



We are pleased to introduce our new Product Catalog. This publication features our latest offering of laboratory equipment and supplies that are distributed throughout the world.

Founded in 1984, Labnet started with the basic mission of supplying products of high quality, utility and value to bioscience research laboratories. We have maintained that mission for over 30 years and combined it with a focused effort on growing our business through new product introductions and expansion of our distribution network.

As we move forward we understand that the future growth and success of our company will require a continuous stream of innovative products. We have expanded our US manufacturing facility, acquired manufacturing and distribution facilities in Europe, and have developed contract manufacturing partnerships throughout the world.

Our in-house product design and development teams are continually working on new products to meet the evolving needs of the scientific research community. Labnet's Mission is to continually grow our position as a valued supplier to the Bioscience Research Market by sourcing, developing and manufacturing products which offer our customers the best combination of quality, features, service and cost."

Today, Labnet is a leading worldwide supplier in a number of core product areas: centrifugation, liquid handling, constant temperature equipment, molecular biology and electrophoresis, agitation, and plasticware.

Our well established brands which include our Spectrafuge<sup>TM</sup>, BioPette<sup>TM</sup>, Enduro<sup>TM</sup>, AccuBlock<sup>TM</sup>, and MultiGene<sup>TM</sup> are recognized throughout the world as reliable and effective research tools.

Labnet products are available to our end user customers through a qualified, worldwide network of dealers covering over 80 countries. These dealer partners provide technical information, product demonstrations and field support, and stock our products to quickly fill customers orders.

In support of our dealers, Labnet provides in-house technical and service support and maintains large inventories in our US and European facilities.

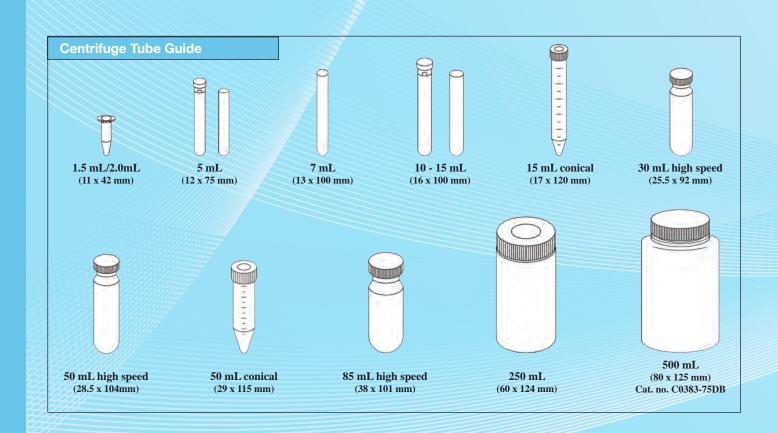
Please visit Labnet's website: www.labnetinternational.com for up to date information on new and existing product lines, technical documents, instruction manuals, and links to contact our various departments and sales offices. Price quotations can also be requested from the website. In addition, customers can complete an on-line warranty registration for recently purchased products.

## **TABLE OF CONTENTS**

CENTRIFUGATION	1-28
• MINI	
• MICRO	
• COMPACT	
• UNIVERSAL	
<ul><li>HIGH PERFORMANCE</li><li>FILTRATION</li></ul>	
FILINATION	
LIQUID HANDLING	29-40
<ul> <li>MANUAL PIPETTORS</li> </ul>	
ELECTRONIC PIPETTORS	
PIPETTE TIPS	
PIPETTE CONTROLLERS	
BOTTLETOP DISPENSERS	
CONSTANT TEMPERATURE EQUIPMENT	41-56
DRY BATHS	
<ul><li>HOT PLATE STIRRERS</li><li>INCUBATORS</li></ul>	
SHAKING INCUBATORS	
HYBRIDIZATION OVENS	
WATER BATHS	
MOLECULAR BIOLOGY & ELECTROPHORESIS	57-76
THERMAL CYCLERS	
PLATE SEALER	
• GEL BOXES	
BLOTTING     BOWER OF BRIDE	
<ul><li>POWER SUPPLIES</li><li>TRANSILLUMINATORS</li></ul>	
GEL DOCUMENTATION	
- GLE DOCOMENTATION	
AGITATION EQUIPMENT	77-92
VORTEXERS     OPRITAL SHAKERS	
<ul><li>ORBITAL SHAKERS</li><li>3-D SHAKERS</li></ul>	
BOTATORS	
RECIPROCAL SHAKERS	
ROCKING PLATFORMS	
SHAKING INCUBATORS	
PLASTICWARE	93-100
TUBE STORAGE BOXES	
• TUBE RACKS	
SAMPLE COOLERS	
<ul> <li>MICROPLATES</li> </ul>	

# CENTRIFUGATION MINI MICRO COMPACT UNIVERSAL HIGH PERFORMANCE FILTRATION Labnet Labnet Labnet International, Inc.

Centrifuge Selection Guide	Madif	Jung force	odions dis	Security of the security of th	Mot pro	Corriotel Digital	Diedied Retri	Seldior REMINO	Religion to the second
Mini Plate Spinner	500 x g	1	-	-	- ///	No	No	No	Yes
Spectrafuge Mini	2,000 x g	2	6/-	-	-	No	No	No	No
Prism Mini	2,000 x g	2	8/-	-	+////	No	No	No	No
Spectrafuge 16M	16,000 x g	1	18/-	-	1	No	No	No	No
Spectrafuge 24D	16,300 x g	1	24 / -	-	/// <del>/</del> /////	Yes	No	Yes	No
Prism	21,200 x g	1	24 / -	-	-	Yes	No	Yes	No
Prism R	17,135 x g	1	24 / -	-	///// <del>/</del> /////	Yes	Yes	Yes	No
Z216 M (MK2)	21,380 x g	8	44 / -	-	-	Yes	Yes	Yes	No
Z 100 A	1,900 x g	1	-	6/-	111114	No	No	No	No
Spectrafuge 6C	4,000 x g	1	-	6/-	-	Yes	No	No	No
Z 206 A	4,180 x g	4	18/-	12/-	6/-	Yes	No	Yes	No
Z 306	17,310 x g	10	30 / 20	30 / 12	6/8	Yes	No	Yes	Yes
Z 326 (K)	23,545 x g	16	44 / 20	30 / 12	6/4	Yes	Yes	Yes	Yes
Z 366 (K)	24,321 x g	11	24 / -	30 / 28	10/12	Yes	Yes	Yes	Yes
Z 446 (K)	24,328 x g	13	24 / 100	10/56	10 / 28	Yes	Yes	Yes	Yes
Z 36 HK	65,390 x g	10	30 / -	30 / 28	6/12	Yes	Yes	Yes	Yes



## Spectrafuge™ Mini Centrifuges and Slide Spinner

Compact in design and personal sized, the Spectrafuge Mini is ideal for microfiltration and quick spin downs from the walls and caps of microcentrifuge tubes while the Slide Spinner is designed for drying microarray slides before scanning.

The Spectrafuge Mini is supplied with interchangeable rotors and adapters to accommodate 1.5/2.0 mL, 0.5 mL and 0.4 mL tubes as well as 0.2 mL strips and individual tubes. The rotors are easily interchanged.

The Slide Spinner dries two a in as little as 10 seconds for quality imaging and screening results. The slides are placed into cassettes that catch all liquid without splashing. Cassettes are reuseable.

Both centrifuges feature a translucent lid that pivots on a durable stainless steel hinge pin. A switch on the side of the centrifuge starts and stops operation. Alternatively, with the switch in the "on" position, the centrifuge can be started and stopped by closing and opening the lid.

The Spectrafuge Mini is available in five different lid colors: gray, blue, teal, purple and red, to allow you to personalize your lab.





Slide Spinner

1	SPECIFICATIONS	Spectrafuge Mini	Slide Spinner		
ı	Maximum speed/RCF	6,000 rpm/2,000 x g <sup>1</sup>	4000 rpm/500-850 x g		
	Maximum capacity	2 x 0.2 mL strips or 6 x 1.5/2.0 mL	2 standard slides		
	Dimensions (W x D x H)	5.9 x 5.9 x 4.6 in/15 x 15 x 11.7 cm	5.9 x 5.9 x 4.6 in/15 x 15 x 11.7 cm		
	Weight	1 lb/0.45 kg	1 lb/0.45 kg		
	Electrical	120V~, 60 Hz or 230V~, 50 Hz	120V~, 60 Hz or 230V~, 50 Hz		
	<sup>1</sup> Average max rcf in the strip tube rotor is 1,177 x g				

CAT NO.	DESCRIPTION
C1301*	Spectrafuge Mini complete with 1.5/2.0 mL rotor, strip tube rotor, 0.5 mL and 0.4 mL adapters, smoke gray lid, 120V
C1301-B*	Spectrafuge Mini, as above, blue lid, 120V
C1301-T*	Spectrafuge Mini, as above, teal lid, 120V
C1301-P*	Spectrafuge Mini, as above, purple lid, 120V
C1301-R*	Spectrafuge Mini, as above, red lid, 120V
C1300-RT	Replacement rotor for 6 x 1.5/2.0 mL tubes
C1300-RTS	Replacement rotor for 0.2 mL strip tubes or individual 0.2 mL tubes
C1205	Individual adapters for 0.5/0.6 mL tubes, pk of 6
C1206	Individual adapters for 0.4/0.25 mL tubes, pk of 6
C1222	Individual adapters for 0.2 mL thermal cycling tubes, pk of 6
C1303-T*	Slide Spinner with two slide drying cassettes, 120V
C1303-SC	Extra cassettes for Slide Spinner centrifuge, pk of 2

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK to the end of the catalog number.



#### **Prism Mini**

Labnet's approach to provide innovative and feature rich lab equipment is proven in the Prism Mini Centrifuge. Reliable and easy-to-use, the Prism Mini is compact and economical, allowing each workstation to be equipped with a "personal" centrifuge.

The Prism Mini can be used for a wide range of molecular biology separations and quick spins. The centrifuge was designed to be extremely compact with an exceptionally small footprint. It includes 2 quick release interchangeable rotors, which spin up to 6000 rpm's. An electronic brake provides quick deceleration and the self opening lid allows for easy sample access, both reducing handling time.

The Prism Mini's maintenance-free drive is remarkably quiet and the unique design allows for excellent air-flow, to protect temperature-sensitive samples.



#### **SPECIFICATIONS**

Capacity: 8 x 1.5/2.0mL rotor and 4 x .2 mL strips

Rotor Speed: 6000 rpm G Force: 2000 x G

Dimensions: 5.2 x 5.2 x 4.4 inch / 13.2 x 13.2 x 11.2 cm

Weight: 1.2 lbs / .55 kg
Electrical: 120V or 230V, 50/60Hz

CAT NO.	DESCRIPTION
C1801	Prism Mini Centrifuge, 120V
C1801-230V-EU	Prism Mini Centrifuge, 230V, EU Plug
C1801-230V-UK	Prism Mini Centrifuge, 230V, UK Plug
C1205-8	0.5/0.6mL Individual tube adapter, pk of 8
C1206-8	0.4/0.25mL Individual tube adapter, pk of 8
C1222-8	0.2mL Individual tube adapter, pk of 8

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## MPS 1000 Mini Plate Spinner Centrifuge

Labnet's MPS 1000 Mini Plate Spinner is the first centrifuge designed specifically for quick and easy centrifugation of samples in PCR plates or microplates.

Centrifuges that accept microplates are typically larger units that take up valuable space on the bench. The unique design of the Mini Plate Spinner, results in a compact centrifuge that has an extremely small footprint - just 6 x 6 in. Two standard microplates are loaded through a slot in the top of the unit. Sealed plates are loaded vertically - surface tension keeps samples in place so there is no danger of spilling samples.

Upon closing the lid of the unit, the rotor quickly accelerates the microplates to 2,500 rpm. Pressing the open button engages the brake and brings the rotor to a stop. For temperature sensitive applications, the Plate Spinner may be used in a cold room.



#### **SPECIFICATIONS**

Capacity 2 standard PCR or microtiter plates

Rotor Speed 2,500 rpm G Force 500 x G Ambient operating range 4° to 35°C

Dimensions (W x D x H) 6 x 6 x 7 in/15.24 x 15.24 x 17.78 cm

Weight 3.3 lb/1.5 kg

Electrical 100, 120 or 230V, 50/60Hz

CAT NO.	DESCRIPTION
C1000*	MPS 1000 Plate Spinner centrifuge, 120V
C1000-ADAPT	MPS 1000 PCR Support Plate for tubes and half plates

\*To order 230V units add-230V to the end of the catalog number. 230V product includes both EU and UK power cords Add -100V when ordering 100V units



## Spectrafuge<sup>™</sup> 16M

CSA Compliant

The Spectrafuge 16M is the perfect high speed compact microcentrifuge. Producing a maximum of  $16,000 \times g$ , it is the ideal unit for DNA applications. A brushless, maintenance free motor provides extremely fast acceleration and deceleration of the 18-place rotor and makes the Spectrafuge 16M one of the quietest microcentrifuge in its class.

Speed and time are set with the control knobs on the front panel of the unit. A "Quick" button allows for momentary runs. A continuous flow of ambient air through the rotor chamber keeps the rotor and samples cool. For applications requiring sub-ambient temperatures, the Spectrafuge 16M may be operated in a cold room.

The Spectrafuge 16M is supplied complete with an 18 place rotor for 1.5/2.0 mL tubes. Smaller tubes are accommodated by adapters (sold separately). The optional Strip-Spin<sup>TM</sup> rotor adapter holds two 8 x 0.2 mL strips, typically used for PCR.



1,000 to 14,000 rpm	
16,000 x g	
18 x 1.5/2.0 mL	
1 - 30 min or continuous	
"Quick" button for momentary operation	
4° to 35°C	
8.25 x 8.9 x 7.6 in/21 x 23 x 19.3 cm	
10 lb/4.5 kg	
120V~ or 230V~, 50/60 Hz	

CAT NO.	DESCRIPTION
C0160*	Spectrafuge 16M Microcentrifuge, standard gray, 120V
C0160-SS	StripSpin adapter for 0.2 mL tubes and strips. Fits on standard rotor
C1205	Individual adapters for 0.5/0.6 mL tubes, pk of 6
C1206	Individual adapters for 0.4/0.25 mL tubes, pk of 6
C1222	Individual adapters for 0.2 mL thermal cycling tubes, pk of 6

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.

## Spectrafuge<sup>™</sup> 24D

The Spectrafuge 24D combines innovations such as a unique, easy access rotor, exclusive multi-flow air cooling system and high performance drive with a digital microprocessor that precisely regulates operation.

Parameters are selected with two "smart" knobs and values are shown on large, easy to read, LED displays. Speed can be set and displayed in rpm or g-force while runs may be timed, continuous or momentary.

The unique design of the 24-place aluminum rotor allows easy access to the tops of the tubes. An optional StripSpin<sup>™</sup> adapter fits onto the rotor for spinning 0.2 mL tubes and strips. A powerful, brushless motor quickly accelerates the rotor to set speed.

Air enters the centrifuge through vents on the back of the housing and is circulated in multiple directions to maximize cooling. The result is a cool running microcentrifuge that keeps samples close to ambient temperature, even during extended runs at maximum speed. For samples that require below ambient temperatures, the Spectrafuge 24D may be used in a cold room.



#### **SPECIFICATIONS**

Speed range 500 to 13,300 rpm

Maximum RCF 16,300 x g

Maximum capacity 24 x 1.5/2.0 mL

Timer 1 to 30 minutes or continuous

"Quick" button for momentary operation

Ambient operating range 0° to 40°C

Dimensions (W x D x H)  $9.25 \times 11.5 \times 8.5 \text{ in} / 23.5 \times 29.3 \times 21.6 \text{ cm}$ 

Weight 18 lb/8.1 kg

Electrical 120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION
C2400*	Spectrafuge 24D digital microcentrifuge, standard gray, 120V
C2400-B*	Spectrafuge 24D digital microcentrifuge, blue accents, 120V
C2400-T*	Spectrafuge 24D digital microcentrifuge, teal accents, 120V
C2400-P*	Spectrafuge 24D digital microcentrifuge, purple accents, 120V
C2400-R*	Spectrafuge 24D digital microcentrifuge, red accents, 120V
C2400-SS	StripSpin adapter for 0.2 mL tubes and strips. Fits onto standard rotor
C1205	Individual adapters for 0.5/0.6 mL tubes, pk of 6
C1206	Individual adapters for 0.4/0.25 mL tubes, pk of 6
C1222	Individual adapters for 0.2 mL thermal cycling tubes, pk of 6

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both, EU and UK power cords.



## **Prism™ and Prism R Microcentrifuges**

The Prism and Prism R are the premier models to Labnet's microcentrifuge line. These two units feature powerful brushless motors and an intuitive control panel.

The Prism R is the refrigerated model that incorporates a powerful cooling system that maintains temperatures as low as -10°C and can reach 4°C in less than 8 minutes. The Prism is the air-cooled model, which was designed to keep samples close to ambient temperature, even when operating at maximum speed. It can also be used in a cold room.

Speed in both units is easily set and displayed in either rpm or rcf. Operation of the units can be timed, continuous or momentary, using the "Quick" button. Vibration free operation is ensured by an isolation system. In the event of a significant imbalance, operation of the centrifuge is automatically stopped for safety. Deceleration at the end of a run is very quick, but will not disrupt samples.

Both of these centrifuges are supplied with a uniquely designed  $24 \times 1.5/2.0 \, \text{mL}$  rotor that allows easy access to the tops of the sample tubes. Individual tube slots in the solid aluminum rotor support tubes along their length and contain the sample in the event of tube failure. Adapters are available for smaller tubes as well as PCR strips. The rotor is seated on a tapered shaft which facilitates easy removal for cleaning and autoclaving.





SPECIFICATIONS	Prism	Prism R
Speed range	500 to 15,000 rpm	500 to 13,500 rpm
Maximum RCF	21,200 x g	17,135 x g
Maximum capacity	24 x 1.5/2.0 mL	24 x 1.5/2.0 mL
Γimer	0.5 to 99 minutes or continuous	0.5 to 99 minutes or continuous
	"Quick" button for momentary operation	"Quick" button for momentary operation
Temperature range	N/A	-10° to 40°C
Dimensions (W x D x H)	9.45 x 13.8 x 7.48 in/24 x 35 x 19 cm	10.9 x 17.75 x 9.75 in/27.7 x 45 x 24.75 cr
Weight	21 lb/9.6 kg	44 lb/20 kg
Electrical	120V~, 60 Hz or 230V~, 50 Hz	120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION
C2500*	Prism air-cooled microcentrifuge with 24 place rotor, 120V
C2500-R*	Prism R refrigerated microcentrifuge with 24 place rotor, 120V
C2400-SS	StripSpin adapter for 0.2 mL tubes and strips
C1205	Individual adapters for 0.5/0.6 mL tubes, pk of 6
C1206	Individual adapters for 0.4/0.25 mL tubes, pk of 6
C1222	Individual adapters for 0.2 mL thermal cycling tubes, pk of 6

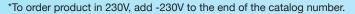
<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.

## Z 216 M and Z216 MK2 Microcentrifuges

The Hermle Z 216 M and Z 216 MK2 are setting new standards in the high speed microcentrifuge class, capable of centrifuging up to 44 x 1.5 / 2.0 ml at each run. Due to their remarkably small footprint, they fit perfectly on a crowded bench top and their quiet operation is ideal for today's busy labs. The control panel of the Z 216 series features an easy to read LCD with one ergonomic adjustment knob for easy setting of parameters. Speed can be set and viewed in both rpm and rcf. Preselection of the rotor code provides the proper g-force conversion, while acceleration and deceleration can be set to 10 different ratings. Up to 99 sets of parameters may be stored in memory and quickly recalled for repetitive runs. Powerful refrigeration controls temperature within the 216-MK2 from -20° to 40°C and keeps samples at temperatures as low as 4°C during a continuous run at 20,000 x g. The "Quick COOL" feature allows for the rotor and chamber to be quickly precooled before a run from room temperature to +4°C in under 10 minutes. Safety features include a rugged motorized locking system and software, which incorporates an imbalance identification system with automatic shutoff. There are eight rotor options that can be used interchangeably between the 216-M and 216-MK2, including the 12 x 5mL rotor used to spin down 5mL microcentrifuge tubes.

SPECIFICATIONS	Z216 M	Z216 MK2
Maximum Speed:	15,000 min-1	15,000 min-1
Maximum RCF:	21,380 x g	21,380 x g
Maximum volume:	44 x 1.5 / 2.0 ml	44 x 1.5 / 2.0 ml
Speed range:	200 - 15,000 min-1	200 - 15,000 min-1
Temperature range		-20°C to 40°C
Running time:	59 min 50 s / 10 s increments	99 h 59 min 50 s / 1 min increments
Dimensions (W x H x D):	28 x 29 x 39 cm / 11 x 11.5 x 15.3 in	28 x 29 x 55 cm / 11 x 11.5 x 21.6 in
Weight:	17 kg / 37 lbs	35 kg / 77 lbs
Electrical:	280 W	560 W

CAT NO.	DESCRIPTION
C0216-M*	Non-refrigerated microcentrifuge, 120V
C0216-MK2*	Refrigerated microcentrifuge, 120V
C0216-24-V2	24 x 1.5/2.0mL, max 15,000 rpm/21,380 x g
C0216-24H-V2	24 x 1.5/2.0mL with hermetically sealed lid, max 15,000 rpm/21,380 x g
C0216-30H-V2	30 x 1.5/2.0mL, max 13,500 rpm/19,150 x g
C0216-44-V2	44 x 1.5/2.0mL, max 13,500 rpm/17,720 x g
C0216-64-V2	64 x 1.5/2.0mL, max 13,500 rpm/16,700 x g
C0216-12.5-V2	12 x 5mL reaction tubes, max 14,500 rpm/19,974 x g
C0216-38-V2	4 x 8 PCR strip tubes, 15,000 rpm/15,342 x g
C0230-58-V2	24 x capillaries for Z216M only, 12,000 rpm/14,968 x g
701.015	1.5/2.0mL reaction tube adapter for C0216-12.5-V2 rotor
701.016	1.0mL cryo tube adapter for C0216-12.5-V2 rotor
701.017	1.8mL cryo tube adapter for C0216-12.5-V2 rotor





## **Z 100 A Clinical Centrifuge**

The Z 100 A Clinical Centrifuge is suitable for a variety of applications in the clinical setting or in the research laboratory.

The fixed angle rotor accepts 6 x 15 mL or 10 mL tubes directly. Optional adapters can be purchased to accommodate smaller tubes, including most common blood draw tubes.

A clear lid allows for visualization of the rotor. For safety, power is cut to the unit when the centrifuge lid is opened. The rugged ABS housing adds durability to the centrifuge and makes cleaning easier.

The Z 100 A can be used in a cold room for subambient applications.



#### **SPECIFICATIONS**

Speed range 1,000 to 4,000 rpm

Maximum RCF 1,967 x g

Maximum capacity 6 x 10/15 mL round or conical Timer, Analog 1 to 30 minutes or continuous

Dimensions (W x D x H) 11 x 13.75 x 10.2 in./26.5 x 33 x 24.5 cm

Weight 12 lb/5.5 kg
Electrical 120V~, 50-60 Hz

CAT NO.	DESCRIPTION
C0100-A	Z 100 A Clinical Centrifuge with 6 x 10/15 mL rotor, 120V
C0200-17A	Adapters for 5 mL (13 x 75 mm) and 7 mL (13 x 100 mm) tubes, pk of 6

\*Only available in 120V

## Spectrafuge<sup>™</sup> 6C



The Spectrafuge 6C has been designed for quick production of PPP (platelet poor plasma) or PRP (platelet rich plasma) as well as other applications in the clinical and research laboratory.

The fixed angle rotor of the Spectrafuge 6C holds up to 6 x 15 mL conical tubes of maximum tube height of 120mm, and with adapters will accommodate most common blood draw tubes. Variable speed allows for a variety of applications to be performed. A timer controls operation from 30 seconds to 30 minutes or can be set to "hold" for continuous operation.

The control panel of the centrifuge features easy turn knobs and large digital displays for time and speed. During operation of the centrifuge, the lid is locked. Once the rotor has come to a stop, the lid knob can be pressed to unlock the lid and gain access to the samples.

A small footprint allows the Spectrafuge 6C to fit on even the most crowded bench. Its rugged construction will provide years of trouble free operation. The centrifuge is cold room compatible.



#### **SPECIFICATIONS**

Speed range	300 to 6,500 rpm

Maximum RCF 4,000 x g
Maximum capacity 6 x 15 mL

Timer 5 - 30 min or continuous

Dimensions (W x D x H) 8.25 x 7 x 9.5 in/21 x 18 x 24 cm

Weight 10 lb/4.5 kg

Electrical 120V or 230V~, 50/60 Hz

CAT NO.	DESCRIPTION
C0060*	Spectrafuge 6C Centrifuge with 6 x 10/15 mL rotor, 120V
C0200-17A	Adapter set for 5, 7 and 10 mL tubes, pk of 6

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.



#### Z 206 A

**CSA** Compliant

The Hermle Z 206 A is a compact centrifuge ideal for use in both research and clinical laboratories.

The centrifuge's modern control panel features a large digital display and easy turn knob for setting parameter values. The microprocessor maintains precise control over operation of the centrifuge offering ten levels of acceleration and deceleration settings and an imbalance sensor. Speed can be set or displayed in rpm or g-force with both values visible at all times. Inputting a rotor code allows more exact g-force conversion values.

Three fixed angle rotors are available for use with the Z 206 A. A 12 x 15 mL rotor and 6 x 50 mL rotor both accept round and conical bottom tubes for durability. Both rotors are made of polypropylene, which allows them to be lightweight yet durable. The third angle rotor accepts  $18 \times 1.5/2.0$  mL tubes. In addition, the Z 206 A will also accommodate a swing out rotor for  $6 \times 5$  mL tubes. Optional adapters accommodate various tube sizes including standard conical tubes and round bottom blood tubes. The centrifuge is cold room compatible.





