

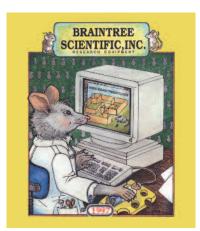
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Ordering Information:

Order online or by phone, fax, email or mail your orders to us any time of day. Orders will be processed and in-stock items shipped within 24 hours after receipt of order. Please specify any special shipping instructions when placing your order.

Braintree Scientific, Inc. P.O. Box 850498 Braintree, MA 02185 Phone: 781-917-9526 Fax: 978-244-8917 Email: info@braintreesci.com



Methods of Payment:

Purchase orders on pre-approved accounts, or prepayment by Visa, MasterCard, American Express, bank check, money order or wire transfer. Wire transfers must be drawn on a US Bank and are subject to a bank processing fee - please call for quote. All monies quoted in US dollars. When placing your order, be sure to include your tax exempt number where applicable.

Shipping Charges:

Shipping and Handling Charges are prepaid and added to invoice. Freight is FOB Braintree, MA. For orders shipping out of the country freight charges are to be paid in advance prior to release.



If for any reason you are not fully satisfied, call for a Return Material Authorization number and shipping instructions. All returns must be received within 35 days of shipping. A 20% restocking fee may apply depending on circumstances of return. Please inspect all shipments upon receipt. If any visible damage - sign for as damaged and contact carrier to place a claim.

Please Note: All prices are subject to change without notice.

Online ordering now available!

Please visit our website at www.braintreesci.com.

New and current product listings, pricing, detailed product information, as well as frequently asked questions, are available at your fingertips.





About the cover

2020 marks Braintree Scientific's 40th year, a highly significant milestone thanks to all our faithful customers and employees. Our 2020 Catalog cover celebrates notable 2020 half-century scientific anniversaries — can you identify the individuals and events?

Answers provided on page:

- 50th Anniversary page 5
- 100th Anniversary page 33
- 150th Anniversary page 39
- 200th Anniversary page 53

Micro-Renathane® Implantation Tubing

Reduces the probability of intravascular thrombosis



Polyurethane Catheter Tubing

Braintree Scientific is proud to present a major advance in chronic catheter material. In our opinion, Micro-Renathane® is the most blood-compatible tubing ever made. For implantation studies in experimental animals this tubing offers extended catheter life and reduces the probability of intravascular thrombosis.

The scanning electron micrographs (approx. 10,000X) illustrate the dramatic difference between Renathane tubing and conventional vinyl tubing. After use in hemodialysis, Renathane showed significantly fewer surface deposits of platelets, proteins, trapped red cells and other blood elements than other tubings.

"Medical Grade" Plastics

It is appropriate to clarify the definition of the phrases "medical grade" plastic and "FDA approved" plastic. There is no approved "medical grade" plastic or resin. Each individual supplier has his own criteria for what polymer and additive combinations constitute suitability for medical use. Similarly, there is no "FDA approved" plastic or resin in the Code of Federal Regulations. Food and Drugs, Title 21, Part 121, the FDA has listed the additives allowable in plastics intended for food contact use. In formulating a PVC compound for medical use the manufacturer generally chooses plasticizers, stabilizers, antioxidants, colorants, etc., which are acceptable for food use.

Micro-Renathane® does not contain any plasticizers.

Medical Uses of Polyurethane

Polyurethane based polymers were introduced into the United States from Germany. Early biomedical applications of polyurethanes were described by Boretos and Pierce. They reported excellent vascular acceptability in experimental heart-assist pump chambers and arterial cannulae. In subsequent work Boretos reported the absence of acute toxicity for segmented polyurethanes. He also reported that polyurethane rings did not deteriorate or cause tissue reaction after implantation for 18 months.

Lyman and coworkers have also investigated polyurethanes for the fabrication of heart-assist devices. Artificial heart devices were constructed of this material and implanted in calves. Other uses of polyurethanes as biomaterials have been described by Bruck. Polyurethane based polymers are currently commercially employed in hollow fiber kidneys, vascular catheters and intra-aortic balloons. Due to the slightly higher cost of polyurethanes, they have only been used where exceptional biologic and blood compatibility is required.

Micro-Renathane® is sold only for experimental use in laboratory animals.

A brief report, with references, is included with each shipment of Micro-Renathane®. We will be pleased to send a copy upon request.

Supplied non-sterile. +/- .002

MODEL	OD/ID WALL
MRE-010	0.010" OD x 0.005" ID (0.25 OD x 0.12 ID mm)I
MRE-025	0.025" OD x 0.012" ID
	(0.64 OD x 0.30 ID mm)
MRE-033	0.033" OD x 0.014" ID
	(0.84 OD x 0.36 ID mm)
MRE-037	0.037" OD x 0.023" ID
	(0.94 OD x 0.58 ID mm)
MRE-040	0.040" OD x 0.025" ID
	(1.02 OD x 0.64 ID mm)
MRE-040-S-20	0.040" OD x 0.020" ID
	(1.02 OD x 0.50 ID mm)
MRE-050	0.050" OD x 0.040" ID
	(1.27 OD x 1.02 ID mm)
MRE-065	0.065" OD x 0.030" ID
	(1.65 OD x 0.76 ID mm)
MRE-080	0.080" OD x 0.040" ID
	(2.03 OD x 1.02 ID mm)
MRE-080-S-38	0.080" OD x 0.038" ID
	(2.03 x 0.96 ID mm)
MRE-095	0.095" OD x 0.066" ID
NDE 400	(2.41 OD x 1.68 ID mm)
MRE-160	0.160" OD x 0.091" ID
	(4.06 OD x 2.31 ID mm)

^{*}Kit includes 12 individually packaged 3ft lengths (excludes MRE-010). †Minimum 36' when ordering continuous lengths.

More length options available online at braintreesci.com

Teflon Coated Guide Wire

MODEL	DESCRIPTION
ST003-14	0.003" Teflon Coated Guide Wire 14"L (non-sterile)
ST003-7	0.003" Teflon Coated Guide Wire 7"L (non-sterile)

A Guide to Manufacture, Surgical Implantation, Maintenance and Use of Micro-Renathane[®] Vascular Catheters in Laboratory Animals

by Alfred Sherer, D.V.M. and Lewis Kinter, Ph.D.

This comprehensive manual includes how to manufacture catheters from Micro-Renathane® tubing, different implantation techniques, catheter use, and maintenance.

MODEL

MRE-MANUAL



RenaSil™ Silicone Rubber Tubing

RenaSil™ is a Platinum cured silicone tubing that is inert and contains no harmful leachable plasticizers. It is essentially non-reactive. The tubing will maintain its flexibility through a



temperature range of -100°F to 500°F. Storage temperature and humidity have virtually no effect on silicone tubing, therefore shelf life is unusually long. This tubing may be autoclaved and re-sterilized without altering physical characteristics. RenaSil™ meets the standards of the US Pharmacopoeia, Class IV and CRF 21 Part 177.2600 for food additives. All sizes are packaged clean, without talc and sealed in polyethylene bags.

Supplied non-sterile.

MODEL	OD/ID WALL
SIL025	0.025" OD x 0.012" ID (0.64 OD x 0.30 ID mm)
SIL037	0.037" OD x 0.025" ID (0.94 OD x 0.64 ID mm)
SIL047	0.047" OD x 0.025" ID (1.19 OD x 0.64 ID mm)
SIL065	0.065" OD x 0.030" ID (1.65 OD x 0.76 ID mm)
SIL080	0.080" OD x 0.040" ID (2.03 OD x 1.02 ID mm)

Polyethylene Tubing

Polyethylene is a relatively rigid polymer suitable for short-term catheterizations and for ex vivo applications. Polyethylene 'sleeves' can be slipped over less rigid catheter materials (Micro-Renathane $^{\text{\tiny TM}}$, Renasil $^{\text{\tiny TM}}$) at suture points to protect the latter from inadvertent constriction.

Supplied non-sterile. Minimum order 36 feet.

MODEL	OD/ID WALL
PE10	0.024" OD x 0.011" ID (0.60 x 0.28mm)
PE20	0.043" OD x 0.015" ID (1.09 x 0.38mm)
PE30	0.030" OD x 0.017" ID (0.76 x 0.43mm)
PE50	0.038" OD x 0.023" ID (0.965 x 0.58mm)
PE60	0.048" OD x 0.030" ID (1.22 x 0.76mm)
PE100	0.060" OD x 0.034" ID (1.52 x 0.86mm)

Tygon® Catheter Tubing

Flexible and clear; this tubing is ideal for cannulations. Easily fabricated to various catheter styles and virtually "kink free" when securing in a vessel and exiting the animal model. Material is less permeable than silicon rubber tubing and has a very smooth surface which inhibits thrombic events.

MODEL	OD/ID WALL	LENGTH	
TYG-030	0.03" OD x 0.01" ID (0.8mm x 0.3mm)	50 ft. coil	
TYG-060	0.06" OD x 0.02" ID (1.5mm x 0.5mm)	50 ft. coil	
TYG-070	0.07" OD x 0.04" ID (1.8mm x 1.0mm)	50 ft. coil	

PTFE Heat Shrink Tubing

(USP Class VI Approved)

Medical grade polyetrafluoroethylene tubing has high tensile strength and preserves high fidelity pressure waveforms with very small internal diameter tubing. PTFE heat shrink tubing can be shrink-fitted to make secure connections with other devices. 2-1 heat-shrink ratio.

Supplied non-sterile.

MODEL	EXP ID	REC ID	REC WALL	TOL
PTFE-015	0.034" ID (0.86mm)	0.015" ID (0.38mm)	0.006"	±0.002"
	0.038" ID (0.97mm)	,		±0.002"
PTFE-032	0.055" ID (1.4mm)	0.032" ID (0.81mm)	0.012"	±0.003"
PTFE-039	0.060" ID (1.5mm)	0.039" ID (0.99mm)	0.012"	±0.003"
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PTFE Sub-Lite Wall® Tubing

A major breakthrough in micro-miniature tubing

(USP Class VI Approved)



Medical grade polyetrafluoroethylene tubing has superior lubricity and slides easily into tiny convoluted passages. No residue build-up inside tubing, non-toxic, non-contaminating, and easily sterilized (excluding Gamma). Compatible with

tissues and fluids, yet withstands moisture, it is chemically inert and stable. Continuous service temperature (up to 500°F).

Supplied non-sterile.

MODEL	OD/ID WALL	THICKNESS	LENGTH
SUBL-060	0.006" x 0.002" (0.15 x 0.05mm)	0.002"	25 ft coil
SUBL-080	0.008" x 0.004" (0.20 x 0.10mm)	0.002"	25 ft coil
SUBL-120	0.012" x 0.006" (0.30 x 0.15mm)	0.003"	25 ft coil
SUBL-140	0.014" x 0.008" (0.36 x 0.20mm)	0.003"	25 ft coil
SUBL-160	0.016" x 0.010" (0.41 x 0.25mm)	0.003"	25 ft coil
SUBL-190	0.019" x 0.013" (0.48 x 0.33mm)	0.003"	25 ft coil
SUBL-220	0.022" x 0.016" (0.56 x 0.41mm)	0.003"	25 ft coil
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RenaPulse[™] High Fidelity Pressure Tubing

Measure blood pressure and waveforms more accurately, while keeping superb biocompatibility

RenaPulse[™] tubing, exclusively from Braintree Scientific, transmits pulse waveforms with high fidelity. During pressure pulses, fluid flows into the catheter and depresses the diaphragm of a pressure transducer. However, the same pressure wave that reaches the transducer also causes the pressure catheter to bulge slightly. This bulging may allow a significant volume of fluid to flow in and out of the catheter with each pulse. Given the resistance of the catheter, this small flow can lead to pressure drop along the catheter and inaccurate pressure readings from the transducer. RenaPulse[™] is a stiffer tubing which allows high fidelity measurement of systolic and diastolic pressures. Because air bubbles in pressure catheters are very 'soft,' they can completely distort the pulse wave. We make RenaPulse[™] tubing transparent to help user locate and remove such bubbles. Small clots can block pressure catheters, and prevent pulse waves from reaching the transducer. Since RenaPulse[™] has the superb blood compatibility of Micro-Renathane®, the chance of clot formation is greatly reduced.

These features make RenaPulse[™] the tubing of choice for high fidelity pressure measurements in small animals. RenaPulse[™] is flexible enough for direct vessel insertion. It can be bonded to luer lock terminations and stopcocks. RenaPulse[™] can also be used with standard compression adapters or needle stubs.

Supplied non-sterile.

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MODEL	OD/ID WALL	
RPT-015	0.017" OD x 0.012" ID	
	(0.43 OD x 0.3 ID mm)	
RPT-033	0.033" OD x 0.014" ID	
	(0.84 OD x 0.36 ID mm)	
RPT-037	0.037" OD x 0.023" ID	
	(0.94 OD x 0.58 ID mm)	
RPT-040	0.040" OD x 0.025" ID	
	(1.02 OD x 0.64 ID mm)	
RPT-080	0.080" OD x 0.040" ID	
	(2.03 OD x 1.02 ID mm)	
*Kit include	es 12 individually packaged 3 ft lengths	

†Minimum 36 feet when ordering continuous lengths.

More length options available online at braintreesci.com

Rat Vascular Cathers

Vascular catheters have stood the test of time because they are *affordable* and *they work!* These catheters, modified from the original design of Tinsley (1983), are fabricated from medical grade polyethylene (PE) tubing and silicone tubing. When filled with a viscous catheter lock solution they maintain a very high rate of patency for several weeks. They can be sealed with a stainless steel plug. Both the thoracic and femoral models have the following features:

Externalized polyethylene (PE) tubing catheter port:

Flared for easy access with a blunted 23 ga. hypodermic needle for sampling or infusion. Port is sealed with 0.025 " diameter stainless steel plug when not in use. Catheter port is designed to exit between the scapulae and to be secured with a single Autoclip® 9 mm stainless steel wound clip.

Polyethylene (PE) tubing catheter body: The rigidity of polyethylene (PE) tubing minimizes the incidence of catheter lumen constriction and relaxation, an "eye dropper" effect, which allows blood to enter the intravascular tip. All catheter anchor points allow for suturing around the polyethylene (PE) tubing minimizing the likelihood of suture induced catheter lumen constriction.

Silicon intravascular tip: For reducing intravascular thrombus formation.

Reduced diameter intravascular tip: Reducing the inner diameter of the intravascular tip relative to the inner diameter of the port allows for efficient expulsion of blood from the intravascular tip. The last step following catheter implantation or use should be to advance the stainless steel plug into the port for a few millimeters. This is sufficient to expel trace amounts of blood from the intravascular tip with a minimum amount of catheter lock solution entering the bloodstream.

Thoracic Model

Suitable for blood sampling and/or drug infusion in either the jugular vein or carotid artery of the rat. When cannulating the jugular vein, the catheter tip should reside at the entrance of the right atrium (Waynforth and Flecknell, 1991). When cannulating the carotid artery, the catheter tip should reside within the descending aortic arch (Waynforth and Flecknell, 1991).



MODEL	DESCRIPTION	CATHETER TIP LENGTH	TOTAL LENGTH	
R-JVC-STD	Rat Thoracic Jugular Vein	32mm	65mm	
R-CAC-STD	Rat Thoracic Carotid Artery	26mm	65mm	
R-JVC-M37-R	Rat Thoracic Jugular Vein, Rounded Tip	32mm	115mm	
R-CAC-M37-R	Rat Thoracic carotid Artery, Rounded Tip	26mm	115mm	
PP-23	Stainless Steel, 0.025" dia, port plug (d	ozen)		

Femoral Model

Suitable for blood sampling and/or drug infusion in either the femoral artery or femoral vein. The femoral catheter is available in three different sizes of catheter body length.



MODEL	DESCRIPTION
R-FC-L R-FC-M R-FC-S	Rat Femoral Vein/Artery Cather, Large (160-170m) Rat Femoral Vein/Artery Catheter, Medium (140-150mm) Rat Femoral Vein/Artery Catheter, Small (120-130mm)
R-FC-M37-R-L	Rat FemoralVein/Artery Catheter, Small (120-130mm) Rat FemoralVein/Artery Catheter, Rounded Tip, Large (230mm)
R-FC-M37-R-M	Rat Femoral Vein/Artery Catheter, Rounded Tip, Medium (210mm)
R-FC-M37-R-S PP-23	Rat Femoral Vein/Artery Catheter, Rounded Tip, Small (190mm) Stainless Steel, 0.025" dia. port plug dozen

Mouse Vascular Cathers

These catheters are similar in design to our rat vascular catheters and have the following specifications.

Mouse Jugular Vein & Carotid Artery

- ► Mouse jugular vein intravascular tippet consists of SIL025 with a suture anchor point 13 mm from catheter tip
- ➤ Mouse carotid artery intravascular tippet consists of PE10 with a suture anchor point 11 mm from catheter tip, tapered for easier insertion into carotid artery lumen
- ► Catheter body consists of PE10, 25 mm length
- ► Catheter port consists of PE50, 15 mm length attached perpendicular to catheter body
- ➤ Catheter port external end is flared and accepts 23 ga. blunted catheter needles (N-23) for access or 23 ga. wire (23-PLUG) for closure



MODEL	DESCRIPTION	CATHETER TIP LENGTH	TOTAL LENGTH
M-JVC-STD M-CAC-SD	Mouse Thoracic Jugular Vein Mouse Thoracic Carotid Artery	13mm 11mm	25mm 25mm
PP-23	Stainless Steel, 0.025" dia. port plug	(dozen)	

Mouse Femoral Artery/Vein

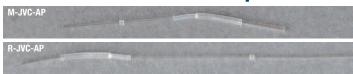
- ► Intravascular tippet consists of PE10 with a suture anchor point 9 mm from catheter tip, tapered for easier insertion into blood vessel lumen
- ► Catheter body consists of PE10, 45 mm length
- ➤ Catheter port consists of PE50, 15 mm length attached inline to catheter body
- ► Catheter port external end is flared and accepts 23 ga. blunted catheter needles (N-23) for access and 23 ga. wire (23-PLUG) for closure



MODEL	DESCRIPTION
M-FC-STD	Mouse Femoral Vein/Artery Catheter, catheter body length 45mm
PP-23	Stainless Steel, 0.025" dia. port plug (dozen)0



Intravenous Osmotic Pump Catheter



Braintree Scientific's Micro-Renathane® based catheter for continuous, intravenous (via the jugular vein) administration of drug solutions delivered with the ALZET® Osmotic Pump. Catheter can be modified for infusion via other blood vessels (please inquire).

