	30 to 300 rpm (Increments: 1 rpm)
Mixing Orbit:	19 mm
CO2 Range:	0 to 20% (Increment: 0.1%)
CO2 Accuracy:	± 0.1%
Time Range:	1 min. to 48 hours (or continuous)
Platform Dimensions:	23.5 x 29 cm
Chamber Dimensions:	33.5 x 26 x 39.2 cm (46 L)
Exterior Dimensions:	42 x 46.5 x 55.3 cm
Weight:	40.1 kg
Electrical:	230V, 50-60Hz, 350W
Warranty:	2 Years

Maximum Capacity:

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

Item No.	Description:
55H3501-E	Incu-Shaker CO₂ Mini, with non-slip rubber mat platform
55H2300-REG	Optional CO₂ Gas Regulator
	MAGic Clamp Accessories
55H1000-MR	MAGic Clamp Universal Platform, 24,1 x 29,2 cm
55H1000-MR-CMB	MAGic Clamp Adjustable Flask Clamp, for 125, 250 & 500 ml Erlenmeyer flasks (max. 12 x 125 ml, 8 x 250 ml or 5 x 500 ml)
55H1000-MR-50	MAGic Clamp Flask Clamp, for 50 ml Erlenmeyer flask (max. 20)
55H1000-MR-125	MAGic Clamp Flask Clamp, for 125 ml Erlenmeyer flask (max. 12)
55H1000-MR-250	MAGic Clamp Flask Clamp, for 250 ml Erlenmeyer flask (max. 8)
55H1000-MR-500	MAGic Clamp Flask Clamp, for 500 ml Erlenmeyer flask (max. 5)
55H1000-MR-1000	MAGic Clamp Flask Clamp, for 1L Erlenmeyer flask (max. 4)
55H1000-MR-MP	MAGic Clamp Flask Clamp, for microplates (max. 4)
55H1000-MR-T15	MAGic Clamp Tube Rack, 32 x 15 ml (max. 2)
55H1000-MR-T50	MAGic Clamp Tube Rack, 15 x 50 ml (max. 2)
55H1000-MR-1550	MAGic Clamp Tube Rack, 32 x 15 ml (max. 1)
55H1000-MR-T600	MAGic Clamp Tube Rack, 4 x 500/600 ml bottles
55H1000-MR-TSR	Slanted Rack Holder, holds tube racks at an adjustable angle



MultiTherm™ **Heating/Cooling Vortexer**





- Temperature control from 0° to 100 °C
- Exchangeable blocks, for tube sizes 0.2 ml to 50 ml
- 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)

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 / 3 mm
Capacity:	Per selected block
Dimensions: (WxDxH)	21 x 29 x 21 cm
Weight:	8 kg
Electrical:	230V, 50-60Hz, 500W
Warranty:	2 Years

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:
55H5000-HC-E	MultiTherm Shaker with heating and cooling
55H5000-H-E	MultiTherm Shaker with heating only
55H5000-02	Block, 96 x 0.2 ml or 1 PCR plate
55H5000-05	Block, 54 x 0.5 ml
55H5000-CMB	Block, combination, 15 x 0.5 ml & 20 x 1.5 ml
55H5000-15	Block, 35 x 1.5 ml
55H5000-20	Block, 35 x 2.0 ml
55H5000-12	Block 24 x 12 mm (200-1200 rpm / Amb10° to 100 °C)
55H5000-150	Block, 12 x 15 ml (200-750 rpm / Amb10 ° to 100 °C)
55H5000-500	Block, 6 x 50 ml (200-750 rpm / Amb10° to 100 °C)
55H5000-MP	Block, 1 x microplate (Amb10 to 60 °C)
55H5000-1232	Block, 24 x 2 ml HPLC / Autosampler vials (12 x 32 mm)
55H5000-5MT	Block, 12 x 5 ml centrifuge tubes (conical)
55H5000-DWMP	Block, 1 x deep well microplate (max. height, 54 mm)
55H5000-CU	Block, custom drilled, for tubes/vials up to 40 mm tall
55H5000-WB	Block, for liquids, beads, etc. (chamber: 10.2 x 6.6 x 2.5 cm)



Vortex mixing motion, up to 1200 rpm

INCU-MIXER M 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

Item No.	Description:
55H6002-E	Incu-Mixer MP2, 2 position incubated plate vortexer
55H6004-E	Incu-Mixer MP4, 4 position incubated plate vortexer
55BT1500-A1520	Optional adapter, 20 x 1.5/2.0 ml for microplate shakers
55BT1500-A05	Optional adapter, 20 x 0.5 ml for microplate shakers