#### **SPECIFICATIONS**

Speed range 200 to 6,000 rpm

Maximum RCF 4,185 x g

Maximum capacity 12 x 15 mL or 6 x 50 mL

Timer 10 seconds to 99 min 59 secs or continuous

Dimensions (W x D x H) 11 x 14.6 x 10.2 in/28 x 37 x 26 cm

Weight 30 lb/15 kg

Electrical 120V~, 60 Hz or 230V~, 50 Hz



C0200-18



C0200-97

CAT NO.	DESCRIPTION
C0206-A*	Z 206 A Compact, general purpose centrifuge without rotor, 120V
C0200-96	Fixed angle rotor, 12 x 15 mL, max 6,000 rpm/4,180 x g
C0200-17A	Combination adapter for 5, 7 and 10 mL in 15 mL rotor, pk of 6
C0200-97	Fixed angle rotor, 6 x 50 mL, max 6,000 rpm/3,820 x g
C0232-8B	Adapter for 10 and 15 mL conical and round bottom in 50 mL rotor, pk of 6
C0232-9B	Adapter for 5 mL (12 x 75 mm) and 7 mL (13 x 100 mm) in 50 mL rotor, pk of 6
C0230-41	Adapter cushion for 12 x 75 mm tubes, pk of 12
C0200-18	Swing out rotor, 6 x 5 mL, max 3,500 rpm/1,450 x g
C0200-1	Angle rotor, 18 x 1.5/2.0 mL, max 6,000 rpm/2,930 x g
C0200-2	Combination rotor, 2 x 15mL and 2 x 50mL, max 6,000 rpm/3,820 x g
C1205	Individual adapters for 0.5/0.6 mL tubes, pk of 6
C1206	Individual adapters for 0.4/0.25 mL tubes, pk of 6
C1222	Individual adapters for 0.2 mL thermal cycling tubes, pk of 6

<sup>\*</sup>To order product in 230V, add -230V to the end of the catalog number.

# Hermle Cyto-System...applications for the Z 306, Z 326 and Z 326 K Centrifuges

The Hermle Cyto-System was developed for sedimentation of cells from liquid solution onto microscope slides. Cytology sedimentations occur at low rcf values between 20 and 400 x g, which is equivalent to speeds between 300 and 3000 rpm, resulting in excellent nuclear presentation. The Cyto-System includes special buckets and lids that can adapt to the standard 4 x 100ml swing-out rotor used on a variety of centrifuge models, including the Z306, Z326 and Z326-K. The accessories and centrifuges are sold separately.

#### Step by Step Procedure:





Insert the microscope slide into the carrier.





Place a filter card onto the microscope slide.





Put the cyto container onto the filter card.





Place the micro tube (with bottom hole) into the container chamber, and fill it with the sample fluid.



## Step

Insert the carriers including the container into the bucket.



Step

Put the buckets into the centrifuge rotor immediately.





If necessary, close the container with the lid.

CAT NO.	DESCRIPTION
C0326-72	Rotor, 4 x 100mL swing out
C0323-010	Buckets
C0323-064	Cyto Container, 2 x 1.5mL cylindrical
C0323-065	Cyto Container, 2 x 3mL conical
C0323-062	Carrier
C0323-085	Filter Cards, cylindrical
C0323-086	Filter Cards, conical
C0323-103	Lid



#### **Z** 306

The Hermle Z 306 centrifuge is the most compact of the universal units in the Hermle line. This centrifuge accommodates microplates and tubes up to 100 mL in swing-out and fixed angle rotors. A broad speed range and high g-force make the Z306 ideal for applications from clinical research to molecular biology.

A modern design control panel displays both preset and actual parameters with a dial for simple one handed operation. Precise centrifugation is obtained with 10 rpm/rcf increments and 10 acceleration or deceleration levels to protect fragile samples. The microprocessor allows up to 99 programs to be saved with simple program retrieval.

Improperly loaded rotors trigger the safety imbalance detection system which stops operation of the centrifuge. Other safety features include automatic rotor recognition with over speed protection and a motor driven lid lock system.



#### **SPECIFICATIONS**

Speed range	10 to 13,500 rpm
Maximum RCF	17,319 x g
Maximum capacity	4 x 100 mL
Timer	10 sec. to 99 hr. and 59 sec.
Dimensions (W x D x H)	14 x 18.6 x 13 in/35.5 x 47.4 x 33 cm
Weight	59.4 lb/27 kg
Electrical	120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION
C0306*	Z 306 Universal Non-Refrigerated Centrifuge, 120V

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number.

## **Fixed Angle Rotors for Z 306**

CAT NO.	DESCRIPTION	
C0326-97	6 x 50mL, max 6,000 rpm/3,820 x g	
C0232-8B	15mL conical/round tubes, pk/6	
C0232-9B	5/7mL adapter, pk/6	
C0230-41	Cushion for C0232-9B, pk/12 for 12 x 75 mm tubes	
C0036-19	30 x 15mL, max 4,500 rpm/2,830 x g	
C0200-10	10mL round, pk/2	
C0200-17A	Combination adapter for 5, 7 and 10mL tubes, pk/6	

## Fixed Angle Rotors for Z 306

CAT NO.	DESCRIPTION	
C0326-96	12 x 15mL, max 6,000 rpm/4,180 x g	
C0200-17A	Combination adapter for 5, 7 and 10mL tubes, pk/6	
C0230-20	1.5mL adapter, pk/4	
C0200-05	5/7mL vacu., pk/2	
C0036-17	30 x 1.5/2.0mL, max 12,000 rpm/15,133 x g	
C0326-24	24 x 1.5/2.0mL, max 13,500 rpm/17,319 x g	
C0326-24H	Sealed angle rotor 24 x 1.5/2.0mL, max 13,500 rpm/17,319 x g	
C1205	Adapters for 0.5/0.6mL tubes, pk/6	
C1206	Adapters for 0.4/0.25mL tubes, pk/6	
C1222	Adapters for 0.2mL thermal cycling tubes, pk/6	

## **Swing out Rotors for Z 306**

CAT NO.	DESCRIPTION	
C0326-72C	4 x 100mL, max 4,000 rpm/2,486 x g, with buckets	
C0320-720	1 x 100mL insert, pk/2	
C0320-728	1 x 50mL conical insert, pk/2	
C0320-722	1 x 50mL round insert, pk/2	
C0320-726	2 x 15mL conical insert, pk/2, sealing lid does not fit	
C0320-726X	1 x 15mL conical insert, pk/2	
C0320-724	4 x 10mL insert, pk/2	
C0320-730	4 x 5/7mL insert, pk/2	
C0320-721	5 x 1.5mL insert, pk/2	
C0320-72B	Sealing lid for buckets, each	
C0326-72	4 x 100mL, max 4,000 rpm/2,486 x g, without buckets	
C0326-72A	3 x 15mL bucket, pk/2	
C0326-72B	2 x 50mL bucket, pk/2	
C0326-12	4 x 100mL, max 4,500 rpm/3,350 x g	
C0300-120	1 x 100mL bucket, pk/2	
C0300-122	1 x 50mL conical bucket, pk/2	
C0300-123	2 x 15mL conical bucket, pk/2	
C0300-124	7 x 10mL round bucket, pk/2	
C0300-126	7 x 5/7mL bucket, pk/2	
C0300-127	10 x 1.5mL bucket, pk/2	
C0036-16	2 x 3 microplates, max 4,500 rpm/2,740 x g	
C0320-504	Adapter for 48 x 1.5/2.0mL tubes, pk/2	



#### Z 326/326 K Series

CSA Compliant

These high performance centrifuges are capable of high speed operation, expanding their use to applications in molecular biology and basic research.

The Z 326 series centrifuge has a capacity up to 4 x 100 mL with 16 different rotor options. Capable of 99 memory programs, this centrifuge has a large LCD display showing both pre-selected and actual run parameters with 10 different acceleration and deceleration levels. Run parameters, including rotor type can be saved to 10 program memories. Braking intensity can be set to ten different levels.

Both centrifuges are equipped with motor driven lid lock systems to reduce the force to activate lock. Speed is set and displayed in RPM or RCF. Proper calculation of g-force with different size tubes and adaptors is ensured by a radius correction feature. A maintenance-free induction drive provides quiet operation and quick accceleration and deceleration.

Safety features incorporated into the centrifuges include automatic rotor recognition, over speed protection and imbalance sensors.



Z 326 K

SPECIFICATIONS	<b>Z</b> 326	Z 326 K
Speed range	200 to18,000 rpm	200 to 18,000 rpm
Maximum RCF	23,545 x g	23,545 x g
Maximum capacity	4 x 100 mL	4 x 100 mL
Timer	10 s to 99 hr 59 s	10 s to 99 hr 59s
	"Quick" button	"Quick" button
Temperature range	NA	-20° to +40°C
Dimensions (WxDxH)	15.7 x 18.9 x 14.1 in	15.7 x 27.6 x 14.2 in
	40 x 48 x 36 cm	40 x 70 x 36 cm
Weight	94.86 lb/43 kg	132 lb/60 kg
Electrical	120V~, 60 Hz	120V~, 60 Hz
	230V~, 50 Hz	230V~, 50 Hz

CAT NO.	DESCRIPTION
C0326*	Z326 High Performance Non-Refrigerated Centrifuge, 120V
C0326-K*	Z326-K High Performance Refrigerated Centrifuge, 120V

<sup>\*</sup>To order product in 230V, add -230V to the end of the catalog number.

## Fixed Angle Rotors for Z 326/326 K Series

CAT NO.	DESCRIPTION
C0326-78	6 x 85mL, max 11,000 rpm/13,933 x g (Z326); 13,000 rpm/20,986 x g (Z326K)
C0326-78H	Sealed angle rotor, same speed and capacity as above
C0036-18	6 x 85mL, max 9,000 rpm/10,414 x g
C0036-20	4 x 85mL, max 12,000 rpm/14,811 x g
C0360-94D	50mL conical, pk/2
C0360-94A	50mL round, pk/2
C0360-94B	30mL, pk/2
C0360-94C	15mL round, pk/2
C0360-94X	15mL conical, pk/2
C0036-56	10 x 50mL conical, max 7,500 rpm/8,170 x g, for use with serial numbers after 120V: 65135011,
	230V: 65130060 (Z326) and 120V: 66135021, 230V: 66130090 (Z326-K)
C0036-52A	1 x 15mL conical/round, pk/2
C0326-97	6 x 50mL, max 6,000 rpm/3,823 x g
C0232-8B	15mL conical/round tubes, pk/6
C0232-9B	5/7mL adapter, pk/6
C0230-41	Cushion for C0232-9B, pk/12 for 12 x 75 mm tubes
C0036-22	6 x 50mL round, max 12,000 rpm/13,523 x g
C0360-91C	30mL, pk/2
C0360-91A	16mL, pk/2
C0360-91D	15mL, pk/2
C0232-8B	15mL conical, pk/2
C0036-19	30 x 15mL, max 4,500 rpm/2,467 and 2,829 x g
C0200-10	10mL round, pk/2
C0200-17A	Combination adapter for 5, 7 and 10mL tubes, pk/6
C0326-96	12 x 15mL, max 6,000 rpm/4,185 x g
C0200-17A	Combination adapter for 5, 7 and 10mL tubes, pk/6
C0230-20	1.5mL adapter, pk/4
C0200-05	5/7mL vacu., pk/2
C0036-28	20 x 10mL, max 12,000 rpm/15,938 x g (no adapters available)



## Fixed Angle Rotors for Z 326/326 K Series

CAT NO.	DESCRIPTION
C0036-17	30 x 1.5/2.0mL, max 13,000 rpm/17,760 x g (Z326); 14,000 rpm/20,589 x g (Z326K)
C0326-24	24 x 1.5/2.0mL, max 13,000 rpm/17,760 x g (Z326); 15,000 rpm/21,381 x g (Z326K)
C0326-24H	Sealed angle rotor, same speed and capacity as above
C0036-23	12 x 1.5/2.0mL, max 18,000 rpm/23,545 x g
C1205	Adapters for 0.5/0.6mL tubes, pk/6
C1206	Adapters for 0.4/0.25mL tubes, pk/6
C1222	Adapters for 0.2mL thermal cycling tubes, pk/6

## Swing out Rotors for Z 326/326 K Series

CAT NO.	DESCRIPTION
C0326-72C	4 x 100mL, max 5,000 rpm/3,885 x g, with buckets
C0320-720	1 x 100mL insert, pk/2
C0320-728	1 x 50mL conical insert, pk/2
C0320-729	1 x 50mL round insert, pk/2
C0320-722	1 x 50mL round insert, pk/2
C0320-726	2 x 15mL conical insert, pk/2, sealing lid does not fit
C0320-726X	1 x 15mL conical insert, pk/2
C0320-724	4 x 10mL insert, pk/2
C0320-730	4 x 5/7mL insert, pk/2
C0320-721	5 x 1.5mL insert, pk/2
C0320-72B	Sealing lid for buckets, each
C0326-72	4 x 100mL, max 5,000 rpm/3,885 x g, without buckets
C0326-72A	3 x 15mL bucket, pk/2
C0326-72B	2 x 50mL bucket, pk/2
C0326-12	4 x 100mL, max 4,500 rpm/3,350 x g
C0300-120	1 x 100mL bucket, pk/2
C0300-122	1 x 50mL conical bucket, pk/2
C0300-123	1 x 15mL conical bucket, pk/2
C0300-124	7 x 10mL round bucket, pk/2
C0300-126	7 x 5/7mL bucket, pk/2
C0300-127	10 x 1.5mL bucket, pk/2
C0036-16	2 x 3 microplates, max 4,500 rpm/2,740 x g
C0320-504	Adapter for 48 x 1.5/2.0mL tubes, pk/2

#### Hermle Z 366 and Z 366 K

The Hermle Z 366 series high speed centrifuges are the perfect choice for medium throughput laboratories, offering outstanding versatility for all applications. These models feature a modern control panel with large digital display and single knob control. Users can choose from 10 different acceleration and deceleration rates and the microprocessor allows for 99 programs to be stored in memory and recalled at the touch of a button. Despite the space-saving footprint, there are 11 different swing-out or fixed angle rotors to choose from that can handle nearly every common tube type in the laboratory. The 4 x 250mL swing out rotor can accommodate up to 28 x 15mL or 12 x 50mL tubes. When using the many fixed angle rotor options, the Z366 is able to reach an impressive maximum g force of 24,321 x g. The 366 series sets the standard for universal high-powered centrifugation.



SPECIFICATIONS	Z 366	Z 366 K
Speed range:	200 to 15,000 rpm	200 to 16,000 rpm
Maximum RCF:	21,382	24,321 x g
Maximum Volume:	6 x 250 ml	6 x 250 ml
Temperature range	NA	-20°C to 40°C (Z 366-K)
Running time:	99 h 59 min / 59 min 50 s in 1 min / 10 s increments	99 h 59 min / 59 min 50 s in 1 min / 10 s increments
Dimensions (W x H x D):	43 x 36 x 51 cm / 17 x 14.2 x 20 in	72 x 36 x 51 cm / 28.5 x 14.2 x 20 in
Weight:	52 kg / 114 lbs	77 kg / 169 lbs
Power input:	520 W	785 W

CAT NO.	DESCRIPTION
C0366*	Z366 High Speed, non-refrigerated centrifuge, 120V
C0366-K*	Z366K High Speed, refrigerated centrifuge, 120V

<sup>\*</sup>To order product in 230V, add -230V to the end of the catalog number.

## Fixed Angle Rotors for Z 366 and Z 366 K

CAT NO.	DESCRIPTION
C0036-21	6 x 250mL round, max 8,000 rpm/10,017 x g
C0036-21C	1 x 50mL conical, pk/2
C0036-21B	1 x 50mL round, pk/2
C0036-21D	2 x 30mL, pk/2
C0036-21A	4 x 15mL conical, pk/2
C0036-21E	5 x 10mL, pk/2
C0036-21F	8 x 1.5/2.0mL, pk/2
C0036-18	6 x 85mL, max 11,000 rpm/15,556 x g
C0036-20	4 x 85mL, max 12,000 rpm/14,807 x g
C0360-94D	50mL conical, pk/2, rotor lid does not fit on rotor C0036-20
C0360-94A	50mL round, pk/2
C0360-94B	30mL, pk/2

## Fixed Angle Rotors for Z 366 and Z 366 K

CAT NO.	DESCRIPTION
C0360-94C	15mL round, pk/2
C0360-94C2	2 x 15mL round, pk/2, for C0036-18 rotor only
C0360-94X	15mL conical, pk/2, rotor lid does not fit on rotor C0036-20
C0036-22	6 x 50mL round, max 13,000 rpm/15,871 x g
C0360-91C	30mL, pk/2
C0360-91A	16mL, pk/2
C0360-91D	15mL, pk/2
C0232-8B	15mL conical, pk/2
C0036-52	10 x 50mL conical, max 15,000 rpm/21,382 x g (Z366); 16,000 rpm/24,321 x g (Z366K)
C0036-52A	1 x 15mL conical/round, pk/2
C0036-19	30 x 15mL, max 4,500 rpm/2,467 and 2,830 x g
C0200-10	10mL round, pk/4
C0200-05	5/7mL vacu., pk/2
C0200-17A	Combination adapter for 5, 7 and 10mL tubes, pk/6
C0036-28	20 x 10mL, max 12,000 rpm/15,777 x g (no adapters available)
C0326-24	24 x 1.5/2.0mL, max 15,000 rpm/21,382 x g (Z366); 16,000 rpm/24,321 x g (Z366K)
C0326-24H	Sealed angle rotor, same speed and capacity as above
C1205	Adapters for 0.5/0.6mL tubes, pk/6
C1206	Adapters for 0.4/0.25mL tubes, pk/6
C1222	Adapters for 0.2mL thermal cycling tubes, pk/6

## Swing out Rotors for Z 366 and Z 366 K

CAT NO.	DESCRIPTION
C0036-75	4 x 250mL, max 4,500 rpm/3,780 x g
C0036-75D	1 x 250mL, pk/2
C0036-75F	1 x 100mL, pk/2
C0036-75B	3 x 50mL round, pk/2
C0036-75C	3 x 50mL conical, pk/2
C0036-75A	7 x 15mL conical, pk/2
C0036-75E	8 x 10mL, pk/2
C0036-75G	10 x 5/7mL, pk/2
C0036-75LID	Sealing lid, each
C0036-16	2 x 3 microplates, max 4,500 rpm/2,716 x g
C0320-504	Adapter for 48 x 1.5/2.0mL tubes, pk/2
	I annot

#### Hermle Z 446 and Z 446 K



The Z446 series centrifuges are ideal for the mid- to highthroughput laboratory. With multiple swing-out and fixed angle rotor options to choose from, these centrifuges can be used for a wide range of applications from molecular and cellular biology to microplate technology. Both centrifuges accept the 4 x 750mL high-capacity swing-out rotor that is capable of spinning up to 28 x 50 mL or 56 x 15 mL conical or 72 x 15mL round bottom tubes. The microprocessor based controls are designed for efficient programming. Parameters can be quickly and conveniently set with a single rotary knob while values are shown on a large backlit LCD display. Both the Z446 and Z 446 K feature a maintenancefree induction drive motor, which is capable of reaching 26,331 x g when using the 4 x 85 ml fixed angle rotor in the refrigerated model. Safety features include a motor driven lid lock, imbalance sensor and automatic rotor identification system with over speed protection that activates immediately upon rotor insertion. 10 acceleration and deceleration rates can be programmed with the possibility of un-braked deceleration. A continuous flow of ambient air through the rotor chamber of the Z 446 prevents sample temperature from rising significantly above ambient, even during extended runs. The powerful refrigeration system in the Z 446 K provides a temperature range from -20°C to 40°C as well as a pre-cooling program.



Z 446



Z 446 K

SPECIFICATIONS	Z 446	Z 446 K
Speed range:	200 to 16,000 rpm	200 to 16,000 rpm
Maximum RCF:	26,331 x g	26,331 x g
Maximum volume:	4 x 750 ml	4 x 750 ml
Temperature range	NA	-20°C to 40°C
Running time:	59 min 50 s / 10 s increments	59 min 50 s / 10 s increments
	99 h 59 min 50 s / 1 min increments	99 h 59 min 50 s / 1 min increments
Dimensions (W x H x D):	54 x 39 x 67 cm / 21.3 x 15.4 x 26.4 in	73 x 39 x 67 cm / 28.7 x 15.4 x 26.4 ir
Weight:	79 kg / 174 lbs	111 kg / 245 lbs
Power input:	640 W	1630 W

CAT NO.	DESCRIPTION
C0446	High capacity general purpose centrifuge, non-refrigerated, 120V
C0446-K	High capacity general purpose centrifuge, refrigerated, 120V

<sup>\*</sup>To order product in 230V, add -230V to the end of the catalog number.

## Fixed Angle Rotors for Z 446 and Z 446 K

CAT NO.	DESCRIPTION
C0446-51	4 x 500mL, max 8,000 rpm/10,375 x g
C0446-51A	1 x 250mL, pk/2
C0446-51B	1 x 250mL Corning, pk/2
C0446-51C	1 x 175 or 225mL conical, pk/2
C0446-51D	1 x 50mL conical, pk/2
C0446-51E	3 x 50mL, pk/2
C0446-51F	4 x 30mL, pk/2
C0446-51G	6 x 15mL conical, pk/2
C0036-21	6 x 250mL round, max 8,000 rpm/10,017 x g
C0036-21C	1 x 50mL conical, pk/2
C0036-21B	1 x 50mL round, pk/2
C0036-21D	2 x 30mL, pk/2
C0036-21A	4 x 15mL conical, pk/2
C0036-21E	5 x 10mL, pk/2
C0036-21F	8 x 1.5/2.0mL, pk/2
C0036-18	6 x 85mL, max 11,000 rpm/15,552 x g
C0036-20	4 x 85mL, max 15,000 rpm/23,142 x g (Z446); 16,000 rpm/26,331 x g (Z446K)
C0360-94D	50mL conical, pk/2, rotor lid does not fit on rotor C0036-20
C0360-94A	50mL round, pk/2
C0360-94B	30mL, pk/2
C0360-94C	15mL round, pk/2
C0360-94C2	2 x 15mL round, pk/2
C0360-94X	15mL conical, pk/2, rotor lid does not fit on rotor C0036-20
C0446-52	10 x 50mL conical, max 10,000 rpm/14,532 x g (Z446); 10,500 rpm/16,019 x g (Z446K)
C0446-52A	1 x 15mL conical or round, pk/2
C0446-52B	1 x 7mL, pk/2, must be used in adapter C0446-52A
C0446-52C	1 x 5mL, pk/2, must be used in adapter C0446-52A
C0446-52D	1 x 1.5/2.0mL, pk/2, must be used in adapter C0446-52A
C0036-22	6 x 50mL round, max 13,000 rpm/15,871 x g
C0360-91C	30mL, pk/2
C0360-91A	16mL, pk/2
C0360-91D	15mL, pk/2
C0232-8B	15mL conical, pk/2
C0036-28	20 x 10mL, max 12,000 rpm/15,777 x g (no adapters available)



## Fixed Angle Rotors for Z 446 and Z 446 K

CAT NO.	DESCRIPTION
C0446-17	30 x 1.5/2.0mL, max 15,000 rpm/23,645 x g
C0446-87	24 x 1.5/2.0mL, max 16,000 rpm/24,328 x g
C0446-87H	Sealed angle rotor, same speed and capacity as above
C1205	Adapters for 0.5/0.6mL tubes, pk/6
C1206	Adapters for 0.4/0.25mL tubes, pk/6
C122 C0446-17	30 x 1.5/2.0mL, max 15,000 rpm/23,645 x g
C0446-17	30 x 1.5/2.0mL, max 15,000 rpm/23,645 x g
C0446-87	24 x 1.5/2.0mL, max 16,000 rpm/24,328 x g
C0446-87H	Sealed angle rotor, same speed and capacity as above
C1205	Adapters for 0.5/0.6mL tubes, pk/6
C1206	Adapters for 0.4/0.25mL tubes, pk/6
C1222	Adapters for 0.2mL thermal cycling tubes, pk/6

## Swing out Rotors for Z 446 and Z 446 K

CAT NO.	DESCRIPTION	
C0383-75-V2	4 x 500mL, max 4,000 rpm/3,434 x g(Z446);4,500 rpm/4,347 x g(Z446K),without bucket	
C0383-75D	1 x 500mL bottle, pk/2	
C0383-75E	1 x 250mL bottle, pk/2	
C0383-75C	7 x 50mL conical, pk/2, sealing lid does not fit	
C0383-75B	5 x 50mL conical, pk/2	
C0383-75A	12 x 15mL conical, pk/2	
C0383-75A-RB	14 x 15mL, pk/2	
C0383-75F	19 x 10mL, pk/2	
C0383-75G	19 x 5/7mL, pk/2	
C0383-75I	25 x 1.5/2.0mL, pk/2	
C0383-75H	3 std. microplates, pk/2	
C0383-75L	Sealing lid, each	
C0446-75	4 x 750mL, max 4,000 rpm/3,434 x g (Z446); 4,500 rpm/4,347 x g (Z446K), with bucket	
C0446-75E	1 x 250mL bottle, pk/2	
C0446-75B	5 x 50mL conical, pk/2	
C0446-75C-CB	7 x 50mL conical, pk/2, sealing lid does not fit	
C0446-75C-RB	7 x 50mL round, pk/2	
C0446-75I	8 x 30mL, pk/2	
C0446-75A-CB	14 x 15mL conical, pk/2	
C0446-75A-RB	18 x 15mL round, pk/2	
C0446-75F	21 x 10mL, pk/2	
C0446-75G	32 x 7mL, pk/2	
C0446-75J	21 x 11/13 x 65/100 mm tubes, pk/2	
C0446-75K	18 x 15/16 x 75/100 mm tubes, pk/2	
C0446-75L	38 x 16 x 92 mm tubes, pk/2	
C0446-75H	3 std. microplate, pk/2	
C0446-75-LIDRND	Rotor lid, each	
*no bucket insert nee	*no bucket insert needed for 500 & 750 mL bottles	
C0446-16	2 x 3 microplates, max 4,500 rpm/2,716 x g	
C0320-504	Adapter for 48 x 1.52.0mL tubes, pk/2	





#### **Z** 36 HK

The Hermle Z 36 HK is a refrigerated large capacity centrifuge capable of high speed operation. With a powerful induction drive motor, it provides the highest speeds of all Labnet centrifuge models, reaching 30,000 rpm or 65,390 x G.