Supplied non-sterile

MODEL	DESCRIPTION
R-JVC-7710	Rat Intravenous Osmotic Pump Catheter
M-JVC-7700	Mouse Intravenous Osmotic Pump Catheter

Restrained Tail Vein Infusion Model



Most researchers use butterfly needles to administer fluids via the tail vein. Allows access for both timed injections and repeated bolus administration. The MTV-1 system incorporates a small catheter that is easily inserted into the tail vein and will remain insitu in a restrained mouse for as long as restraint is feasible. Due to the flexibility and size of the catheter, trauma to the tail vein is minimized, allowing for long term

and repeated bolus dosing. By avoiding the damage associated with indwelling needles there is an increased chance that the tail vein will remain viable for the duration of the study.

MTV-2, MTV-2S, MTV-3 catheters are used for researchers that use small bore MRI machines or that need extra length for long bore magnets.

MTV-9 includes stylet, splittable needle and injection cap.

- ► Eliminates the need for an assistant
- ► Reduces setup and procedure time
- Provides superior control
- ► Improves visualization

1-	
MODEL	DESCRIPTION
MTV-1	Restrained Tail Vein Infusion Catheter 10cm of 28ga (0.014" x 0.007") connected to 7" of (0.033" x 0.014") with stylette and 23ga thin wall needle
MTV-2	10cm of 28ga (0.014" x 0.007") connected to 20" of (0.033" x 0.014") and 23ga thin wall needle, no stylette
MTV-2S	10cm of 28ga (0.014" x 0.007") connected to 20" of (0.033" x 0.014") with stylette and 23ga thin wall needle
MTV-3	10cm of 28ga (0.014" x 0.007") connected to 31.5" of (0.033" x 0.014") and 23G thin wall needle, no stylette

More options available online at braintreesci.com

Micro Cannula System



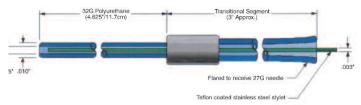
The Micro Cannula System provides quick and convenient access to an artery or vein in small animals such as mice and rats. The tapered design of the PFA tubing provides strength while maintaining a very small distal tip of 0.016" OD x 0.008" ID. The sharpened stylette and beveled tip provides easy insertion into any vessel. Total length is approximately 10cm not including the stylette.

MODEL	DESCRIPTION
MC-28	Micro Cannula System

MODEL DECORIDATION

32ga Mouse Catheter System

This catheter system offers the smallest diameter catheter/stylet product available for murine procedures



Ultra-thin diameter catheters for applications in mice:

This 32ga murine catheter is a key component of a withdrawal/delivery system specifically developed for use in mice and other small research animals. Its material and small size produces a minimally reactive catheter, thereby reducing catheter-induced artifacts that could obscure experimental observations. Suitable for cardiovascular, intracranial, and other applications.

Includes

- ► 11.7cm 32ga (0.010" OD/0.005" ID) polyurethane catheter
- ► Bonded connection assembly flared to accept a 27ga needle
- ➤ 0.003" diameter Teflon®-coated stainless steel stylet to facilitate placement
- ► Individually packaged

MODEL	DESCRIPTION
CS-32	32ga Intracranial Catheter System

Intrathecal Catheter

Intrathecal Catheter0



Braintree Scientific's rat intrathecal catheter offers a means for the administration of microliter amounts of drug solution to the lumbar (or higher) region of the rat spinal cord. This catheter system is ideal for use in antinociceptive studies involving rats.

	antinociceptive studies involving rats.	.,
MODEL	DESCRIPTION	

Mouse Intravascular Catheter



Designed for quick and easy insertion into arteries and veins of mice and rats (primarily mice).

Supplied sterile.

R-ITC

MODEL	DESCRIPTION	SIZE	TIP OD	TIP ID	MATERIAL
MC-0189E0	Mouse Catheter	28G, 60mm	.014"	.007"	PU



Molecular Imaging Catheters



Catheter consists of medical grade PTFE tubing (SUBL-160, 0.016" OD x 0.010" ID), 40cm long with an attached 27ga blunted luer hub.

MODEL	DESCRIPTION
MIC	Molecular Imaging Catheter

Stereotaxic Brain Lesioning Cannula

These stainless steel cannulae are designed to fit in slotted acrylic stereotaxic clamping devices and are ideal for administering chemical solutions to discrete areas of the rat and mouse brain.



- Cannula consists of a 60mm length of 30ga stainless steel hypodermic tubing with a 45mm overlapping sleeve of 23ga stainless steel tubing to facilitate secure placement by the stereotaxic clamping device
- ➤ Tip of the cannula consists of exposed 30-gauge stainless steel hypodermic tubing, 10mm long
- Cannula comes with an 18" length of Tygon tubing with an end designed to fit over a micro syringe needle tip

MODEL	DESCRIPTION
RM-SBL	Stereotaxic brain lesioning cannula

Double Lumen Catheters

CR-DL28: Double lumen intracranial catheter system contains an 11.7cm 28g (0.025" OD distal portion/0.007" ID each lumen) polyurethane catheter, a bonded connection assembly flared to accept a 27ga needle, a 0.003" diameter Teflon®-coated stainless steel stylet to facilitate placement. Individually packaged. *Supplied non-sterile*.



CR-DL32: Double lumen intracranial catheter system contains an 11.7cm 32ga (0.018" OD distal portion/0.005" ID each lumen) polyurethane catheter, a bonded connection assembly flared to accept a 32ga needle, a 0.003" diameter Teflon®-coated stainless steel stylet to facilitate placement. Individually packaged. *Supplied non-sterile.*

MODEL	DESCRIPTION	
CR-DL28 CR-DL32	11.7cm 28ga/0.007" ID 11.7cm 32ga/0.005" ID	

Bile Duct Catheter

For bile duct collection in rats, with a fine diameter tip (MRE-025)

i di bilo c	idot obiloction in rato, with a line diameter up (with 020).
MODEL	DESCRIPTION
BDC-R BDC-M	Rat Bile Duct Catheter Mouse Bile Duct Catheter

Duodenal Rat Catheter

Can be used as a return catheter; to shunt the bile into the duodenum; its tip is larger in diameter (MRE040).

MODEL	DESCRIPTION
R-DUOD	Duodenal Catheter

Vein Pick

Holds vessel open during cut-down catheter insertion procedure. Tapered tip of vein pick is inserted into incision of vessel. Catheter slides under groove on underside of vein pick into vessel.

unuer gro	ove on underside of vein pick into vesser.	
MODEL	DIMENSIONS	UNITS/PK
V-PIC	Tapered tip Vein Pick	. 10

GentleSharp

A more humane blood sampling system

GentleSharp uses micro-vibrations to help sharps puncture and glide through tissue more smoothly, minimizing subject discomfort and stress during small volume blood sampling.



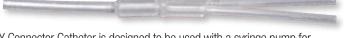
The research behind Gentle Sharp scientific studies showed reduced stress in rats and mice.

Research not only outlines the major findings, but also summarizes results and experimental design for each:

- ► Reduced plasma corticosterone for serial blood
- ► Reduced animal movement and vocalization for serial blood collection
- ► Reduced peak insertion force during rat tail penetration
- ► Decreased needle insertions for serial blood collection
- ► Increased collection success for serial blood collection
- ► Increased collection success for novice collectors
- ► Increased blood mass for serial blood collection
- ► No significant change in mice handling time for serial blood collection

MODEL	DESCRIPTION
GS-101-2	GentleSharp System – 2' cord
GS-101-4	GentleSharp System – 4' cord
GS-201	Hard Carrying Case with custom foam insert

Y Connector Catheter



Y Connector Catheter is designed to be used with a syringe pump for infusion and withdrawal of fluids. Primarily used to adapt two osmotic pumps to one catheter line.

Supplied sterile.

MODEL	DESCRIPTION	SIZE	TUBE OD	TUBE ID	MATERIAL
Y-0225E0	Rat Y Connector Catheter	4.5F, 40mm	.039"	.023"	PE
	double outlets		.052"	.034"	PE



Blunt Tip Catheter Needles

Stainless steel, blunt tip, hypodermic needle with standard luer hub. For use as an interface to connect a hypodermic syringe directly to catheter port for intravascular substance administration, blood sampling and catheter flushing.

MODEL	DESCRIPTION	UNITS
NB-30	30 gauge - 0.5"	1 dz
NB-27	27 gauge - 1"	1 dz
NB-26	26 gauge - 0.5"	
NB-25	25 gauge - 1"	1 dz
NB-23	23 gauge - 1"	1 dz
NB-22	22 gauge - 1"	1 dz
NB-21	21 gauge - 1"	1 dz
NB-20	20 gauge - 1"	1 dz

Sharp Tip Catheter Needles

Ultra-sharp, tri-beveled, anti-coring, stainless steel needle. Translucent, color-coded luer lock hub.

Supplied sterile.

MODEL	DESCRIPTION	UNITS/PK
NS-30	30 gauge - 0.5"	. 100
NS-27	27 gauge - 0.5"	. 100
NS-25	25 gauge - 1"	. 100
NS-23	23 gauge - 1"	. 100
NS-22	22 gauge - 1"	. 100
NS-21	21 gauge - 1"	. 100
NS-20	20 gauge - 1"	. 100
NS-18	18 gauge - 1"	. 100

Stainless Steel Port Plugs

Stainless steel port plug, 0.5" length.

MODEL	DESCRIPTION	UNITS
PP-30	0.012" plug	1 dz
PP-28	0.014" plug	
PP-27	0.016" plug	1 dz
PP-23	0.025" plug	1 dz
PP-22	0.028" plug	1 dz
PP-21	0.032" plug	1 dz
PP-20	0.036" plug	1 dz
PP-19	0.042" plug	1 dz

Stainless Steel Connectors

Stainless steel tubing connectors, 0.5".

MODEL	DESCRIPTION	UNITS
C-30	30 gauge	. 1 dz
C-28	28 gauge	. 1 dz
C-27	27 gauge	. 1 dz
C-23	23 gauge	. 1 dz
C-22	22 gauge	. 1 dz
C-21	21 gauge	. 1 dz
C-20	20 gauge	. 1 dz
C-19	19 gauge	. 1 dz

Straight Non-Coring Huber Needles



Great for dosing or sampling. Use with an access port or injection cap. Special point allows for greater septum life.

MODEL	DESCRIPTION	UNITS/PK
H22-75	22 gauge 0.75"	. 25

Blunt Needles with Syringe

Attached blunt needles on 1cc syringes not only save tremendous amounts of time but will also help lower costs.



Additional size syringes are available and can be supplied with any size blunt needle. All syringes are capped and ETO exposed. Call for additional sizes.

MODEL	SIZE	GAUGE	LENGTH	QTY/PK	
B20-50-1	1cc	20	0.5"	25	
B20-100-1	1cc	20	1"	25	
B22-50-1	1cc	22	0.5"	25	
B22-100-1	1cc	22	1"	25	
B23-50-1	1cc	23	0.5"	25	
B23-100-1	1cc	23	1"	25	
B25-50-1	1cc	25	0.5"	25	
B25-100-1	1cc	25	1"	25	

Zero and Minimal Dead Volume Syringes



Zero dead volume sterile syringes offer researchers the ability to completely

remove all fluid from the syringe for zero test article or blood loss.

MODEL DESCRIPTION UNITS/PK

DESCRIPTION	UNITS/PK
Icc Zero Dead Volume Syringe with 22G connector	25
cc Zero Dead Volume Syringe with 22G connector	100
Icc Zero Dead Volume Syringe without connector	10
Icc Minimal Dead Volume Syringe without connector	10
	cc Zero Dead Volume Syringe with 22G connector cc Zero Dead Volume Syringe with 22G connector cc Zero Dead Volume Syringe without connector

Prefilled Syringes

Prefilled syringes for flushing, locking or sampling through any catheter or port system. Order as needed in convenient, ready to use packaging. Syringe sizes range from 1cc-60cc with volumes from 0.2ml-60ml.

Prefilled syringes can be filled with most any solution including saline, heparin/saline, dextrose, heparin/dextrose, and many others.

MODEL	SYRINGE SIZE	FILL VOL	HEPARIN	UNITS/CS	
Saline (0.9%)	Filled Syringe				
SYS-1-0.5	1cc	0.5cc	_	300	
SYS-1-1	1cc	1cc	_	300	
SYS-3-2	3cc	2cc	_	300	
SYS-3-3	3cc	3cc	_	300	
SYS-5-3	5cc	3cc	_	300	
SYS-5-5	5cc	5cc	_	150	
SYS-10-10	10cc	10cc	_	90	
SYS-60-60	60cc	60cc	_	15	
Heparin & Sal	ine Filled Syringes				
SYH-50-0.5	1cc	0.5cc	50u/ml	300	
SYH-50-1.0	1cc	1cc	50u/ml	300	
SYH-50-2.0	3cc	2cc	50u/ml	300	
SYH-50-3.0	3cc	3cc	50u/ml	300	
SYH-100-0.5	1cc	0.5cc	100u/ml	300	
SYH-100-1.0	1cc	1cc	100u/ml	300	
SYH-100-2.0	3cc	2cc	100u/ml	300	
SYH-100-3.0	3cc	3cc	100u/ml	300	
SYH-300-0.5	1cc	0.5cc	300u/ml	300	
SYH-300-1.0	1cc	1cc	300u/ml	300	
SYH-300-2.0	3cc	2cc	300u/ml	300	
SYH-300-3.0	3cc	3cc	300u/ml	300	
SYH-500-0.5	1cc	0.5cc	500u/ml	300	
SYH-500-1.0	1cc	1cc	500u/ml	300	
SYH-500-2.0	3cc	2cc	500u/ml	300	
SYH-500-3.0	3cc	3cc	500u/ml	300	

For a larger selection of syringes visit www.braintreesci.com



T-FloLoc[™]

Premium 2% Tetra-EDTA catheter flushing and locking solution offering both patency and infection control.

Provides broad-spectrum activity effective against gram-positive and gram-negative bacteria and fungi associated with catheterrelated infections



- ► Prevents and eradicates biofilm eliminates protected microbial colonization of catheters reducing the risk of catheter-related infection
- ► Effective anticoagulant promotes catheter patency; avoids systemic anticoagulation associated with heparin
- ► Non-toxic; no topical or systemic effects are known
- ► No development of resistance does not induce development of drug-resistant bacterial strains

Each syringe is sterile packaged, suitable for sterile field use

MODEL	DESCRIPTION	UNITS/PK
TFL-1202-01	2mL 2% Tetra-EDTA Solution in 12mL Syringe	10
TFL-1202-05	2mL 2% Tetra-EDTA Solution in 12mL Syringe	50
TFL-1202-10	2mL 2% Tetra-EDTA Solution in 12mL Syringe	100

Skin Buttons



Rodent Skin Buttons are used for externalizing a catheter or for an attachment of a spring tether to the animal as an alternative to the harness or jacket. The advantage of a skin button is lower chance of infection, secure catheter anchoring and the ability to keep the catheter away from the animal. The silicone

sleeve is the perfect size for most standard rodent tethers and the 1" Dacron Mesh allows for suture attachment and tissue ingrowth.

MODEL	DESCRIPTION
SBD-01 SBD-02 SBD-M2	Skin Button with Dacron Mesh

New! Dual Connect Skin Buttons for Mice

Dual channel vascular access buttons are implanted during surgery and allow safe, comfortable access to implanted catheters without a need for a harness or jacket.

- ► Dacron® mesh patch
- ▶ Dual cannula
- ► 22ga and 25ga available
- Optional ingrowth patch



MODEL	DESCRIPTION	CANNULA GAUGE	TUBING & DIMENSIONS	PATCH	ATTACHMENT
MRI-01	25G with Ingrowth Patch	25 x 2	PE 0.015 ID x 0.043 0D	Mesh ¾"	None
MRI-02	25G with Patch & Silicone Collar	25 x 2	PE 0.015 ID x 0.043 0D	Mesh ¾"	None
MRI-03	22G with Patch & Silicone Collar	22 x 2	PE 0.023 ID x 0.039 OD	Mesh ¾"	None
MRI-04	25G with Auto Sampler Hook	25 x 2	PU 0.015 ID x 0.033 OD	Mesh ¾"	Wire Auto Sampler Loop
MRI-06	25G Dual Skin Button	25 x 2	PU 0.015 ID x 0.033 OD	None	None
MRI-25	25G Dual Skin Button	25 x 2	PE 0.015 ID x 0.043 OD	None	None

Cath-Loc HGS: Heparin/Glycerol **Catheter Lock Solution**



The antithrombic characteristics of heparin plus the viscous nature of glycerol is combined in a solution to promote and extend the patency of vascular catheters. Proven as the solution of choice in studies in catheterized animals*, Cath-Loc HGS solution acts as a non-toxic anticoagulant lock solution for indwelling catheters. This formulation is the most widely used as a pre-clinical catheter lock.