CoolCube™ Microtube and PCR Plate Cooler



Technical Data:

Temperature:	0 °C for up to 4 hours
Capacity:	
Top Side:	36 x 1.5/2.0 ml tubes
Bottom Side:	96 x 0.2 ml tubes 12 x 0.2 ml strips 1 x 96 well PCR plate 10 x 1.5/2.0 ml
Dimensions: (W x D x H)	14.3 x 14.3 x 6.4 cm
Weight:	1 kg
Warranty:	2 Years

Euullube "

- Maintains 0 °C for 4 hours
- → Ideal for:
 1.5 ml & 2.0 ml microtubes
 0.2 ml PCR tubes & strips
 96 well PCR plates
- → Also for use as a PCR workstation

The CoolCube™ is designed to keep samples cold on the lab bench without the mess of a melting ice bucket. Simply place the CoolCube in a freezer overnight and it's ready for use, keeping samples cold, but not frozen. Maintains temperature at approximately 0 °C for up to four hours.

Ordering Information:

Item No.	Description:
55R1000	CoolCube Microtube and PCR Plate Cooler

hybex™ **Media Storage Bottles**



Technical Data:

Material:	hybex borosilicate glass (3.3)
Cap Thread Size:	GL45
Temerature Range:	-70° to 500 °C
Sterilization:	Autoclave
Cap Material:	Polypropylene (140 °C)
Cap Colors:	Standard blue, green, purple, yellow, white or assorted



- → Borosilicate 3.3 hybex™ glass
- → Autoclavable caps (GL45) & drip rings
- Permanent enamel graduation markings
- → Large area for bottle marking/identification
- Autoclavable, reuseable & breakage resistant
- Five cap colors

ordering information.				
Item No.	Description:			
55B3000-50-B	Bottle, 50 ml with GL32 blue cap, 10/pk.			
55B3000-100-B*	Bottle, 100 ml with standard (GL45) blue cap, 10/pk.			
55B3000-250-B*	Bottle, 250 ml with standard (GL45) blue cap, 10/pk.			
55B3000-500-B*	Bottle, 500 ml with standard (GL45) blue cap, 10/pk.			
55B3000-1000-B*	Bottle, 1 I with standard (GL45) blue cap, 10/pk.			
55B3000-2000-B*	Bottle, 2 I with standard (GL45) blue cap, 10/pk.			
55B3000-SP-B*	Bottle, Starter Pack with standard (GL45) blue cap, includes, 2×100 ml, 3×250 ml, 3×500 ml and 2×1 l)			
55B3000-CAP-B*	Replacement cap, standard blue (GL45), 10/pk.			
55B3000-CAP2	Replacement cap, standard blue (GL32), 10/pk.			
55B3000-CAP-HTC	High temperature caps, red (GL45), up to 180°, 10/pk.			

^{*}Please replace (-B) with (-G) for green caps, (-P) for purple caps, (-Y) for yellow caps, (-W) for white caps or (-AS) for assorted caps (2 of each color).

Accuris™ Instruments



















Accuris™ Mini Balances











Protective cover, included

Model	Mini 100 g	Mini 500 g				
Max capacity	100 grams	500 grams				
Readability	0.01 g	0.1 g				
Calibration	Exte	ernal				
Pan size	5.3 x 5.7 cm					
Weighing units	g, ct, dwt, gn					
Display	backlit LCD					
Power	2 AAA batteries					
Exterior dims.	6.6 x 9.9 x 1.9 cm					

- Super compact, less than 7 cm wide
- Easy to read, backlit LCD
- Calibration function
- Includes two AAA batteries
 - Snap on, protective cover

Accuris Mini Balances are extraordinarily compact, easy to use, and convenient for a variety of laboratory weighing applications. With a footprint of only 6.6 x 9.9 cm, these Mini Balances offer exceptional accuracy and linearity through their full weighing ranges. Available with either a 100g or 500g capacity, these digital balances feature an easy to read, backlit, liquid crystal display. Buttons for

ON/OFF, MODE & TARE are located on the front for easy access. The software includes a calibration function for in-lab calibration with a 100 g or 500 g calibration weight (available separately).

Accuris Mini Balances are powered by 2 AAA batteries (included). After one minute sitting idle, the power shuts off to conserve battery life. Ideal for lab or field use, each balance includes a snap on, protective cover with instructions conveniently printed on the underside.