Safety features include a motorized lid lock, overspeed protection and imbalance detection system. With over 10 different swing-out or fixed angle rotors available, the Z 36 HK can accommodate nearly every common tube type in the laboratory, up to 250 mL. Additionally, this model has a robust refrigeration system which allows for precise temperature management down to -20°C.

All of the features of this super speed centrifuge are offered in a space-saving bench top footprint, making the Z 36 HK ideal for molecular as well as other common laboratory applications.



SPECIFICATIONS	Z 36 HK
Speed range	200 to 30,000 rpm
Maximum RCF	65,390 x g
Maximum capacity	6 x 250 mL
Timer	30 seconds to 99 minutes 59 seconds
	"Quick" button for momentary operation
Temperature range	-20° to +40°C
Dimensions (W x D x H)	28 x 16.5 x 20 in/71.1 x 41.9 x 50.8 cm
Weight	200 lb/91 kg
Electrical	120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION
C0036-HK*	Z36 HK High Performance Refrigerated Centrifuge, 120V

<sup>\*</sup>To order product in 230V, add -230V to the end of the catalog number.

## Fixed Angle Rotors for Z 36 HK

CAT NO.	DESCRIPTION
C0036-21SC	6 x 250mL round, max 10,000 rpm/15,650 x g
C0036-21C	1 x 50mL conical, pk/2
C0036-21B	1 x 50mL round, pk/2
C0036-21D	2 x 30mL, pk/2
C0036-21A	4 x 15mL conical, pk/2
C0036-21E	5 x 10mL, pk/2
C0036-21F	8 x 1.5/2.0mL, pk/2

## Fixed Angle Rotors for Z 36 HK

CAT NO.	DESCRIPTION	
C0036-18SC	6 x 85mL, max 12,000 rpm/18,510 x g	
C0036-20SC	4 x 85mL, max 20,000 rpm/41,140 x g	
C0360-94D	50mL conical, pk/2, rotor lid does not fit on rotor C0036-20SC	
C0360-94A	50mL round, pk/2	
C0360-94B	30mL, pk/2	
C0360-94C	15mL round, pk/2	
C0360-94X	15mL conical, pk/2, rotor lid does not fit on rotor C0036-20SC	
C0036-22SC	6 x 50mL round, max 21,000 rpm/41,410 x g	
C0360-91C	30mL, pk/2	
C0360-91A	16mL, pk/2	
C0360-91D	15mL, pk/2	
C0232-8B	15mL conical, pk/2	
C0036-19SC	30 x 15mL, max 4,500 rpm/2,830 x g	
C0200-10	10mL round, pk/4	
C0200-17A	Combination adapter for 5, 7 and 10mL tubes, pk/6	
C0036-28SC	20 x 10mL, max 16,000 rpm/28,040 x g (no adapters available)	
C0036-17SC	30 x 1.5/2.0mL, max 20,000 rpm/42,030 x g	
C0036-23SC	12 x 1.5/2.0mL, max 30,000 rpm/65,390 x g	
C1205	Adapters for 0.5/0.6mL tubes, pk/6	
C1206	Adapters for 0.4/0.25mL tubes, pk/6	
C1222	Adapters for 0.2mL thermal cycling tubes, pk/6	

## Swing out Rotors for Z 36 HK

CAT NO.	DESCRIPTION		
C0036-75SC	4 x 250mL, max 4,500 rpm/3,780 x g		
C0036-75D	1 x 250mL, pk/2		
C0036-75F	1 x 100mL, pk/2		
C0036-75B	3 x 50mL, pk/2		
C0036-75C	3 x 50mL conical, pk/2		
C0036-75A	7 x 15mL conical, pk/2		
C0036-75E	8 x 10mL, pk/2		
C0036-75G	10 x 5/7mL, pk/2		
C0036-75LID	Sealing lid, each		
C0036-16SC	2 x 3 microplates, max 4,500 rpm/2,740 x g		
C0320-504	Adapter for 48 x 1.5mL tubes, pk/2		
	Labret International.		

## **Sieva-2 Filtration Centrifuge**



The Hermle Sieva-2 Filtration centrifuge offers a wide range of applications in chemical, pharmaceutical, biotech, food processing and research laboratories. The two options of either perferated or non-perforated rotor baskets make the Sieva-2 ideal for filtration or solid/liquid sedimentation (decantation). The rotors are designed with cone-shaped centers to guarantee an even spread of filtered material and rinsing agent. The powerful induction drive motor reaches speeds of 10,000 rpm or 7,825 x g.



#### **SPECIFICATIONS**

Speed range 250 to 10,000 rpm

Maximum RCF 7,825 x g Maximum capacity 500 mL

Timer 1 to 60 min. in increments of 1 min. or continuous run

Temperature Range N/A

Dimensions (W x D x H) 16 x 14 x 19.5 in/39 x 36 x 49 cm

Weight 55 lbs/25 kg

Electrical 120V/60 Hz, or 230V/50 Hz

CAT NO.	DESCRIPTION
C0300-SIEVA-2	Sieva-2 Filtration Centrifuge, 120V
C0300-SIEVA-2EU	Sieva-2 Filtration Centrifuge, 230V
C0300-S-PERF	Sieva-2 Perforated rotor
C0300-S-NONPERF	Sieva-2 Non-perforated rotor
C0300-SIEVA-LID	Lid, for perforated rotor basket



## **BioPette™ Plus Autoclavable Single Channel Pipettes**

These precision pipettes are designed with a finger hook for exceptional comfort and easy single-hand operation. Lightweight and well balanced, the BioPette Plus pipettes fit comfortably in either the right or left hand and offer very low plunger forces. Chemically resistant, maintenance-free seals and finely polished pistons provide unsurpassed accuracy sample after sample. The continuously adjustable, digital micrometer is slightly recessed with a volume lock to prevent unintentional change while pipetting.

For convenience, volume can also be adjusted by turning the push-button. Ergonomically positioned, the tip ejector reduces fatigue during prolonged use.

BioPette Plus pipettes have a universal shaft that will accept most pipette tips. The stainless steel tip ejector is adjustable to accommodate various styles of tips and removable for pipetting into narrow tubes. The BioPette Plus pipettes are fully autoclavable.

Eight models cover the volume range from 0.1  $\mu$ l to 10,000  $\mu$ l. A calibration tool is included with each unit for easy in-lab recalibration. Pipettes are individually tested and supplied with a certificate of quality.

ACCURACY AND PRECISION				
Volume Range	Accuracy	Precision		
0.1-2.0 μl	±12 to ±1.5%	≤6.0 to ≤0.7%		
0.5-10 μl	±4.0 to ±0.5%	≤2.8 to ≤0.4%		
2-20 µl	±3.0 to ±0.8%	≤1.5 to ≤0.3%		
10-100 μl	±1.6 to ±0.8%	≤0.8 to ≤0.2%		
20-200 μl	±1.2 to ±0.6%	≤0.6 to ≤0.2%		
100-1,000 μΙ	±1.6 to ±0.6%	≤0.40 to ≤0.15%		
1,000-5,000 µl	±0.6 to ±0.5%	≤0.25 to ≤0.15%		
1,000-10,000 µl	±2.5 to ±0.5%	≤0.6 to ≤0.2%		





CAT NO.	VOLUME RANGE	TIP		
P3942-2*	0.1-2.0 μΙ	10 μΙ		
P3942-10*	0.5-10 µl	10 μΙ		
P3942-20*	2-20 µl	200 μΙ		
P3942-100*	10-100 μΙ	200 μΙ		
P3942-200*	20-200 µl	200 μΙ		
P3942-1000*	100-1,000 μl	1,000 μΙ		
P3942-5000*	1,000-5,000 μΙ	5,000 μΙ		
P3942-10000*	1,000-10,000 μΙ	10,000 μΙ		
P3985-P	Universal carousel stand for	Universal carousel stand for 6 pipettes		
P3989	Universal linear rack for 6 p	Universal linear rack for 6 pipettes		
P3982	4 position linear plexi stand	4 position linear plexi stand		
P3986	Universal shelf clip for 3 pipettes			
P3942-SK4	BioPette Plus Four Pack st	BioPette Plus Four Pack starter kit containing 4 pipettes (0.5-10 μl, 2-20 μl, 20-200 μl		
	and 100-1,000 µl), 3 racks of BioFree tips and a 6 place carousel stand			

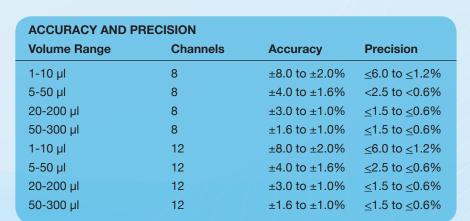
## **BioPette<sup>™</sup> Plus Autoclavable Multichannel Pipettes**

Ideal for all standard 96 well formats, the BioPette Plus Multichannel Pipettes stand up to the wear and tear of constant use while maintaining excellent accuracy and reproducibility. Four overlapping volume ranges are available to precisely meet liquid handling requirements from 1 µl to 300 µl.

The ergonomic handle fits comfortably in either the right or left hand and has a slightly recessed volume adjustment wheel with volume lock to prevent accidental change. Volume setting can also be accomplished by turning the push-button. The BioPette Plus Multichannel pipettes offer reduced pipetting forces. The manifold rotates 360° for comfortable pipetting in any direction. An individual piston suspension system allows even sealing of tips across all channels without rocking the pipette. The curved ejector design pushes the tips off in steps, thus requiring minimal force to operate.

Each channel has an independent, precision piston assembly to ensure accuracy and reproducibility from one pipetting series to the next as well as between channels.

Four volume ranges are available as both 8 and 12 channel models. Each pipette is individually tested and supplied with a certificate of quality and a calibration key. The BioPette Plus multichannel pipettes are fully autoclavable.



CAT NO.	VOLUME RANGE	CHANNELS	TIP
P4808-10*	1-10 µl	8	10 μΙ
P4808-50*	5-50 µl	8	200 μΙ
P4808-200*	20-200 µl	8	200 μΙ
P4808-300*	50-300 μl	8	200/300 μΙ
P4812-10*	1-10 µl	12	10 μΙ
P4812-50*	5-50 μΙ	12	200 μΙ
P4812-200*	20-200 µl	12	200 μΙ
P4812-300*	50-300 μl	12	200/300 μΙ
P5423	Multichannel pipette stand. I	Holds 1 single or multichannel piper	te
P3989	Universal linear rack for 6 pig	pettes	
P3986	Universal shelf clip for 3 pipe	ettes	



## **BioPette™ Autoclavable Single Channel Pipettes**

These precision pipettes are designed for exceptional comfort and accuracy. Lightweight and well balanced, the Biopettes fit comfortably in either the right or left hand and offer a significant reduction in plunger forces. Chemically resistant, maintenance-free seals and finely polished pistons provide unsurpassed accuracy sample after sample.

The continuously adjustable, digital micrometer is slightly recessed to prevent unintentional change and is protected from the effects of thermal expansion by the insulated body of the pipette. For convenience, volume can also be adjusted by turning the push-button. Ergonomically positioned, the tip ejector reduces fatigue during prolonged use.

Biopettes have a universal shaft that will accept most pipette tips. The stainless steel tip ejector is adjustable to accommodate various styles of tips and removable for pipetting into narrow tubes. The Biopettes are fully autoclavable. Eight models cover the volume range from 0.1  $\mu$ l to 10,000  $\mu$ l. A calibration tool is included with each unit for easy in-lab recalibraation. Pipettes are individually tested and supplied with a certificate of quality.

ACCURACY AND PRECISION			
Volume Range	Accuracy	Precision	
0.1-2.0 μl	±12 to ±1.5%	<6.0 to <0.7%	
0.5-10 μl	±4.0 to ±0.5%	<4.0 to <0.4%	
2-20 µl	±4.0 to ±0.8%	<3.0 to <0.4%	
10-100 μΙ	±1.6 to ±0.8%	<0.8 to <0.3%	
20-200 μΙ	±1.2 to ±0.6%	<0.6 to <0.3%	
100-1,000 µl	±0.9 to ±0.6%	<0.45 to <0.25%	
1,000-5,000 µl	±0.6 to ±0.5%	<0.3 to <0.2%	
1,000-10,000 µl	±2.5 to ±0.5%	<0.6 to <0.2%	



New image to come P3960-SK4

CAT NO.	VOLUME RANGE	TIP
P3960-2A	0.1-2.0 μΙ	10 μl
P3960-10A	0.5-10 μΙ	10 μΙ
P3960-20A	2-20 μΙ	200 μΙ
P3960-100A	10-100 μΙ	200 μΙ
P3960-200A	20-200 μl	200 μΙ
P3960-1000A	100-1,000 μl	1,000 μΙ
P3960-5000A	1,000-5,000 μΙ	5,000 μΙ
P3960-10000A	1,000-10,000 μΙ	10,000 μΙ
P3985-P	Universal carousel stand for 6 pipettes	
P3989	Universal linear rack for 6 pipettes	
P3982	4 position linear plexi stand	
P3986	Universal shelf clip for 3 pipettes	
P3960-SK4	BioPette A Four Pack starter kit containing 4 pipettes	
	(0.5-10 µl, 2-20 µl, 20-200 µl and 100-1,000 µl), 3 racks of BioFree tips and a 6 place carousel stand	

<sup>\*</sup>Only available outside of the US

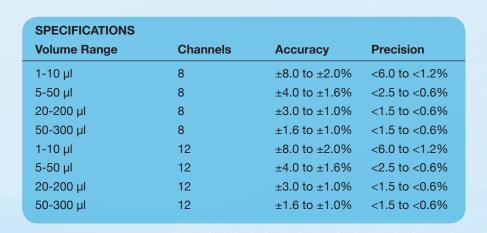
### **BioPette™ Autoclavable Multichannel Pipettes**

Ideal for all standard 96 well formats, the Biopette Multichannel Pipettes stand up to the wear and tear of constant use while maintaining excellent accuracy and reproducibility. Four overlapping volume ranges are available to precisely meet liquid handling requirements from 1 µl to 300 µl.

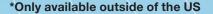
The pipettes fit comfortably in either the right or left hand and have a slightly recessed volume adjustment wheel to prevent accidental change. Volume setting can also be accomplished by turning the push-button. Biopette Multichannel pipettes offer reduced pipetting forces. The manifold rotates  $360^{\circ}$  for comfortable pipetting in any direction. An individual piston suspension system allows even sealing of tips across all channels without rocking the pipette. The curved ejector design pushes the tips off in steps, thus requiring minimal force to operate.

Each channel has an independent, precision piston assembly to ensure accuracy and reproducibility from one pipetting series to the next as well as between channels.

Four volume ranges are available as both 8 and 12 channel models. Each pipette is individually tested and supplied with a certificate of quality and a calibration key. The Biopettes are fully autoclavable.



CAT NO.	VOLUME RANGE	CHANNEL	TIP
P4608-10A	1-10 µl	8	10 μΙ
P4608-50A	5-50 µl	8	200 μΙ
P4608-200A	20-200 µl	8	200 μΙ
P4608-300A	50-300 μΙ	8	300 µl
P4612-10A	1-10 µl	12	10 μl
P4612-50A	5-50 µl	12	200 μΙ
P4612-200A	20-200 µl	\12	12 200 µl
P4612-300A	50-300 μl	12	12 300 μΙ
P5423	Multichannel pipette stand. H	lolds 1 single or multichann	el pipette
P3989	Universal linear rack for six p	ipettes	
P3986	Universal shelf clip for three p	pipettes	





### **BioFree™ Pipette Tips**

Labnet BioFree Pipette Tips are designed to fit a wide variety of single and multichannel pipettes. Flexible walls and a series of internal sealing rings ensure a secure fit and minimal force to eject.

Tips are manufactured from high quality, FDA compliant polypropylene in a clean-room environment. Diamond polished, stainless steel molds produce a tip with exceptionally smooth surfaces and extreme accuracy. During the manufacturing process, each lot of tips is tested for accuracy and precision. Tips are also carefully inspected for uniformity and manufacturing irregularities.

BioFree tips are certified to be RNase, DNase and endotoxin free.



CAT NO.	DESCRIPTION
510 μl tips	
P1000-10	0.5 - 10 µl pipette tips, bulk pack of 1,000
P1000-10-R	0.5 - 10 µl pipette tips, 10 racks of 96
P1000-10X	0.5 - 10 µl pipette tips, extended length, bulk pack of 1,000
P1000-10X-R	0.5 - 10 µl pipette tips, extended length, 10 racks of 96
200 µl tips	
P1000-200	200 μl pipette tips, bulk pack of 1,000
P1000-200-R	200 μl pipette tips, 10 racks of 96
300 µl tips	
P1000-300	300 μl pipette tips, bulk pack of 1,000
P1000-300-R	300 μl pipette tips, 10 racks of 96
1,000 µl tips	
P1000-1000	1,000 µl pipette tips, bulk pack of 1,000
P1000-1000-R	1,000 µl pipette tips, 10 racks of 96
1,200 µl tips	
P1000-1200-R	1,200 µl pipette tips, 10 racks of 96
5,000 / 10,000 µl tips	
P3998	5,000 µl pipette tips, bulk pack of 250
K943	10,000 µl pipette tips, bulk pack of 100

### FastPette V2™ and FastPette Pro Pipette Controllers

The FASTPETTE PRO- lightweight and ergonomically shaped motorized pipette controller designed for work with glass or plastic serological pipettes from 0.5 to 100 ml range. Conveniently positioned switches allow choosing different operation modes and speed depending on the volume of the serological pipette and liquid viscosity. Additionally aspirating and dispensing speed is controlled through two comfortable finger triggers.

When fully charged, the NiMH batteries enable up to eight hours of continuous use. The large LCD display indicates the battery status along with the pipetting mode and speed selected. In order to protect the device against overfilling the FASTPETTE PRO is equipped with a 0.2 um PTFE filter. The filter, the pipette holder and the nosepiece are autoclavable. The FASTPETTE PRO is also supplied with the universal battery charger, an additional hydrophobic 0.2 um filter and a two-position charging stand.

The FastPette V2 was designed with the user in mind. It has a lightweight handle with smooth push-button and ergonomically located switches. An updated valve control system allows very fine control. Battery powered, this pipette controller works with glass and plastic pipettes in the 1 to 100 ml range.

When fully charged, the FastPette V2 can be used continuously for over 2,000 pipetting cycles. A low battery warning light indicates that the unit should be recharged. Should the charge run out while working with the pipette, simply attache the power supply and continue to use.



CAT NO.	DESCRIPTION
P2000	FastPette V2 with three 0.2 µm filters, wall hanger and charger, universal power supply*
P2002	FastPette Pro pipette controller with two-position charging stand, universal power supply* and additional 0.2um filter
P2021	Replacement silicone pipette holder
P2023	PTFE autoclavable filter 0.2μm, pk/5
P2024	PTFE autoclavable filter 0.45µm, pk/5
P29052	Nosepiece for FastPette Pro
P29054	Pipette Holder for FastPette Pro
P29055	Two-position charging stand for Fastpette Pro
P2028	Wall hanger for FastPette V2
P2029	Bench stand for FastPette V2

<sup>\*</sup> Universal power supply is suitable for US, EU, UK and AU



### **Labpette FX™ Fixed Volume Pipettes**

Labpette FX pipettes are ideal for applications where specific volumes are used repeatedly and sterilization by autoclaving is required. Thirty-two pipettes cover the range from 2  $\mu$ l to 1,000  $\mu$ l with exceptional accuracy and reproducibility.

An ergonomically designed body and finger rest make these pipettes comfortable to hold, even during extended pipetting sessions. The smooth plunger action and unique "twist-eject" tip removal system require minimal force and reduce the risk of repetitive strain injuries.

Manufactured from lightweight, high impact plastic, the Labpette FX pipettes are extremely durable, offer excellent chemical resistance and retain their high level of accuracy and precision during repeated use. The Labpette FX can be autoclaved at 121°C.

Labpette FX pipettes are color coded for easy identification and proper tip selection. Each pipette is individually tested, supplied with a factory calibration certificate and covered by a limited lifetime warranty.

.,				
CAT NO.	VOLUME	ACCURACY	PRECISION	TIP
P3900-2	2 μΙ	±3.0	±1.5	200 μΙ
P3900-5	5 μl	±2.0	±1.0	200 ul
P3900-7	7 μl	±1.5	±0.7	200 ul
P3900-10	10 μl	±1.2	±0.5	200 ul
P3900-15	15 µl	±1.0	±0.5	200 ul
P3900-20	20 μΙ	±0.9	±0.4	200 ul
P3900-25	25 µl	±0.9	±0.4	200 ul
P3900-30	30 µl	±0.9	±0.3	200 ul
P3900-40	40 μl	±0.9	±0.3	200 ul
P3900-50	50 μl	±0.9	±0.3	200 ul
P3900-60	60 µl	±0.9	±0.3	200 ul
P3900-70	70 µl	±0.9	±0.3	200 ul
P3900-75	75 µl	±0.9	±0.3	200 ul
P3900-80	80 µl	±0.9	±0.3	200 ul
P3900-90	90 μl	±0.9	±0.3	200 ul
P3900-100	100 μΙ	±0.9	±0.3	200 ul
P3900-120	120 µl	±0.8	±0.3	200 ul
P3900-150	150 µl	±0.7	±0.3	200 ul
P3900-200	200 μΙ	±0.6	±0.2	200 ul
P3900-200A	200 μΙ	±0.6	±0.2	1,000 ul
P3900-220	220 µl	±0.6	±0.2	1,000 ul
P3900-250	250 μΙ	±0.6	±0.2	1,000 ul
P3900-300	300 μΙ	±0.6	±0.2	1,000 ul
P3900-400	400 μΙ	±0.6	±0.2	1,000 ul
P3900-450	450 μl	±0.6	±0.2	1,000 ul
P3900-500	500 μl	±0.6	±0.2	1,000 ul
P3900-600	600 µl	±0.6	±0.2	1,000 ul
P3900-700	700 μl	±0.6	±0.2	1,000 ul
P3900-750	750 µl	±0.6	±0.2	1,000 ul
P3900-800	800 µl	±0.6	±0.2	1,000 ul
P3900-900	900 μΙ	±0.6	±0.2	1,000 ul
P3900-1000	1,000 µl	±0.6	±0.2	1,000 ul
P5447	Carousel stand f	or Labpette FX		





### **Labpette R™ Repeating Pipette and Combi-Syringes**

The Labpette R Repeating Pipette provides accurate and precise repetitive pipetting from the single filling of a disposable tip. Use of the Labpette R saves time and reduces the fatigue associated with repetitive pipetting using a standard pipette.

The Labpette R is simple to use – select the appropriate tip and lock in place. Then choose the desired volume setting with the click stop adjustment dial and fill the tip with the required volume, using the sliding fill lever. To dispense, depress the plunger. For convenience, a chart showing the volume dispensed for each tip size and dial position is located on the body of the pipette.

The Labpette R performs best when used with Labnet's BioFree<sup>®</sup> Combi-Syringe™ dispenser tips. Available sterile or nonsterile, Combi-Syringes are supplied in sturdy, stackable dispenser boxes of 100.

CAT NO.	DESCRIPTION	I			
P3000	Labpette R Re	peating Pipette, 1 μ	l to 5,000 μl		
BIOFREE COMBI-	SYRINGE DISPEN	SER TIPS			
CAT NO.	CAT NO.	TIP	1/1//		QUANTITY
Nonsterile	Sterile	Capacity	Accuracy	Precision	Per Box
P3505 <sup>1</sup>	P3505-S	0.05 mL	±2.5%	<5.0% to <2.5%	100
P3512 <sup>2</sup>	P3512-S	0.5 mL	±0.8%	<0.7% to <0.4%	100
P3515 <sup>1</sup>	P3515-S	1.25 mL	±0.8%	<0.5% to <0.2%	100
P3518 <sup>1</sup>	P3518-S	2.5 mL	±0.7%	<0.4% to <0.2%	100
P3521	P3521-S	5.0 mL	±0.4%	<0.3% to <0.2%	100
P3524	P3524-S	12.5 mL	±0.3%	<0.3% to <0.1%	100
P3525*	P3525-S	25.0 mL	±0.3%	<0.2% to <0.1%	100/
P3527*	P3527-S	50.0 mL	±0.2%	<0.2% to <0.1%	100
P3535	Combination p	Combination pack, 20 each of 0.5, 1.25, 2.5, 5.0 and 12.5 mL			
P3527-A	Adapter for 25	and 50 mL Combi-S	Syringes		1 m

<sup>\*</sup> Four adapters included 1 result using a 10µl tip attached 2 result using a 200 µl tip attached

UNIVERSAL COMBI	-SYRINGE DISPE	NSER TIPS			
CAT NO.	CAT NO.	TIP			QUANTITY
Nonsterile	Sterile	Capacity	Accuracy	Precision	Per Box
P3503U	P3503U-S	0.1 mL	±1.0%	<5.0% to <1.0%	100
P3504U	P3504U-S	0.2 mL	±1.0%	<0.5% to <0.9%	100
P3512U	P3512U-S	0.5 mL	±0.8%	<0.3% to <0.9%	100
P3513U	P3513U-S	1 mL	±0.9%	<0.4% to <0.6%	100
P3518U	P3518U-S	2.5 mL	±0.9%	<0.15% to <0.45%	100
P3521U	P3521U-S	5 mL	±0.8%	<0.15% to <0.35%	100
P3522U	P3522U-S	10.0 mL	±0.8%	<0.15% to <0.3%	100
P3525U	P3525U-S	25.0 mL	±0.5%	<0.15% to <0.3%	25
P3527U	P3527U-S	50.0 mL	±0.2%	<0.15% to <0.3%	25



### **Excel™ Electronic Pipettes**

The Excel is a multifunctional pipette that is fully motorized, eliminating hand strain and allowing efficient multi-dispensing. A high precision stepping motor controls piston action, resulting in exceptional accuracy and precision and minimal pipetting forces. Accuracy is further enhanced by a state-of-the-art microprocessor which controls the action of the stepping motor. The calibration of the unit is checked each time an operation is performed.