*Y.S. Luo, et. al. AALAS 2000 Comparison of Catheter Lock Solutions in Rats. Not for human use – animal research use only

MODEL	DESCRIPTION	UNITS
HGS	Cath-Loc HGS, 10ml vial	5

Cath-Loc HD: Heparin/Dextrose Catheter Lock Solution



Cath Loc HDS acts as a non-toxic anticoagulant lock solution for indwelling catheters for pre-clinical research. This is one of the most common formulations used as a reliable pre-clinical lock solution to maintain catheter patency in vascular catheters. This solution, used in both large and small animals, combines the high viscosity of 50% dextrose with the anticoagulant activity of heparin to promote and extended implanted catheter patency. The high osmolarity of dextrose prevents bacterial colonization and multiplication and the high

viscosity of dextrose reduces washout from the catheter tip. The heparin in the solution also aids in prevention of clot formation. Since both dextrose and heparin are physiological constituents which occur naturally in the blood, any excess Cath-Lock HDS injected is quickly metabolized, when used properly. Available in 10ml sterile vials.

MODEL	DESCRIPTION	UNITS
HDS	Cath-Loc HD, 10ml vial	5

TCS Anti-Microbial Lock Solution

Providing patency and infection control



TCS, a catheter lock solution, combines two active ingredients vital to the effective management of vascular access catheters; Taurolidine and Citrate. When TCS is instilled in device lumens, their internal flow passages are resistant to clot formation and hostile to bacterial and fungal growth. TCS is non-toxic and there are no known systemic effects. Taurolidine, an antimicrobial agent, promotes catheter patency by preventing Biofilm formation while Citrate, acts as the anticoagulant.

Taurolidine component offers broad spectrum antimicrobial activity against aerobic and anaerobic gram-positive and gram-negative bacteria. yeast and fungi. Prevents biofilm development and consequently bacterial and fungal colonization, decreasing the risk of infection does not induce the development of resistant microbes.

Citrate component forms a complex with calcium, disrupting the normal coagulation cascade, precipitating it into an unusable form inhibiting blood coagulation with no systemic effect.

MODEL	DESCRIPTION	UNITS
TCS-CS	Taurolidine-Citrate Solution, 7 ml vial used for catheter lock solution (1 box/10 vials)	10
TCS-EA	Taurolidine-Citrate Solution, 7 ml vial used for catheter lock solution	1

Cannulock[™] Catheter Access Buttons[™] and Ports

Quick, clean catheter access for secure, non-slip catheter connections

Catheter Access Buttons™ with Cannulock™

Safe and secure rat Catheter Access Buttons[™] feature Cannulock[™] technology for the best catheter fit.





- ► Smooth barb safely "locks" with a catheter to eliminate disconnections
- ► Soft Dacron felt for secure anchoring and rapid tissue ingrowth
- Quick, clean access to 1, 2, or 3 catheters in rats, hamsters and guinea pigs
- ➤ 22G catheter connection fits multiple vascular access catheters: jugular, femoral, carotid, gastric, and bile
- ► Closed, split septum access to minimize introduction of pathogens
- ► Magnetic tether attaches quickly and easily for a simplified connection
- ► Lightweight metal cap protects the button for worry free group housing (sold separately)
- ► Built to withstand multiple insertions

MODEL	DIMENSIONS	UNITS
CAB22-RI	Single Channel Catheter Access Button with Cannulock technology	Each
CAB22-R2	Double Channel Catheter Access Button with Cannulock technology	Each
CAB22-R3	Triple Channel Catheter Access Button with Cannulock technology	Each

Catheter Access Ports™

 Smooth barb safely "locks" with the catheter to eliminate disconnections



- ► Unique shape designed for secure external suturing
- ► Quick, clean access to catheters via a closed split septum
- ► Packaged 2 per sterile pouch, quantities as low as 20 units
- ► Three color options available to color code catheters
- ▶ 22G port is the perfect size for rats, hamsters and guinea pigs
- ▶ 25G port is the perfect size for mice and CannuLock[™] tether lines
- ➤ Choose from a 22G or 25G catheter connection to fit multiple vascular access catheters: including mugular, femoral, and carotid catheters in mice, rats, hamsters and guinea pigs

MODEL	DIMENSIONS	GAUGE	COLOR	UNITS/PK
CLP22W-20	Catheter Access Ports	22G	White	20/pk
CLP22W-100		22G	White	100/pk
CLP22R-20		22G	Red	20/pk
CLP22R-100		22G	Red	100/pk
CLP22B-20		22G	Blue	20/pk
CLP22B-100		22G	Blue	100/pk
CLP25B-20		25G	Blue	20/pk

Catheter Access Port Adapters™

- Provides a remarkably secure connection between catheter and the port
- ► Each sterile pouch contains 2 adapters
- ► Connect to a slip tip syringe for easy catheter access
- ➤ Available pre-attached to empty syringe or on pre-filled flush and lock syringes, and customized kits for maximum efficiency (call for pricing)

MODEL	DIMENSIONS	UNITS/PK
CLPAD-20	Catheter Access Port Adapters	20/pk
CLPAD-100	Catheter Access Port Adapters	100/pk

Catheter Access Button™ Caps

- Lightweight metal caps connect and protect Catheter Access Buttons[™], allowing users to group house animals without worry
- ► Magnetic cap is self-aligning, attaching easily
- ► Lightweight and durable for worry free group housing
- ► Three colors available for easy identification of study groups

MODEL	DIMENSIONS	UNITS
CAB-RCR CAB-BCR CAB-GCR	Red Magnetic Cap for Catheter Access Button Blue Magnetic Cap for Catheter Access Button Green Magnetic Cap for Catheter Access Button .	Each Each Each

Miniature Manifolds





Perfusion manifolds can be used in any application where from 2 to 8 perfusion lines are required to be connected to a chamber or other device. Manifold input6s converge to the common output with minimum dead space. Designed for use with polyethylene (PE) tubing, manifolds can be used with any other tubing of similar dimensions. When connected to a chamber via a short length of tubing, very rapid solution changes are possible.

Miniature manifolds are useful for applications involving small volumes or slow flow rates. Small diameter tubing is used with these models; PE-50 $\,$

tubing for the input ports, and PE-10 or PE-50 tubing for the MM or ML series output ports, respectively.

Specifications:

Material: Delrin™ Large Diameter: 8.0mm Small Diameter: 4.7mm Body Length: 18mm

Input Tubing: PE-50

• Contput	Inputs
022	.149

MODEL	DESCRIPTION
ML-2	Miniature Manifold, 2 ports
ML-4	Miniature Manifold, 4 ports
ML-6	Miniature Manifold, 6 ports
ML-8	Miniature Manifold, 8 ports
MM-2	Miniature Manifold, 2 ports
MM-4	Miniature Manifold, 4 ports
MM-6	Miniature Manifold, 6 ports

The single port is available in either PE10 (MM Series) or PE50 (ML Series) and the manifold is PE50.



Rodent Ports

Small, light-weight access ports designed specifically for rodent studies.

Penny MousePort for intravascular and peritoneal access



Penny MousePort incorporates two major design breakthroughs; a unique septum design and an all silicone port body. MousePort is provided with preattached silicone catheters, in sizes 1-4 French.

- ► Low profile
- ► Small size and weight
- ► Biocompatible oval shape
- Easy port entry into the smallest mouse
- ► Small dead volume
- ► Reduces infusate volume
- ► Unique septum offfering 180° access
- ► Stainless steel needle guard protection
- ► Ideal for both intravascular and peritoneal access
- Avoids repeated tail vein catheterization

Specifications:

Material: all silicone with a stainless steel needle guard

Weight: 1g Volume: 100ul Height: 0.28"/0.7cm

Septum Opening: 180° access (1.2cm x 0.4cm)

Footprint: 2cm x 1.1cm

Catheter Material: Preattached silicone catheter

Catheter Configuration: 1-4 French

MODEL DESCRIPTION

Silicone V-A-P MMP Model Mouseport preattached models

MMP-1S 1F Silicone Catheter x 6"/15cm MMP-2S 2F Silicone Catheter x 6"/15cm MMP-3S 3F Silicone Catheter x 6"/15cm MMP-4S 4F Silicone Catheter x 6"/15cm

Rat-O-Port for intravascular and peritoneal access

Rat-O-Port's rounded port chamber has been shown to prolong patency by preventing sludge formation. The Rat-O-Port can be provided with preattached or attachable polyurethane or silicone catheters, rounded or blunt tip, in sizes 1-5 French.



- ► Low profile and light weight
- ► Reduces incidence of skin necrosis
- ► Rounded port reservoir and tangential catheter outlet
- ► More complete flushing reduces complications
- Ringed septum easy to palpate
- ► Provides easy access during needle insertion
- ► Ideal for long-term access procedures
- ► Tested to 350 punctures with a 24 gauge huber needle
- Avoids repeated venipuncture
- ► Promotes animal welfare
- ► Ideal for both intravascular and peritoneal access
- Avoids repeated tail vein catheterization

Specifications:

Material: Plastic with stainless steel catheter pin

Weight: 1.5g Volume: 0.11cc Height: 0.35"/0.9cm Septum Opening: 0.3"/0.8cm Footprint: 0.7"/1.7cm

Catheter configuration: Rat-O-Port models can be ordered with attached

or unattached catheters

Catheter material: Rat-O-Port models can be ordered with silicone,

polyurethane, or hydromer coated in sizes 1-7 French

Catheter tip configuration: Blunt or rounded tip

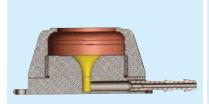
MODEL DESCRIPTION

Plastic V-A-P ROP Model Rat-O-Port preattached and attachable models

ROP-15	1F Silicone Catheter x 6"/15cm
ROP-1P	1F PolyUrethane Catheter x 6"/15cm
ROP-2S	2F Silicone Catheter x 6"/15cm
ROP-2P	2F PolyUrethane Catheter x 6"/15cm
ROP-3S	3F Silicone Catheter x 6"/15cm
ROP-3P	3F PolyUrethane Catheter x 6"/15cm
ROP-3.5P	3.5F PolyUrethane Catheter x 6"/15cm
ROP-4S	4F Silicone Catheter x 6"/15cm
ROP-2H	2F Hydrocoat PolyUrethane Catheter x 6"/15cm
ROP-3H	3F Hydrocoat PolyUrethane Catheter x 6"/15cm
ROP-3.5H	3.5F Hydrocoat PolyUrethane Catheter x 6"/15cm
ROP-2IS	2F Silicone Radiused Tip Catheter x 6"/15cm
ROP-3IS	3F Silicone Radiused Tip Catheter x 6"/15cm
ROP-4IS	4F Silicone Radiused Tip Catheter x 6"/15cm

LoVol[™] Port

Ultra-low dead volume port for CSF infusion and withdrawal





Ultra-low dead volume of Lovol Port is the port of choice for any application requiring minimal dead volume, i.e. an unusually expensive test article of CSF collection. Available in 2 sizes, MIN-LoVol and MID-LoVol, with reservoir volume only 10% of the Solomon MIN and MID standard SoloPorts. LoVol ports can be accessed with standard 22ga and 24ga huber needles and infusion sets.

MODEL	DESCRIPTION
MINLOA-C30	Mini Port only- attaches to a 3F catheter
MINLOA-C35	Mini Port Only- attaches to a 3.5F catheter
MINLOA-PU-C30	Mini Port with a 3F round tip 60cm polyurethane
	catheter with moveable bead
MINLOA-PU-C35	Mini Port with a 3.5F round tip 60cm polyurethane
	catheter with moveable heads

Shop online at www.braintreesci.com



Collars, Tethers, Slings and Harnesses

Rodent Sling and Restraint Cover

Slings can be used to securely restrain rodents during many procedures. Choice of restraint in many sizes and range of adjustment make rodent sling a valuable asset to any laboratory setting.

Other small animal species may also be restrained using same frame with suits and slings available for mice and guinea pigs.



Restraints: Full body restraint is provided with choice of either sling suit or sling cover. Both restrainers allow for access to all limbs, head and tail. Velcro fasteners allow for quick and secure restraint and adjustable fit for individual animals. Sling suits are sold in five sizes according to weight range of animals. Rodent Sling Cover is available in single size for rats up to 500g. Custom sizes available on request.

MODEL	DESCRIPTION
RSL-FS1	Rodent Sling - frame and cover
RSL-FC01	Rodent Sling Cover only
RSL-FC1	Rat Sling Suit Small, 150-200g
RSL-FC2	Rat Sling Suit Medium, 250-350g
RSL-FC3	Rat Sling Suit Large, 350-500g
RSL-FC4	Rat Sling Suit X-Large, 500g+
RSL-C00	Mouse Sling Suit
RSL-C03	Mouse Sling Suit Large, 30g+

Rodent Jackets



Manufactured from breathable, latex-free power net mesh in a saddle-style format. Designed for use with rodent tethers and available in a range of sizes to ensure a secure yet comfortable fit.

MODEL	DESCRIPTION
RJ-M01	Mouse up to 25g
RJ-M02	Mouse 25-30g
RJ-M03	Mouse 30+g
RJ-S	Rat 150-250g
RJ-M	Rat 250-350g
RJ-L	Rat 350-500g
RJ-XL	Rat 500+g
RJ-RDI	Rat Dermal Insert
RJ-MDI	Mouse Dermal Insert

Rodent Tail Cuffs

Constructed of stainless steel with self-threading tether attachment point. Used as an alternative to the rodent jacket.



MODEL	DESCRIPTION
TC-RT-T1	Rat Tail Cuff
TC-MT-T1	Mouse Tail Cuff
TC-RTC-1	Light Weight Rodent Tail Cuff, anodized aluminum
TC-RTC-2	Tapered Stainless Steel Rodent Tail Cuff, 16mm OD – 14mm ID

Elizabethan Collars

Designed to prevent animals from grooming and to protect surgical or treatment sites. All collars are manufactured from a low-density polyethylene, for smaller animals a lightweight material is used. Collars close with Velcro fasteners providing adjustable and secure fit for individual animals. Neck openings are bound with cotton jersey for comfort and light padding.

MODEL	DESCRIPTION
EC-M1 EC-R1 EC-R2	Elizabethan Collar for Mice 2.75" Elizabethan Collar for Rats up to 450g - 4.625" Elizabethan Collar for Rats 450g+ - 5.125"

Swivel

Rodent swivels are made from durable plastic and are fitted with a 20g or 22g needle. Designed for long-life and repeated usage. Sterile packaged.

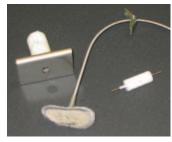
MODEL	DESCRIPTION
RS-20G	Gas Sterilized 20g
RS-22G	Gas Sterilized 22g

Swivel Mount

Rodent swivel mount secures to the outside of the cage. Comprised of a retainer made of durable plastic with a stainless steel clip.

MODEL	DESCRIPTION
RSM	Rodent Swivel Mount

Tethers



Constructed from lightweight stainless steel spring-coil, rodent tethers come complete with a crimped end for direct attachment to the rodent swivel (removing the need for potentially troublesome connection hardware). Jacket anchors comes ready sewn with silver woven fabric for added comfort and resistance to

opportunistic infection. Rodent tethers are designed to protect the exteriorized catheter and can be used with rodent jackets.

MODEL	DESCRIPTION
RT-12	Tether 12" sewn
RT-18	Tether 18" sewn

LOMIR Butterfly Harness

A versatile product; created from One Strap™ Velcro for making a simple to use mouse harness suitable for the majority of mice commonly used in research. Butterfly harnesses' versatility extends to a wide range of applications; originally designed to protect excisions during healing. The harness is compatible with infusion systems and those for dermal applications.

MODEL	DESCRIPTION
MHBF00	Mouse Butterfly Harness (single piece back to back Velcro™) - one size



EZ Clip™

Ideal for use with lab animals or in veterinary surgery



Autoclip® and EZ Clip

Racks of 9mm clips are individually packaged in heat sealed, peel-away sleeves for cleanliness, ease of handling and storage. EZ Clips™ are packaged 20 clips on

a rack, with 5 racks per strip (100 clips total). They can be purchased by the strip, 2 strips (200 clips) or by the case (1000 clips). Clips are

pyrogen free and non-sterile. However, the autoclavable plastic packaging allows for sterilization

of the clips without removing them from the packaging. The Clip Applier is a stainless steel applying forcep that holds one rack of 20 clips. Works like a staple gun to apply clips to wound. The clips are fed by rustless berylliumcopper springs. The Clip Remover is also stainless steel and can be used to remove all sizes of wound clips.

MODEL	DESCRIPTION
EZC-KIT	EZ Clip Kit
ACS-APL	Clip Applier
ACS-RMV	Clip Remover
EZC-2PK	EZ Clips, Non-Sterile, (200 clips)
EZC-CS	EZ Clips, Non-Sterile, Case (1,000 clips)

Reflex 7mm Wound Closure System

For those who prefer the smaller clip; the Reflex 7mm Skin Closure System is the right choice.

	, 0
MODEL	DESCRIPTION
RF7-APL RF7-CS RF7-RMV RF7-KIT	Applier Case of 100/box Remover Includes applier, remover and 100 clips



Autoclip® Wound Closing System



The Autoclip® Applier works like a staple gun to rapidly apply Autoclip closures. The applier will hold 20 Autoclips, which are held firm and ready for use by rustless beryllium-copper

springs. Autoclips provide maximum holding force with minimal trauma. There is no need for assistance to operate the applier or remover. When the wound is healed, clips are easily removed with the Autoclip Remover. Stainless steel Autoclips are non-pyrogenic and supplied non-sterile, but may be autoclaved. Ideal for use with laboratory mice and rats.