Ordering Information:

Item No.	Description:
55W4000-100	Accuris™ Mini Balance, 100 g capacity (0.01 g readability)
55W4000-500	Accuris Mini Balance, 500 g capacity (0.1 g readability)

Accuris[™] Calibration Weights



Accuris calibration weights are ideal for routine calibration of your Accuris (or any brand) lab balance. Single weights as well as complete weight sets are available in various tolerance classes: OIML class E2, F1, and M1.

M1 Class: Ideal for basic (compact) 0.1 to 0.01 g readability balances F1 Class: Suitable for precision 0.01 to 0.001g readability balances E2 Class: Recommended for analytical 0.0001g readability balances

Individual weights come in a protective case. Weight sets include a protective carrying case with foam liner.

- → Various individual and weight sets available
- Choose E2, F1, or M1 OIML class depending on requirements
- Weight sets supplied in convenient protective cases

55W1000-100	Accuris™ Calibration Weight (F1 grade) 100 g
55W1000-200	Accuris™ Calibration Weight (F1 grade) 200 g
55W1000-500	Accuris™ Calibration Weight (F1 grade) 500 g
55W1005-1000	Accuris™ Calibration Weight (M1 grade) 1 kg
55W1005-2000	Accuris™ Calibration Weight (M1 grade) 2 kg
55W1000-TF	Tweezers, for handling calibration weights
55W1101-6-100	Calibration set for Analytical Balances (Class E2) 6 pcs: 1x100 mg, 1x10 g, 2x20 g, 1x50 g, 1x100 g, incl. protective case, tweezers & cleaning cloth
55W1100-200	Calibration set for Precision Balances (Class F1) 23 pcs, 1mg to 200g, includes protective case, tweezers, dust brush and cleaning cloth
55W1105-9-1000	Economy calibration set for compact balances (Class M1), 9 pcs: 1 x 10 g, 2 x 20 g, 1 x 50 g, 1 x 100 g, 2 x 200 g, 1 x 500 g, 1 x 1 kg, includes protective case



Accuris™ Compact & Precision Balances



Variable capacitance technology offers reliability, precision and fast stabilization

- Large, user-friendly interface
- Easy, in-lab calibration
- RS232 port for data output and printing
- Multiple program options (standard weighing, count mode, percent, etc.)

Accuris *Compact* and *Precision* balances quickly and accurately display sample mass measurements on a large, backlit LCD control panel. Utilizing a highly precise, gold plated ceramic capacitance sensor, these balances can provide reliable measurements to 0.001 grams (Precision models). All models feature multiple program options for standard weighing, count (or pieces) mode, as well as percent calculation. In addition, each balance incorporates firmware for easy and reliable, in-lab calibration.

The economical, *Compact* balances are ideal for a wide range of *general weighing* applications. They are available with a readability of 0.01g or 0.1g. Six models cover a range of up to 10,000 grams. With enhanced shock resistance and overload protection, the *Compact* series is ideal for general purpose weighing at medium precision, in varying environments.

The *Precision* series balances are designed for more critical laboratory applications. Engineered for true *research grade* weighing capabilities, these balances offer higher levels of precision and readability (0.01g and 0.001g). They are useful for any laboratory application that does not require a dedicated analytical balance with sub-milligram readability. Advanced software ensures error-free weighing for various applications, including count weighing, percent calculation and inspection mode.

Compact Balances

Item No.*	55W3300-120	55W3300-300	55W3300-500	55W3300-1200	55W3300-5K	55W3300-10K
Capacity	120 grams	300 grams	500 grams	1200 grams	5000 grams	10000 grams
Readability	0.01 grams	0.01 grams	0.01 grams	0.1 grams	0.1 grams	0.1 grams
Pan Size (round)	11.5 cm			16 cm	18 cm	18 cm
Repeatability/Linearity	0.01 / 0.02			0.1 / 0.2		
Draft Shield	Yes, plastic ring			No		
Weighing Units	g, oz, ct, pieces, %					
Calibration	External					
Exterior Dimsions (W x D x H)	18.8 x 28 x 8 cm					

Precision Balances

Item No.*	55W3200-120	55W3200-320	55W3200-500	55W3200-1200	55W3200-3200	55W3200-5K
Capacity	120 grams	320 grams	500 grams	1200 grams	3200 grams	5000 grams
Readability	0.001 grams	0.001 grams	0.001 grams	0.01 grams	0.01 grams	0.01 grams
Pan Size (round)	11.5 cm				16 cm	
Repeatability/Linearity	0.001 / 0.002			0.01 / 0.02		
Draft Shield	Yes, 3-door glass enclosure				No	
Weighing Units	g, oz, ct, pieces, %					
Calibration	External					
Exterior Dimsions (W x D x H)	20.5 x 35 x 31 cm				20.5 x 35 x 8 cm	