The Excel features an adjustable tip ejector along with a universal tip shaft designed for compatibility with a wide variety of manufacturers' tips. The lower portion of the pipette is easily removed for autoclaving.

Each pipette is individually tested and supplied with a certificate of quality. Also included is a shelf clip, Lithium-ion battery and battery charger.



SPECIFICATIONS				
Volume Range	Tip	Increments	Accuracy	Precision
0.5-10 μΙ	10 µl	0.1 µl	±4.0 to ±1.0%	≤2.5 to ≤0.4%
2-20 µl	10 µl*	0.1 μΙ	±4.0 to ±1.0%	≤2.0 to ≤0.4%
10-200 µl	200 μΙ	1.0 µl	±2.0 to ±0.6%	≤1.0 to ≤0.15%
100-1,200 μl	1,000/1,200 µl	1.0 µl	±1.5 to ±0.5%	≤0.6 to ≤0.15%
*Most manufacturers' 10	μl tips will accurately a	ccommodate 20 µl.		

CAT NO.	DESCRIPTION
P3600L-10*	Excel Electronic Pipette, 0.5-10 μl, single channel, with charger, 120V
P3600L-20*	Excel Electronic Pipette, 2-20 µl, single channel, with charger, 120V
P3600L-200*	Excel Electronic Pipette, 10-200 µl, single channel, with charger, 120V
P3600L-1200*	Excel Electronic Pipette, 100-1,200 µl, single channel, with charger, 120V
P3600L-BAT-1	Extra Lithium-ion battery, for all voltages
P3628L	Shelf clip for Excel Electronic Pipette, holds 1
P3630L	Acrylic stand for Excel Electronic Pipette, holds 3
P3935L	Carousel stand for Excel Electronic Pipette, holds 6

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU, -UK or -AU.

## **Excel™ Multichannel Electronic Pipettes**

Available in both eight and twelve channels, the Excel multichannel electronic pipettes are ideal for efficiently working in a 96 well format. Both models are available in four overlapping volume ranges, from 0.5  $\mu l$  to 1,200  $\mu l$ . A high precision stepping motor controls piston action resulting in exceptional accuracy and precision and minimal pipetting forces. Unusually light for an electronic pipette, the Excel fits comfortably in either the right or left hand.

Angled away from the user, the large LCD and simple interface allows users to easily toggle between the six pipetting modes. By selecting the "MD" mode for multi-dispensing the user can quickly fill an entire 96 well plate without having to refill the tips.

Each pipette is self calibrating. The lower portion is easily removed for autoclaving. Complete with shelf clip, Lithium-ion battery and battery charger, the pipette comes ready for use.



SPECIFICATIONS				
Volume Range	Tip	Increments	Accuracy	Precision
0.5-10 μΙ	10 µl	0.1 µl	±4.0 to ±1.5%	≤2.5 to ≤0.5%
2-20 µl	10 μl*	0.1 μΙ	±5.0 to ±1.0%	≤2.0 to ≤0.5%
10-200 μl	200 μΙ	1.0 µl	±3.0 to ±0.6%	≤1.0 to ≤0.15%
100-1,200 μl	1,000/1,200 µl	1.0 µl	±3.0 to ±0.5%	≤0.8 to ≤0.20%
*Most manufacturers' 10 µl tips will accurately accommodate 20 µl.				

CAT NO.	DESCRIPTION	
P3608L-10*	Excel Electronic Pipette, 0.5-10 µl, 8 channel, with charger, 120V	
P3608L-20*	Excel Electronic Pipette, 2-20 µl, 8 channel, with charger, 120V	
P3608L-200*	Excel Electronic Pipette, 10-200 µl, 8 channel, with charger, 120V	
P3608L-1200*	Excel Electronic Pipette, 100-1,200 µl, 8 channel, with charger, 120V	
P3612L-10*	Excel Electronic Pipette, 0.5-10 µl, 12 channel, with charger, 120V	
P3612L-20*	Excel Electronic Pipette, 2-20 µl, 12 channel, with charger, 120V	
P3612L-200*	Excel Electronic Pipette, 10-200 µl, 12 channel, with charger, 120V	
P3612L-1200*	Excel Electronic Pipette, 100-1,200 µl, 12 channel, with charger, 120V	
P3600L-BAT-1	Extra Lithium-ion battery, for all voltages	
P3628L	Shelf clip for Excel Electronic Pipette, holds 1	
P3630L	Acrylic stand for Excel Electronic Pipette, holds 3	
P3935L	Carousel stand for Excel Electronic Pipette, holds 6	

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU, -UK or -AU.





### **Labmax™ Bottletop Dispensers**

The Labmax offers the ultimate in dispensing convenience. A new automatic air purging system conveniently dispenses any air prior to dispensing media. A safety shutdown position eliminates dripping and accidental discharge. The integrated swivel neck allows dispensing in any direction without affecting the fit of the dispenser on the bottle threads. Volume adjustment is quick and easy with the locking turn knob. The direct displacement glass piston fully dispenses the reagent with each stroke, ensuring accuracy and eliminating sticking and freezing caused by excess reagent remaining in the reservoir.

The Labmax is fully autoclavable and is easily disassembled for cleaning. The standard Labmax is available in six volume ranges. A glass piston and cylinder allow for compatibility with most common reagents and organic solvents. A PTFE piston and cylinder version is available for use with HF.



### **SPECIFICATIONS**

Piston Direct displacing glass piston

Cylinder PTFE

 $\begin{array}{ll} \mbox{Housing} & \mbox{Polypropylene} \\ \mbox{Volume adjust} & \mbox{Locking turn knob} \\ \mbox{Accuracy/Reproducibility} & \pm 0.7\% \ / \ \pm 0.1\% \end{array}$ 

Chemical compatibility Suitable for most reagents and organic solvents.

HF version available for use with hydrofluoric acid.

CAT NO.	VOLUME RANGE	ACCURACY	TOLERANCE	THREAD
D5370-2	0.3-2.5 mL	0.05 mL	0.02 mL	33 mm <sup>1</sup>
D5370-5	1.0-5.0 mL	0.10 mL	0.04 mL	33 mm <sup>1</sup>
D5370-10	2.0-10.0 mL	0.20 mL	0.08 mL	33 mm <sup>1</sup>
D5370-25	5.0-25.0 mL	0.50 mL	0.15 mL	45 mm <sup>2</sup>
D5370-50	10.0-50.0 mL	1.00 mL	0.40 mL	45 mm <sup>2</sup>
D5370-100	20.0-100.0 mL	2.00 mL	0.80 mL	45 mm <sup>2</sup>
D5370-10-HF*	2.0-10.0mL	0.20 mL	0.08 mL	33 mm <sup>1</sup>
D5370-25-HF*	5.0-25.0 mL	0.50 mL	0.15 mL	45 mm <sup>2</sup>
D5370-002	Extended discharge tube, fits -2, -5 and -10 dispensers			
D5370-012	Extended discharge tube, fits -25, -50 and -100 dispensers			
D5377	Calcium chloride drying tube	e, fits all Labmax disp	ensers	

<sup>&</sup>lt;sup>1</sup> Supplied with 24, 28, 38 and 45 mm adapters

<sup>&</sup>lt;sup>2</sup>Supplied with 28, 33 and 38 mm adapters

<sup>\*</sup>HF = PTFE piston and cylinder version for HF and other aggressive solvents.



## AccuBlock™ Mini-Compact Dry Bath

The AccuBlock Mini combines digital control, a fast heating microtube block and a convenient AccuRack<sup>TM</sup> transfer system, all in an ultra compact footprint. With a temperature range to 100°C which can be set in increments of 0.1°C, Labnet's AccuBlock Mini is suitable for a range of uses in life science, molecular biology, environmental and industrial laboratories and a variety of applications including incubation, enzyme reactions, and immunoassays. The small form factor allows it to find a place on even the most crowded laboratory benchtop and it is easy to transport.

The packaging includes the 12 x1.5mL block as well as the convenient AccuRack, which is designed to allow quick loading or unloading of all sample tubes simultaneously. The rack fits onto the top of the unit and its self-standing design allows it to hold samples when they are being prepped or loaded.



### **SPECIFICATIONS**

Temperature range Ambient +5° to 100°C Temperature increments 0.1°C ≤0.2°C Temperature uniformity Temperature accuracy ≤0.2°C Timer 0-19 hr 59 min or continuous Block **Anodized Aluminum** Block capacity 12 x 1.5 mL tubes Dimensions (W x D x H) 5.5 x 4.8 x 2.4 in/14 x 12 x 6 cm

Weight 3 lb/1.3 kg

Electrical 120V or 230V~, 50/60 Hz

CAT NO.	DESCRIPTION
D0100*	AccuBlock Mini Dry Bath with 12 x 1.5mL block

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes EU and UK cords.

### **Mini Incubator**



Labnet's compact mini incubator is designed for personal use, small laboratories and classrooms. The units feature a broad temperature range to meet a variety of small sample applications.

Multiple heating elements provide even heating and uniformity and the hydraulic thermostat ensures temperature stability within the chamber. A thermometer port in the top of the unit allows the user to monitor temperatures. The large window in the door gives a clear view of the contents which can include up to 48 petri dishes or 28 standard microplates. Shelves can be placed at two points within the corrosion resistant chamber. A cord port allows small mixers to be placed in the incubator.



I5110A-MLR model shown

SPECIFICATIONS	Mini Incubator
Temperature range	Ambient +5° to 70°C
Capacity	9.2 liters/0.375 cu. ft.
Controls	Analog
Exterior dimensions (W x D x H)	11.2 x 11 x 13.2 in 28.5 x 28 x 33.5 cm
Interior dimensions	9 x 7.9 x 7.9 in 21 x 20 x 20 cm
Weight	8.3 kg/18.4 lb
Electrical	120V~ or 230V~, 50/60 Hz

CAT NO.	DESCRIPTION
I5110A*	Mini Incubator, 120V
I5110A-MLR*	Mini Incubator with Mini Lab Roller and rotisseries for 1.5, 15 and 50 mL tubes (max temp 55°C)
I5110-SHELF	Additional shelf, 22 x 18 cm
W0020-110C	Non-toxic, PTFE coated thermometer for -20° to 110°C, with 1 resolution, 305 mm long, 76 immersion

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK. For more information on our Mini LabRoller, please visit pg 84.



### **AccuBlock**<sup>™</sup> Digital Dry Baths

Labnet's single and dual block digital dry baths accept multiple block configurations that can be used for a variety of applications in molecular biology, histology, environmental and industrial settings. The dry baths feature a broad temperature range, up to 150°C, and excellent temperature uniformity. A microprocessor regulates the high wattage heater to provide precise, accurate control and rapid heating.

The molded aluminum block chamber ensures an even transfer of heat from the heating element to the block. Temperature and time can be easily set using touch pad controls with easy-to-read, independent LED displays. When using the dry bath in timed mode, an alarm will sound to indicate when time reaches zero. The user calibration function allows for easy calibration to in-house standards when required. The dry bath is available as a single or dual block model. Interchangeable blocks (sold separately on page (will need to fill in page #) are available to accommodate a wide variety of tubes, plates and slides. Solid blocks are also available for custom machining. Each dry bath is supplied with a block lifter that enables the user to exchange blocks easily, even when the block is hot.





### **SPECIFICATIONS**

Temperature range Ambient +5° to 150°C, in 0.1° increments

Temperature resolution  $0.1^{\circ}\text{C}$ Temperature uniformity  $\pm 0.2^{\circ}\text{C}$ Temperature accuracy  $\pm 0.3^{\circ}\text{C}$ 

Temperature control Microprocessor

Timer 1-999 minutes, in 1 min increments or continuous

Block chamber construction Aluminum

Communication RS232

Dimensions (W x D x H) 7.9 x 10.4 x 3.3 in/20 x 26.5 x 8.3 cm

Weight 4.8 lb/2.2 kg

Electrical 120V~ or 230V~, 50/60 Hz

CAT NO.	DESCRIPTION	
D1100*	AccuBlock Digital Dry Bath, single block capacity, 120V	
D1200*	AccuBlock Digital Dry Bath, dual block capacity, 120V	

See page 35 for available block formats

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes EU and UK cords.

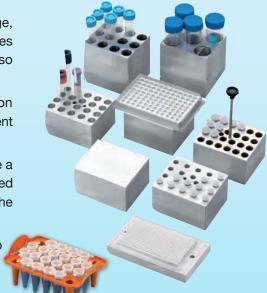
### **Dry Bath Blocks**

Designed for use with the AccuBlock Digital Dry Baths on the previous page, these blocks are supplied in a variety of different formats to accept tubes from 0.2 mL to 50 mL as well as microplates and slides. A solid block is also available for custom machining.

The blocks are made of high grade, non-porous aluminum and precision machined for a close fit with sample containers - important for fast and efficient heat transfer. Anodizing adds corrosion resistance.

Most blocks, except those designed for use with plates and slides, include a position for a thermometer and a hole for use with the block lifter tool (supplied with the bath). The unique PopStopper accessory, sold separately, fits on the microtube blocks to keep tube lids from popping open during heating.

The AccuRack™ accessory accommodates 20 x 1.5 mL tubes and fits onto the D1105A block. The rack can be used to quickly transfer sample into and out of the block and is self standing. Insulated handles protect users fingers. The rack can be used at temperatures up to 150°C and is autoclavable.



D1105A-Rac	k
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SPECIFICATIONS	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Construction	Anodized, high grade, non-porous aluminum	
Thermometer well Available in all blocks except those used with plates and slides		
Compatibility	ompatibility Labnet's high grade blocks will work in any manufacturers' dry bath with an opening	
	3.05 x 3.60 inches. Block D1196-PCR requires a depth of 2.125 inches or less.	

CAT NO.	DESCRIPTION
D1101	Solid Block for machining (no holes)
D1102	Block, 48 x 0.2 mL PCR tubes or 6 x 0.2 mL strips
D1102A Block, 24 x 2.0 mL	
D1105	Block, 24 x 0.5 mL tubes
D1105A	Block, 20 x 1.5 mL tubes
D1105A-RACK	AccuRack accessory for 20 x 1.5 mL tubes, compatible with D1105A, pk of 3
D1106	Block, 35 x 6 mm tubes
D1110	Block, 20 x 10 mm tubes
D1112	Block, 20 x 12 mm tubes
D1113	Block, 20 x 13 mm tubes
D1115-TALL	Block, 12 x 15 mL centrifuge tubes
D1116	Block, 12 x 15 or 16 mm tubes
D1117	Block, 12 x 17 mm tubes
D1120	Block, 6 x 20 mm tubes
D1125	Block, 6 x 25 mm tubes
D1150-TALL	Block, 5 x 50 mL centrifuge tubes
D1196-PCR Single Block, 96 well PCR plate, skirted or nonskirted (for single block unit of D1296 Dual Block, 96 well microtiter plate or 4 slides (for dual block unit only)	
D1100-PS	PopStopper for microtube blocks, D1102, D1102A, D1105, D1105A
D12384	Dual Block, 384 well PCR plate (for dual block unit only)



## AccuPlate<sup>™</sup> Digital HotPlate and Magnetic Stirrers

CSA Compliant

Labnet's AccuPlate hot plate stirrers are available in analog or digital models, making them ideal for both the Science and Education or Research markets.

The analog hot plate stirrers are designed with a 7" x 7" ceramic coated top plate that provides an even heating surface with a maximum temperature rating of 380 °C. Stirring models have a speed range between 100-1,500 rpm. To allow for accurate programming, these units have actual temperature and speed ranges printed on the control panel

The digital hot plate stirrers are equipped with a 5" x 7" fully ceramic top plate that is extremely durable, easy to clean and is highly resistant to chemical attack. In addition, the ceramic plates can reach a maximum temperature of 550°C. The white colored surface makes it easy to view color changes in applications such as titrations. Stirring models have a speed range between 60-1,150 rpm.

Every AccuPlate Hotplate and Hotplate Stirrer model incorporates a powerful heating and motor drive systems as well as fine tune controls designed to minimize stir bar decoupling. Each unit is built for consistent performance and long term reliability. Safety features for all models include a hot top indicator lamp and extended control panel that protects the electronics in case of an accidental spill. A built in support rod holder with locking knob can accept the optional Support Rod. With six models to choose from, there is an AccuPlate to meet every lab's need.



	SPECIFICATIONS	AccuPlate HotPlate	AccuPlate Stirrer	AccuPlate HotPlate Stirrer
	Temperature Range *	5° - 550°C (41° - 1022°F)	N/A	5° - 550°C (41° - 1022°F)
ı	Temperature accuracy	± 2°C	N/A	± 2°C
ı	Speed range	N/A	60 - 1150 rpm	60 - 1150 rpm
ı	Top Plate Material	Ceramic	Ceramic	Ceramic
	Top Plate Size	12.7 x 17.8 cm (5" x 7")	12.7 x 17.8 cm (5" x 7")	12.7 x 17.8 cm (5" x 7")
ı	Dimensions (W x D x H)	19.7 x 28 x 10.8 cm	19.7 x 28 x 10.8 cm	19.7 x 28 x 10.8 cm
ı	Weight	2.7 kg (6.0 lbs.)	3.2 kg (7.0 lbs.)	3.2 kg (7.0 lbs.)
	Electrical	120/230V, 50/60Hz	120/230V, 50/60Hz	120/230V, 50/60Hz

<sup>\*</sup>Temp range when using external temp controller is 5-200° C

CAT NO.	DESCRIPTION	
D0400*	Hot Plate, 5" x 7", Digital, 120V	
D0410*	Stirrer, 5" x 7", Digital, 120V	
D0420*	Hot Plate/Stirrer , 5" x 7", Digital, 120V	
D0461	Accessory kit, includes D0462 and D0466	
D0462	External temperature probe	
D0463	PTFE Stir bar	
D0464	Boss head clamp, holds D0465	
D0465	Holding rod for D0462	
D0466	Vertical support rod	

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number.

### **AccuPlate™ Analog HotPlate and Magnetic Stirrers**

Labnet's analog hot plate stirrers were developed to be safe and reliable, making them ideal for the Science and Education or Research markets. The detailed control panel includes actual values to allow for accurate setting of both rpm and temperature . The 7" x 7" ceramic coated top plates are resistant to chemicals and coated in a pure white, for easy observation of sample color change. The top plate has a maximum temperature rating of 380° C and provides quick thermal conduction and uniform surface temperature. Each stirring model contains a powerful motor, which can be precisely controlled for smooth start and stop to prevent fluid spill over or decoupling of stir bar.

Safety features for all models include a hot top indicator lamp and control panel extended away from the hot surface as well as a power switch conveniently positioned on the front side of the unit. A built in support rod holder with locking knob can accept the optional Support Rod.

CAT NO.	DESCRIPTION
D0300	Analog Hot Plate, 120V
D0300-230V*	Analog Hot Plate, 230V
D0310	Analog Magnetic Stirrer, 120V
D0310-230V*	Analog Magnetic Stirrer, 230V
D0320	Analog Hot Plate Stirrer, 120V
D0320-230V*	Analog Hot Plate Stirrer, 230V
D0300-SR	Support Rod (included with D0300 & D0320)

<sup>\* 230</sup>V product includes both EU and UK power cords







Stirring	Speed Capacity Control		100 ~ 1500/RPM 100 mL - 5L	100 ~ 1500/RPM 100 mL - 5L
		-	100 mL - 5L	100 ml - 5l
	Control			100 IIIL - 3L
		Electronic	Electronic	Electronic
Watts		680W	15W	695W
Dimensions	Plate area		180 x 180 mm (7 x 7 in)	
$(w \times d \times h)$	Overall		200 x 300 x 115 mm	
Electrical			110V 50/60 Hz	
			220V 50/60 Hz	
RPM (Max)			1,500 rpm	1,500 rpm
Hot Plate Tempe	erature (Max)	Up to 380° C	-	Up to 380° C



### Model 311D and 611D Digital Incubators

**CSA** Compliant

Ideal for applications requiring strict temperature control as well as general incubations, Labnet's 311D and 611D High Performance Incubators feature a broad temperature range and microprocessor control.

Incubator temperature is set with a membrane keypad with values shown digitally on the large display. The feedback systems in Labnet's exclusive SmartChek<sup>TM</sup> system ensure precise regulation of temperature.

A jacket of warm air surrounds the chamber on all sides, including the door, to provide a stable, uniform environment. For quick recovery after the door is opened and added uniformity, the turbo fan may be turned on. Opening the solid outer door turns on the interior light and reveals the full size glass inner door. Samples can be visualized without disrupting the temperature environment.

The electronics in the 311D and 611D incubators are located away from the chamber, keeping them safe from heat related stress. An independent safety thermostat protects samples in the event of a primary controller failure. Each incubator features an interior outlet for powering small equipment such as the Orbit™ shakers (see pages 67-71). Two shelves are supplied standard with the 311D and 611D digital incubators.



	SPECIFICATIONS	311D	611D
	Chamber volume	2.75 cu. ft.	6.0 cu. ft.
	Temperature range	Ambient +5° to 95°C	Ambient +5° to 95°C
	Temp uniformity/accuracy	±0.2°C @ 37°C	±0.25°C @ 37°C
	Temp. display	to 0.1°C	to 0.1°C
	Dimensions (W x D x H)		
	Chamber	17 x 14 x 20 in	21 x 20 x 25 in
		43.2 x 35.6 x 51 cm	53.3 x 51 x 63.5 cm
ı	Exterior	27 x 20 x 29 in	31 x 26 x 34 in
		68.6 x 51 x 73.7 cm	78.5 x 66 x 86.4 cm
	Weight	140 lb/63.6 kg	185 lb/84 kg
	Electrical	120V~, 60 Hz	120V~, 60 Hz

CAT NO.	DESCRIPTION
I5311-D	Digital Incubator, Model 311D
I5319	Additional shelf for 311D incubator
I5611-D	Digital Incubator, Model 611D
l5619	Additional shelf for 611D incubator

<sup>\*</sup>Only available in 120V

### 211DS Digital Shaking Incubator: 4 x 1 L Capacity

A small footprint, compact, stackable design and expanded temperature range make the 211DS shaking incubator ideal for molecular biology and general use. The 211DS features an integrated orbital shaker, making it suitable for liquid cultures and other applications requiring shaking combined with strict temperature control.

Labnet's exclusive SmartChek™ system guarantees precise temperature control. Mechanical convection maintains a stable temperature environment and provides quick recovery after opening the door. A settable safety thermostat is located on the back of the unit. The insulated door has a large glass observation panel and opens nearly 180° for easy access.

One half and two full shelves are supplied with the incubator. A flat platform, flask platform (clamps sold separately) and universal spring clamp platform are available separately.



# SPECIFICATIONS Chamber volume

Temperature range/display	Ambient +5° to 80°C in 0.1° increments/digital
Temp. uniformity/accuracy	±0.25°C/±0.1°C
Shaker speed	20 to 400 rpm (max 300 when stacked)
Shaker timer	0 - 99 min or continuous
Shaker orbit	19 mm
Flask capacity	4 x 1 L, 5 x 500 mL, 9 x 250 mL, 16 x 125 mL
Construction	Interior - mirrored stainless,
	Exterior - cold rolled steel

1.7 cu. ft./49 liters

Chamber (W x D x H) 13.5 x 14.75 x 15 in/34.3 x 37.5 x 38.1 cm Exterior (W x D x H) 19.75 x 23 x 22.25 in/42.5 x 55 x 58 cm

Weight 83 lb/37.7 kg

Electrical 120V or 230V, 50/60 Hz

CAT NO.	DESCRIPTION	
I5211-DS*	Shaking Incubator, Model 211DS, 120V	
I5211-SA	Stacking adapter, required when stacking incubators	
15230	Flask clamp platform, pre-drilled (see clamps below)	
I5231	Flat platform with non-slip rubber mat (30 x 30 cm)	
I5231-D	Double flat platform with non-slip rubber mat	
S2031-13	Universal spring loaded clamp platform for flasks, bottles, etc., fits 211DS	
S2040-85**	Flask clamp, 125 mL (max. 16)	
S2040-99**	Flask clamp, 250 mL (max. 9)	
S2040-09**	Flask clamp, 500 mL (max. 5)	
S2040-01**	Flask clamp, 1000 mL (max. 4)	

See page 91 for racks to fit the universal platform



<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes EU and UK cords.

<sup>\*\*</sup>Other sizes available, call for details.



### 311DS Digital Shaking Incubator: 4 x 2 L / 6 x1 L Capacity

The 311DS is a high performance incubator with a built-in orbital shaker. A broad temperature range expands the use of this incubator to liquid cultures, washing blots and other shaking applications requiring precise temperature control.

Temperature within the 311DS is strictly regulated by the SmartChek<sup>™</sup> temperature control system. All electronics are located away from the chamber to protect them from heat related stress and provide a long, maintenance-free service life.

The sturdy, integral shaker has a 19 mm orbit. A flat platform with non-slip rubber mat, as well as a variety of flask platforms are available separately. Platforms can hold as many as four 2 L and six 1 L liter flasks.

The gasketed door has a large, integral viewing area for checking samples without disturbing the chamber contents. Opening the door stops operation of the shaker.

The incubator is supplied with one shelf. Additional shelves and shaker platforms are sold separately.





15331

### **SPECIFICATIONS**

Chamber volume	2.5 cu. ft./71 liters
Temperature range	Ambient +5° to 80°C
Temp. uniformity/accuracy	±0.2°C @ 37°C

Temp. display 0.1°C

Shaker speed/orbit 19/20 mm to 300 rpm
Timer 0 - 99 min or continuous

Dimensions (W x D x H)

Chamber 17.4 x 15.6 x 16 in/44.2 x 39.6 x 40.6 cm Exterior 22.6 x 21.4 x 25 in/57.4 x 54.4 x 63.5 cm

Weight 140 lb/63.6 kg

Electrical 120V or 230V, 50/60 Hz

CAT NO.	DESCRIPTION
I5311-DS*	Shaking Incubator, Model 311DS, 120V
15322	Additional shelf
I5331	Flat shaker platform with non-slip rubber mat (39 x 33 cm)
15330	Shaking platform pre-drilled for flask clamps, clamps sold separately (see page 45)
15330-2000	Platform with 4 x 2 L flask clamps
I5330-1000	Platform with 6 x 1 L flask clamps
15330-500	Platform with 8 x 500 mL flask clamps
15330-250	Platform with 12 x 250 mL flask clamps
I5330-125	Platform with 20 x 125 mL flask clamps
15330-50	Platform with 30 x 50 mL flask clamps
I-5330-RH15	Rack holder Fits I-5330, holds K 566 test tube rack
I-5330-RH50	Rack holder Fits I-5330, holds K568 test tube rack

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes -EU and -UK cords.