•	•
MODEL	DESCRIPTION
ACS-KIT	Autoclip Starter Kit (includes applier, remover, and 1,000 clips)
ACS-APL	Autoclip Applier
ACS-RMV	Autoclip Remover
ACS-BX	Autoclips 100/box
ACS-CS	Autoclips 1,000/case

Basic Sutures for Small Animal Surgery



Non-absorbable natural silk

The softness of natural silk has been preserved in this high-grade suture.

MODEL	SIZE	MATERIAL		LENGTH		
Spools						
SUT-S-103	7-0	Silk		100 yds		
SUT-S-104	6-0	Silk		100 yds		
SUT-S-106	5-0	Silk		100 yds		
SUT-S-108	4-0	Silk		100 yds		
SUT-S-110	3-0	Silk		100 yds		
SUT-S-113	2-0	Silk		100 yds		
SUT-S-116	0	Silk		100 yds		
SUT-S-119	1	Silk		100 yds		
MODEL DESCI	RIPTION		SIZE	MATERIAL	LENGTH	
Spools with swagged needles						
SUT-1074 0.375	circle reverse	cutting	3-0	Silk	18"	
SUT-7116 0.5" ci	rcle taper poin	t double needle	4-0	Silk	24"	
SUT-9403 Straigh	nt taper		3-0	Silk	30"	

Surgical Instruments



Technocut® Plus Disposable Safety Scalpels

The safety and performance you need



- ► Fully extended blade enables clear line of sight
- ► Top activation allows for ambidextrous use
- ► Fully enclosed front enhances blade stability and security
- ► Audible clicks help confirm proper blade position
- Final lock for safe handling and disposal
- ► Non-slip ergonomic handle with metric scale
- Color coded slider button for easy blade size identification

- Highest quality standards
- ► Uses premium GLASSVAN® blades. Computerized grinding and proprietary polishing processes for the blades ensure consistent, clean, sharp cutting edges
- Scalpel blades produced from high quality, high durability Swiss stainless steel
- Scalpels manufactured in ISO 13485 certified facilities

MODEL	SIZE
SSS-10	#10
SSS-11	#11
SSS-12	#12
SSS-15	#15
SSS-20	#20

^{*10} sterile scalpels per box, 5 boxes per case



Disposable Stainless Steel Safety Scalpel

Engineered for safety and simplicity. Complies with the OSHA directive by providing a fully retractable scalpel blade, which protects the user from accidental needle sticks associated with traditional scalpels.

Reusable sterile stainless dissecting surgical blades and handles also available – call for size and pricing.

Supplied sterile. Single use.

MODEL	SIZE	QTY
45-10	#10	10/pk
45-11	#11	10/pk
45-12	#12	10/pk
45-15	#15	10/pk
45-22	#22	10/pk

Surgical Spears



Disposable, super absorbent surgical spears for use during ophthalmic and other microsurgical procedures. Available in cellulose and PVA.

Supplied sterile.

MODEL	DESCRIPTION	QTY	
SP-40400	PVA Surgical Spears	100/pk	
SP-40410	Cellulose Surgical Spear	100/pk	

Micro Clip Setting Forceps

MODEL	DESCRIPTION
FC148	4.75"L

Micro Vascular Clips

MODEL	OCCLUSION PRESSURE	VESSEL DIA.	LENGTH	
MVC-00	10-15g	1mm	8mm	
MVC-02	15-20g	1-2mm	11mm	
MVC-04	20-30g	2-3mm	14mm	

Specialty Scissors



For precise vascular and neurological dissection. Ideal for small specimens. 4.5", (114.3mm)

MODEL	DESCRIPTION
	Std. Pattern, Straight
SC-I-129	Std. Pattern, Curved
SC-I-130	Std. Pattern, Angled

Scissors

SuperCut Scissors

Manufactured with the highest grade surgical stainless steel. Tempered and hardened for a longer sharper life. The SuperCut blade has a specially designed razor sharp edge.

Tungsten Carbide Scissors

Unique tungsten carbide cutting edges provide effortless yet accurate cuts through the toughest tissue. Shanks are tempered to allow proper flexibility and comfort. Finger rings are well rounded and polished allowing better feel while preventing finger fatigue.

MODEL DESCRIPTION

SuperCut Surgical Scissors - Sharp/Blunt

SCT-S-508 Surgical Scissors - Straight 5.5" (139.7mm) SCT-S-511 Surgical Scissors - Curved 5.5" (139.7mm)

SuperCut Metzenbaum Scissors - Delicate

SCT-M-523 Straight, 4.5" (114.3mm) SCT-M-525 Curved, 4.5" (114.3mm)

SuperCut Iris Scissors

SCT-I-528 Straight 4.5" (114.3mm) SCT-I-529 Curved 4.5" (114.3mm)

Tungsten Carbide - Iris Scissors

SC-T-405 Straight, 4.5" (114.3mm) SC-T-406 Curved, 4.5" (114.3mm)

Dissection Scissors

Metzenbaum Scissors

A unique combination of narrow blunted points along with thin delicate shafts for delicate dissection and minimal damage to surrounding tissues.

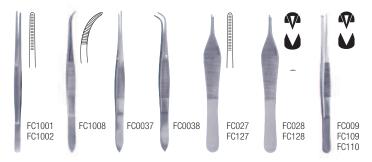
MODEL DESCRIPTION SC-M-125 Curved, Delicate, 5.5" (139.7mm) SC-M-126 Curved, Delicate, 7" (177.8mm) SC-M-180 Curved, Std. Pattern, 5.5" (139.7mm) SC-M-182 Curved, Std. Pattern, 7" (177.8mm)

Single Use Surgical Instruments



MODEL	DESCRIPTION	QTY
ST5-120	Mayo, 5.5", Straight, Blunt	50/bx
ST5-124	Mayo, 6.75", Straight, Blunt	50/bx
ST5-16	OR Scissor, 5.5", Straight, Sharp/Blunt	50/bx
ST5-180	Metzenbaum, 5.5", Curved	50/bx
ST5-182	Metzenbaum, 7", Curved	
ST5-304	Iris Scissor, 4.5", Straight	50/bx
ST5-306	Iris Scissor,4.5",Curved	50/bx
ST6-118	Adson Forcep, 4.75"	50/bx
ST6-120	Adson Forcep, 4.75",1x2	50/bx
ST6-44	Tissue Forcep, 5.5",1x2	50/bx
ST6-8	Dressing Forcep, 5.5"	50/bx
ST7-2	Halstead Forceps, 5", Straight	50/bx
ST7-4	Halstead Forceps, 5", Curved	50/bx
ST7-36	Kelly Forceps, 5.5", Straight	50/bx
ST7-38	Kelly Forcens, 5.5", Curved	50/bx

Forceps



Premium Grade Dressing Forceps

Serrated tips and ribbed grip to assist with delicate dissection. Standard pattern, serrated handle.

MODEL DESCRIPTION

Standard Pattern, serrated handles

FC-1001 Premium Grade 4.5" (114.3mm) FC-1002 Premium Grade 5" (127mm)

Curved, delicate narrow tips

FC-1008 Premium Grade 5" (127mm)

Iris Tissue Forceps

Sharp 1 x 2 interlocking teeth for secure grip with minimal tissue compression.

MODEL	DESCRIPTION
FC-0037	Straight, 1 x 2 teeth, 4" (101.6mm)
FC-0038	Full curved 1 x 2 teeth 4" (101 6mm)

Adson Forceps

Extra broad ribbed grip for delicate precision dissection. Available with serrated or toothed tips.

MODEL DESCRIPTION

Standard Grade

FC-027 Dressing, serrated, 4.75" (120.7mm) FC-028 Tissue 1 x 2 teeth, 4.75" (120.7mm)

Premium Grade

Dressing, serrated, 4.75" (120.7mm) FC-127 FC-128 Tissue 1 x 2 teeth, 4.75" (120.7mm)

Delicate Specialty Dissection Forceps

MODEL DESCRIPTION

Delicate Tissue Forceps

Serrated, 5" (127mm) FC-032 Tissue, 1 x 2 teeth, 5" (127mm) FC-033 Fine Point, 4.5" (127mm)

Standard Pattern Tissue Forceps

Secure ribbed grip.

MODEL DESCRIPTION

Standard Pattern, Serrated Handles, 1 x 2 Teeth

FC-109 Premium, 4.5" (114.3mm) FC-110 Premium, 5" (127mm) FC-111 Standard Grade, 4.5" (114.3mm)

Dumont Forceps

MODEL	DESCRIPTION
FC-5005	109mm lnox, 45° angle, tip 0.05 x 0.01mm
FC-5058	109mm Dumoxel, 45° angle, tip 0.10 x 0.06mm
FC-5043	110mm lnox, straight, 11cm

Micro Instruments





Micro Scissors

Very delicate scissors for precision dissection. Excellent for small animal dissection.

MODEL DESCRIPTION

Micro Iris Scissors

SC-MI-150 Straight, sharp points, 4" (101.6mm) SC-MI-151 Curved, sharp points, 4" (101.6mm)

Micro Scissors

SC-MS-152 Straight, superfine blades, 3.25" (82.5mm) SC-MS-153 Curved, superfine blades, 3.25" (82.5mm) SC-MS-154 Right Angle 4" SC-MS-155 Left Angle 4"

Premium Grade Micro-Tissue Forceps

FC-145 Curved Tip 4.25" (107.95mm) FC-146 Narrow Fine Tip 4.25" (120mm) FC-147 Super Fine Tip 4.25" (107.95mm)

Alm Retractor

Specifications:

Spread: 2.75" (7cm) **Prongs:** 2.25" (5.7cm) **Depth:** 0.125" (0.32cm)



ALM-112 Alm Retractor



Biocon: Extremely durable; easy to open, yet remains tightly shut when not in use.

MODEL **DESCRIPTION**

CS-7550 Holds up to 8 instruments in separate compartments CS-7575 Holds up to 10 instruments in separate compartments

Zippered: Velveteen-lined case with "leather-look" vinyl exterior; zips closed around three sides

MODEL **DESCRIPTION**

CS-7700 Holds up to 12 instruments 0

Bone Wax

► Bone wax is used to control bleeding in procedures that involve cutting through bones, such as thoracic, neurosurgery, orthopedic, oral and maxillofacial surgeries.



- ► Soft and easy to form and apply.
- ► Each easy-to-open foil package contains 2.5 grams of wax.

MODEL	DESCRIPTION	QTY
DYNJ-BW26	Sterile Synthetic Bone Wax	12/bx
DYNJ-BW25	Sterile Natural Non-Bleached Beeswax	12/bx

Extensive selection of instruments available. Please email info@braintreesci.com for details and pricing.

Microsurgical Instrument Kit



- ➤ Derf needle holder: grated jaws, 4000 teeth per square inch, 4.75" (12.1cm)
- ► Iris scissors: straight, 4" (10.2cm)
- Swiss jeweler style forceps: non-magnetic stainless steel, style 5, micro-fine, 4.375" (11.2cm)
- McPherson micro iris suturing forceps: straight, smooth platform 0.3mm x 5mm, no teeth, 3.5" (8.9cm)
- ► McPherson-Vannas micro iris scissors: straight, sharp points, 3.25" (8.3cm)
- ► PlainWire eye speculum: blades 15mm wide, 2.5" (6.4cm)
- ► Probe: double ended, malleable, sterling, 4.5" (11.4cm)
- ► Storage cassette: 6.5" x 6.25" x 1.25" (MSK-6890 only)
- ► Storage cassette mat (MSK-6890 only)

MODEL	DESCRIPTION	
MSK-6890	Microsurgical Instrument Kit	
MSK-6890-NC	Kit without Storage Cassette and Mat	

Rodent Dental Kit

Motorized dental kit provides all the necessary instruments to help treat commonly encountered dental problems in rodents.

Kit includes: small, medium and large cheek dilator, mouth gag, periodontal probe, flat and concave tongue spatulas, incisor and molar luxator, 5 piece burr set, burr cones, burr guard, diamond disc, safety shield and case.



MODEL	DESCRIPTION
ECK 177250	Padant Dantal Kit

Rat and Mouse Dissection Kits



MDK-R

Rat kit includes: Dumont forceps #5, Vannas scissors, SuperCut Iris scissors, straight, Alm retractor, needle holder, blunt probe, zippered case



MDK-M

Mouse kit includes: Dumont forceps #5, Vannas scissors, Dissecting scissors, Wire retractor, needle holder, blunt probe, zippered case

MODEL	DESCRIPTION
MDK-R	Rat Dissection Kit
MDK-M	Mouse Dissection Kit



Designed for research applications that require surgical burrs and trephines. Drill is constructed of light-weight aluminum alloy for balance and control and powered by a rechargeable 6-volt nickel cadmium battery. Under normal operating conditions unit will function for 8 hours between charges. Drill comes with five burrs: 0.6mm, 0.8mm, 1mm, 1.2mm, 1.6mm

- ► Rechargeable
- ► Light-weight design
- ► No special tools needed to change burrs
- ► Hard plastic case with die-cut foam for convenient storage
- Excellent balance and handling

Specifications:

Length (without burr): 17.5cm

Diameter: 1.9cm **Power:** 6-Volts DC **Speed:** 12,000 rpm **Stall torque:** 1.25 oz/in

MODEL	DESCRIPTION		
MD-1200	Ideal Micro-DrilI™		



Sentry Ultrasonic Cleaner

Sentry Ultrasonic Cleaner is a highefficiency cleaner specially developed to clean surgical instruments. Ultrasonic waves pump micron-sized bubbles into the water. Bubbles fit into the tightest spaces which would be impossible to clean by traditional methods. When bubbles implode, water hits the instrument at



speeds up to 250 mph providing a very powerful cleaning action.

- ► High-capacity elongated tank easily accommodates long surgical instruments and other equipment that may not fit into desktop ultrasonic cleaners.
- ► Uses a powerful generator to create ultrasonic waves that provide effective cleaning action. When heavy bio-burden or oily residue is present, Sentry's cleaning power can be enhanced with a heating feature that warms water up to 65°C.
- ► Operates quietly without disrupting work in laboratory. Lid decreases noise and includes a viewing window to monitor progress.
- ► Takes up little space for convenient storage on lab bench. Light weight for easy transport or storage.

MODEL	DESCRIPTION
ULTRA-9911	Sentry Ultrasonic Cleaner

Infrared Microsterilizer



BactiZapper[™] has an asbestos-free core element that uses infrared heating to produce 815°C (1500°F). It completely sterilizes micro-

organisms in 5-7 seconds. BactiZapper uses well-proven technology to provide instant sterilization of platinum inoculating loops, needles, glass tube pipette mouths and various metal and borosilicate glass instruments. Ceramic heating element is safely enclosed in a perforated stainless steel quard chamber, protecting users from accidental contact with extreme temperatures of the core area. It is extremely compact,

convenient and can be used in anaerobic and aerobic chambers.

► Complete infrared sterilization in 5-7 seconds

- Safe, convenient and no spatter
- ► Ideal for platinum loops, needles and tube mouths

Specifications:

Max temperature: 815° C/1500° F

Sterilization: 5-7 secs

Chamber diameter: 0.55"/14mm Chamber length: 3.94"/100mm External dimensions: 4" x 6" x 6.5"

MODEL	DESCRIPTION
B1000	BactiZapper Infrared Microsterilizer



Germinator 500

Dry sterilize surgical instruments in seconds



NIH guidelines recommend sterilizing instruments for small animal surgery. Hot glass bead sterilizers are ideal for this application. Stavs cool to the touch - the chassis stays cool, even at the end of a full day of operation. Air above unit is cool enough to insert an instrument into well without discomfort. Insert surgical instrument into well, sterilization of inserted parts by dry heat (250°C) takes 2-5 seconds. Handles of instruments, outside heat, do not get hot. Metal in beads is heated only on the surface,

not to the depth, so cooling is quick after removal. Within 30 seconds, surgical instruments are cool enough to use.

Specifications:

Warm up time: 20 min.

Working temp: 250°C (approximately 500°F)

Sterilization time: 2-5 sec.

Well size: 20cm deep x 5cm diameter.

Beads eventually, after extensive use, wear to powder. Replace when it becomes difficult to push instruments in deep enough.

MODEL	DESCRIPTION
GER-5287	Dry Sterilizer
GER-5289	Glass Bead Refill Package

Micro Bead Sterilizer

- ► Digital control, up to 300°C
- ► Sterilizes forceps, needles and other tools (generally in 15 seconds)
- ► Eliminates the danger associated with open flames
- ► Tall model, for sterilization of larger objects

Ideal for sterilization of small research tools (forceps, scissors, etc.). When

chamber is filled with included glass beads, high temperatures (up to 300°C) can be used to eliminate presence of bacteria, spores and other microorganisms. Chamber temperature can be viewed on large LED control panel and conveniently adjusted with control knob. Outer casing of unit stays cool to

touch, even when sterilizer is used all day. Supplied safety cover can be placed over opening to conserve energy and reduce heating/ramping rate. Micro Bead Sterilizer does not use gas, flame or chemicals and is safe for use in hoods. With adjustable temperature, application range of sterilizer can also be expanded into incubations and decontamination of plastic objects/tools.

Designed for RESEARCH USE ONLY. Not intended for clinical use.

•	
MODEL	DESCRIPTION
MB-1201 MB-1202 MB-1201-BEAD	Micro-Bead Sterilizer, chamber height 80mm Micro-Bead Sterilizer, Tall, chamber height 140mm Micro-Bead Sterilizer glass replacement beads only

Change-A-Tip Deluxe Kits



Replaceable battery and tip cauteries are the next advance in battery operated cauteries where reusability is a must. Excellent for office, ER, and clinical procedures. Can be purchased as DEL-0, DEL-1 or DEL-2 prepackaged Change-A-Tip cautery and tip kits or individually in high or low temperature models with a variety of tips for various procedural needs.