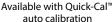
Accuris™ Analytical **Balances**





- → Readable to 0.0001 g (0.1 mg)
- → Available with Quick-Cal™ internal calibration option
- RS232 port for data output
- Multiple program options (standard weighing, count mode & percent)







Extended base, limits vibration & improves stability

Accuris Analytical Balances provide accuracy and precision for the most demanding research applications. Two capacity options are available, each incorporating a highly precise, electromagnetic force restoration sensor to deliver unsurpassed accuracy & readability to 0.0001g (0.1mg).

All models feature advanced adjustable feet and a leveling bubble indicator. A tare key is conveniently located on either side of the control panel, providing convenience and comfortable use for both right and left handed users. Although all models incorporate in-lab calibration firmware, they are also available with a unique Quick-Cal™ function (Items: 55W3100A-120 & 55W3100A-210) that provides fast, reliable internal calibration with the push of a button. While standard models (Items 55W3100-120 & 55W3100-210) include a 100 g calibration weight for external user-calibration.

All Accuris Analytical Balances feature a glass enclosure (draft shield) with 3 sliding doors, "right, left, and top" to isolate the weighing area from the ambient environment.

Analytical Balances

Item No.*	55W3100-120	55W3100-210	55W3100A-120	55W3100A-210
Calibration	External (100 g cal. weight included)		Internal Quick-Cal™	
Capacity	120 grams	210 grams	120 grams	210 grams
Readability	0.0001 grams		0.0001 grams	
Repeatability/Linearity	0.0001 / 0.0002		0.0001 / 0.0002	
Pan Size (Round)	Stainless Steel: Ø 9 cm		Stainless Steel: Ø 9 cm	
Weighing Units	g, oz, lb, ct, pieces, %		g, oz, lb, ct, pieces, %	
Draft Shield	Yes, glass		Yes, glass	
Exterior Dims. (W x D x H)	32 x 47 x 28 cm		32 x 47 x 28 cm	

Accuris Calibration Weights available on page 50.



Glass draft shield opens from the left, right, and top for easy access to the weighing pan







Quietly and safely aspirates liquid waste from plates/vessels

Technical Data:

Max. Aspiration Rate:	14 ml / sec.
Max. Flow Rate:	15 L / min.
Vacuum Range:	-30 mbar to -750 mbar
Noise Level:	59.6 db
Dimensions: (W x D x H)	24 x 20 x 34 cm
Weight:	2.2 kg
Electrical:	230V, 50Hz to 60Hz
Warranty:	2 years

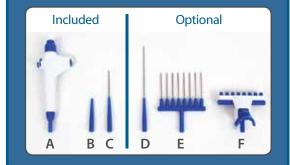
Ordering Information:

Item No.	Description:
	ASPIRE™ Laboratory Aspirator
55V0020-E	Includes base with internal vacuum pump, 21 polycarbonate bottle with lid, silicone tubing, handheld vacuum controller and single channel adapters
55V1002-1SL	Optional single channel adapter,
33 V 1002 13L	X-long (80 mm) stainless steel (D)
55V1002-S8	Optional eight channel adapter, fine tip stainless steel (E)
55V1002-8	Optional 8-channel adapter, for use with 200 µl pipette tips (F)
55V1002	Handheld vacuum controller with single channel adapters (A, B, C / included)
55V0020-F1	Hydrophobic filter (1 included)
55V0020-QD	Optional quick disconnect kit for collection bottle, includes 2 male/female attachments & silicone tubing
55V0020-BOT	Graduated, PC collection bottle with lid (included)
55V0020-TB	Extra vacuum tubing with connector, 1 meter

Comes complete with:

- Base with internal vacuum pump
 2 liter, polycarbonate collection bottle
 Antibacterial / hydrophobic filter

- Silicone tubing
- Handheld vacuum controller (A)
- Adapter for 200 µl pipette tips (B)
 Adapter, fine stainless steel, 40 mm (C)



myGel™ Mini Electrophoresis System







- Complete System
 Includes gel tank, power supply
 & casting accessories
- Quick and Easy Gel Casting (No spacers or clamps required)
- → Compact Design, 19 x 13 cm footprint

The Accuris myGel Mini Electrophoresis System includes all the equipment you need to get up and running - gel tank, power supply and 2 complete casting sets. Ideal for personal use, small laboratories, or the classroom, this gel box/power supply combination is compact and easy to use.