### 222DS Benchtop Shaking Incubator

The 222DS Benchtop Shaking Incubator provides small footprint with large performance. The lid has a low pivot point which provides a compact lab friendly shaking incubator sure to fit on the lab bench and under your shelves. The large assortment of accessories allows users the flexibility to use for many molecular biology applications. The included software, not required for use, allows monitoring of rpm and temperature throughout runs and saving data to a PC.

#### **SPECIFICATIONS** Speed 20 - 300 rpm Orbit Circular, 19 mm Ambient +5°C to + 70°C Temp Range Temp Increments 0.1°C Temp Accuracy ± 0.5°C Temp Uniformity ± 0.5°C **Speed Increments** 1 rpm **Platform Dimensions** 11.8 x 11.8 in 30 x 30 cm Operation Temp Range 4°C - 65°C Dimensions (W x D x H) 14.6 x 20.9 x 15.7 in 37 x 53 x 40 cm Weight 43 lb/19.5 kg Height lid open 21.7 in/55 cm Yes with included SmartChekTM USB temp monitor software. Windows PC not included. 1 min – 99 hours or continuous Timer Open door lid cutoff switch Yes Electrical 120V or 230V, 50/60Hz



DESCRIPTION
222DS Benchtop Shaking Incubator - 115 V
222DS Benchtop Shaking Incubator - 230 V
Universal Platform 30 x 30 cm (11.8 x 11.8 in)
Petri Dish Shelf
Sticky Mat - 15 x 15 x 3 cm (5.9 x 5.9 in) set of two
Microtiter hotel - 3 x microplates stacked individually
Combi Tube Holder 6 x 15/50 mL tubes
Plastic Flask Clamp 1000mL
Plastic Flask Clamp 500mL
Plastic Flask Clamp 250mL
Plastic Flask Clamp 125mL



## **AccuTherm Microtube Shaking Incubator**

CSA Compliant

The AccuTherm is a temperature controlled vortexer that uses peltier technology to rapidly heat and cool precious samples. Its compact footprint incorporates an intuitive control panel with large multi-color display, which allows users to easily program and view temperature, time and speed settings.

Eight interchangeable aluminum blocks accommodate PCR plates and a variety of common tube sizes, including a multi-block that holds both 0.5mL and 1.5mL tubes. The combination of heating and cooling with mixing makes the AccuTherm ideal for many life science research applications in the fields of molecular biology, biochemistry and clinical chemistry.



#### **SPECIFICATIONS** 0-105° Temp Setting Range Temp Control Range Ambient -14° to 100° Timer range 1min - 99h 59min Mixing Speed 300-1500 rpm Mixing orbit 3mm Temp Control Accuracy +/- 0.5° Temp Uniformity +/- 0.5° **Heating Time** 6.5°/minute **Cooling Time** 1.5°/minute Noise level <60 Dba **Blocks** 8 available sizes 12.9 x 6.5 x 9.8 in **Dimensions** 33 x 16.6 x 24 cm Weight 18.75 lbs/8.5 Kg



CAT NO.	DESCRIPTION
I-4001-HCS	AccuTherm Microtube Shaking Incubator, 120V
I-4002-HCS	AccuTherm Microtube Shaking Incubator, 230V
I-4000-A	Block A, 40 x 1.5mL
I-4000-B	Block B, 54 x 0.5mL
I-4000-C	Block C, 96 x 0.2mL
I-4000-D	Block D, 24 x 15mm
I-4000-E	Block E, Water bath (ID: 115 x 73 x 38mm)
I-4000-G	Block G, 26 x 0.5mL and 24 x 1.5mL
I-4000-H	Block H, 40 x 2.0mL
I-4000-J	Block J, 96 Well ELISA Plate





### **VorTemp 56<sup>™</sup> and VorTemp 1550<sup>™</sup> Shaking Incubators**

Designed for simultaneous heating and mixing of small samples, the VorTemp 56 is supplied with interchangeable platforms for microtubes ( $56 \times 1.5 \text{ mL}$  tubes, or smaller tubes with adapters) or microplates (accepts standard and deepwell plates, up to 2.0 mL). VorTemp 1550 includes platforms for  $8 \times 50 \text{ mL}$  and  $18 \times 15 \text{ mL}$  tubes.

Temperature and shaking speed are adjustable over a broad range, making the VorTemps useful for a variety of applications, including bacterial cultures. Mechanical convection provides a uniform and stable environment. The shaker in the VorTemp 56 may be turned off, allowing the unit to be used as a static incubator.

A microprocessor controls all parameters including temperature and timed operation. Self diagnostic software continuously monitors the unit for proper temperature and shaking speed, alerting the user to any errors. Heating and shaking are controlled by feedback loops which precisely maintain chosen parameters, independent of load or voltage fluctuations. The sturdy construction of the VorTemps provides stability during high speed shaking. The chamber is fully insulated to maintain uniform temperature and to reduce operating noise.



SPECIFICATIONS	VorTemp 56	VorTemp 1550
Temperature range	Ambient +5° to 99°C	Ambient +5° to 99°C
Temperature accuracy	±0.5°C	±0.5°C
Speed range	200 - 1,400* rpm	200 - 900 rpm
Motion/orbit	Circular/3 mm	Circular/3 mm
Timer	1 - 99 min or continuous	1 - 99 min or continuous
Capacity	56 x 1.5/2.0 mL tubes; 4 standard	18 x 15 mL; 8 x 50 mL tubes
	or 2 deep well microplates	
Dimensions (W x D x H)	9 x 12.3 x 9 in/23 x 31 x 23 cm	10 x 12.3 x12 in/26 x 31 x 31 cm
Weight	24.2 lb/11 kg	26.6 lb/12 kg
Electrical	120V~, 60 Hz or 230V~,50 Hz	120V~, 60 Hz or 230V~, 50 Hz
*Maximum speed for 230V unit is 1,200 rpm		

CAT NO.	DESCRIPTION	
S2056A*	VorTemp 56 Shaking Incubator for microtubes and microplates, 120V	
S2050A*	VorTemp 1550 Shaking Incubator for 15 and 50 mL tubes, 120V	
S2056-R	Additional platform/workstation for microtubes	
S2056-Q	Microplate platform	
C1205	Individual adapters for 0.5/0.6 mL tubes, pk of 6	
C1206	Individual adapters for 0.4 mL tubes, pk of 6	
C1222	Individual adapters for 0.2 mL thermal cycling tubes, pk of 6	

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes EU and UK cords.



### ProBlot™ 6/12 and 12S Hybridization Ovens

The ProBlot 6/12 and 12S Hybridization Ovens utilize the proven rotisserie method for hybridization. In addition, the ProBlot 12S has a built-in shaker, making it a truly versatile incubator.

The rotisserie and incubation system in the ProBlot ovens provides the perfect conditions for consistent results with low background. Mechanical convection circulates air through the chamber to create an extremely uniform environment, while heat input is controlled by a microprocessor. A see through window in the door allows for sample visualization without disrupting the temperature. The desired agitation level is obtained with the variable speed and adjustable axis rotisserie.

The integrated shaker in the ProBlot 12S has an orbit of 10 mm and a maximum speed of 300 rpm. Shaker operation is controlled by a 2 hr timer with a hold position. The standard shaking platform has a non-slip rubber mat for shaking plates, dishes and boxes.

Interiors are corrosion resistant, mirrored stainless steel. The ovens are provided with a rotisserie that holds both 35 mm diameter bottles and 50 mL disposable tubes, a drip tray, two large bottles and a pack of hybridization mesh. Additional accessories can be purchased separately (see page 45).





SPECIFICATIONS	ProBlot 6/12	ProBlot12S
Bottle capacity	(6) 6 lg./12 sm. (12) 12 lg./24 sm.	12 large/24 small
Rotisserie/rocker speed	to 20 rpm	4 to 20 rpm
Temperature range	Amb. +5° to 80°C	Amb. +5° to 80°C
Temperature control	Microprocessor	Microprocessor
Temp. resolution/uniformity	0.1°C/0.5°C	0.1°C/0.5°C
Shaker speed/orbit	N/A	10 to 300 rpm/10mm
Timer	N/A	0 - 99 min or hold
Exterior dimensions (WxDxH)	19 x 17.5 x 19.5 in/48.3 x 44.5 x 49.5 cm	19 x 17.5 x 19.5 in/48.3 x 44.5 x 49.5 cm
Chamber dimensions (WxDxH)	14.5 x 11 x 13.5 in/36.8 x 27.9 x 34.3 cm	14.5 x 11 x 13.5 in/36.8 x 27.9 x 34.3 cm
Weight	59 lb/26.8 kg	65 lb/29.5 kg
Electrical	120V~ or 230V~, 50/60 Hz	120V~ or 130V~, 50/60 Hz

CAT NO.	DESCRIPTION	
H0600A	ProBlot 6 Hybridization Oven with 2 large bottles and one pk of mesh, 120V	
H1200A*	ProBlot 12 Hybridization Oven with 2 large bottles and one pk of mesh, 120V	
H1200-SA*	ProBlot 12S Hybridization Oven with built-in shaker, 2 large bottles, 1 pk mesh, 120V	

Accessories for the ovens can be found on the following page.

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK.

### **ProBlot™ Hybridization Oven Accessories**

ProBlot Hybridization Oven accessories include rocking platforms, shaking platforms (ProBlot 12S only), various rotisseries, different sizes of bottles and hybridization mesh.

Both of the ProBlot Hybridization Ovens will accept a rocking platform when the rotisserie is removed. The platform connects to the rotisserie hub and operates from the same controls as the rotisserie. Optional rotisseries include those for 1.5 mL, 15 mL and 50 mL disposable tubes. Various shaker platforms are available for the ProBlot 12S.

Labnet's ProBlot hybridization bottles are constructed of high quality borosilicate glass which meets or exceeds the requirements for Class I, Type A glass of ASTM 438. Heavy walled, they block >95% of the beta emissions given off by <sup>32</sup>P. The high temperature caps have a rugged PTFE seal for leakproof performance, even after repeated use. The seals fit tightly into the caps and will not fall out when the caps are removed from the bottles. Bottles, caps and seals are resistant to all common hybridization reagents, including PEG. A convenient rack can be used for storing bottles upright when not in use.

Hybridization mesh, used to separate stacked membranes and aid in the flow of hybridization solutions between them, prevents membrane to membrane contact in areas of overlap and assists in the handling of blots. Labnet's hybridization mesh is made of an inert material that cleans up easily.



H1200-RA



H1200-250A

H1200-RA	Rocking platform with attachment hardware	
H1212-40VA	Rotisserie for 16 x 50 mL, vertical	
H1264-VA	Rotisserie for 64 x 1.5 mL or 32 x 15 mL, vertical	
H1264-HA	Rotisserie for 64 x 1.5 mL or 32 x 15 mL, horizontally	
H1200-250A	Flask platform with 6 x 250 mL flask clamps, for ProBlot 12S only	
H1200-18	Universal platform for flask clamps (max. 2 x 1 L, 5 x 500 mL, 12 x 125 mL, 15 x 50 mL), for ProBlot 12S only	
B3003	Large hybridization bottle, 300 x 35 mm	
B3003-PC	Large hybridization bottle, 300 x 35 mm, plastic coated	
B3003-DC	Large hybridization bottle, 300 x 35 mm, caps on both ends	
B2503	Medium hybridization bottle, 250 x 35 mm	
B1503	Small hybridization bottle, 150 x 35 mm	
B1503-PC	Small hybridization bottle, 150 x 35 mm, plastic coated	
B2753	Small hybridization bottle, two 75 mm chambers	
B0753	Extra small hybridization bottle, 75 x 35 mm	
B1500-CAP	Replacement cap with PTFE seal, fits all ProBlot 35 mm diameter bottles	
B1500-SEAL	Replacement PTFE seal, pack of 10, fits all ProBlot 35 mm diameter bottle caps	
H9088	Large hybridization mesh, 23 x 23 cm, pk of 5 sheets	
H9089	Small hybridization mesh, 10 x 15 cm, pk of 5 sheets	
H9090	Roll of hybridization mesh, 40 in. x 5 yards (100 cm x 4.6 m)	



### **Mini Water Bath**

CSA Compliant

The Mini Water Bath has a 6 liter capacity to accommodate test tube racks or up to three 250 mL flasks. A powerful 550W heater allows for quick temperature adjustment. A hydraulic thermostat ensures accurate temperature control. The seamless, stainless steel chamber is corrosion resistant and easy to clean. A stainless steel gable cover helps to retain heat in the bath and control evaporation. A clip is included for suspending a thermometer in the bath.

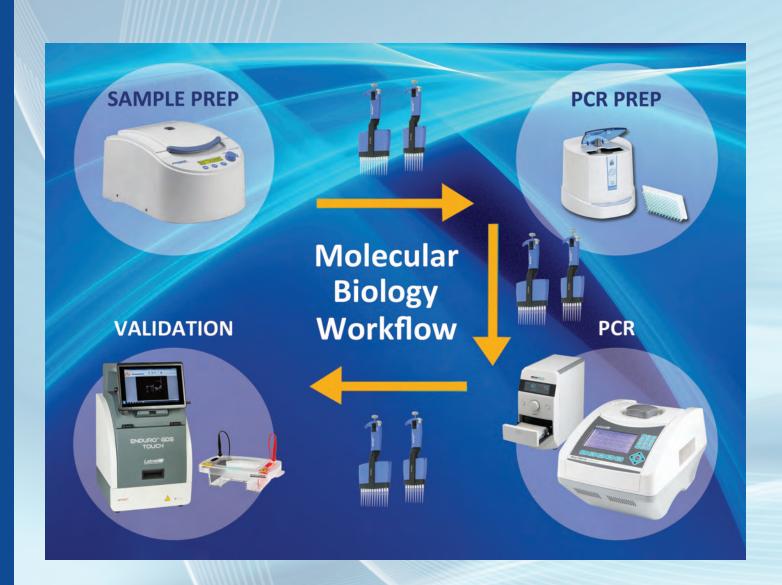


SPECIFICATIONS	Mini Water Bath
Temperature range	Ambient +5° to 100°C
Capacity	6 liters
Controls	Analog
Exterior dimensions (W x D x H)	14 x 11 x 13 in
	36 x 28 x 32 cm
Interior dimensions	32 x 17 x 18 cm
	12.6 x 6.7 x 6.9 in
Weight	7.7 kg/17 lb
Electrical	120V~or 230~, 50/60 Hz

CAT NO.	DESCRIPTION
W1106A*	Mini Water Bath with stainless steel gable cover and thermometer clip 120V
W0020-100C	Non-toxic, PTFE coated thermometer fro -20° to 110°C, with 1° resolution, 305mm long, 76mm immersion

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units include EU and UK cords





Molecular Biology Workflow

Sample Prep: Prism High Speed Microcentrifuge, C2500

PCR Prep: MPS1000 Plate Spinner, C1000

PCR: Optimax Thermal Cycler, TC9610 & Plate Sealer, PS1000

Validation: GDS Gel Document System, GDS-1302 & Horizontal Gel Box, E1010-10

In between steps: BioPette Plus Autoclavable Pipettes

Labnet has a complete offering of general laboratory equipment for the Molecular Biology Workflow that includes microtube and Plate Spinner centrifuges for PCR sample preparation, liquid handling for transfer of valuable samples, thermal cycler and plate sealer for running PCR and electrophoresis and gel documentation systems for validating the results. Each of these components were designed for optimal performance and ease of use. For additional information please visit our website or call Labnet customer service.

## MultiGene™ Mini Personal Thermal Cycler

The MultiGene Mini combines a versatile and precise cycling unit with fast ramping, up to 5°C/second. Not limited to the amplification of nucleic acids, the unit is also useful for enzymatic digestion, ligation, and other procedures that require temperature controlled incubation of small samples.

In addition to the standard parameters of time and temperature, the software also allows for successive time and temperature increments and decrements (for touchdown amplification and auto-extension), auto-restart after a power failure, end of cycling elongation steps and extended soaks at 4°C.

Programming the MultiGene Mini is simple and intuitive. The control pad combines function keys, a key pad and arrow keys for easy navigation and entering of parameters. The large graphical display is easy to read.

The MultiGene Mini is available with either a  $24 \times 0.2$  mL tube block or  $18 \times 0.5$  mL tube block. Blocks are easily interchanged. The MultiGene Mini is supplied with a heated lid.

Max. number of cycles



230V~ or 120V~, 50/60 Hz

Ī	SPECIFICATIONS			
	Block Capacity	24 x 0.2 mL or 18 x 0.5 mL tubes	Max. number segments	9
ı	Temp. control range	4° to 99°C	Max. holding time/step	99 minutes 59 seconds
	Max Heating/cool rate	5°C per sec/4°C per sec	Program storage	up to 100 programs
	Accuracy/uniformity	±0.3°C/±0.5° at 55°C	Dimensions (W x D x H)	21.8 x 28.5 x 17.8 cm
i	Heated lid temperature	105°C	Weight	7 1 lbs/3 2 kg

Electrical

CAT NO.	DESCRIPTION
TC020-24*	MultiGene Mini Personal Thermal Cycler with 24 x 0.2 mL tube block, 120V
TC050-18*	MultiGene Mini Personal Thermal Cycler with 18 x 0.5 mL tube block, 120V

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes EU and UK cords.



## **MultiGene™ OptiMax Thermal Cycler**

The MultiGene OptiMax Thermal Cycler delivers advanced speed and features while providing premium performance at an affordable price. This simple to program unit is compact in design and built to perform. Programming is intuitive with the large display and multiple pre-programmed templates supplied with unit. The OptiMax comes with standard built in 2-step, temperature optimization, touchdown and time increment protocols that are easy to adjust to meet your cycling needs. You can select lid temperature or turn it off depending on your needs. The faster ramp rates allow more work to be done in a work day.

Additionally, The MultiGene OptiMax employs a new protocol optimization process improving on older gradient features. This "Better than Gradient" capability allows users to select up to 6 distinct annealing temperatures to be run simultaneously. This is ideal for method optimization as well as applications like genotyping.

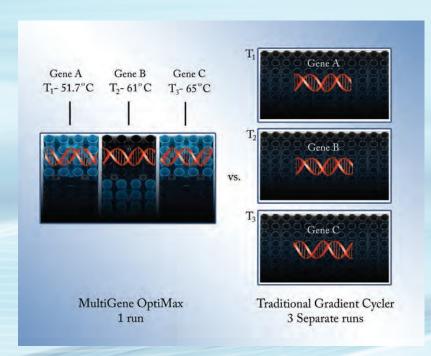


#### SPECIFICATIONS

SPECIFICATIONS	
Sample Capacity	1 x 96 well plate, 12 8 x 0.2mL strip tubes, 96 x 0.2mL tubes
Programmable Temperature Range	4°C to 99.9°C
Temperature Control	Calculated or block
Temperature Accuracy/Uniformity	±0.5°C/±0.5°C
Optimization temperature range	30°C to 99°C. Annealing Temperatures of each 6-segment block can be set independently.
	Maximum Temperature difference between each 6-segment temperature block 24°C
Orientation	6 segmented block each 4 x 4 wells in size
Programmable lid temperature	60° to 65°C, 100° to 115°C or off
Program memory	200 complete programs
Temp. increments/decrements	Yes
Time increments/decrements	Yes
User program folders	50 sets
Password protected programs	Yes
Dimensions (W x D x H)	9.4 x 16.5 x 9.8 in/ 24 x 42 x 25 cm
Weight	19.8 lbs/9 kg
Electrical	240V or 120V, 50/60 Hz
Ramp Rates	High 5°C heating/ 3.5°C cooling
	Low 3°C heating/ 2°C cooling
Sample volume range	5- <mark>100μl</mark>
Warranty	3 Years
Display	LCD

CAT NO.	DESCRIPTION
TC9610	MultiGene OptiMax with 96 well block, 120V
TC9610-230	MultiGene OptiMax with 96 well block, 230V
TC96-CM-10	Compression mat, Silicone, pk of 10

The Labnet MultiGene OptiMax is ideal for streamlining the genotyping workflow. A typical genotyping experiment requires the ability to evaluate multiple transgenes in a single animal. In an existing gradient thermal cycler verifying the integrity of your line requires three separate runs/experiments to achieve what the MultiGene OptiMax allows in one method. This is achieved by assigning the appropriate annealing temperatures for each gene in each peltier block (up to 6 different ones) and running that method. Results have confirmed that the data generated in the MultiGene OptiMax were comparable to running 3 individual runs/experiments thereby saving time and reagents and making for a greater efficiency in the workflow.



Download a copy of the application note. "Streamlining the Genotyping Workflow with the MultiGene OptiMax" at www.labnetinternational.com



The 6 distinctive blue and black peltier elements on the 96 well block can each be set to a unique and distinctive annealing temperature in your single method.

### AccuSeal™ Semi Automated Plate Sealer



Labnet's new AccuSeal semi automated plate sealer is ideal for the low to medium throughput laboratory that requires uniform and consistent sealing of microplates. Offering complete versatility, the AccuSeal will accept a full range of plates for PCR, assay or storage applications, and can be used for standard height to deep well plates. Operation is easy. Sealing parameters are set and displayed via the user-friendly control panel, and the sealing operation is automated to guarantee consistent results.

### **Controls and Operation:**

The AccuSeal's control system allows optimal settings for all types of plates and sealing material. Sealing time (in 0.1 second increments), and sealing temperature (in 1.0°C increments) can be accurately set using the control knob.

Operation is simple: Place a microplate with a sealing film onto the drawer. Press the "SEAL" button and the motorized drawer will automatically close, the heated sealing platen will press down on the seal, and then the drawer will open to present the sealed plate.

### **Versatility and Convenience:**

Labnet's AccuSeal can accept a variety of plate heights – the AccuSeal adapter is used for assay plates and PCR plates. The motorized heated platen adjusts automatically for different height plates, and provides uniform pressure to ensure a quality seal.



SPECIFICATIONS	
Dimensions (W x D x H)	6.75 x 12.75 x 14.25 in/17.1 x 32.4 x 36.2 cm
Weight	27 lbs / 12 kg
Sealing Temperature	OFF, 100 °C to 190°C, (increments of 1.0°C)
Temperature Accuracy	+/- 1.0 °C
Temperature Uniformity	+/- 1.0 °C
Sealing Time	0.5 to 10 sec. (increments of 0.1 sec)
Compatible Plate Materials	PP (Polypropylene)
	PS (Polystyrene)
	PE (Polyethylene)
Compatible Plate Types	Standard Assay Plates, Deep-Well Plates, PCR Plates
Maximum Plate Height	45mm

CAT NO.	DESCRIPTION
PS1000*	AccuSeal Semi Automated Plate Sealer, includes adapters for standard and deepwell microplates, 120V
PS1000-PCR	Accuseal Adapter for sealing assay and PCR plates
PS1000-ADAPT	Accuseal Adaptor for sealing assay plates and plates needing more support

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes EU and UK cords.

## AccuSeal<sup>™</sup> Heat Sealing Films

Labnet offers a full range of heat sealing films optimized for use in the Accuseal plate sealer. Please utilize the following guide to find out which film is best for your application.

PS1000-GP300	Easy to use, paper backed general purpose film is peelable and good for low temperature compound storage and PCR plates	100 films/case
PS1000-100	Clear polyester backed film forms a weld seal to PP microplates. Good optical characteristics make it suitable for QPCR	100 films/unit 5 units/case
PS1000-150	Clear polyester backed film forms a peelable seal to PP, PS and COC microplates. Good optical characteristics make it suitable for QPCR	100 films/unit 5 units/case
PS1000-200	Peelable film is ideal for PP and COC microplates. It can be peeled directly from the freezer. Provides a good barrier resistance to aqueous solutions and moderate resistance to solvents at room temperature.	100 films/unit 5 units/case
PS1000-300	Forms a weld seal to PE plates. Good for low temperature compound storage and PCR. Aluminum foil film ideal for use with PP plates. It is a very strong pierce seal that provides a high degree of sample protection and good solvent resistance to DMSO when stored at room temperature or below.	100 films/unit 5 units/case
PS1000-400	Peelable film good for PP and COC microplates. Can be peeled directly from the freezer. Ideal for low and room temperature compound storage. Forms a weld seal to PE plates. Good barrier resistance to aqueous solutions and solvents especially DMSO at room temperature or below.	100 films/case 5 units/case

Recommended sealing temperature and time for all PP microplates is 175°C and 3 seconds. Time and temperature can vary depending upon combination of film and microplates being utilized.



### **ENDURO™** Horizontal Gel Boxes

The ENDURO Horizontal Gel Boxes have been designed with safety and ease of use in mind. Constructed of quality materials, they stand up to everyday use and provide a long, trouble-free service life.

The gel boxes are molded from UV transparent acrylic, for leakproof performance. Cassettes enclose the electrodes to protect them from breakage and allow for easy cleaning and replacement.

Rubber casting gates fit easily onto the gel trays for tape-free gel casting. Positioning slots on the sides of the trays hold combs in place while pouring gels. The supplied combs are 1.5 mm thick and are adjustable to control well depth.

Each gel tray is supplied with a Wellcomb Mat that can be placed underneath to aid in visualizing wells when loading. The domed lid and drip ring prevent condensation from falling onto the gel.

The Enduro line includes a full range of sizes, from a compact mini system to a large system that accommodates as many as 450 samples. Additional gel trays and different sizes of combs are available as well as Enduro™ molecular weight markers. New are the Bicaster and Tricaster models that provide casting trays for multiple sized gels in a single package.