MODEL	DECODIDETION		
MODEL	DESCRIPTION		
DEL-0	Change-A-Tip deluxe low-temp cautery kit (includes one low temperature handle, two DEL100 non-sterile tips, two DEL104 non-sterile tips, one "AA" battery and a foam-lined case)		
DEL-1	Change-A-Tip deluxe high-temp cautery kit (includes one handle, two DEL101 non-sterile tips, two DEL103 non-sterile tips, two "AA" alkaline batteries and a foam-lined case		
DEL-2	Change-A-Tip deluxe HI-LO cautery kit (includes one low-temperature handle, one hightemp handle, one sterile DEL-100 tip, one sterile DE-L101 tip, one sterile DEL-103 tip, one sterile DEL-121 tip, six "AA" alkaline batteries and a foam-lined case)		

Change-A-Tip Replacement Tips

DEL-100	Low-Temp Fine Tip (10/box)
DEL-101	High-Temp Fine Tip (10/box)
DEL-103	High-Temp Loop Tip (10/box)
DEL-104	Low-Temp Elongated Fine Tip (10/box)

Additional sizes available online at www.braintreesci.com

Gemini Cautery System

Dual Operating Temperatures

Battery operated system provides two different operating temperatures: 1300°F and 2200°F. Easily replaceable, autoclavable, nickel-chrome tips require less power and provide longer battery life. Convenient battery spacer converts hand piece from high temp to low temp. Comes complete with standard AA batteries, battery



spacer, 2 each tips - sizes 5mm and 10mm, all in a hard plastic case with die cut foam for convenient storage.

3		
MODEL DESCRIPTION		
GEM-5917 GEM-5918 GEM-5919	Gemini Cautery System Replacement Tips, 5 x 1mm (box of 10) Replacement Tips, 10 x 1mm (box of 10)0	

Freezpoint Cryosurgery Device

Cryosurgery is a popular treatment for simple skin lesions. The Freezpoint is a safer, easier, and



colder device, that delivers an improved, low cost per procedure, cryosurgical option. The Freezpoint device is 27% - 62% colder than common multi-use disposable systems. Slim tip design aids in clear visualization of the lesion for precise delivery of -89°C, non-flammable, Nitrous Oxide therapy. Very safe, clinically effective treatment with reduced tissue damage to surrounding healthy skin.

	•	•	•	
MODEL	DESCRIPTION			
CRY-16 CRY-8 CRY-16-2	Freezpoint Crysurgica Freezpoint Crysurgica Freezpoint Crysurgica	I Device,	8g	



Clippers and Trimmers

BravMini+ Trimmer

- ► Professional power cordless trimmer works best for all over trimming
- ► NiMH battery with 2 hour quick full charge time
- ► Cool running with 100 minutes of cordless operation
- Exceptionally guiet
- Glides through coats quickly and efficiently with low vibration
- Quiet enough for sensitive or shy animals but has the power to get the job done

Kit includes: Professional cordless BrayMini+ Trimmer, snap on and off #30 trimmer blade (1/32" cut), 5 position adjustable attachment comb (3mm to 6mm), charging stand, blade oil, cleaning brush and instruction book.

MODEL	DESCRIPTION
CLP-41590-R	BravMini+ Cordless Trimmer, red
CLP-41590-P	BravMini+ Cordless Trimmer, purple
CLP-41590-7370B	#30 Replacement Blade
CLP-41590-7840B	Designer 1/2" Replacement Blade



- ► Powerful 5.500 SPMs with 80 minute cordless runtime
- ► Always cool running clipper and blade with continuous cordless operation
- ► No maintenance motor, exceptionally lightweight and amazingly quiet
- ► Non-stop drop-in NiMH rechargeable battery provides constant clipping power
- ► Ergonomic clipper is easy to clean and maintain
- ► Includes #45 non-adjustable surgical cut blade

Kit includes: Professional cordless clipper; #45 (1/50) non-adjustable surgical cut, detachable blade set, 2 drop-in NiMH rechargeable battery packs, charging base with indicator light, soft storage case, 4 attachment guide combs (#3, #6, #9, #12), cleaning brush, blade oil and instruction book.

MODEL	DESCRIPTION
CLP-8786-1101	Arco SE Professional Cordless Clipper
CLP-8786-7190B	#45 Replacement Blade





Arco SE Professional '5 in 1' Blade **Cordless Clipper**

- ► Professional cordless '5 in 1' blade clipper kit with 2 NiMH batteries and unsurpassed cutting performance
- ► Lightweight and powerful, 5,500 strokes per minute with adjustable '5 in 1' blade with sizes #9, #10, #15, #30 and #40



- Clipper and blade are always cool running and clipper is amazingly guiet.
- ► Continuous cordless operation with dual-charge battery packs

Kit includes: Cordless clipper, 2 NiMH batteries for continuous runtime, '5 in 1' adjustable blade, bonus dvd: "The fundamentals and essentials of tech grooming", charging base, 4 snap-on guide combs (#3, #6, #9, and #12), cleaning brush, blade oil, blade guard and instructions.

MODEL		DESCRIPTION		ION	
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Arco Professional Cordless Clipper, '5 in 1' blade CLP-8786-451A

KM5 2-Speed **Professional Clipper**

- ► German engineered professional 2-speed rotary motor clipper with superior power and torque.
- Features constant speed control which automatically delivers more power when needed while clipping through mats and thick coats making quick work of tough situations. Proven increased power and torque while being extremely quiet.
- ► Features an ergonomic and lightweight body shape for increased comfort and control with all the benefits of being correctly-balanced and minimal vibration for reduced wrist fatigue.



- ► #10 ultimate competition series blade set for better clipping performance
- ► Excellent blade system: blades stay secure and are easily detachable

Kit includes: Professional 2-speed rotary motor clipper with 14 ft. flexible cord, ultimate competition series #10 detachable blade set, blade oil, cleaning brush and instruction book.

MODEL **DESCRIPTION** CLP-9787-03 KM5 2-Speed Professional Corded Clipper CLP-9787-2352B #40 Replacement Blade CLP-9787-2358B #10 Replacement Blade

MiniARCO

- Unsurpassed rotary motor is very fast and powerful
- ► Cordless operation for convenience
- ► Lightweight, guiet and cool running
- ► Superior quick detachable blade set

Kit includes: Trimmer, charger, detachable #30 blade set, cleaning brush, blade oil, two dual-sided guide combs and instruction book.



MODEL	DESCRIPTION
CLP-8787-450A CLP-8787-7370B	MiniArco Professional Cordless Trimmer #30 Replacement Blade
CLP-8787-2179-100B	Designer ½" Replacement Blade

KM Cordless[™] Cordless **Detachable Blade Clipper**

The KM Cordless combines the signature brushless motor with lithium Ion technology in Wahl's very first detachable blade cordless clipper! Not only does a brushless motor run cooler than any other clipper motor, but it also has the longest life.

- ► Quick charge feature provide an extra 15 minutes of clipping for every 10 minutes it charges
- ► Ergonomically designed to be correctly balanced for comfortable clipping
- ► Includes a #10 blade for faster, smoother clipping
- ► Constant Speed Control automatically delivers more power and torque in tough areas
- ► Lithium Ion battery provides 2 hours of cordless run time
- ► Cord/cordless capable allows for all day use
- ► Two powerful speeds: 3,000 & 3,700 SPM



blade oil.	5 5 ,	, 0	
MODEL	DESCRIPTION		

KM Cordless™ Cordless Detachable Blade Clipper

Replacement Blades

CLP-9596-100

CLP-9596-02352B #40 Replacement Blade CLP-9596-02358B #10 Replacement Blade

Battery Operated Trimmer Set



Kit includes: Battery operated trimmer, touch-up trimmer, storage base, 6-position attachment comb, 3 attachment combs, 3 AA batteries, blade oil, cleaning brush.

MODEL	DESCRIPTION
CLP-9990-1201 CLP-9990-1001B	Battery Operated Trimmer Set Trimmer Replacement Blade





MiniFigura Cordless Trimmer

- ► Professional power lithium ion rechargeable trimmer works great for surgical prep and trimming
- ► Easy to snap on and off high performance super surgical prep and trimming
- ► Quiet, lightweight and powerful with up to 6.000 strokes per minute and low vibration
- ► New lithium ion battery technology gives optimal performance
- ► Cool running with 75 minutes of cordless operation and only a 60 minute quick full charge time
- Ergonomic curved design allows comfort and control for all of your trimming needs

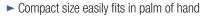
Kit includes: Professional lithium ion rechargeable trimmer, super surgical detachable trimmer blade (1/64" cut length), charge stand, four attachment guide combs $(\#1^{1}/8 \text{ cut}, \#2^{1}/4 \text{ cut}, \#3^{1}/3 \text{ cut} \text{ and } \#4^{1}/2 \text{ cut})$, blade oil, cleaning brush and instruction book.

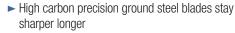
MODEL	DESCRIPTION
CLP-9868-14	MiniFigura Cordless Trimmer
CLP-9868-2111	#40 Replacement Blade



Pocket Pro Pet Trimmer

Light-duty trimmer ideal for precision trimming and great for touch-ups





► Cordless, battery operated for convenient use anywhere

WAHL

MODEL	DESCRIPTION
CLP-9931-B	Pocket Pro Pet Trimmer, blue
CLP-9931-P	Pocket Pro Pet Trimmer, purple

Super Pocket Pro Battery Operated Trimmer

- ▶ Durable black chrome body
- ► Quieter and more powerful than original Pocket Pro
- ► 4" long and weighs 3 oz.
- ► Cordless with up to 6,000 strokes per minute ideal for precision trimming on ears and paws

CLP-9961-2801 Super Pocket Pro Battery Operated Trimmer

► Includes: Trimmer with #40 blade and bonus #40 T-Blade, 6-position length guide, 1 AA battery, 2 attachment guide combs, travel pouch, cleaning brush, blade oil, blade quard and instructions





Surgical Tables and Boards

Grace Small Animal Procedure/Dissection Boards

Boards are made of 1" thick high density polyethylene (HDPE) with excellent chemical resistance, easy-to-clean, solid work surface.

Procedure/Dissection Board (GPS1)

- ► Size: 12"L x 8"W
- Non-skid feet for added stability

Procedure/Dissection Board with Magnetic Base System (GPM1)

- ► Same features and size as GPS1 procedure/dissection board
- Magnetic base system

Procedure/Dissection Board with LED, Magnifier and **Magnetic Base System (GPM2)**

- ► Size: 12"L x 9.5"W
- ► Two flexible LED lights provide direct illumination without shadows or heat
- ► Flex arm, non-obstructive rimless magnifying glass (main lens: 2.3X, inset lens: 4.0X) allows continuous eye contact with object when moving into magnification area
- ► Universal input power supply (100-240 VAC, 50-60 Hz)
- ► Non-skid feet for added stability

Procedure/Dissection Board with LED, and Magnifier (GPS2):

- ► Same features and size as GSM2 procedure/dissection board
- ► Magnetic base system

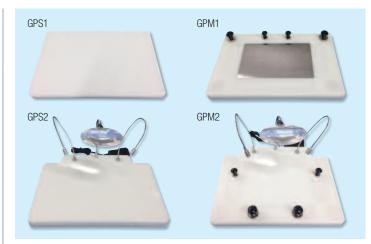
Large Magnetic Drape Holders (GDH-L) Set of 4 Small Magnetic Drape Holders (GDH-S) Set of 4 Magnetic Limb Restraints (GLR1) Set of 4

Magnetic LED Light (GLED)

Universal input power supply 100 – 240 VAC, 50-60 Hz)

Magnetic Magnifier (GMAG)

Main lens 2.3X, inset lens 4.0X



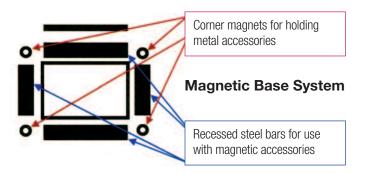
MODEL	DESCRIPTION
GP-S1	Procedure/Dissection Board
GP-M1	Procedure/Dissection Board with Magnetic Base System0
GP-S2	Procedure/Dissection Board with LED and Magnifier
GP-M2	Procedure/Dissection Board with LED, Magnifier
	and Magnetic Base System

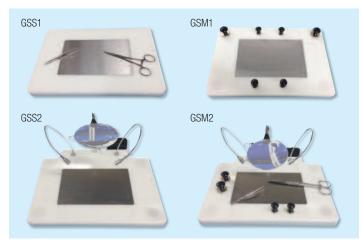
Accessories for Magnetic Base:

7,0000	orics for magnetic base.
MODEL	DESCRIPTION
GDH-L	Large Magnetic Drape Holders, set of 4
GDH-S	Small Magnetic Drape Holders, set of 4
GLR1	Magnetic Limb Restraints, set of 4
GLED	Magnetic LED Light
GMAG	Magnetic Magnifier

Grace Small Animal Surgery Boards

Boards are made of 1" thick high density polyethylene (HDPE) with excellent chemical resistance, easy-to-clean, solid work surface.





Warming Thermal Plate or Cooling Hypothermic Plate

Grace Surgery Board (GSS1)

- ► Size: 12"L x 8"W
- ► 7" x 4" 1x magnetic stainless steel warming plate
- ► One Space Gel heating pad
- ► Suction cup limb restraints
- ► Non-skid feet for added stability

Grace Surgery Board with Magnetic Base System (GSM1)

- ► Same features and size as GSS1 surgery board
- ► Magnetic base system

Grace Surgery Board with LED and Magnifier (GSS2)

- ➤ Size: 12"L x 9.5"W
- ► 7" x 4" 1x magnetic stainless steel warming plate
- ► One Space Gel heating pad
- ► Suction cup limb restraints
- ► Two flexible LED lights provide direct illumination without shadows or heat
- ► Flex arm, non-obstructive rimless magnifying glass (main lens: 2.3X, inset lens: 4.0X) allows continuous eye contact with object when moving into magnification area
- ► Universal input power supply (100-240 VAC, 50-60 Hz)
- ► Non-skid feet for added stability

Grace Surgery Board with LED, Magnifier and Magnetic Base System (GSM2)

- ► Same features and size as GSS2 surgery board
- ► Magnetic base system



Thermal Plate Heating Options

DC powered thermal plate (GETP)

Use with GVT1, GPS1, GPS2, GPS3

Variable Temp Controller (GVT1)

Set any plate temp. Use with GETP.

Single Temp Power Supply

Provides a single constant plate temp. Use with GETP. *Note: Final plate temp is dependent on room temp.*

GPP-1: 30°C **GPP-2:** 34°C

GPP-3: 38°C

Space Gel Heating Pad (SPGL-S)

33-34°C can be reactivated. For use with standard thermal plate.

Thermal Drape (SP-TS)

12" x 16", non-sterile, 2 pack. Keeps animal warm or cold during surgery.

Hypothermic Cooling Plate (GBHP)

For use with ice, 3-4°C.

MODEL	DESCRIPTION
GSS-1	Surgery Board
GSM-1	Surgery Board with Magnetic Base System
GSS-2	Surgery Board with LED and Magnifier
GSM-2	Grace Surgery Board with LED, Magnifier and
	Magnetic Base System
GETP	DC Powered Thermal Plate
GVT2	Variable Temp Controller
GPP-1	Single Temp Power Supply - 30°C
GPP-2	Single Temp Power Supply - 34°C
GPP-3	Single Temp Power Supply - 38°C
DP-SASB	Deltaphase Heating Pad
SPGL-S	Space Gel Heating Pad
SP-TS	Thermal Drape (12" x16") non-sterile, 2 pk
GBHP	Hypothermic Cooling Plate

Accessories for Magnetic Base:

MODEL	DESCRIPTION
GDH-L GDH-S GLR1 GLED GMAG	Large Magnetic Drape Holders, set of 4 Small Magnetic Drape Holders, set of 4 Magnetic Limb Restraints, set of 4 Magnetic LED Light Magnetic Magnifier

Shop online at www.braintreesci.com



Surgical Tables and Boards

"Blue Wax" Dissection Tray

Add a dissection tray with a wax base pinning surface for detailed dissections!

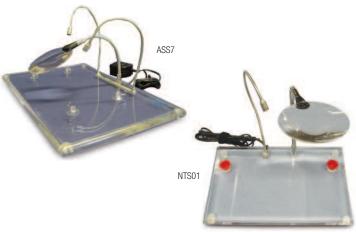
Specially formulated to provide proper consistency to allow pins to stick firmly and be easily removed. Dissection tray uses a completely environmentally safe wax product instead of "black wax" like product used in most other dissection trays. MSDS sheet for this product lists no toxic chemicals and no fire, health or reactivity hazards with this product. "Blue Wax" can be heated to renew surface and dissection tray can be reused several times.



MODEL DESCRIPTION

DTW-1 Dissection Tray 9" x 6.5" x 1" (each) Large Dissection Tray 12.25" x 8.25" x 1.25" DTL-1L

Surgery and Micro Tattooing Platform



Can be used for surgery, micro manipulations, general micro-utility platform (i.e. organ inspections, dissections, etc.).

- ► Flex arm, non-obstructive rimless magnifying glass (main lens: 2.3 X; inset lens: 4.0 X)
- Non-skid feet for added stability.
- ► Universal input power supply (100-240 VAC, 50-60 Hz)

Surgery Platform:

- ➤ Two flexible LED lights provides direct illumination, no shadows and no heat
- ▶ Limb restraints
- ► Size: 9"x13.5"

Micro Tattooing Platform:

- ➤ One Flexible LED light provides direct illumination with no heat
- ► Cup holders (1.5ml)
- ► Size: 6" x 9"

MODEL	DESCRIPTION
ASS7	Surgery Platform

NTS01 Micro Tattooing Platform



Small Animal Surgery System



The small animal surgery system sets a new standard of procedural control. The fully integrated procedural and stabilization system provides precisely controlled retraction at the operative site. The CD+ Labs System allows researchers to operate independently eliminating the need for an assistant or improvised assistive devices.