The myGel Mini power supply attaches directly to the gel box for a secure connection every time. Selectable parameters include 3 preset voltages - 35, 50 and 100 V - and a 99 minute timer.

Set parameters using the membrane keypad. The safety lid is vented to dissipate heat generated during electrophoresis, and features a viewing area above the gel. Current will only run through the system when the lid is properly in place on top of the gel box.

Trays and casting stands for both 10.5×6 cm and 5×6 cm gels are included with the myGel Mini system, as are double sided combs. The smaller tooth combs are compatible with multichannel pipettes. Casting is quick and easy - just place the tray in the casting stand and pour. The gel trays feature a dark contrast strip to help visualize wells while loading, and lines that fluoresce under UV and blue light to track the progress of the run.



Ordering Information:

Item No.	Description:	
55E1101-E	MyGel Mini Electrophoresis System, complete with 55E1101-CS1 and 55E1101-CS2	
myGel Mini includes all of the below casting accessories:		
55E1101-CS1	Extra casting set, for 10.5 x 6 cm gels, includes two trays and two combs (22/12 teeth)	
55E1101-COMB1	Extra double sided combs, 22/12 teeth, for 55E1101-CS1 casting set, pk 2 (multi-channel compatible)	
55E1101-CS2	Extra casting set, for 5 x 6 cm gels, includes four trays and two combs (18/10 teeth)	
55E1101-COMB2	Extra double sided combs, 18/10 teeth, for 55E1101-CS2 casting set. pk 2 (multi-channel compatible)	

Output voltage:	35V, 50V or 100V
Timer:	0-99 minute or continuous
Safety:	Magnetic and mechanical lid interlock
Max. buffer volume:	230 ml
Gel capacity:	One 10.5 x 6cm or two 5 x 6 cm
Dimensions: (W x D x H)	19 x 13 x 5.5 cm
Weight:	0.45 kg
Electrical:	230V, 50Hz
Warranty:	2 years



myVolt™ Mini **Power Supply**



Ordering Information:

Item No.	Description:
55E2100-E	myVolt™ Mini Power Supply, 100V / 200V

- Ideal for basic electrophoresis and compatible with standard electrophoresis gel tanks
- Compact and simple with 100V or 200V output
- → Two pairs of output terminals

Technical Data:

Voltage Output:	100V or 200V constant
Current Output:	Max. 200 mA
Max Wattage:	40 W
Output Terminals:	2 pairs (wired in parallel)
Dimensions (W x D x H):	16 x 11.5 x 5.7 cm
Weight:	0.4 kg
Electrical:	100 - 240V, 50 - 60Hz
Warranty:	2 years

myVolt™ Touch **Power Supply**



Technical Data:

Output Settings:	Constant voltage or constant current
Voltage Output:	10 - 300V (5V increments)
Current Output:	5 - 400 mA (5 mA increments)
Max Wattage:	80 W
Timer:	1 min. to 99 hours 59 min.
Output Terminals:	4 pairs (wired in parallel)
Safety:	No load, load change, overload detection
Display: (W x D x H)	5 x 5 cm touchscreen LCD
Dimensions:	21.5 x 15.5 x 9.75 cm
Weight:	2.9 kg
Electrical:	230V, 50Hz
Warranty:	2 years

Ordering Information:

Item No.	Description:
55E2300-E	myVolt™Touch Power Supply, 1 to 300V max, 400 mA

- Touchscreen control
- Dual orientation, auto-rotating display (fits anywhere in a crowded lab)
- Intuitive programming
- Control voltage or amperage



Dual Orientation, Auto-Rotating Display

The Accuris myVolt Touch is a work horse electrophoresis power supply that includes all of the performance and specifications needed for efficient separation of nucleic acids and proteins. The perfect companion for both horizontal and vertical gel tanks, the myVolt Touch incorporates some very unique user-friendly features:

Touch-screen Control Panel:

Setting up an electrophoresis run with the myVolt Touch couldn't be easier... adjust voltage, current and time values. Then touch "Start" to begin the run. Voltage, current and run time are all displayed.

Dual Orientation, Auto-Rotating Display:

The myVolt Touch packs plenty of power and features into a compact housing. But for those crowded lab benches, we've taken our design a step further. The myVolt can be oriented horizontally or vertically to fit the space available either on the lab bench or a shelf. When the power supply is tilted up vertically or back down horizontally, the display automatically rotates. Folding feet can be extended when the power supply is horizontal for convenient access and viewing of the touch screen. When set vertically, the touchscreen is also tilted up toward the user.





Biozym

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