SPECIFICATIONS	Enduro 7.7	Enduro 7.10	Enduro 10.10	Enduro 15.10	Enduro 15.15	Enduro 20.20
Gel (W x L cm)	7 x 7	7 x 10	10 x 10	15 x 10	15 x 15	20 x 20
Unit (W x L x H cm)	9 x 21 x 9	9 x 21 x 9	12.5 x 22 x 9	17.5 x 26.5 x 9	17.5 x 26.5 x 9	23 x 39.5 x 9
Buffer volume	225 mL	225 mL	300 mL	500 mL	500 mL	1,200 mL
Max sample capacity	32	64	100	140	210	450
Supplied combs	8 tooth (2)	8 tooth (3)	10* tooth (2)	16* tooth (1)	16* tooth (1)	20 tooth* (2)
W////				20 tooth (1)	28* tooth (1)	40 tooth* (2)
3///					20 tooth (1)	
SPECIFICATIONS	Enduro 96	Enduro 7 BiCaster	Enduro 10 BiCaster	Enduro 15 TriCaster	Enduro 20 BiCaster	
Gel (W x L cm)	10 x 12	7 x 10	15 x 10	15 x 15	20 x 20	
Unit (W x L x H cm)	12.5 x 22 x 9	9 x 21 x 9	17.5 x 26.5 x 9	17.5 x 26.5 x 9	23 x 39.5 x 9	
Buffer volume	300mL	225 mL	500 mL	500 mL	1,200 mL	
Max sample capacity	96 plus	64	140	210	450	
Supplied combs	96 well 1 mm	8 tooth (3)	16* tooth (1)	16* tooth (1)	20 tooth* (2)	
			20 tooth (1)	28* tooth (1)	40 tooth* (2)	
Supplied Casting Trays		7 x 7, 7 x 10	10 x 7,	15 x 7	20 x 10	
			10 x 10	15 x 10	20 x 20	
*Denotes multichannel com	patible combs			15 x 15		

R1000-10BP	ENDURO MW Marker, 10bp ladder (100-2,000 bp), 0.1 μg/μl, 500 μl vial
R1000-1KB	ENDURO MW Marker, 1 kb ladder (300-10,000 bp), 0.1 μg/μl, 500 μl vial
E1007-7	ENDURO 7.7 Horizontal Gel Box
E1007-10	ENDURO 7.10 Horizontal Gel Box
E1010-10	ENDURO 10.10 Horizontal Gel Box
E1015-10	ENDURO 15.10 Horizontal Gel Box
E1015-15	ENDURO 15.15 Horizontal Gel Box
E1020-20	ENDURO 20.20 Horizontal Gel Box
E1010-9611	ENDURO 96
E1007-BI	ENDURO 7cm Horizontal Gel Box with 2 casting trays
E1010-BI	ENDURO 10cm Horizontal Gel Box with 2 casting trays
E1015-TRI	ENDURO 15cm Horizontal Gel Box with 3 casting trays
E1020-BI	ENDURO 20cm Horizontal Gel Box with 2 casting trays

<sup>\*\*</sup>Labnet offers a wide range of combs, spacers and other accessories for your electrophoresis needs. They are available on our website or by requesting our ENDURO Full Line electrophoresis catalog.



### **ENDURO™ Gel XL - A Complete Electrophoresis System**

The compact design of ENDURO Gel XL results in a much smaller footprint than that of traditional gel boxes and power supplies. The 150V power supply connects directly into the gel box, eliminating tangled leads. Casting gels is quick and easy - place the gel tray in the stand, slide the comb into the slots and pour. Combs are multichannel compatible and gel trays are UV transparent.

The molded gel tank provides leak-proof performance while the vented lid aids in dispersing heat. For safety, a magnetic sensor recognizes the presence or absence of the lid and allows current to flow accordingly. Operating parameters are set digitally, including amperage and voltage with automatic crossover. A run can be paused at any time and the parameters changed. A micro casting set for four 6 x 6 cm gels is available separately.



### **SPECIFICATIONS**

Output voltage/current 10V to 150V/10 - 400 mA

Timer 0 - 99 hr or continuous, audible alert Overall Dimensions (W  $\times$  D  $\times$  H) 10  $\times$  6.7  $\times$  2.5 in./24.5  $\times$  17  $\times$  6.2 cm

Gel Capacity 1 large (12.5 x 12 cm), 2 small (12.5 x 6 cm), 4 micro (6 x 6 cm)

Program memory Last programmed parameters saved Electrical Universal 100V- 240V, 50/60 Hz

DESCRIPTION
ENDURO Gel XL, with standard casting set (E0168), gel tank with safety lid and power supply
Large Gel Tray Set (12.5 x 12 cm), pk of 2
Small Gel Tray Set (12.5 x 6 cm), pk of 2
Micro Gel Tray Set (6 x 6 cm), pk of 4
Large Comb Set, 14/28 teeth, reversible, pk of 2
Micro Comb Set, 5/8 teeth, reversible, pk of 2
Micro Casting Set, includes 4 micro gel trays, 2 micro combs and a casting stand
Casting Stand, for all gel sizes
Standard Casting Set, includes 1 large and 2 small gel trays, 4 large combs and a casting stand

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK.



To order 120V units for Canada add -CAN to the end of the catalog number.

### **ENDURO™ VE 10 Vertical Gel System**

Labnet's ENDURO Modular Mini Vertical Gel System for protein electrophoresis is ideal for screening new samples and evaluating sample preparation conditions. It is a great research tool that can run a maximum of 4 gels within an hour. These gels can be either custom cast or pre-cast. The same system allows for either PAGE or Electroblotting to be carried out in the same tank by changing the insert.

Each VE10 electrophoresis system can accommodate up to 4 handcast gels and 2 commercial precast gels to provide complete flexibility for individual research needs. The unique sliding clamp technology within the PAGE insert facilitates fast, intuitive leak-free casting. Reversible combs also serve as loading indicators to aid pipette-well alignment, preventing sample loading errors. Insert your comb into a freshly poured gel which is allowed to set before inverting the comb to use a loading template that sits conveniently above the newly formed sample wells.

With easy set up and reliable performance, the VE10 Mini Vertical systems are perfect for today's laboratories where the ability to generate reproducible results quickly is of prime importance.



### **SPECIFICATIONS**

Number of gels (Handcast)

Precast gel compatability

(Up to 2 gels/run) Pierce Protein Gel, BIO-RAD Mini

PROTEAN® Precast gels.

Glass Plate Dimensions (W x H x T)

Gel Dimensions (W X H)

Total buffer volume

Standard run time for SDS-Page

Unit Dimensions (W x H)

Unit Weight

Novex®, SERVAGel™, Thermo Precise

10x10x0.2 cm

8 x 8.5 cm

Min 250mL Max 1200mL

1-2 hours at from 90-225V

19 x 13 x 15 cm

1.8Kg

CAT NO.	DESCRIPTION
E2010-PA	ENDURO VE10 PAGE system, includes PAGE insert, buffer tank with leads and cooling pack
E2010-PBA	ENDURO VE 10 PAGE system with Electroblotting Insert . (E2010-BM + E2010-PA)
E2010-PCA	ENDURO PAGE casting system
E2010-BM	ENDURO VE10 Electro blotting Module for use with VE10 vertical gel system, includes 4
	cassettes and 8 fiber pads

<sup>\*</sup>Labnet offers a wide range of combs, spacers and other accessories for your electrophoresis needs. They are available on our website or by requesting our ENDURO Full Line electrophoresis catalog.

### **ENDURO™ VE 20 Vertical Gel System**

The ENDURO VE20 is Labnet's new large format vertical gel electrophoresis system. Designed to perform a variety of separations, including first and second-dimension SDS-PAGE, native, preparative, gradient, high-resolution nucleic acid electrophoresis and electroblotting, the VE20 is one of the most versatile large format vertical systems available.

The VE20 distinguishes itself in its flexibility of applications, ease of gel casting and set-up requiring only 4 screws to secure 4 (16 x 17.5 cm) gels. The VE20 vertical screw-clamp configuration distributes pressure evenly along the height of the gel rather than in the center to eliminate plate bowing and gel compression. The new configuration still maintains a leak-proof seal during casting; while the ergonomic wave-like design of the PAGE insert aids both handling and set up.



Whether it is running 2 or 4 gels, electroblotting or IEF using IPG strips, all of these techniques may be performed using the same base unit while retaining the benefits provided by large format electrophoresis, such as extended separation distances, greater sample throughput and superior resolution. Whatever your large format gel requirements are, the VE20 can be made to meet them.

SPECIFICATIONS	
Plate dimensions: (W x H x D)	20 x 20 x 0.4 cm
Standard spacer dimensions: (W x H)	2 x 20 cm
IPG spacer dimensions: (W x H)	0.6 x 20 cm
Unit dimensions: (W x H x D)	30 x 27 x 18 cm
Unit deight	5.5 lbs/ 2.5 kg
Number of gels	1-4
Total volume inner buffer chamber	640 mL
Total buffer Volume for 2 gels	5.3 L
Total buffer Volume for 4 gels	4.8 L
Std run time without cooling	4-5 hours
Std run time with cooling	3-4 hours

CAT NO.	DESCRIPTION
E2020	ENDURO VE20 Vertical Gel System includes glass plates, 2 x 24 well combs, cooling coil and casting base
E2020-CU	ENDURO VE20 Dual Casting System 2 sets of glass plates, 1 mm thick bonded spacers, 2 x 24 well 1 mm
	thick combs, cooling coil, dummy plate and caster with external
E2120-EC	ENDURO VE20 External Casting Stand
E2120-CAST	ENDURO VE20 Casting Base
E2120-PI	ENDURO VE20 Page insert
E2120-CC	ENDURO VE20 Detachable Cooling Coil
E2120-RM	ENDURO VE20 Replacement Rubber mats for 20 x 20 cm caster.
E2120-MCB	ENDURO VE20 Maxi Cooling Block
E2120-CC	ENDURO VE20 Detachable Cooling Coil
E2120-LD	VE20 lid (No cables)

<sup>\*</sup>Labnet offers a wide range of combs, spacers and other accessories for your electrophoresis needs.



They are available on our website or by requesting our ENDURO Full Line electrophoresis catalog.

### **ENDURO™ VE 10 Blotter**

This ENDURO VE10 blotter has a 4 mini gel (10 x 10 cm) capacity and can be purchased either as a stand-alone tank blotter or part of an integrated mini-gel/blotting system utilizing one shared tank.

This electroblotting system includes tank, blotting inserts and 4 cassettes with fiber pads.



CAT NO.	DESCRIPTION
E2010-BT	ENDURO Electroblotting System, includes tank, blotting insert & 4 cassettes
E2010-BM	Mini Vertical Electroblotting Module for use with mini vertical gel system, includes 4 cassettes and 8 fiber pads
E2010-PMA*	Mini Vertical PAGE module for use with mini vertical gel system.
E2110-B-MC	Blotting Cassette
E2110-B-FP	Fiber Blotting Pads, pack of 8 pads
E2110-CP	Mini Cooling Pack for use with mini vertical gel system

<sup>\*</sup>Glass plates, combs & caster not included.

### **ENDURO™ VE 20 Blotter**

The ENDURO VE20 blotter has a large capacity that can hold up to 16 mini-gels or 4 large format gels. The VE20 electroblotting system provides all necessary components for performing transfers from vertical slab gels. It comes with tank, lid, platinum wire electrodes, 4 cassettes, 18 fiber pads and cooling coil. It has interchangeable modular inserts that can combine with VE20 vertical PAGE to use the same universal tank and lid. Complete flexibility is provided as the VE20 can be run with most power settings required. It can perform overnight transfers at voltages as low as 35V and rapid, high-intensity transfers up to 200V in 1-2 hours.



The VE20 comes standard with platinum wire electrodes 8 cm apart for increased capacity. A high intensity insert with plate electrodes 4 cm apart for rapid transfers is also available, E2020-HITB. The detachable cooling coil, which connects to the laboratory water supply or a recirculating chiller, prevents buffer depletion to allow overnight transfers and fast high-intensity blots. It also maintains the low temperatures important for protein stability during native transfers. The open design and rigid cassettes maximize current transfer and eliminate 'shadow band' formation. Color-coded cassettes prevent polarity reversal ensuring proper blotting. This is a well thought out high capacity tank blotter and a great value.

CAT NO.	DESCRIPTION
E2020-TB	ENDURO VE20 Blotting System, system Including tank and lid, 4 cassettes, 18 fibre pads, cooling coil
E2020-TBI	ENDURO VE20 Maxi Platinum Wire Blotting Inset, 4x compression cassettes and 18x fibre pads
E2120-TBC	ENDURO VE20 Blot Maxi Cassette
E2120-TBFP	Fibre pads - pk of 6
E2020-HITB	ENDURO VE20 HS Blotting System, High Intensity System including tank and lid, 1 casettes, 6 fiber pads, cooling coil
E2120-HITBI	ENDURO VE20 HS Blotting System High intensity insert - includes 1 casette and 6 fibre pads
E2120-CC	ENDURO VE20 Detachable Cooling Coil
E2120-LD	VE20 lid (No cables)
E2120-T	VE20 Tank

<sup>\*</sup>specifications based on VE20, see page 63

<sup>\*\*</sup>specifications based on VE10, see page 62

#### **ENDURO™ Semi Dry Blotter**

The ENDURO Semi Dry Blotter offers rapid transfer times for DNA, RNA and protein blotting – typically 15 to 30 minutes. Western , Northern and Southern Blots can be easily accomplished via uncomplicated buffer and set up procedures. The Semi Dry Blotter is compatible with gel thicknesses from 0.25 mm up to 10 mm without the need for additional equipment.

The Semi Dry Blotter has the added benefit of economic transfers due to very low buffer volumes – typically only a few milliliters of buffer is required per transfer. The SemiDry Blotter utilizes a screw down lid, which secures the blot sandwich and allows complete control of pressure ensuring even transfer. The electrodes, comprising platinum coated anode and stainless steel cathode, will exhibit practically no corrosion therefor providing many years of trouble free use. Uniform heat dispersion across the blot sandwich ensures stable transfer times and no heat induced sample loss or transfer distortions. Electrode plates are fully separated to prevent arcing or damage.



SPECIFICATIONS	
Dimensions (L x W x H)	12.8 x 9.8 x 2.2 in
	32.5 x 25 x 5.5 cm
Recommended current	.8mA / cm2
Active transfer area	20 x 20 cm
Weight	3 lbs/1.4 kg
Buffer volume	20 mL
Sample capacity	
4 Blots:	8 x 8.5 cm
2 Blots:	16 x 8.5 cm
1 Blot:	16 x 17.5 cm
Run time	15 - 30 min

CAT NO.	DESCRIPTION
E2020-SDB	ENDURO Semi Dry Blotter for Western, Southern and Northern Blots
E2020-SDBPS*	ENDURO Semi Dry Blotter/ 250V Power Supply Kit -115V
E0203*	ENDURO Model 250V Power Supply 250V, 3A, 300W programmable with timer
R1000-10BP	ENDURO MW Marker, 10bp ladder (100 - 2,000 bp), 0.1μg/μl, 500 μl vial
R1000-1KB	ENDURO MW Marker, 1 kb ladder (300 - 10,000 bp), 0.1μg/μl, 500 μl via

<sup>\*</sup>To order 230V add -230V to end of catalog number.



#### **ENDURO™** Power Supplies

The ENDURO power supplies meet a wide range of applications for DNA, RNA and protein electrophoresis as well as blotting. Designed with safety in mind, they are loaded with features that todays applications demand. 4 models are available to meet your needs. Operating modes depending on model include constant voltage, current or wattage all with automatic crossover.

Operational parameters are easy to set using the membrane keypad and are displayed digitally on the large backlit LCD. The large display is visible from across the laboratory. The Model 250V allows 10 steps per program and the 500V provides 6 steps per program. Four sets of color coded output terminals allow multiple gels to be run simultaneously except in the Mini which allows 2 sets gels at once.In the event of a power failure, the ENDURO units have an automatic recovery feature to maintain the previous settings.

The Mini 300V Power supply has an optional Power Stack. This combination rack and power source allows you to ergonomically stack 3 units only using one plug on the lab bench while providing optimal air flow around power supplies.



SPECIFICATIONS	Model 300V	Model 250V
Output voltage/range/increments	2-300V/1V	5-250-V/1V
Output current range/increments	4-500mA/1mA	10-3,000mA/10mA
Output power range/increments	90W max/na	1-300W/1W
Timer	1 min – 999 min. or continuous	1 min – 999 min. or continuous
Programmable	No	Yes, 10 steps/program, 20 program memory
Dimensions	19 x 25 x 8 cm	19 x 25 x 8 cm
Weight	4.8 lbs/2.2 kg	5.5 lbs/2.5 kg
Input voltage	120-230V	120V-230
SPECIFICATIONS	Model 500V	Model Mini 300V
Output voltage/range/increments	5-500V/1V	10-300V/1V
Output current range/increments	1-800mA/1mA	10-400mA/1mA
	000/4/4/4/	0014/
Output power range/increments	300W/1W	60W
Output power range/increments  Timer		1 min - 99 hr 59 min or continuous
Timer	1 min – 9999 minutes or continuous	1 min - 99 hr 59 min or continuous
Timer Programmable	1 min – 9999 minutes or continuous 6 steps/30 programmable files	1 min - 99 hr 59 min or continuous No

CAT NO.	DESCRIPTION
E0303*	ENDURO Model 300V
E0203*	ENDURO Model 250V
E0500*	ENDURO Model 500V
E0304*	ENDURO Model Mini 300V
E0304-R	ENDURO PowerStack
E0304-BUN*	ENDURO mini power supply and powerstack bundle, includes two mini power supplies

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units include EU and UK power cords.

#### **ENDURO™** Power Supplies selection guide

				C D				F 15				
ı		Gel Size	# of	Start Run Voltage	CST	Current	CST	End Run Voltage	CST	Current CST	Run	Power
		(W x L x H)	Gels	voltage	C31	Current	C31	voltage	C31	Current C51	Time	Supply
-	SDS-PAGE, SECOND-DIMENSION 2D											
_	VE10	80 x 85 x 1 mm	2-4	200v	<b>√</b>	120- 240mA		200v	✓	120mA	40-60 min	E0303, E0304, E0500, E0203
,	VE20	160 x 175 x 1 mm	2-4	100v		35mA	<b>√</b>	350v		35mA ✓	5 hr. max.	E0500
Ī	DNA REST	RICTION ANALYS	SIS									
]	E1007-7	70 x 70 x 5 mm	1	80v	✓	40mA		80v	<b>√</b>	45mA	45 - 60 min	E0303, E0304, E0500, E0203
]	E1007-10	71 x 70 x 5 mm	1	80v	✓	40mA		80v	✓	45mA	45 - 60 min	E0303, E0304, E0500, E0203
]	E1010-10	100 x 100 x 5 mm	1	90v	✓	50mA		95v	✓	55mA	45 - 60 min	E0303, E0304, E0500, E0203
1	E1015-10	100 x 150 x 5 mm	1	90v	<b>√</b>	50mA		95v	✓	55mA	45 - 60 min	E0303, E0304, E0500, E0203
]	E1015-15	150 x 150 x 5 mm	1	90-150v	✓ ·	50 - 80mA		90-150v	✓	55 - 90mA	60 - 90 min	E0303, E0304, E0500, E0203
	E1020-20	200 x 200 x 5 mm	1	100- 150v	/	50 - 80mA		100- 150v	✓	55 - 90mA	60 - 90 min	E0303, E0304, E0500, E0203
_	HIGH THRO	DUGHPUT DNA E	LEC1	ROPHOF	RESI	S (HORIZO	NTA	 L)			_	
_	E1010-9611	100 x 120 x 5 mm		70v	✓	40		80v	✓	45mA	30-45 min	E0303, E0304, E0500, E0203
1	WESTERN	BLOTTING										
]	E2010-BT	80 x 85 x 1 mm	4	100v		250mA		100v	✓	400mA	2 hr.	E0303, E0304, E0500, E0203
	Е2020-ТВ	160 x 175 x 1 mm	4	50 / 100v Wire/Plate Electrode	✓	150 - 250 /1000mA 1600 Wire/P Electrode	√ late	50 / 100v Wire/Plate Electrode	✓	150 - 250	5-20hr / 1-5hr	E0203
(	E2020-SDB (semi-dry)	200 x 200 x 2/5 mm	1 lg 4 sm	75v	<b>√</b>	1200mA		75v	✓	1200mA	15 - 30 min	E0203

<sup>\*</sup>CST=Constant

#### **ENDURO™ UV Transilluminators**

CSA Compliant

The ENDURO UV Transilluminator represent a great new imaging product true to the ENDURO name. These UV transilluminators have been designed for rugged use and durability with exceptional performance. The unique hinge design and frame on the UV shield prevents the lid from cracking and hinge damage predominant on most transilluminators in the market. The compact size and quality of image offer a great value. These UV transilluminators come in single or dual wavelength models.

SPECIFICATIONS	Model U1001	Model U1002
Outer Dimensions	253 x 340 x 80 mm	253 x 340 x 80 mm
Viewing Dimension	210 x 260 mm	210 x 2260 mm
Wavelength	302 nm	302 nm / 365 nm
UV tubes - 302 nm	8W x 6	8W x 6
UV tubes - 365 nm		8W x 6
Power	100V-240V, 50/60 Hz	100V-240V, 50/60 Hz
Weight	5 kg	5 kg



CAT NO.	DESCRIPTION
U1001*	ENDURO UV Transilluminator with 302 nm wavelength, 115V with US plug
U1002*	ENDURO UV Transilluminator with 302 nm and 365 nm wavelengths, 115V with US plug.

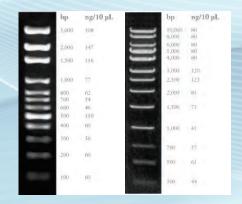
<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V units includes EU and UK cords.

#### **ENDURO™ MW Markers**

The 100 bp and 1 Kb DNA markers are designed to allow the sizing of a wide range of crisp and precise DNA fragments ranging from 100 bp to 10000 bp. These markers are stable at ambient temperature with 2 years shelf life. They are ready-to-use, formulated with loading buffer and Bromophenol blue for easy loading and tracking on the gel.

The 100 bp DNA ladder contains 11 discrete DNA fragments ranging in size from 100 bp to 3,000 bp, this marker is ideal for the size determination of PCR products.

The 1 Kb DNA ladder contains 13 discrete DNA fragments ranging in size from 300 bp to 10,000 bp. This marker is ideal for the size determination of digested DNA



R1000-100bp

R1000-1KB

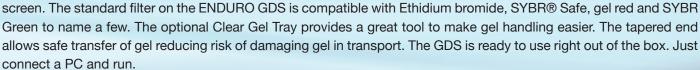
CAT NO.	DESCRIPTION
R1000-100bp	ENDURO Molecular Marker 100bp DNA ladder: 11 fragments, 100-2,000bp, 500 μL
R1000-1Kb	ENDURO Molecular Marker 1 Kb DNA ladder: 13 fragments, 300-10,000bp, 500 μL

#### **ENDURO™ GDS Gel Documentation System**

The ENDURO GDS Gel Documentation System is a state-of-the-art imaging system providing an incredible combination of performance, value and ease of use. It is a perfect fit with the rapidly expanding ENDURO Electrophoresis and Labnet Molecular Biology product line.

The ENDURO GDS provides exceptional resolution with a 5MP scientific camera, a built in UV transilluminator with a safety shut off switch, and viewing port are unique in this price range. The large field of view (20 cm x 24 cm) allows for large gel imaging, or the imaging of many gels at once. The system was designed to always be in focus, which means no manual manipulation of the lens is required, ever.

Application flexibility is achieved through the UV transilluminators, the optional white light conversion screen, and optional blue conversion



The ENDURO GDS was designed to save images as either jpg. files for publications or tiff. files for quantitative analysis. Labnet offers Total Lab 1D software in either single, multiple user or network licenses. Total Lab 1D provides for the rapid analysis of images and can get you results in a single click of the mouse. The user has the ability to review each stage of the workflow analysis and intervene or edit if required. Combining high levels of automation with final user review allows rapid and accurate quantitative analysis. The user then has full control of the visualization tools and data display - outputting only those data fields that are of importance as well as the images of choice. Reports can easily be generated including quantitative data, gel image and band profile. This is a full featured analytical software package that is the result of decades of software refinement.



#### **SPECIFICATIONS**

Camera 5 Megapixels (2592 x 1944), scientific grade sensor

Lens 8 mm, f1.4 hands-free lens with Smart Capture technology

Cabinet Built in UV transilluminator (302 nm or 365 nm) with:

UV viewing port

Software controls of UV light with automatic shut-off switch

UV safety override switch in door

Maximum field of view 20 x 24 cm

Software Application-driven imaging offers streamlined workflow

Optional: TotalLab 1D for quantitative analysis\*

Dimensions 34.6 x 31.1 x 68.6 cm (13.6' x 12.2' x 27')

Weight 21.4 kg (48 lbs)

\* Recommended that Microsoft Excel is loaded on the PC to use optional

TotalLab 1D software



PC SPECIFICATIONS Operating System Windows 7 Windows 8 Windows 10

Minimum hardware requirements 1.4 GHz processor speed 2GB RAM 16 GB Free Hard Disk Space 2 USB (camera and printer)

CAT NO.	DESCRIPTION			
GDS-1302*	ENDURO GDS Imaging System, 302 nm - Universal Voltage			
GDS-1365*	ENDURO GDS Imaging System, 365 nm - Universal Voltage			





#### **ENDURO™ GDS Touch Gel Documentation System**

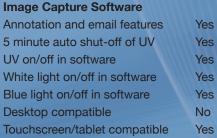
The ENDURO GDS Touch is an integrated system for DNA analysis and gel documentation. It is based on the GDS but incorporates an integrated tablet PC with a three position filter wheel with both EPI-Blue and EPI-White light sources standard. The market has shown a growing demand for being able to image DNA at higher wavelengths so as to prevent DNA nicking for downstream applications.