The system removes the complexities and distractions of improvised setups, allowing the researcher to focus full attention on the surgical procedure.

- ► Eliminates the need for an assistant
- ► Reduces setup and procedure time
- ► Provides superior control
- ► Improves visualization

Animal tables are made of ferro-magnetic steel and incorporate a window for compatibility with body temperature maintenance systems.

Fixators hold retractors. Contain rare earth magnets that attach anywhere on the animal table. A push-button top operates multi-level locking jaws that grip wire or elastomers firmly. They can be adjusted linearly or rotationally with finger-tip release. Complete depression of the push-button allows for insertion of the wire or elastomer while partial depression of the push-button allows for adjustment. Fixators can also lock onto other lab components that require stabilization in the surgical setting, such as neurological or rectal probes or anesthesia delivery systems. The magnetic field is well controlled within the fixator to minimize interference with sensitive instrumentation.

Retractor wires are formed from light, flexible stainless steel. Retractor wires can be used on their own to retract or manipulate tissue, or fitted to provide a wide range of retractor styles. Retractor wires engage and lock into the fixator jaws at the desired elevation allowing both linear and rotational adjustment over the entire length of the wire. One end of the wire is formed in a loop to provide grip for a gloved hand, and the business end is formed into a right angle hook that can retract on its own or lock to a range of retractor tips. Can also be reformed to create restraints or engage other lab apparatus that need to be secured in the surgical field. Wires are available in 10cm and 14cm lengths for mouse and rat procedures. Retractor tip widths range from 1mm to 7.5mm, plus a single point, sharp tissue hook. Each tip can be locked onto a wire for static retraction or affixed to an elastomer to form a dynamic retractor.

10DEL	DESCRIPTION
IODEL	DEGOTHI HON

ACD-014	Small Animal Set (Mouse)
ACD-015	Medium Animal Set (Rat)
ACD-001	Fixator-magnetic -1"-two slot (1/pk)
ACD-002	Fixator- magnetic-2"-4 slot (1/pk)
ACD-005	Retractor, Wire Handle- 4" (10/pk)
ACD-006	Retractor, Wire Handle- 6" (10/pk)
ACD-007	Lab System Elastomer- 2 meter roll
ACD-008	Retractor -sample pack (2 each style, 5 sizes)
ACD-009	Retractor-sharp-single prong (10/pk)
ACD-010	Retractor- 1mm (10/pk)
ACD-011	Retractor-2.5mm (10/pk)
ACD-012	Retractor- 5mm (10/pk)
ACD-013	Retractor- 7.5mm (10/pk)



Thermo Controlled Surgery Platform

Easily maintain animal body temperature during surgery!



- ► Two flexible LED lights provide direct illumination with no shadows and no heat
- ► Thermo reflector and turbo heat sink to maximize heat transfer
- ► Flex arm, non-obstructive rimless magnifying glass, 2.3 X main lens, 4.0 X inset lens. Allows continuous eve contact with object when moving into magnification area
- ▶ I imb restraints
- ► 4 Space Gels for continuous heat
- ➤ 2 Space Blankets to retain heat
- ► Non-skid feet for added stability
- Universal input power supply
- ► Size: 13.5"L x 9"W

MODEL	DESCRIPTION
ASS7T	Thermo Control Surgery Platform with 4 Space Gels
SPGL-S	Space Gel Pad 4" x 6"
SPGL-M	Space Gel Pad 5.5" x 10"
SP-DR	Space Drape 3.5" x 10"
ASS7D	Thermo Control Surgery Platform with Deltaphase Pads
DPIP	Deltaphase Isothermal Pad 6" x 7.5"

See microscope section for digital microscope attachments.

Tail Vein Injection Platform

The quickest and easiest restraint for tail vein injections. Simply pull mouse tail through the slot and make injection!

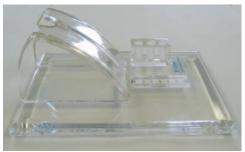


- ▶ Non-grip surface
- ▶ Wide opening for easy access
- Open slot for easy cleaning feces and urine easily washed away

MODEL	DESCRIPTION
IL-300	Tail Vein Injection Platform

Tail Snipping Platform

For isolating DNA from transgenic animals for genotyping





Simply pull mouse tail through the slot, measure and collect tip in the vial.

- ► Micro Tube Holder: Collect tail tip directly in the prelabeled tube preventing DNA cross contamination
- ► **Measuring Ruler (mm):** Accurately measure tail length for cutting. Enhances IACUC compliance
- ► Cleaning Slot: Feces and urine are easily washed out with stream of water (minimizes cross contamination)

MODEL	DESCRIPTION
II -200	Tail Snipping Platfo

Deltaphase® Operating Board



are provided for sponges, instruments and anesthetic apparatus. This board was designed by research scientists to be functional, durable, and easy to clean. Its low cost and safety make it appropriate for use in student laboratories. The unit is supplied with two Deltaphase pads.

Each pac	d is 8" x 8" x 0.75"
MODEL	DESCRIPTION
390P 39DP 390M	Operating Board, 2 Deltaphase Pads and 2 Insulators 3 Deltaphase Pads and 3 Insulators only (no board) Operating Board, 2 Deltaphase Pads and 2 Insulators with magnetic board
DP-PAD	Single Deltaphase Pad - 8" x 8" x 0.75"

Shop online at www.braintreesci.com



Restraint, Containment and Handling Equipment

DecapiCones®

The economical mouse and rodent restrainer





Make injections and decapitation quicker and easier with Braintree Scientific's DecapiCones. Tapered plastic film tubes provide quick and easy restraint of rats, mice, and other small animals. I.P. injections can be made directly through the film! DecapiCones restrain post-decapitation kicking and prevent personal contact with feces or urine.

A unique dispenser holds DecapiCones open and ready for use. Simply hold the

DecapiCone in one hand and introduce the animal with the other. Animals enter readily, heading for the breathing hole at the small end. Roll and squeeze the large end closed.

May be used repeatedly for injections and simply discarded when soiled. For decapitation, hold at the rear and insert the small end into the decapitator.

MODEL	DESCRIPTION
MDC-200	For Mice
	200 Decapicones (2 dispensers contain 100 cones each)
DC-200	For Rats
	200 Decapicones (4 dispensers contain 50 cones each)
DCL-120	For Large Rats (500-800g)
	120 Decapicones (4 dispensers contain 30 cones each)

Mouse Transfer Tunnel



Enrichment and transfer tunnel, 130mm x 5mm dia. Tunnel handling is a proven method to reduce stress and anxiety when transferring a mouse. This polycarbonate tube can withstand the high temperatures of an autoclave and also maintain its shape.

MODEL	DESCRIPTION
TRANS-TURE	Mouse Transfer Tunnel

Rotating Tail Injector

Reduce time and increase productivity on mice tail injections and tattooing!

The only mouse restrainer in which the tail can be rotated. This feature provides for easy access to either vein in the tail for an i.v. injection. Animal chamber accommodates mice weighing up to 45g. RTI is ideal to adequately restrain an unanesthetized animal while having the tail vein straight in line with user's eyes for a successful injection. A pattern



of airholes provide ventilation as well as a "toe-hold" for the mice.

The unit sits comfortably on a bench top or in a laminar flow hood and it can be U.V. sterilized for use with immunocompromised mice. The raised table top lets user rest their hands to administer the injection.

MODEL	DESCRIPTION
RTI	Rotating Tail Injector (for mice up to 45g)
RTI-I	Standard Replacement Tube
RTI-2	Smaller Replacement Tube, ID 1.125"

Tailveiner®

Tail vein injection made easier!

The Tailveiner is the first easy-to-use mouse and rat restrainer specifically designed for tail vein injections. Slotted tube permits the rat or mouse to be quickly pulled in by the tail. The animal is then restrained by a plug which slides easily to accommodate any size rat or mouse, but locks automatically when



handle is released. After dosing, the handle is lifted and the plug is easily removed. The Tailveiner is the fastest restrainer yet for intravenous injections in small animals.

Mouse size includes free screw down noseplug option.

MODEL	DESCRIPTION
TV-150-STD	For Mice 1.25" ID Tube
TV-150-SM	For Mice 1.125" ID Tube
TV-150-LG	For Mice 1.5" ID Tube
RTV-170	For Rats up to 120g0
RTV-180	For Rats up to 350g
RTV-190	For Rats up to 500g

Red Tube Tailveiner® Restrainer

- ► Laboratory rodents are largely color blind, so a red tube simply looks like a comforting shelter
- Red Tube is transparent, allowing investigator to observe animal inside for normal body position and breathing
- Improved comfort for rats and mice during acute experimental procedures without sacrificing safety or welfare



Tail vein injection made easier! Tailveiner® is the first easy-to-use mouse and rat restrainer specifically designed for tail vein injections. Slotted tube permits rat or mouse to be quickly pulled in by the tail. Animal is then restrained by a plug which slides easily to accommodate any size rat or mouse, but locks automatically when handle is released. After dosing, handle is lifted and plug is easily removed. Tailveiner is the fastest restrainer yet for intravenous injections in small animals. Includes a free stopper/plug option.

MODEL	DESCRIPTION
TV-RED-150STD	For Mice, 1.25" ID
RTV-R-170	Rats, up to 120gms, 1 3/4" ID
RTV-R-180	Rats, up to 350gms, 2 3/4" ID
RTV-R-190	Rats, up to 500gms, 3 1/4" ID

Red Short Base (Shorti) Tail Vein Injection Tube

- ► Laboratory rodents are largely color blind, so a red tube simply looks like a comforting shelter
- Red Tube is transparent, allowing investigator to observe animal inside for normal body position and breathing



Tail vein restraint system, mounted on a wider baseplate allowing tail to drop vertically for greater range of motion during venipuncture. Use when intending to mount tube above (e.g. on blocks) or at the edge of a work station/table.

MODEL	DESCRIPTION
SHORTI-STD	Mouse Tail Vein Injection Tube, 1.25" id, Red Tube

Restraint, Containment and Handling Equipment



Rat Wrap

Fuly adjustable. Safely handle rats; 120g to 800g in size. Silicone-wrap design makes it fully adjustable. Wrap gently surrounds the rat in a stress-free snuggle. Rat cannot turn around making it safe for



the operator. Simplifies performance of basic experimental procedures such as tail vein injections and blood collection, tail tattoos, tail blood-pressures, subcutaneous and IP injections. Easily cleaned with alcohol between rats and is fully autoclavable.

MODEL	DESCRIPTIO
WRAP-R	Rat Wrap

Mouse Wrap

Stainless steel and silicone, fully adjustable. Gently and safely holds mice for tail vein injections, blood sampling or tattoo identification. Tilting device allows for IP injections. Adjusts to any size of mouse. Calm and comforting, wrapping whole mouse in a soft silicone snuggle. Mouse cannot turn around. Easily cleaned and fully autoclavable. Membrane is easily replaced.

MODEL	DESCRIPTION
WRAP-M	Mouse Wrap

Universal Restrainer

Adjustable and easy to use – unique spiral grip makes single-size restrainers obsolete. Low stress, gentle, but secure. Rats cannot turn or escape, natural posture maintained. Wide, stable base stands up to daily use, heavy construction. Easy to clean, will not corrode, no blind ends. Plastic and stainless steel construction. User has



both hands free. Relax and avoid accidents, knowing animals are gently but firmly restrained.

MODEL DESCRIPTION

Mouse Restrainer (for mice 20-60g)

500M-S Smoked Canvas 500M-C Clear Canvas

Rat Restrainer (for rats up to 350g)

700R-S Smoked Canvas 700R-C Clear Canvas

Economy Flat Bottomed Restrainers

Individual semicylindrical plastic restrainers in small, medium and large. Each unit has an open slot on the bottom (for intra-peritoneal injections), a hole on the top (for the neck), and a slotted tail piece (for intravenous injections). Front slots provide ample ventilation.



MODEL	DESCRIPTION
FB-S	SmallMouse Restrainer
	(for mice 15 to 30g) 1.5" D x 4" (3.81cm D x 10.16cm)
FB-M	Medium Rat Restrainer
	(for rats 30 to 125g) 2" D x 5" (5.08cm D x 12.70cm)
FB-M/L	Medium/Large Rat Restrainer
	(for rats 125 to 250g) 2.5" D x 6" (6.35cm D x 15.24cm)
FB-L	Large Rat Restrainer
	(for rats 250 to 500g) 3.25" D x 8" (8.25cm D x 20.32cm

LabArt Mouse Restraint







Adjustable height restraint for laboratory mice. Provides optimal aid for injections and blood withdrawals from the tail vein. Restrainers are made of transparent material to allow observations on animal's condition.

- ► Completely autoclavable base plate with stainless steel guide rails and four slip-proof rubber feet
- ► Plexiglas restrainer (not autoclavable) with fixing ring and locking screw
- ► Red restrainer sleeve available to assist in calming of rodent
- ► Stainless steel restrainer is autoclavable

MODEL	DESCRIPTION
LABART SET	Set, with medium restrainer
LABART SM	Small Restrainer only, 25mm
LABART MED	Medium Restrainer only, 34mm
LABART LG	Large Restrainer only, 54mm
LABART RS-MED	Red Sleeve only for Medium Restrainer
LABART RS-SM	Red Sleeve only for Small Restrainer
LABART-SS-SET	Stainless Steel Set, with medium autoclavable restrainer
LABART-SS-SM	Stainless Steel Small Autoclavable Restrainer only, 25mm
LABART-SS-MED	Stainless Steel Medium Autoclavable Restrainer only, 34mm

Dorsal Access Mouse Restrainer



Accurate, safe and fast way to give injections to mice 18-35g. The dorsal skin of the mouse is easily accessed through the top circular opening enabling the user to perform subcutaneous injections without risk of being bitten and less likelihood of user sticking own finger.

- ► Easy entry: draw mouse tail or head first through the wide entry funnel into back of tube and then position stop gate in choice of two slots
- ► With tail first entry, tail is exposed at rear of tube allowing easy access for tattooing and tail bleeds
- ▶ Dimensions: 7.4cm L x 10cm W x 6.7cm H (6.8"L x 3.9"W x 2.6"H)
- ► Made from crystal-clear, durable, and chemical resistant TPX®. Can be repeatedly disinfected with EtOH and is autoclave-safe

MODEL	DESCRIPTION
DA-MOUS	Dorsal Access Mouse Restrainer

Solid Brass Mouse Restrainer

The Solid Brass Mouse Restrainer is designed to comfortably restrain a mouse for tail vein injections or sampling.

► Able to warm for animal comfort and

- vasodilatation of the tail
- ► 2" x 4" solid brass restrainer maintains heat for extended periods
- ► 2 lb.weight provides a stable and secure placement on lab bench
- ► Long lasting can be sterilized via autoclave_ETO_liquid_VHP

Long lasti	rig carr be sternized via autociave, ETO, liquia, vrii
MODEL	DESCRIPTION
SAI-MBR	Solid Brass Mouse Restrainer



Restraint, Containment and Handling Equipment

Tail Snipping Platform

For isolating DNA from transgenic animals for genotyping

Simply pull mouse tail through the slot, measure and collect tip in the vial.

- ► Micro Tube Holder: Collect tail tip directly in the prelabeled tube preventing DNA cross contamination
- ► Measuring Ruler (mm): Accurately measure tail length for cutting. Enhances IACUC compliance
- ► Cleaning Slot: Feces and urine are easily washed out with stream of water (minimizes cross contamination)



MODEL	DESCRIPTION
IL-200	Tail Snipping Platform

Tail Vein Injection Platform

Quickest and easy restraint - simply pull mouse tail through the slot and make injection! Non-grip surface, wide opening for easy access. Open slot for easy cleaning feces and urine easily washed away.



MODEL	DESCRIPTION
L-300	Tail Vein Injection Platform

ECU™ Experimental Conditioning Unit

Conditions rats and mice for long experiments

Provides comfortable containment to facilitate repeated measurements of physiological and pharmacological parameters. Not a restrainer: animals are preconditioned (trained) to accept appropriate periods of confinement in the ECU. Blood pressure, clearance, and metabolism studies are better and easier using ECUs.



Molded plexiglass canopy hinged to a plexiglass base and tapered canopy with opaque plastic hood to protect animal from visual disturbances. Canopy length is adjustable for animal size and easy access to dorsal catheters and electrical leads. Base has a large through drilled slot for accessing ventral catheters, feces and urine. Four comfortable slots to support feet.

The Braintree Scientific ECU is set up in position with the required equipment. The animal is placed in the ECU and the catheters and leads connected to the appropriate devices.

For best results, animals should be conditioned to appropriate periods of confinement in the ECU. This is easily achieved by introducing animals to the ECU daily for increasing periods of time.

DESCRIPTION
ECU less than 50g
ECU 50 to 120g
ECU 120 to 250g
ECU 250 to 350g0
ECU 350 to 400g
ECU 400 to 800g



Tail Illumination

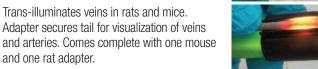
Veinlite TV®

With tail vein adapters









MODEL	DESCRIPTION
\/I_T\/	Voinlito TV

and one rat adapter.

New! VeinLite LED® for Swine

A new approach to the visualization of veins prior to and during vein access in swine. Rechargeable, portable 2 color LED Veinlite features 28 bright light emitting diodes (LEDs). The 22 bright orange and 6 red LEDs can be operated together or separately for maximum versatility and use on patients. Kit includes charger, adapters and 50 disposable covers.



MODEL	DESCRIPTION
VLED+	VeinLite LED® for Swine

Illuminated Rodent Tail Vein Unit

Illuminated rodent tail vein unit featurings "brite light" illumination system.



- Clear plastic tail insertion cone
- Formed white base housing batteries, on/off switch, and lights
- Base acts as battery charging unit
- ► Electrical plug for recharging batteries. (100 to 240 VAC capacity)

MODEL **DESCRIPTION**

Illuminated Rodent Tail Vein Unit includes 2 rechargeable batteries

Mouse Tail Illuminator

Efficiently illuminates and warms mouse tail for easy injection or bleeding. Includes restraining tube and illumination source. Additional tubes available.

- ► Restraining tube slides off base for easy cleaning
- ► Illuminated slot for easy tail vein injection, etc.
- ► Sliding doors keep mouse gently restrained

MODEL	DESCRIPTION
MTI	Mouse Tail Illuminator
MTI-1	Standard Replacement Tube
MTI-2	Smaller Tube 1.125".
MTI-3	Rotating Tube

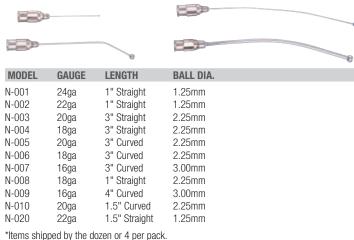


Feeding Needles and Equipment

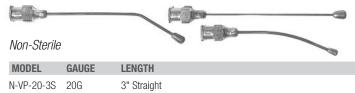


Animal Mice Rats	Weight Range 25-150g 100-400g	Ball Diameter 1.25mm 2.25mm
Rats	350-500g	3.00mm
Other	over 450g	4.00mm

Reuseable Feeding Needles



Value Priced Stainless Steel Feeding Needles



MODEL	GAUGE	LENGTH
N-VP-20-3S	20G	3" Straight
N-VP-18-3A	18G	3" Angled
N-VP-18-3C	18G	3" Curved
N-VP-20-15A	20G	1.5" Angled
N-VP-20-15C	20G	1.5" Curved
N-VP-22-15S	22G	1.5" Straight
N-VP-24-1S	24G	1" Straight

Flexible Plastic (PTFE) Disposable Feeding Needles with Bite Protectors

Flexible plastic (PTFE) tube is covered at hub end with 304 stainless steel tubing, protecting tubing from damage due to biting during use. Plastic (PTFE) tube is softer than other tubing types, very flexible and translucent for easy confirmation of reagent delivery. Plastic luer hubs and soft silicone tips, non-toxic and non-pyrogenic.

Packaged 5 needles per sterile peel pouch/20 pouches per box.

MODEL	GAUGE	LENGTH	BALL DIA.	QTY	
BG-9928	18ga	1.5"	2.0mm	100	
BG-9923	18ga	2"	2.0mm	100	
BG-9924	18ga	3"	2.0mm	100	
BG-9926	17ga	3.3"	2.4mm	100	
BG-9925	15ga	3.1"	2.8mm	100	
BG-9927	15ga	3.9"	2.8mm	100	

Sterile Malleable Disposable Feeding Needles

These needles feature plastic luer hubs and silicone tips and can be easily formed to desired shape.

100 sterile needles per box.

MOD	EL GAUGE	LENGTH	
D-00	20G	1.5" Straight	
D-002	2 18G	2" Straight	
D-003	3 15G	3" Straight	

Sterile Flexible Plastic (PTFE) Disposable Feeding Needles

Animal feeding needles (AFN) allow user to precisely dispense liquid to animal while minimizing the chances of esophogial piercing. Sterile, non-toxic, and non-pyrogenic, available in a variety of gauges and lengths.

100 sterile needles per box.

MODEL	GAUGE	LENGTH	BALL DIA.	QTY	
DT-9928	18ga	1.5"	2.0mm	100	
DT-9925	15ga	3.07"	2.8mm	100	
DT-9920	20ga	1.5"	1.9mm	100	
DT-9926	17ga	3.3"	2.4mm	100	
DT-9930	13ga	5"	4.0mm	100	

Trocars

Skin tunneling needles (trocars) offer a quick and easy method for routing catheters and electrodes subcutaneously. Trocars are manufactured from thick walled medical grade stainless steel and have a semi-blunt 45 degree beveled tip or a stylet. The 7g trocar is perfect for most large animal catheters while 10g is suited for smaller animals and catheters. Call for custom lengths.

MODEL	DESCRIPTION
TRO-7-6	Semi-blunt tip, 7 gauge x 6"/15cm
TR0-7-12	Semi-blunt tip, 7 gauge x 12"/30cm
TRO-10-8	Semi-blunt tip, 10 gauge x 8"/20cm

Trocars with Stylet

TRO-14MS	Mouse Irocar with Stylet
TRO-7B-12	Semi-Blunt Tip, 7 gauge x 12" with Stylet
TRO-7B-6	Semi-Blunt Tip. 7 gauge x 6" with Stylet

Rodent Feeder Bar

- Administer easily! No special skills required and completely eliminates need for dangerous gavage procedure
- ➤ Reduce time! Administer dose to 10-15 animals in 5-10 minutes
- Mix drugs directly to any food matrix (peanut butter, yogurt, cheese)
- ► Confirm visually drug uptake by animals
- ➤ Works effortlessly for all rodents and small or large groups of animals
- ► Animals adapt to a feeder bar fast and effortlessly

MODEL	DESCRIPTION
FD-BAR	Rodent Feeder Bar



Feeding Needles and Equipment

Mini Capsules

For laboratory mice, rats and guinea pigs



- ► Ideal for materials that are insoluble, form poor suspensions, are affected by excipients or are odorous and distasteful, e.g., sustained release beadlets, paint flakes, chromic oxide marker
- ► For lower GI drug delivery size 9 has been used in rats >200gm and Guinea Pigs; size M has been used in mice >30gm. Capsule holders are available for dip coating in enteric solutions
- ► Size 9 can be used for intra-colonic delivery via rectal insertion in rats >200-250gm
- ► Save time and money by eliminating validation of suspension/solution homogeneity
- ► Eliminate excipients absorption affects

	•		
PARAMETER	SIZE 9EL	SIZE 9	SIZE M
Capsule body capacity	0.08ml	0.025ml	0.004ml
Fill weight (materials with density 1g/ml)	80mg	25mg	4mg
External Diameter Maximum	2.70mm	2.70mm	1.27mm
Length when locked maximum	23.2mm	8.4mm	8.4mm
Surface area locked capsule in sq mm, for enteric coating.	not applicable	$68 \pm 3 \text{ sq mm}$	31 ± 3 sq mm
Weight empty (cap and body) average ¹	17mg	10mg	~2mg
Colors available	clear and opaque	clear and opaque	white

¹For a specific net fill weight tare the weight of each capsule body individually and then fill or use a pre-weighed amount of powder for each capsule.

Capsule Kit: Includes capsules, funnel, stand, tamper, dosing device and instructional video. Size 9 and 9el kits include 100 capsules.

Size M kits include 50 capsules.

For easier dosing, we recommend the following aids:

Stainless Steel Dosing Syringe:

If dosing multiple animals, order additional syringes to allow them to dry between administrations. Syringes have a Luer lock design.

Stainless Steel Filling Funnel: Includes funnel, tamper, and stand. For precision filling on a balance.

Multiple Capsule Filler: Fill 40 capsules at a time to within \pm 7-10% of average weight. Includes filler, tamper, and spreader.

Holder: Holds six capsules for enteric coating. Not for use with 9el as it will not pass through to the lower intestine.

Capsule Sinker: For determining dissolution time for a capsule. Designed for use with 9 & 9h; 9el & M

SINKER SIZE	WIRE DIA. (mm)	NO. OF SPIRALS	INNER LENGTH (mm)	INNER DIA. (mm)	WEIGHT (gm)
9/9h	0.5	5	10.0	4.0	0.16
9el	0.8	8	25.0	4.0	0.68
M	0.5	6	10.0	3.0	0.14

MODEL	DESCRIPTION	SIZE	QTY
X-KIT-9el	Rat Capsule Kit	9el	100 capsules
X-KIT-9h	Hamster Capsule Kit	9h	100 capsules
X-KIT-9	Rat Capsule Kit	9	100 capsules
X-KIT-M	Mouse Capsule Kit	M	50 capsules
A-CT-9el	Capsules	9el	100/container
A-CT-9h	Capsules	9h	100 capsules
A-CT-9	Capsules	9	100/container
A-CT-M	Capsules	M	50/container
X-SYR-9el	Stainless Steel Dosing Syringe	9el	each
X-SYR-9h	Stainless Steel Dosing Syringe	9h	each
X-SYR-9	Stainless Steel Dosing Syringe	9	each
X-SYR-M	Stainless Steel Dosing Syringe	M	each
X-FUN-9el	Stainless Steel Filling Funnel	9el	each
X-FUN-9h	Stainless Steel Filling Funnel	9h	each
X-FUN-9	Stainless Steel Filling Funnel	9	each
X-FUN-M	Stainless Steel Filling Funnel	M	each
X-FILL-9el	Multiple Capsule Filler	9el	each
X-FILL-9	Multiple Capsule Filler	9	each
X-HOLD-9	Holder	9	each
X-HOLD-M	Holder	M	each
X-SINK-9el	Capsule Sinker	9el	each
X-SINK-9-9h	Capsule Sinker	9 & 9h	each
X-SINK-M	Capsule Sinker	M	each

Dyets Powder Feeder Jar Setup



- Prevents tipping or moving of Dyets feeding jar
- ► 100% stainless steel for easy cleaning and durability
- ► Versatile design allows for placement in any cage corner
- Set contains iar, lid, follower, and holder

MODEL	DESCRIPTION
DYETS-SETUP	Feed Jar Holder - 4 oz. and Complete Jar Set
DYETS-JAR	Feeding Jar - 4 oz. Clear Glass Jar, dia. 3" x 2"H
DYETS-FOL	Food Follower - 4 oz. Stainless Steel, 6 holes 1%" dia.
DYETS-LID	Deluxe Lid - 4 oz. Stainless Steel Snap-on Hole, dia. 1"

Water Bottles

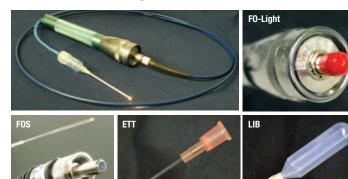


100 ml glass bottles are graduated by 1ml and include a 2.5" straight drinking tube and stopper.

MODEL	DESCRIPTION
WTBR-S-BL WTBR-S-NB	Water Bottle with 2.5 straight sipper tube, ball and stopper Water Bottle with 2.5 straight open sipper tube and stopper



BioLITE Intubation Illumination System



The BioLITE system provides better anatomical visualization and combines several tools into one reducing the intubation time making the intubation process fast and easy.

The BioLITE System consists of a family of products: fiber optic illuminator (FO-Light), fiber optic stylets (FOS), endotracheal tubes (ETT), and lung inflation bulbs (LIB) packaged in a variety of kits to meet the individual needs for a variety of research interests.

Unlike other flashlight based fiber optic illuminators, the FO-Light houses an optical system that provides highly efficient light coupling into small core fiber optics resulting in intense illumination. Without the optical system, intensity of light output is insufficient to visualize anatomical features, which is why other flashlight based fiber optic illuminators are not compatible with small core fiber optics.



Using a small core fiber optic as both the stylet and guide wire, the FOS provides enough rigidity for applying mechanical force while remaining flexible enough to traverse convoluted paths. Light can also be delivered through the stylet/guide wire, enabling the user to illuminate the discrete places in the oropharynx directly where needed.

As accessories to the illuminator and stylets, endotracheal tubes and lung inflation bulbs have specific qualities and provide feedback making them

essential to any intubation procedure. The endotracheal tubes are urethane based IV catheters that are softer and more flexible than PTFE based catheters, minimizing the trauma associated with intubation. Lung inflation bulbs provide a means for verifying correct intubation through direct visualization of chest distention, which is more reliable than observing mirror fogging or abdominal breathing.

Also available as a Complete Kit (CO-Kit) that includes all the BioLITE System products for mouse and both sizes of rat. The BioLITE System is available in the following kits:

- ► Large Rat Kit (200+ grams, LR-Kit)
- ➤ Small Rat Kit (less than 200 grams, SR-Kit)
- ► Mouse Kit (10+ grams, MI-Kit)

Each kit contains all the necessary equipment to perform small rodent intubations fast, easy, and relatively painlessly.

- ► Fiber optic illuminator (FO-Light)
- ► Appropriate size fiber optic stylet (FOS-xxx)
- ► 5-pack of the appropriate size endotracheal tubes (ETT-xx-05)
- ➤ 3-pack of lung inflation bulbs (LIB-03)

Though the BioLITE System was initially created for intubation, it remains a highly efficient small core fiber optic illumination system and can essentially be used in any application that requires intense illumination of a small space in a tortuous location.

For those interested in alternate applications or have no need for the intubation accessories, we offer a Stylets Kit (FO-Kit) that includes a mouse fiber optic stylet (FOS-400, 400µm core diameter), a small rat fiber optic stylet (FOS-600), a big rat fiber optic stylet (FOS-800), and a fiber optic illuminator (FO-Light).

MODEL	DESCRIPTION
MI-Kit	Mouse Kit for Mice 10+ grams (includes 1 FOS-400,
	1 FO-Light, 1 LIB-03, and 1 ETT-20-05)
SR-Kit	Small Rat Kit for Rats 100-200 grams
	(includes 1 FOS-600, 1 FO-Light, 1 LIB-03, and 1 ETT-16-05)
LR-Kit	Large Rat Kit for Rats 200+ grams
	(includes 1 FOS-800, 1 FO-Light, 1 LIB-03, and 1 ETT-16-05)
FOS-Kit	Stylets Kit (includes 1 FOS-400, 1 FOS-600,
	1 FOS-800, and 1 FO-Light)
CO-Kit	Complete Kit (includes 1 FO-Kit, 1 LIB-03,
	1 ETT-16-05, and 1 ETT-20-05)

Replacement parts available online at braintreesci.com

Intubation Packs



For use in conjunction with the Rodent WorkStand. The intubation packs, a rat pack and a mouse pack, hold everything needed to directly visualize and quickly intubate with a minimum amount of trauma. Each pack is

designed to hold all tools and supplies needed to perform quick, efficient and minimally traumatic orotracheal intubation of small rodents.

Intubation packs include specially designed and molded, autoclavable intubation speculum, lidocaine applicator, endotracheal tube guide wire, incisor loop and a brief video tutorial of how to perform intubations. Rat Pack also contains scissors, umbilical tape, and mirror for the verification of tracheal intubation. Mouse pack includes two sizes of Hallowell's mouse endotracheal tubes.

Packaged neatly and conveniently in a 13" x 8" x 2" polypropylene organizer box with each compartment labeled for contents and reordering information. Can be stored most anywhere and always ready for use.

MODEL	DESCRIPTION
RW-A3746	Rat Intubation Pack
RW-A3747	Mouse Intubation Pack
RW-A3748	MDS Otoscope - not rechargeable.
	Uses standard, replaceable NICAD batteries.
RW-A3749	Welch Allyn NICAD Otoscope - rechargeable
	Includes charger
RW-A3754	Welch Allyn LI ION Otoscope lighter and brighter- rechargeable
	Includes charger

Replacement parts available online at braintreesci.com

Rodent Work Stand



Rodent Work Stand is designed to support rats, mice and similar small rodents in a stable and comfortable position for the technician during endotracheal intubation and intratracheal dose instillation and other similar procedures. 12" wide x 14" deep x 5.375" high when flat, tilted it is 9.5" high. (Flat: 30.48cm x 35.56cm x 13.65cm, tilted: 24.13cm high)

Heated work stand kit converts this work stand to a heated work stand.

MODEL	DESCRIPTION
RW-A3467	Rodent Work Stand
RW-HHP	Heated Pad Kit

BioLITE Stand

Simple durable stand is easy to clean, store, and is portable



Constructed from durable polycarbonate, this platform provides the perfect stage for intubating mice and rats of all sizes.

The animal is suspended from the incisor wire on the angled side of the stand. Three mounting positions are available to customize the placement of the animal on the stand in order to meet the user's needs. Two sets of posts are provided with each stand. Each post has three positions for the height adjustment to optimally accommodate user and animal.

Stand is constructed from a single piece of polycarbonate plastic with a seamless design. The top of the stand provides a hand rest for stabilization during intubation that is designed to support significant weight. Compact seamless design and its construction make this stand easy to clean. Will not crack with the use of harsh cleaning agents as with similar stands constructed from acrylic.

RIS-100 Fo RIS-200 Fo	



Irradiation

Rad Disk Micro3







Rad Disk Micro3 Weanling/Petri is triple divided for irradiation of weanling sized mice. Also can be used without divider and jump guard system for two adult mice. Four cages fit stacked in stainless steel holder. Without divider system it can also be used as a petri dish application for growth and irradiation of cells/bacteria. Absolute filter lid permits higher air exchange than standard petri. Bacteria or cells requiring greater availability of oxygen or other gaseous mixture, can benefit from lack of pressure buildup within dish, and full, uninterrupted access and exchange of supplied gas or ambient air.

Three Rad Disk Micro3 or four Rad Disk Micro3 Weanling/Petri stacked versions available.

Steam autoclavable, medical grade polycarbonate construction mitigates attenuation of gamma source and allows germ-free rodent transport from cage to Gammacell® and return, using micro-isolation techniques. Modified stainless steel canister.