The powerful EPI-Blue light can discriminate bands stained with SYBR®Safe up to 3 levels of magnitude greater than imagers using blue light conversion screens. Just like the ENDURO GDS, there is no need to touch the camera. Installation and operation is simple and acquisition of image can be achieved in 4 touches of the tablet. The ENDURO GDS Touch is ideal for life science research labs who need a flexible system with a small footprint.



#### **SPECIFICATIONS**

Camera Resolution	5MP
Lens	Manual F 1.4 Lens (No Focus Required)
Field of View	20cm x 24cm
Standard Illumination	Epi blue and white light, 302 or 365nm UV transillumination
Pull out UV	For visualizing and cutting bands
System Controls	Integrated Touchscreen computer
Filter	Three position (EtBr included)



Communications USB . Tablet has wireless and bluetooth options

Footprint 14" by 12.5" x 25"





CAT NO.	DESCRIPTION
GDST-1302*	ENDURO GDS Touch Imaging System, 302 nm - Universal Voltage
GDST-1365*	ENDURO GDS Touch Imaging System, 365 nm - Universal Voltage

\*Unit includes US, EU & UK power cords

® registered trademark of Life Technologies

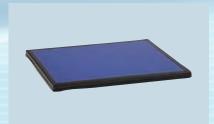
#### **ENDURO™ GDS Documentation System Accessories**



GDS-12018
Clear Gel Tray
Use for gel transfer and cutting



GDS-12019
White Light Conversion Tray
Use for Coomassie and Silver stain



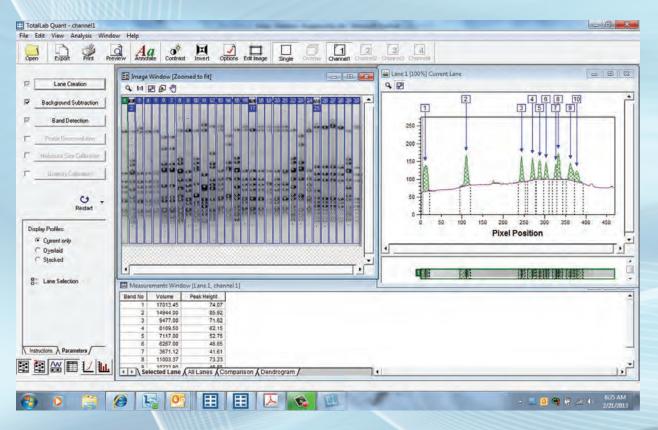
GDS-12020
Blue Light Conversion Screen (for GDS only)
Use for Gel Green, SYBR®Safe stain, and stains that excite at 490 nm

STAIN GUIDE		
Fluor/Stain	Description	Part Number
Ethinium Bromide	302nm UV	Standard
Gel Red	302nm UV	Standard
SYBR Green	302nm and 488nm	Standard
Gel Green	Blue Light Conversion Screen	GDS-12020
SYBR®Safe	Blue Light Conversion Screen	GDS-12020
Coomassie Stain	White Light Conversion Screen	GDS-12019
Silver Stain	White Light Conversion Screen	GDS-12019
OPTIONAL FILTERS (Fo	or GDS Touch only)	
GDST-676R	Red filter (676 nm)	
GDST-572G	Green Filter (572 nm)	
GDST-497B	Blue Filter (497 nm)	
GDS1-497B	Blue Filter (497 nm)	

® registered trademark of Life Technologies

#### **ENDURO™ TOTAL LAB**

Labnet offers TotalLab 1D software in either single, multiple user or network licenses. TotalLab 1D provides for the rapid analysis of images and can get you results in a single click of the mouse. The user has the ability to review each stage of the workflow analysis and intervene or edit if required. Combining high levels of automation with final user review allows rapid and accurate quantitative analysis. The user then has full control of the visualization tools and data display - outputting only those data fields that are of importance as well as the images of choice. Reports can easily be generated including quantitative data, gel image and band profile. This is a full featured analytical software package that is the result of decades of software refinement.



#### \*New Features\*

- -New User Interface with simplified menus
- -Can save frequently used protocols
- -Unique Tutorial mode steps you through analysis

By pressing "Automatic" the first three actions in the experimental overview have been completed

- 1) Lane Creation
- 2) Backgroung subtraction
- 3) Band detection

CAT NO.	DESCRIPTION
GDS - TL1D-1	TotalLab 1D 1 user license
GDS - TL1D-2	TotalLab 1D 2 user license
GDS - TL1D-3	TotalLab 1D 3 user license
GDS - TL1D-1U	TotalLab Quant upgrade 1 user license
GDS - TL1D-3U	TotalLab Quant upgrade 3 user license

# **AGITATION EQUIPMENT** VORTEXERS ORTEXERS ORBITAL SHAKERS 3-D SHAKERS ROTATORS RECIPROCAL SHAKERS ROCKING PLATFORMS SHAKING INCUBATORS Labnet Labnet Labnet International, Inc.

#### **VX-200 Vortex Mixer**

The VX-200 Vortex Mixer features a true circular orbit for even distribution of vortexing across the entire speed range. Variable speed makes the unit useful for a variety of applications from gentle mixing to resuspending pellets.

The standard head supplied with the vortexer, the CombiCup™, will accommodate a single tube or a whole handful. The head is easily removed and replaced with optional heads that accommodate tubes of a variety of sizes as well as microplates.

An optimized counter balance enables the vortex mixer to be lightweight and stable during operation. The powerful motor provides efficient mixing and a long service life. Two modes allow for "touch" or continuous operation.

The VX-200 is safe for cold room or incubator use.



Other accessories available below

SPECIFICATIONS	
Speed range	120V: 0 - 3,400 rpm
	230V: 0 - 2,850 rpm
Operating modes	Touch or continuous
Ambient operating range	+4° to 65°C
Dimensions (W x D x H)	5.5 x 6.3 x 5.1 in/14 x 16 x 13 cm
Weight	4.84 lb/2.2 kg
Electrical	120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION
S0200*	VX-200 Vortex Mixer with CombiCup head, 120V
S0200-20	3" flat head adapter, with dimpled mat
S0200-21	Optional head attachment for 24 x 1.5/2.0 mL tubes, 24 x 0.5 mL tubes and 32 x 0.2 mLtubes (or 4 tube strips)
S0200-22	Optional head attachment for 1 microplate or 64 x 0.2 mL tubes or 8 x 0.2 mL tube strips
S0200-23	Optional head attachment for 8 x 15 mL and 8 x 12/13 mm diameter tubes
S0200-24	Optional head attachment for 6 x 50 mL tubes
S0200-25	Optional head attachment for 12 x 1.5/2.0 mL tubes, held horizontally
S0200-26	Optional head attachment for 4 x 15 mL tubes, held horizontally
S0200-27	Optional head attachment for 2 x 50 mL tubes, held horizontally

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK.

#### Orbit™ Digital Microtube and Microplate Shakers

The Orbit M60, P2 and P4 digital shakers feature variable speed across a broad range, making them useful for a variety of applications. Both time of operation and shaker speed are set digitally with a single knob with their values shown on the large 3-digit LED. A sturdy base encloses the motor for quiet, vibration-free operation. All three models can be used in temperature controlled environments. Their compact size makes them ideal for use in the incubators.

#### Orbit M60

Despite its small size, the Orbit M60 can process up to 60 microtubes at one time. 1.5/2.0 mL tubes are accommodated directly while smaller tubes can be used with adapters, sold separately.

#### Orbit P2 and Orbit P4

These vortexers accept all standard microplates. (For higher capacity and deep well plates, please see Orbit 300 on the following page.) Retaining springs on the contoured steel platform hold samples in place. The Orbit P2 holds two microplates while the Orbit P4 holds four.



Speed range\* 100 - 1,400 rpm

Timer 0 - 99 min or continuous

Motion/orbit size Circular, 3 mm

Maximum capacity M60: 60 x 1.5/2.0 mL microtubes

P2: 2 microplates P4: 4 microplates 0.66 lb/0.3 kg

Maximum load 0.66 lb/0.3 kg
Ambient operating range +4° to 65°C

Base dimensions (W x D x H) 7.4 x 11.8 x 5.9 in/18.8 x 30 x 15 cm

Weight 9.5 lb/4.3 kg

Electrical 120V~, 60 Hz or 230V~, 50 Hz

\*Maximum speed for 230V unit is 1,200rpm







CAT NO.	DESCRIPTION	
S2020-M60-B*	S2020-M60-B* Orbit M60 Digital Shaker with platform for 60 microtubes, 120V	
S2020-R	Extra workstation/transfer rack for above	
C1205	Individual adapters for 0.5/0.6 mL tubes, pk of 6	
C1206	Individual adapters for 0.4 mL tubes, pk of 6	
C1222	Individual adapters for 0.2 mL thermal cycling tubes, pk of 6	
S2020-P2-B*	Orbit P2 Digital Shaker with platform for 2 microplates, 120V	
S2020-P4-B*	Orbit P4 Digital Shaker with platform for 4 microplates, 120V	

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.



#### **Orbit™ 300 Multipurpose Digital Vortexer**

Three interchangeable platforms (available separately) accommodate a variety of sample containers to make the Orbit 300 a truly multi-purpose vortexer. The flat platform, covered with a non-slip rubber mat, holds plates, dishes, boxes, etc. The microplate platform will accommodate up to four deep well microplates. The clamp platform has spring loaded retaining bars that adjust to hold flasks, bottles, racks and other containers in place.

Time and speed are set digitally with a single knob. Values are shown on the large, three digit LED. The broad speed range allows the Orbit 300 to be used for gentle mixing as well as vigorous agitation.

The shaker housing is constructed of plastic; chemically resistant and easy to clean. This compact shaker can be used in temperature controlled environments making it ideal for cold room or incubator use.



#### **SPECIFICATIONS**

Speed range 100 - 1,200 rpm

Timer 0 - 99 min or continuous

Motion/orbit size Circular, 3 mm

Maximum load 4.4 lb/2 kg

Ambient operating range +4° to 65°C

Dimensions (W x D x H) 10.3 x 13.3 x 5.1 in/26.2 x 33.7 x 13 cm

Weight 16 lb/7.3 kg

Electrical 120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION	
S2030-300-B*	Orbit 300 Multipurpose digital Vortexer, without platform, 120V	
S2030-10	Platform for four microplates	
S2030-12	Platform with non-slip rubber mat	
S2030-13	Spring loaded platform for flasks, bottles or tube racks, etc.	
K564	Tube rack, pp, 90 x 13 mm diameter tubes, fits in S2030-13 platform, pk of 5	
K565	Tube rack, pp, 60 x 16 mm diameter tubes, fits in S2030-13 platform, pk of 5	
K566	K566 Tube rack, pp, 40 x 20 mm diameter tubes, fits in S2030-13 platform, pk of 5	

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.

#### Orbit™ LS Low Speed Shaker

The Orbit LS low speed shaker is a high quality, general purpose shaker with economical analog control.

Styled after the other models in the line, the Orbit LS features a streamlined, compact design with easy-access control panel. Electronic controls are utilized for setting speed and time. The knobs used for selecting parameters turn easily and are clearly marked with corresponding values.

A large orbit and low speed make the Orbit LS useful for staining and destaining gels, washing blots and general mixing. The shaker is supplied with a  $30 \times 30$  cm stainless steel flat platform and non-slip rubber mat to keep plates, dishes and other sample containers in place.

Safe for use in temperature controlled environments, the small profile of this shaker makes it ideal for use in incubators.



#### **SPECIFICATIONS**

Speed range 3 - 60 rpm

Timer 20 - 120 min (10 min inc.) or continuous

Motion Circular, 19 mm

Maximum load 11 lb/5 kg

Ambient operating range +4° to 70°C

Dimensions (W x D x H) 10.3 x 13.3 x 5.1 in/26.2 x 33.7 x 13 cm

Weight 14.5 lb/6.6 kg

Electrical 120V~ or 230V~, 50/60 Hz

CAT NO.	DESCRIPTION
S2030-LS-B*	Orbit LS Low Speed Orbital Shaker with flat platform (30 x 30 cm), 120V
S2031-12D	Two stacked platforms (30 x 30 cm) for use with Orbit 1000/Orbit LS
E2110-BBS	Blot box, 9.1 x 6.6 cm, 3-50 mL capacity for mini protein gels, pk of 10
E2110-BBL	Blot box, 11.7 x 8.9 cm, 6-10 mL capacity for larger mini protein gels, pk of 10

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.



#### Orbit™ 1000 Multipurpose Digital Shaker

Four platform configurations allow the Orbit 1000 Digital Shaker to meet a variety of shaking and mixing applications. Single and double flat platforms hold trays, plates and dishes. The double platform allows for expansion of the shaker capacity without increasing the footprint. The universal platform has spring loaded bars that adjust to fit flasks, bottles, tube racks and odd shaped containers. Pre-drilled to hold Erlenmeyer flask clamps (sold separately), the flask platform is ideal for mixing and growing cultures. Platforms are easily removable and interchangeable.

A powerful brushless motor and counter balanced shaker mechanism provide smooth operation and years of trouble-free use. Speed and time are set with the single knob, while the set and current values are displayed digitally. Speed is adjustable over a broad range to allow for applications such as staining and destaining gels, growth of bacterial cultures and hybridization. The Orbit 1000 Digital Shaker is safe for use in temperature controlled environments. Platforms sold separately.



#### **SPECIFICATIONS**

Speed range 20 - 300 rpm

Timer 0 - 99 min or continuous

Motion/orbit size Circular, 19 mm

Maximum capacity 4 x 1L, 5 x 500 mL, 9 x 250 mL, 16 x 125 mL

Maximum load 11 lb/5 kg
Ambient operating range +4° to 65°C

Dimensions (W x D x H) 10.3 x 13.3 x 5.1 in/26.2 x 33.7 x 13 cm

Weight 16 lb/7.3 kg

Electrical 120V~, 60 Hz or 230V~, 50 Hz



S2031-12

CAT NO.	DESCRIPTION
S2030-1000-B*	Orbit 1000 Digital Shaker without platform, 120V
S2031-12	Flat platform with non-slip rubber mat (30 x 30 cm)
S2031-12D	As above, but two stacked platforms
S2031-13	Spring loaded platform for flasks, bottles or tube racks (see tube racks on page 83)
S2031-18	Flask clamp platform without clamps
S2040-25	Clamp for 25 mL Erlenmeyer flask (max. 16)
S2040-50	Clamp for 50 mL Erlenmeyer flask (max. 16)
S2040-85	Clamp for 125 mL Erlenmeyer flask (max. 16)
S2040-99	Clamp for 250 mL Erlenmeyer flask (max. 9)
S2040-09	Clamp for 500 mL Erlenmeyer flask (max. 5)
S2040-01	Clamp for 1,000 mL Erlenmeyer flask (max. 4)

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.

#### Orbit™ 1900 High Capacity Shaker

The Orbit 1900 shaker is designed for continuous use and heavy loads. Its solid construction and counter balanced drive system provide vibration-free operation.

Operation of the shaker can be timed or continuous, while the speed is variable. Both time and speed are set digitally with a single knob. Values are shown on the large, three digit LED display.

Three heavy-duty stainless steel platforms are available to accommodate a variety of different sizes of sample containers. The flat platform is useful for trays, plates, boxes and other containers. A non-slip mat on the platform surface keeps items in place. Flasks are held on the flask platform through the use of clamps (sold separately). As many as five 2L or six 1L flasks can be shaken on the platform. A universal bar clamp platform adjusts to hold odd shaped containers. Suitable for use in an incubator or cold room.



#### **SPECIFICATIONS**

Speed range 20 - 300 rpm

Timer 0 - 99 min or continuous

Motion/orbit size Circular, 19 mm

Maximum load 22 lb/10 kg

Ambient operating range +4° to 65°C

Dimensions (W x D x H) 15.3 x 16.8 x 6.2 in/38.9 x 42.7 x 15.8 cm

Weight 46.2 lb/20.9 kg

Electrical 120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION
S2040-1900*	Orbit 1900 Digital Shaker, without platform, 120V
S2040-12	Flat platform with nonslip mat (40 x 50 cm)
S2040-15	Universal bar clamp platform for holding a variety of containers
S2040-18	Platform for flask clamps (clamps sold separately)
S2040-25	Clamp for 25 mL Erlenmeyer flask (max. 28)
S2040-50	Clamp for 50 mL Erlenmeyer flask (max. 28)
S2040-85	Clamp for 125 mL Erlenmeyer flask (max. 28)
S2040-99	Clamp for 250 mL Erlenmeyer flask (max. 20)
S2040-09	Clamp for 500 mL Erlenmeyer flask (max. 10)
S2040-01	Clamp for 1 L Erlenmeyer flask (max. 6)
S2040-02	Clamp for 2 L Erlenmeyer flask (max. 5)

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.



#### **GyroTwister**<sup>™</sup> 3-D Shaker

The three dimensional shaking motion of the GyroTwister is extremely efficient, yet gentle, making it ideal for general mixing as well as staining gels, hybridization and other applications.

Two versions are available: the GyroTwister and GyroTwister Adjustable. Both feature variable speed across a broad range. The tilt angle of the standard model is fixed while the pitch of the adjustable version is easily changed by turning the dial in the center of the platform.

The shakers are supplied with a 30 x 30 cm platform with non-slip matas well as a dimpled mat for holding tubes. Larger platforms and a stacked standard platform configuration are available to increase shaker capacity. All platforms are made of corrosion resistant stainless steel to prevent bending and warping. The GyroTwister and GyroTwister Adjustable are safe for use in temperature controlled environments, from 4° to 65°C.



SPECIFICATIONS	GyroTwister	GyroTwister Adjustable
Speed range	3 - 60 rpm	3 - 60 rpm
Timer	20 - 120 min or continuous	20 - 120 min or continuous
Motion/ Pitch	3D/fixed 7° pitch	3D/adjustable ±10°
Maximum load	11 lb/5 kg	11 lb/5 kg
Ambient operating range	+4° to 70°C	+4° to 65°C
Dimensions (W x D x H)	13 x 13.9 x 8.3 in	13 x 13.9 x 8.3 in
	33 x 35.2 x 21 cm	33 x 35.2 x 21 cm
Weight	14.3 lb/6.6 kg	14.3 lb/6.6 kg
Electrical	120V~ or 230V~, 50/60 Hz	120V~ or 230V~, 50/60 Hz

CAT NO.	DESCRIPTION	
S1000-B*	GyroTwister 3-D shaker with 30 x 30 cm non-slip platform and dimpled tube mat, 120V	
S1000-A-B*	GyroTwister Adjustable, as above, with adjustable tilt angle,120V	
S1000-30	Stacking platform, 30 x 30 cm, with hardware	
S1000-40	Large platform 40 x 40 cm, with non-slip rubber mat	
S1000-50	Extra large platform, 50 x 50 cm, with non-slip rubber mat	
S1000-M	Dimpled mat, 30 x 30 cm, for holding tubes,	
S2025-T	Elastic tie downs, pk of 4	

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.

#### GyroMini™ and Enduro™ MiniMix™ Nutating 3-D Mixers

The GyroMini and Enduro Mini Mix are small mixers that combine the motions of an orbital shaker and a rocker to produce a three dimensional action. This action provides thorough yet gentle mixing without foaming.

The pitch and speed of the GyroMini are fixed to provide the optimal motion for mixing and resuspending samples in small containers such as blood and centrifuge tubes. A dimpled mat on the platform surface holds tubes firmly in place. The mat will hold as many as  $60 \times 1.5 \text{ mL}$  tubes, 30 pediatric blood tubes (3 mL), 21 standard blood tubes (7 mL),  $17 \times 15 \text{ mL}$  tubes or  $9 \times 50 \text{ mL}$  tubes.

The Enduro MiniMix has a pitch and speed that produces the perfect motion for processing western blots and staining gels. The tilt angle is large enough to provide thorough distribution of solutions, yet is small enough to keep the center of the blot from drying out. Minimal amounts of solution can be used, conserving valuable probes and antibodies. A non-slip mat holds blotting boxes in place on the platform.

Both shakers may be used in temperature controlled environments.





SPECIFICATIONS	GyroMini	Enduro MiniMix
Speed range	24 rpm*	18 rpm*
Motion/Pitch	3-D/fixed 20°	3-D/fixed 5°
Maximum load	1.75 lb/0.8 kg	1.75 lb/0.8 kg
Ambient operating range	+4° to 65°C	+4° to 65°C
Dimensions (W x D x H)	9.5 x 6.75 x 6 in/24.1 x 17.15 x 15.24 cm	9.75 x 6.75 x 6 in/24 x 17.15 x 15 cn
Weight	1.9 lb/0.88 kg	1.9 lb/0.88 kg
Electrical	120V~, 60 Hz or 230V~, 50 Hz	120V~, 60 Hz or 230V~, 50 Hz

CAT NO.	DESCRIPTION
S0500*	GyroMini 3-D shaker with dimpled rubber mat, 120V
S0600*	Enduro MiniMix 3-D shaker with non-slip mat and two large blotting boxes, 120V
E2110-BBS	Blotting box, 9.1 x 6.6 cm, 3-5 mL gel capacity, for mini protein gels, pk of 10
E2110-BBL	Blotting box, 11.7 x 8.9 cm, 6-10 mL gel capacity, for larger mini protein gels, pk of 10

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK.

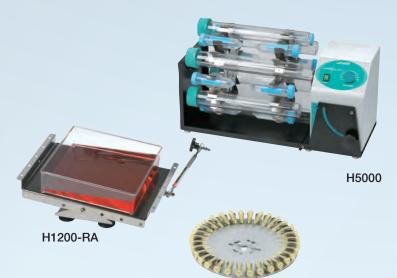


#### LabRoller™ Rotator

Labnet's LabRoller Rotators are ideal for a wide range of applications on the bench or in temperature controlled environments. Multiple rotisseries and carousels are available, including bottle rotisseries for hybridization and Western blotting.

Speed of rotation is adjustable from 3 to 60 rpm. When the rotators are used with carousels, the position of the rotation axis is adjustable from horizontal to a vertical position (90°). This allows for complete control over the level of agitation.

Two versions of the LabRoller Rotator are available. The standard model accepts rotisseries, carousels and a rocking platform. The compact version accepts the carousels and rocking platform. A variety of rotisseries and carousels are available to hold sample containers such as hybridization bottles, 15 and 50 mL tubes, blood tubes and Erlenmeyer flasks. Carousels may be stacked in both units for higher sample capacity.



# H5116-15A

H5100

SPECIFICATIONS

Speed range 3 to 60 rpm

Rotation axis Adjustable, 0° to 90°

Ambient operating temperature +4° to 65°C

Dimensions (W x D x H) 18.5 x 10.6 x 9.7 in/47 x 27 x 24.5 cm

Weight 17.6 lb/8 kg

Electrical 120V~ or 230V~, 50/60 Hz

CAT NO.	DESCRIPTION
H5000	LabRoller Rotator (order rotisserie/carousel separately), 120V
H5100	Compact LabRoller Rotator (order carousel separately), 120V
H1200-RA	Rocking platform, fits both H5000 and H5100
H1212-35A	Rotisserie for 12 of 300 x 35 mm diameter bottles, 24 of 150 x 35 mm diameter bottles or 24 of 50 mL tubes horizontal, fits H5000 on
H1212-40VA	Rotisserie for 12 x 50 mL, vertical, fits H5000 only
H1264-VA	Rotisserie for 64 x 1.5 mL or 32 x 15 mL, vertical, fits H5000 only
H1264-HA	Rotisserie for 64 x 1.5 mL or 32 x 15 mL, horizontal, fits H5000 only
H5108-50A	Carousel for 8 x 50 mL tubes, vertical, fits both H5000 and H5100
H5116-15A	Carousel for 16 x 15 mL tubes, vertical, fits both H5000 and H5100
H5132-HA	Carousel for 32 x 1.5 mL microtubes, horizontal, fits both H5000 and H5100
H5132-VA	Carousel for 32 x 1.5 mL microtubes and blood collection tubes or 16 x 15 mL conical tubes, fits both H5000 and H5100
H5250-4A	Carousel for 4 x 250 mL Erlenmeyer flasks, fits both H5000 and H5100
H5100-RODS	Carousel stacking rods, fits both H5000 and H5100

See page 51 for hybridization bottles and mesh.

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.

#### Revolver™ Rotator

The unique design of the Labnet Revolver allows for mixing tubes horizontally, vertically, or at any position in between, simply by turning the rotisserie plate.

Rotating tubes horizontally produces a gentle mixing motion for applications such as hybridization. Turning the rotisserie plate 90°, so that the tubes are positioned vertically results in an end over end tumbling action, such as that required for mixing samples in blood tubes. Any position between these two extremes can be selected to produce the desired level of agitation.

Each rotisserie consists of two plates that can be adjusted independently of each other, thus allowing two types of motions to occur simultaneously in the same rotisserie. Rotisserie plates may be mixed and matched.

With its compact, portable design, the Revolver is easily transported from the bench to the cold room or incubator. The molded housing and rotisserie assembly are designed for easy cleaning and decontamination.

A  $36 \times 1.5/2.0$  mL rotisserie is supplied with the unit. Rotisserie assemblies are also available for 15mL tubes as well as 50 mL tubes.





#### **SPECIFICATIONS**

Speed range\* Fixed, 18 rpm

Rotation axis Continuously adjustable, 0 - 90°

Ambient operating temperature +4° to 65°C

Dimensions (W x D x H) 9.4 x 5 x 6 in/23.9 x 12.7 x 15.24 cm

Weight 4.4 lb/2.0 kg

Electrical 120V~ or 230V~, 50/60 Hz

\*Speed of 230V unit is 20 rpm.

CAT NO.	DESCRIPTION
H5600*	Revolver Rotator with rotisserie for 36 x 1.5/2.0 mL tubes, 120V
H5600-02	Rotisserie assembly for 36 x 1.5/2.0 mL tubes (supplied with unit)
H5600-15	Rotisserie assembly for 10 x 15 mL conical tubes (15 - 16 mm dia) and 16 5/7 mL tubes
H5600-50	Rotisserie assembly for 6 x 50 mL tubes

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK.



#### Mini Lab Roller™ Rotator

Simple, yet versatile, the Mini LabRoller Rotator is designed for mixing samples in both a horizontal and vertical plane. The unit accepts a broad assortment of tube sizes as well as microplates. Safe for cold room or incubator use, this mixer meets a variety of needs in areas such as biochemistry, molecular biology, clinical testing and histochemistry.

As its name suggests, the Mini LabRoller is compact in design. Lightweight, and portable, it is easily moved from the bench to a hood.

The unique design of this rotator allows the level of agitation to be adjusted from gently rotating, through two levels of tumbling, to end over end mixing simply by changing the rotisserie position or tilting the instrument. Rotisserie speed is fixed at 24 rpm.

The Mini LabRoller is supplied with a rotisserie for 36 x 1.5/2.0 mL tubes. Two optional rotisseries are available. The first holds ten standard or conical 15 mL tubes (or 15-16 mm diameter) as well as twelve 12 - 13 mm diameter tubes. The other holds six 50 mL conical tubes. Microplates can be used with any of the rotisseries

For temperature controlled incubations, the Mini LabRoller can be used inside Labnet's Mini Incubator.





15110A-MLR

#### **SPECIFICATIONS**

Speed range*	Fixed, 24 rpm
Rotation Axis	Adjustable, 0° to 90°
Ambient operating range	+4° to 55°C

Dimensions (W x D x H) 8.4 x 4 x 5 in/47 x 21.3 x 10.2 x 12.6 cm

Weight 4 lb/1.8 kg

Electrical 120V~, 50/60 Hz 230V~, 50/60 Hz

\*Speed of 230V unit is 20 rpm.

CAT NO.	DESCRIPTION
H5500*	Mini LabRoller Rotator with rotisserie for 36 x 1.5/2.0 mL tubes
I5110A-MLR**	Mini LabRoller/Mini Incubator Combo, includes both units and the rotisseries (listed below)
H5500-02	Rotisserie for 36 x 1.5/2.0 mL tubes (supplied with unit)
H5500-15	Rotisserie for 10 x 15 mL conical tubes (or 15-16 mm dia) and 12 x 12-13 mm dia tubes
H5500-50	Rotisserie for 6 x 50 mL tubes

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK.

<sup>\*\*</sup>For more information on our Mini Incubator please visit page 43.

#### Pro 30 Reciprocal Shaker

Labnet's Pro 30 shaker features a left to right linear action to provide gentle to vigorous shaking. Four platform configurations make this model valuable for a variety of applications.

Modern styling gives the Pro 30 a small footprint and easy-access control panel. Speed and time are electronically controlled while their values are set with easy turn knobs.

The four platform configurations include a large 30 x 30 cm flat platform with non-slip rubber mat to hold sample containers in place. For added capacity, a stacked double platform is also available. The spring loaded universal platform holds tube racks, bottles and odd shaped containers. Flasks up to 1L can be shaken on the flask clamp platform. Pre-drilled to hold a variety of different sized clamps, the platform and clamps are sold separately. Platforms are easily interchanged.

The Pro 30 is safe for use in temperature controlled environments. Compact in size, it will fit in many incubators.







S2031-18 (clamps sold separately)

#### **SPECIFICATIONS**

Speed range 6 - 150 strokes/min

Timer 20 - 120 min (10 min inc.) or continuous

Motion Linear, 30 mm stroke length

Maximum load 11 lb/5 kg Ambient operating range +4° to 70°C

Dimensions (W x D x H) 10 x 12.6 x 6.3 in/25.5 x 32 x16 cm

Weight 14.5 lb/6.6 kg

Electrical 230V~ or 120~, 50/60 Hz

CAT NO.	DESCRIPTION
S2030-RC-B*	Pro 30 Reciprocal Shaker without platform, 120V
S2031-12	Flat platform with non-slip rubber mat (30 x 30 cm)
S2031-12D	As above, but two stacked platforms
S2031-13	Spring loaded platform for flasks, bottle or tube racks (see tube racks on page 83)
S2031-18	Flask clamp platform without clamps, pre-drilled
S2040-85	Clamp for 125 mL flask (max. 16)
S2040-99	Clamp for 250 mL flask (max. 9)
S2040-09	Clamp for 500 mL flask (max. 5)
S2040-01	Clamp for 1 L flask (max. 4)

<sup>\*</sup> To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.



#### ProBlot™ Rocker 25 and 25XL

The Labnet compact rockers, ProBlot 25 and 25XL, are ideal for staining, hybridization and general mixing. Their basic design and economical price makes them a great value for any laboratory.

Rocking speed is adjustable to provide the gentle motion required for staining fragile gels as well as the more vigorous action necessary for washing blots. The rocking movement is fixed at 7°.

The platform surfaces are covered with non-slip rubber pads to prevent sample containers from moving during operation. Elastic tie downs are available to secure bags, boxes, tubes and other containers in place. The ProBlot 25 platform measures 26 x 20 cm, while the ProBlot 25XL platform is significantly larger at 30 x 30 cm. For increasing the work area without sacrificing valuable bench space, double platform models are available.

The ProBlot 25 and 25XL Rockers can be used safely in temperature controlled environments up to 65°C. Their low profile and compact size make them perfect for use in incubators.



#### SPECIFICATIONS

Electrical

Speed settings	5 - 120 tilts/min
Timer	0 - 2 hr or continuous
Motion	Rocking
Tilt range	Fixed 7°
Clearance between platforms	3.5 in/9 cm
Maximum load	11 lb/5 kg
Ambient operating range	+4° to 70°C
Dimensions (W x D x H)	
ProBlot 25	11.4 x 12.6 x 5.7 in/29 x 32 x 14.5 cm
ProBlot 25XL	12.8 x 14.2 x 5.7 in/32.5 x 36 x 14.5 cm
Weight	11.7 lb/5.3 kg

CAT NO.	DESCRIPTION
S2025-B*	ProBlot Rocker 25 with single platform (26 x 20 cm), 120V
S2025-D-B*	ProBlot Rocker 25D with double platform (26 x 20 cm), 120V
S2025-XL-B*	ProBlot Rocker 25XL with large single platform (30 x 30 cm), 120V
S2025-XLD-B*	ProBlot Rocker 25XLD with large double platform (30 x 30 cm), 120V
S2025-T	Elastic tie downs, pk of 4

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. 230V product includes both EU and UK power cords.

120V~, 50/60 Hz 230V~, 50/60 Hz

#### **Deluxe ProBlot™ Rocker 35**

Labnet's ProBlot 35 was developed for those laboratories requiring a larger platform area and precise control over rocking parameters.

Both speed and degree of tilt are adjustable across a broad range to provide the exact level of agitation required for all types of samples. The ProBlot 35 is equipped with a 2 hour timer that can also be set for continuous operation.

The heavy duty motor and stainless steel rocking platform can support loads of over 15 pounds. Solid state speed control ensures that the rocker operates at constant speed regardless of voltage fluctuations or load.

The ProBlot 35 is available with a single platform, or for added workspace, two stacked platforms. Each platform is covered with a non-slip rubber mat to keep sample containers in place. The rocker can be used in environments from 4° to 65°C, making it safe for cold room or incubator use.





#### **SPECIFICATIONS**

Speed range 4 - 160 tilts/minute
Timer 0 - 2 hr or continuous

Motion Rocking

Tilt range Adjustable,  $\pm 20^{\circ}$  Clearance between platforms 3.5 in/9 cm Maximum Load 15.4 lb/7 kg Ambient operating range  $\pm 4^{\circ}$  to  $\pm 70^{\circ}$ C

Dimensions (W x D x H) 14 x 13 x 6.5 in/35.6 x 33 x 16.5 cm

Weight 17 lb/7.7 kg

Electrical 120V~, 60 Hz or 230~, 50 Hz

CAT NO.	DESCRIPTION
S2035*	Deluxe ProBlot Rocker 35, single platform (35.6 x 28 cm)
S2035-D*	Deluxe ProBlot Rocker 35D, double platform (35.6 x 28 cm)

<sup>\*</sup>To order 230V units add -230V to the end of the catalog number. Specify cord type by adding -EU or -UK.



<sup>\*\*</sup> Not available in Europe

#### 222DS Benchtop Shaking Incubator

- Exceptional versatility with a large selection of options
- SmartChekTM Software to control and monitor the unit
- Compact design, the unit opens under shelves
- Flexibility, a dual control from Keypad or Software



CAT NO.	DESCRIPTION
I-5222-DS	222DS Benchtop Shaking Incubator - 115 V
I-5222-DS-230V	222DS Benchtop Shaking Incubator - 230 V

For more information, please see the Incubators - Constant Temperature Section - Page 47

#### VorTemp 56™ and VorTemp 1550™ Shaking Incubators

- · Heat and mix small samples
- VorTemp™ 56 Incubator/Shaker complete with microtube and microplate platforms (S2056A)
- VorTemp™ 1550 Incubator/Shaker complete with racks for 50ml and 15ml tubes

CAT NO.	DESCRIPTION
S2056A	VorTemp 56 Shaking Incubator for microtubes and microplates
S2050A	VorTemp 1550 Shaking Incubator for 15 and 50 mL tubes

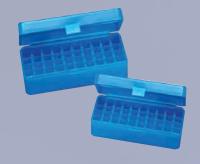
For more information, please see the Incubators - Constant Temperature Section - Page 49



# **PLASTICWARE** TUBE STORAGE BOXES TUBE RACKS SAMPLE COOLERS MICROPLATES Labnet Labnet Labnet International, Inc.

#### 50 Place Microtube Box with Hinged Lid, PP

Ideal for sample storage, these polypropylene boxes can be used in the freezer (to -80°C) and autoclaved. The easy open lid with living hinge and positive catch keeps samples securely in place. The translucent lid is alphanumerically labeled. Boxes available for 1.5/2.0 mL and 0.5 mL tubes. R7901 also holds cryovials and chromotography vials.



CAT NO.	DESCRIPTION	QTY.
R7901	Storage box with hinged lid, blue, 50 x 1.5/2.0 mL (142 x 80 x 46 mm)	each
R7906	Storage box with hinged lid, blue, 50 x 0.5 mL (120 x 70 x 37 mm)	each

#### 50 Place Box with Telescoping Lid, PP

Tubes of varying lengths are accommodated by the telescoping lids of these boxes. Made of polypropylene, they can be used for freezer storage and autoclaved. Lids are alphanumerically labeled. Boxes hold 0.5 mL, 1.5/2.0 mL and 5 mL tubes as well as cryovials and chromatography vials. Freezer storage racks and numeric ID grids are available for the 1.5/2.0 mL boxes.



CAT NO.	DESCRIPTION	QTY.
R7900	Storage box with telescoping lid, 50 x 1.5/2.0 mL (143 x 75 x 45 mm)	each
R7905	Storage box with telescoping lid, 50 x 0.5 mL, 122 x 62 x 33 mm)	each

#### 100 Place Microtube Box with Hinged Lid, PP

Polypropylene boxes with stand freezing (to -80°C) and autoclaving. The 3-point hinge maintains its integrity during repeated use. A positive catch keeps the lid securely fastened. Alpha-numeric indexing is stamped inside the boxes for easy sample ID, and the clear lid allows visibility even when the lid is closed. Boxes are available in a variety of colors for coding samples and hold 100 x 1.5/2.0 mL tubes, cryovials or chromatography vials. Measure 42 x 142 x 55 mm. A solid black box is available for light sensitive samples.



CAT NO.	DESCRIPTION	QTY.
R8300	Storage box with hinged lid, natural, 100 x 1.5/2.0 mL	each
R8300-BLK	As above, but in opaque black for light sensitive samples	each
R8300-X*	As above in green (-G), blue (-B), pink (-P), orange (-O) or yellow (-Y)	each
R8300-A	Rainbow pack, includes one box of each above color	5
R8315	Vertical freezer rack for 9 boxes, fits chest type freezers	each
R8316	Horizontal freezer rack for 8 boxes, fits upright freezers	each

<sup>\*</sup>Substitute the appropriate letter for "X" in the catalog number.

#### **Clear Microtube Rack**

This sturdy rack withstands the stresses of everyday use. Constructed of a durable, proprietary plastic, the rack is clear, autoclavable and unbreakable. The open bottom allows for use in ice baths. Two sizes are available to hold 0.5 mL and 1.5/2.0 mL tubes.



CAT NO.	DESCRIPTION	QTY.
C7871	Microtube rack, clear, 40 x 0.5 mL tubes (200 x 75 x 40 mm)	each
C7872	Microtube rack, clear, 40 x 1.5/2.0 mL tubes (200 x 75 x 40 mm)	each

#### **Microtube Workstation Rack, PP**

Two levels and wide spacing provide easy sample access and visibility. Molded from durable, autoclavable polypropylene, the rack has non-skid rubber feet. Tube positions are numbered, 1 to 20, for organizing samples.



CAT NO.	DESCRIPTION	QTY.
C8210	Microtube support rack, red, 20 x 1.5/2.0 mL tubes (210 x 75 x 35mm)	each

#### Large Capacity Test Tube Rack, PP

Constructed of polypropylene, these racks will not rust or deform. They can be frozen or autoclaved and fold flat for storage. Open design is ideal for use in a waterbath. An alphanumeric grid is located on the top surface.



CAT NO.	HOLE DIA.(mm)	TUBE CAPACITY	FORMAT	DIMENSIONS (mm)	PACK OF
K564-03	13	90	6 x 15	105 x 246 x 64	5
K565-03	16	60	5 x 12	105 x 246 x 72	5
K566-03	20	40	4 x 10	105 x 246 x 72	5
K567-03	25	40	4 x 10	125 x 295 x 85	5
K568-03	30	24	3 x 8	112 x 300 x 85	5



#### 100 Place Styrofoam Storage box

Made from recyclable, expanded polystyrene, this box is ideal for freezer storage of enzymes and other delicate samples. Alphanumerically labeled, it will hold  $100 \times 1.5/2.0$  mL tubes. A finger notch on the side aids in opening the box. Measures  $340 \times 97 \times 64$  mm.



CAT NO.	DESCRIPTION	QTY.
R8000	Styrofoam storage box, 100 x 1.5/2.0 mL	each

#### **Thermal Cycler Accessories**

Accessories are available for use with the MultiGene Gradient Thermal Cycler (pg 50) that includes 0.2 mL tube strips and caps as well as individual 0.2mL tubes and 0.5 mL PCR tubes. Thermal and aluminum sealing tape for 96 well plates are also available in packs of 100.



TCST-02



CAT NO.	DESCRIPTION	QTY.
TCST-02	0.2 mL tube strips, 8 tubes per strip, 125 strips	10pk/cs
TCSC-02	Caps for above strips, 8 caps per strip, 125 strips	10pk/cs
TC020-02-C	0.2 mL tubes with domed caps, clear, pk of 1,000	pk
TC020-02-A	0.2 mL tubes with domed caps, asorted colors, pk of 1,000	pk
TC050-05F-A	0.5 mL flat cap PCR tubes, assorted colors, pk of 1,000	pk
TC050-05F-C	0.5 mL flat cap PCR tubes, clear, pk of 1,000	pk
TC96-CM-10	Compression mat, silione, pk of 10	pk
TC96-TT	Thermal sealing tape for 96 well plates, pk of 100 films	5pk/cs
TC96-AS-100	Aluminum sealing tape for 96 well plates, pk of 100 films	5pk/cs

#### **Deep Well Microplates**

These deep well microplates are ideal for high throughput applications and storage of samples. They are compatible with Labnet's AccuSeal Plate Sealer, sample processing workstations, microplate processing equipment and many microplate centrifuge rotors.

Plates with 0.5 and 1.0 mL well volumes have round wells while 2.0 mL plates have square wells. All wells have conical bottoms to aid in sample recovery.

All of the plates are available in polypropylene for excellent temperature and chemical resistance. They can be frozen or autoclaved, and when used with sealing mats (available separately), are perfect for freezer storage of samples.

Sealing mats are available for the 96 well plates. The mats seal each well individually.

Plates are DNAse/RNase free and supplied sterile or nonsterile. All plates fit in the stainless steel freezer storage racks listed in the ordering information below.



PS1000 (See page 48 for details on the AccuSeal Plate Sealer.)

CAT NO.	DESCRIPTION	QTY.
0.5 mL Plates		
P9605	Plate, 96 x 0.5 mL/round well, polypropylene, nonsterile, pk of 20	pk
P9606	Plate, 96 x 0.5 mL/round well, polypropylene, sterile, pk of 20	pk
P9610	Sealing mat for P9605/P9606, nonsterile, pk of 50	pk
P9611	Sealing mat for P9605/P9606, sterile, pk of 50	pk
1.0 mL Plates		
P9615-50	Plate, 96 x 1.0 mL/round well, polypropylene, nonsterile, pk of 50	pk
P9616-50	Plate, 96 x 1.0 mL/round well, polypropylene, sterile, pk of 50	pk
P9618-50	Sealing mat for P9615-50 plates, nonsterile, pk of 50	pk
P9619-50	Sealing mat for P9616-50 plates, sterile, pk of 50	pk
2.0 mL Plates		
P9635	Plate, 96 x 2.0 mL/square well, polypropylene, nonsterile, pk of 50	pk
P9636	Plate, 96 x 2.0 mL/square well, polypropylene, sterile, pk of 50	pk
P9638	Sealing mat for 96 square well plates, nonsterile, pk of 50	pk
P9639	Sealing mat for 96 square well plates, sterile, pk of 50	pk
384 Well Plates		
P9650	Plate, 384 x 240 µl, nonsterile, pk of 50	pk
P9651	Plate, 384 x 240 µl, sterile, pk of 50	pk

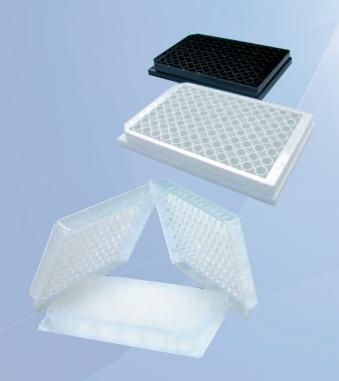
#### **Assay Plates**

Labnet's solid assay plates are available in a 96 well format with well volumes ranging from 225 µl to 325 µl.

The assay plates are supplied in white, for luminescence/ fluorescence assays, black for fluorescence readings and clear for colorimetric assays. All of the plates are manufactured from high quality polystyrene.

The clear plates are supplied in both polystyrene and polypropylene with flat, or round.

All of the solid assay plates are supplied in packages of 100. Bar coding is available upon request.



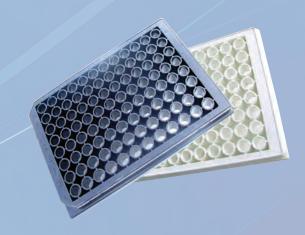
CAT NO.	DESCRIPTION	QTY.
P9725	Plate, 96 x 350 µl, polystyrene, white, 4 bags of 25/pk	pk
P9728	Plate, 96 x 350 µl, polystyrene, black, 4 bags of 25/pk	pk
P9732	Plate, 96 x 270 µl, polypropylene, clear, round bottom, 10 bags of 10/pk	pk
P9734	Plate, 96 x 350 µl, polystyrene, clear, flat bottom, 10 bags of 10/pk	pk
P9735	Plate, 96 x 270 µl, polystyrene, clear, round bottom, 10 bags of 10/pk	pk

#### Krystal™ Plates

The polycarbonate Krystal microplates are supplied white for luminescence/fluorescence or black for fluorescence assays. Clear well bottoms allow for use with instruments that read above or below the plate.

The plates feature a standard 96 well format with a well volume of 350 µl. Both the black and white plates are supplied tissue culture treated and individually wrapped with lids.

Bar coding is available for all plates upon request.



CAT NO.	DESCRIPTION	QTY.
P9803	Krystal plate, 96 x 350 μl, black, tissue culture treated, individually wrapped with lid, pk of 100	pk



#### Krystal™ 2000 Plates

The premium polycarbonate Krystal 2000 plates have been optimized for luminescence and fluorescence assays. A patented manufacturing process provides for clear, individual wells in an opaque matrix. The special design of the plate eliminates well-to-well light cross talk, improving the accuracy and precision of photometric readings.

Krystal 2000 plates are supplied in a 96 x 350 µl/well format. Clear wells allow for measurements to be performed with both top and bottom reading instruments. The white matrix provides for maximum reflectivity, allowing high sensitivity luminescence assays. The black matrix absorbs light to minimize background interference in fluorometric assays.

Plates are available as tissue culture treated. The tissue culture plates are supplied with lids and individually wrapped. All plates are supplied in packages of 100.



CAT NO.	DESCRIPTION	QYT.
P9812	Krystal 2000 plate, 96 x 350 μl, white, with lid, tissue culture treated, individually wrapped pk of 100	pk
P9815	Krystal 2000 plate, 96 x 350 μl, black, with lid, tissue culture treated, individually wrapped, pk of 100	pk

#### Krystal™ 24 Plates

Krystal 24 plates feature a 24 well format in the footprint of a standard 96 well plate.

The plates are black for fluorescence assays and have clear bottoms for use with instruments that read above or below the plate.

The wells of the Krystal 24 plates have a 3.0 mL volume with a large surface area for efficient cell growth. The plates are supplied tissue culture treated and individually wrapped with lids in packages of 56.

Bar coding is available upon request.



CAT NO.	DESCRIPTION	QTY.
P9835	Krystal 24 plate, 24 x 3 mL, black, with lid, tissue culture treated, individually wrapped, pk of 56	pk

#### Labnet's marketing efforts on the web!







Please visit the Labnet website (www.labnetinternational.com) for additional resources and for the most up to date information on new product releases, Labnet company news and promotions as well as helpful video tutorials for many of the products listed in this catalog.

Labnet's social media channels are just one part of our continuous marketing efforts.

Facebook: www.facebook.com/pages/Labnet-International/104645846268303

Twitter: www.twitter.com/labnetnews

YouTube: www.youtube.com/user/LabnetInternational

Please also check our blog where you can find the most up to date information available from the Labnet team.

Don't miss our upcoming posts on:

- Product announcement
- Press releases
- Application Notes
- Promotions

We will welcome your feedback: labnetinfo@corning.com

Labnet International 31 Mayfield Avenue Edison, NJ, 08837 USA









### PRODUCT INDEX

211 DS Incubator	_ 49	Enduro Power Supplies	70
222DS	_ 51	Enduro Power Supply Selection Guide _	71
311 D	_ 48	Enduro Semi Dry Blotter	69
311 DS Incubator	_ 50	Enduro Total Lab	76
611 D	_48	Enduro UV Transilluminator	72
AccuBlock Digital Dry Bath	_ 44	Enduro VE 10 Blotter	68
AccuBlock Mini Dry Bath	_42	Enduro VE 20 Blotter	68
AccuPlate Digital Hot Plate & Stirrers	_46	Enduro VE 10 Vertical gel box	66
AccuPlate Analog HotPlate & Stirrers	_ 47	Enduro VE 20 Vertical gel box	67
Accuseal Heat Sealing Films	_ 63	Excel Single Channel Electronic Pipettes _	38
AccuSeal Plate Sealer	62	Excel Multichannel Electronic Pipettes _	39
AccuTherm Microtube Shaking Incubator	52	Fastpette V2 Pipette Controller	35
Assay Plates	_99	Fastpette Plus Pipette Controller	35
BioFree Combo-Syringes	_37	GyroMini	85
BioFree Pipette Tips	_34	Gyrotwister 3D Shaker	84
BioPette Autoclavable Single Channel _	32	Krystal Plates	99
BioPette Autoclavable Multichannel	_33	Krystal 2000 Plates	100
BioPette Plus Single Channel	_ 30	Krystal 24 Plates	100
BioPette Plus Multichannel	_31	Labmax Bottletop Dispensers	40
BioPette Plus Starter Kit	_30	Labpette FX Fixed Volume Pipettes	36
Centrifuge Selection Chart	_2	Labpette R Repeating Pipette	37
Centrifuge Tube Guide	_2	LabRoller Rotator	86
Cyto System	_13	Mesh, Hybridization	55
Deep Well Microplates	_98	Microtube Boxes	94
Dry Bath Blocks	_ 45	Microtube Rack	95
Enduro GDS Accessories	75	Mini Incubator	43
Enduro GDS	_73	Mini Plate Spinner	5
Enduro GDST	_74	Mini Water Bath	56
Enduro Gel XL	_65	Mini LabRoller Rotator	88
Enduro Horizontal Gel Boxes	_64	Molecular Biology Workflow	58
Enduro MiniMix	85	MultiGene OptiMax Thermal Cycler	60
Enduro MW Markers	72	MultiGene Mini Personal Thermal Cycler _	59

#### PRODUCT INDEX CONT.

Orbit 1000 Multipurpose Thermal Cycler _	82
Orbit 1900 High Capacity Shaker	83
Orbit 300 Multipurpose Vortexer	80
Orbit LS Low Speed Shaker	81
Orbit M60 Microtube Shaker	79
Orbit P2 Microplate Shaker	79
Orbit P4 Microplate Shaker	79
Prism	8
Prism Mini	_4
Prism R	8
Pro 30 Reciprocal Shaker	89
ProBlot 6 Hybridization Oven	54
ProBlot 12/12S Hybridization Oven	54
ProBlot 12/12S Accessories	55
ProBlot Rocker 25	90
ProBlot Rocker 25XL	90
ProBlot Rocker 35	91
Revolver Rotator	87
Sieva-2 Centrifuge	28
Slide Spinner	_3
Spectrafuge 16M	6
Spectrafuge 24D	7
Spectrafuge 6C	_11
Spectrafuge Mini	_3
Storage Boxes	94
Styrofoam Storage Box	96
Thermal Cycler Accessories	97
Test Tube Racks	95
VorTemp 56	53
VorTemp 1550	53
VX-200 Vortey Mixer	78

Workstation Rack	95
Z 36 HK	26
Z 36 HK rotors	27
Z 100A	10
Z 206A	12
Z 216 M	9
Z 216 MK2	9
Z 306	14
Z 306 rotors	15
Z 326	16
Z 326 K	16
Z 326 K rotors	17-19
Z 366	20
Z 366 K	20
Z 366 K rotors	21
Z 446	22
Z 446 K	
7 446 K rotors	23-25



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