Specifications:

Rad Disk Micro3

Height assembled: 2.5" Diameter assembled: 4.75" Height with 3 units stacked: 7.5"

Material: Polycarbonate medical grade, nylon fasteners and screen, and absolute filtration filter media

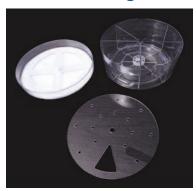
Rad Disk Micro3 Weanling/Petri

Height assembled: 1.88" Diameter assembled: 4.75" Height with 4 units stacked: 7.5"

Material: Polycarbonate medical grade, nylon fasteners and screen, and absolute filtration filter media

MODEL	DESCRIPTION
IRD-P-M3	Rad Disk Micro3, each.
IRD-P-M3W	Rad Disk Micro3 Weanling/Petri, each
IRD-FLT-M3	Replacement Filter
IRD-SSH	Stainless Steel Holder for Micro3 Weanling/Petri

Rad Disk™ and Rad Disk Mini™ Polycarbonate Rodent Microisolation Irradiator Cages



Protection for Irradiated
Animals: Because Rad Disk™
and Rad Disk Mini™ are made
entirely of polycarbonate plastic,
it is autoclavable. The two cage
sizes are designed to fit into
radiation chambers 5" high and
9" diameter and larger. Used as
instructed, Rad Disk™ and
Rad Disk Mini™ prevent
contamination of mice before,
during and after irradiation.

They are also a versatile carrier to protect rodents while transporting them in and out of facilities.

Cage Divider System: Rad Disk and Rad Disk Mini include a polycarbonate removable divider system which divides cages into four to eight compartments for irradiation. Used without dividers, mice can also free range which allows greater uniformity of dose delivery during irradiation.

Imbedded Jump Guard™: Rad Disk and Rad Disk Mini include a polycarbonate piehole cutout cover that can be easily rotated over each divided chamber to insert rodents and prevent escape or jump to adjacent chambers.

Protection from Contamination: Rad Disk and Rad Disk Mini are autoclavable with lid in place. Within a changing hood, animals are transferred from their housing into sterile protective environment of Rad Disk and Rad Disk Mini, using standard microisolation techniques. Lid contains a 3-ply filter which can be used up to 6 months, or 12 autoclave cycles. Lid has aligned air holes through which potential airborne contaminants are trapped on exterior of filter. After transferring animals into Rad Disk and Rad Disk Mini, animals can be transported to the radiation source, even if traveling through a contaminated environment.

Sterile Transportation: After irradiation at location outside of the animal facility, Rad Disk and Rad Disk Mini containing animals are prepared for re-entry into animal facility by placing a strip of plastic tape over each aligned row of airholes, completely sealing lid and allowing for liquid sterilization of exterior of cage prior to facility re-entry (check with facility management for SOP which may vary from institution to institution). Once decontaminated, taped cage can be taken to the sterile or clean change station, and animals may then be transferred back to their original or new cages. Tape can be removed from lid after transporting cage to wash area for reprocessing. Any contaminants are trapped on outside of filter between airholes and lid, so leaving tape in place prevents exposure to facility environment.

Rad Disk and Rad Disk Mini are easy to clean, store, and sterilize for use.

MODEL	DESCRIPTION
IRD-P-M	Mouse Irradiator Cage with Divider (polycarbonate) 8.875" D x 3.875"H (22.5cm D x 9.8cm H)
IRD-P-R	Rat Irradiator Cage with Divider (polycarbonate) 10.75" D x 4"H (27.3cm D x 10.2cm H)
IRD-FLT-M IRD-FLT-R	Mouse Irradiator Cage Replacement Filter Rat Irradiator Cage Replacement Filter

Rat and Mouse Pie Cages

Cages are easy to clean and to use



Circular cages hold up to 11 rodents for whole body irradiation. Notched removable lid can be dialed to any of the ventilated pie-shaped chambers. Also use for temporary transport or storage of animals for acute studies. The rat cages have tail slots for intravenous dosing.

MODEL	DESCRIPTION
MPC-1	Mouse Pie Cage: Unit dimensions: 8.5"D x 3"H (21.5cm D x 7.5cm H) Individual chambers feature 5cm base and 9cm length
MPC-2	Mouse Pie Cage with filter top and filter
MPC-FLT	Replacement Filter
RPC-1	Small Rat Pie Cage
RPC-2	Unit dimensions: 16"D x 2.7"H (41cm D x 6.75cm H) Individual chambers: 10cm (base), 18cm (length) Large Rat Pie Cage
	Unit dimensions: 18"D x 3"H (46cm D x 8cm H)
	Individual chambers: 11.5cm (base), 20cm (length)

Mouse Irradiation Chamber

- ► 1/8" (3.2mm) clear acrylic
- ► Flip-top lid for easy loading and unloading
- Perforated top allows air to circulate throughout unit
- ➤ Top incorporates a slot for filter material to improve contamination control
- ► Non-skid feet prevent unit from slipping and sliding



MODEL	DESCRIPTION
AK-MIC	Mouse Irradiation Chamber
	6" D x 2" H (15.24cm D x 5.08cm H)





Mouse Fixtures and Shields

Partial Body Irradiation Fixtures and Shields

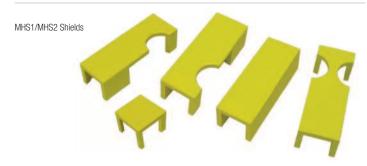
Standard holding fixtures and corresponding lead shield for mice. Can be purchased separately or as a set.











MODEL CONFIGURATION

Fixture Body Dia. 1" (25mm) <25g Mice

MHS1-F-LF Left Flank Exposure
MHS1-F-RF Right Flank Exposure
MHS1-F-DF Dual Flank Exposure

MHS1-F-NF No Flank

Fixture Body Dia. 1.375" (35mm)

MHS2-F-LF Left Flank Exposure
MHS2-F-RF Right Flank Exposure
MHS2-F-DF Dual Flank Exposure

MHS2-F-NF No Flank

Universal Shield Fits both 1" and 1.375" Fixtures

MHS-LF Left Flank Exposure
MHS-RF Right Flank Exposure
MHS-DF Dual Flank Exposure

MHS-NF No Flank

MHS-B Head or Belly Irradiation Shield

Size 1 (<25G Mice) Shield Body Diameter is 1" (25mm)

MHS1-S-LF Left Flank Shield
MHS1-S-RF Right Flank Shield
MHS1-S-DF Dual Flank Shield
MHS1-S-NF No Flank Shield
MHS1-S-B Belly Shield

Size 2 Shield Body Diameter is 1.375" (35mm)

MHS2-S-LF Left Flank Shield
MHS2-S-RF Right Flank Shield
MHS2-S-DF Dual Flank Shield
MHS2-S-NF NO Flank Shield
MHS2-S-B Belly Shield





Split Shield and Bite Guard Restrainer

MODEL	CONFIGURATION
MHS2-HE-BBR	Head Exposure, Restrainer with Bite Block, 1.375" body dia.
MHS2-HE-SPS	Head Exposure, Split Shield only, body 1.375" dia.
MHS2-HE-SET	Head Exposure, Split Shield and Bite Block Set,
	body 1.375" dia.



Quad Head Exposure

MODEL	CONFIGURATION
MHS1-HQ-BPS	>25g, Quad Base Plate and Shield
MHS1-HQ-SET	>25g, Quad Base Plate, Shield, 4 Restrainers
MHS2-HQ-BPS	1.375" body dia., Quad Base Plate and Shield
MHS2-HQ-SET	1.375" body dia., Quad Base Plate, Shield, 4 Restrainers

Mouse Phantoms

Provides standard of reference for Micro-CT scanners

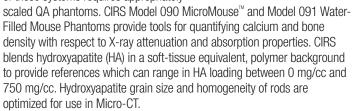
► 25 mg/cc - 750 mg/cc HA targets

▶ Lung, muscle and adipose

► Optimal for Micro-CT

► Solid or liquid filled

For precise, accurate and highresolution measurements. Field of view of these systems requires appropriately



Solid MicroMouse Phantom and Water-Filled Mouse Phantom contain 11 rods of varying mineral loading and dimension. MicroMouse Phantom rods are embedded in soft tissue equivalent epoxy material the size and shape of a small rodent.

Water-Filled Mouse Phantom contains 11 rods in a durable, water-tight, polycarbonate housing, resistant to many chemicals. Model 091 housing can easily be filled with a variety of liquids to vary contrast between rods and surrounding liquid. Eleven Micro-CT rods used in Model 090 and 091 are also available to purchase separately as Model 092, along with other length, diameter, and HA loading options. Send email for information regarding MPT-092.

MODEL	DESCRIPTION
MPT-090	MicroMouse Phantom for Micro CT
MPT-091	Water-filled Mouse Phantom for Micro CT



Canister Humidifier



Allows approximately 2-3 hours of oxygen therapy and should be filled with distilled water.

Includes:

- ► Plastic collar
- ► White nipple connector with cap
- ► 7' crush proof O₂ tubing to canister
- ► Chrome DISS at top of canister
- ► 7' crush proof 0₂ tubing from canister to O₂ source

Modified Mouse Pie Cage sold separately

MODEL	DESCRIPTION
HUM-CAN	Canister Humidifie

Canister Nebulizer



Modified Mouse Pie Cage sold separately

Canister nebulizer with a dial on the top. Allows approximately 2 hours of therapy. Nebulization does not require oxygen (compressed air is sufficient). Use of distilled water is suggested rather than risk particulate from tap water.

Includes:

- ▶ Blue hose
- ► Canister nebulizer
- ► Chrome DISS fitting at top of canister
- ▶ 7' crush proof O₂ tubing from chrome fitting to air compressor and Schuco air compressor

MODEL	DESCRIPTION
NEB-CAN	Canister Nebulizer

New! Nebulizer Compressor

- Quiet operation less than 60 dBA
- ► Compact and lightweight just 3.5 lbs.
- ► Easy to use and clean
- ► Convenient cord storage compartment
- Substantial compressor pressure -35-45 psia
- ► High compressor operating flow rate -7-11 lpm
- ► Therapeutic particle size 0.5 µm-5µm
- ► AC operation-120V 60 Hz

·	
MODEL	DESCRIPTION
S5000	Nebulizer Compressor

Modified Pie Cage

to accept aerosol delivery

- A. Aerosol enters the PIE via tubing attached to the central core. Core is open on the top and solid on the bottom
- **B.** PIE rotates so mice can be placed in individual sections
- C. Aerosol exits each PIE section through one 3mm hole in the center of the outer edge
- D. Aerosol is distributed to each PIE section via five 3mm holes



Thermocare® Intensive Care Units

The Thermocare water-jacketed warmer base is made of heavy gauge fire retardant plastic. The UL and CSA approved heater maintains the temperature of the water accurately through resistance heating controlled thermostatically with a direct water-contact sensor. Creates a natural thermal convection current within the walls of the unit and the heat is radiated to ensure a constant, sustainable temperature within a safe therapeutic range of 75°-100°F wherever the patient lies. This combination of radiant heat and convection currents preclude the use of a pump, fan, or motor which may spark and ignite with the use of oxygen.

Uniform temperature is achieved without "hot spots" and "safe heat" is assured because the animal is surrounded by comforting warmth, just like a "hot water bottle", making Thermocare Warmers a critical part of recovery for reptiles, rodents and animals. Vents on the top of the heated or unheated covered units allow warm air to rise and escape with any carbon dioxide build up. It is the combination of therapeutic heat with respiratory therapy that creates a stand-alone ICU (Intensive Care Unit). For example, with the addition of a cover (domed or flat — which allows respiratory therapy) the Thermocare Warmer becomes an ICU.

To meet your specific needs, ThermoCare® offers a wide selection of intensive care units:

Intensive Care Unit with Dome Cover

ThermoCare's Intensive Care Units (ICUs) allow a full latitude of respiratory therapeutic procedures, including administering oxygen, humidity and nebulization in combination with heat. Units accommodate animals up to 20 pounds (small size) or up to 80 pounds (medium size).

Specifications:

Small: 26"L x 17"W x 15"H Medium: 33"L x 27"W x 25"H

Dome covered units include:

Water conditioner, water level gauge, spin/venting handport covers, humidiquide (temperature/humidity gauges)



MODEL	DESCRIPTION	SIZE
	ICU with Dome Cover	

Intensive Care Unit with Flat Cover

This Intensive Care Unit (ICU) has been named by researchers as the "rodent recovery cage," also great for small birds, reptiles, eggs, and newborns.

Specifications:

Small: 26"L x 17"W x 6.5"H Medium: 33"L x 27"W x 12"H

Flat covered warmers include:

Water conditioner, Digital thermostat, water level gauge to monitor water level within the warmer, Spin/venting handport covers, humidiquide (temperature/humidity gauges)

Accessory Kit (sold separately) includes 02 nebulizer, humidifier, med nebulizer, hoses and connectors.

MODEL	DESCRIPTION	SIZE
FW-2N	ICU with Flat Cover	

Emergency preparedness with disposable cages

All Innovive cages are BPA-FREE



Both equipment failure and a natural disaster can be dealt with efficiently and safely using the Innovive disposable irradiated Innocage® Static rodent cages and pre-filled Aquavive® water bottles.

The Innovive disposable rodent caging disaster recovery and emergency planning solution allows user to:

- Maintain animals' change-out schedule with a supply of fresh irradiated static cages on schedule
- Provide a clean water supply to mice with pre-filled water bottles quickly and easily in any location
- Quickly evacuate IVC racks to a new lab location

Maximize storage space: Innovive disposable rodent cages and water pack arrive double-bagged, irradiated and boxed for easy storage and can be accessed as needed.

Static Disposable Cages

All Innovive static mouse cage lids fit the universal cage bottom, which provides 81" of floor space and 5" of headroom. All Innovive static mouse cage lids are delivered double-bagged and irradiated - 100 units per box. Innovive static rodent cages are designed for stand-alone use, no ventilated rack required.



Innocage® Static Mouse

Specifications:

Dimensions: 14.7"D x 9.2"W x 5.5"H

Uses: Universal **Cage size:** 8.8 oz **Capacity:** 1.9 oz food tray

- Static Lid: Innovive disposable static cage is designed specifically for static rodent housing for mice; it is also an excellent resource for your Emergency Preparedness Plan
- Water: Aquavive Mouse bottle (empty or pre-filled), autowatering, and water pouches
- ► Food Tray: Standard, stainless steel or all plastic



Disposable Cages for Rodent Transportation

The Innovive disposable transportation cage allows transportation of mice in the same cage that they are housed with a simple change of the lid, reducing animals' disturbance with a simple change of the lid.

Rodent Transportation Challenges

- ► Maintaining a low-stress and healthy environment for animals during long- and short-haul transportation
- ► Discrete and secure rodent caging
- Cost-effective transportation solution

Advantages of Innovive Transportation

- ➤ Healthy air for the trip of any length: large top filters provide excellent intracage airflow, which allows 5 mice to be housed in the Innocage up to 7 days
- Secure transport cage for mice: the cage's snap top secures animals during the trip
- No water or food tray needed: simply add a gel pouch and animals are ready to go
- Disposable caging is a cost-effective solution: remove the need to track, return and/or replace expensive traditional rodent cages

Innocage® Transport Mouse

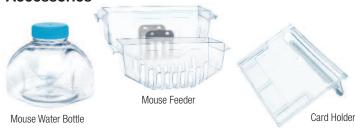
Transport Lid - Whether moving animals a short or long distance, the Innocage Transport is a great solution. Simply replace an IVC lid with a transport lid to prepare the animals for relocation. Maintain a complete stock of transport cages for distributing animals from a breeding operation to primary housing areas.



Lid features:

- ► Imprinted timestamps for precise tracking of production and quality
- ► Extended corner tabs for improved ergonomics in opening the cage
- ► Added ridges at the front side of lid for better grip when handling cages
- ► Corner tab holes can be used for cage card rings, tags or as a mechanism to flag cages

Accessories



MODEL	DESCRIPTION	QTY
MSX2-STD	Innocage Static Mouse (top and bottom)	100
MSX2-C8	Innocage Static Mouse, pre-bedded 0.125" Corn Cob (set)	100
MSX2-AD	Innocage Static Mouse, pre-bedded Alpha Dri (set)	100
MSX4-STD	Innocage Transport Mouse (top and bottom)	100
MSX4-C8	Innocage Transport Mouse, pre-bedded 0.125" Corn Cob (set).	100
MSX4-AD	Innocage Transport Mouse,pre-bedded Alpha Dri (set)	100
M-BTM	Innocage Mouse, bottom only	100
M-BTM-C8	Innocage Mouse, bottom only, pre-bedded 0.125" Corn Cob .	100
M-BTM-AD	Innocage Mouse, bottom only, pre-bedded Alpha Dri	100
M-FEED-STD	Mouse Feeder, extended-use (standard)	100
M-FEED-SS	Mouse Feeder, extended-use (stainless steel)	100
M-FEED-P	Mouse Feeder, extended-use (plastic)	100
M-WB-300	Aquavive Mouse Water Bottle empty	200
CRD-HLD-U	Card Holder	100

Deltaphase® Isothermal Pad

Maintains animals or cultures at 37°C for hours. Ideal for NMR!

Laboratory Evaluation

Rectal temperatures of two rats during six-hour experiment. (Animal weights 350g room temperature 24.5°C.) Animal on Deltaphase Isothermal Pad maintained near normal temperature for more than three hours.

The Deltaphase Isothermal Pad has been evaluated by researchers at a major medical center. Anesthetized rats (pentobarbital 45mg/kg) were placed on either an operating table or a Deltaphase Pad, and rectal temperature was monitored for six hours. The temperature of the rats on the conventional table fell rapidly and stabilized only near 30°C when pronounced shivering began. The rats on Deltaphase Isothermal Pad maintained body temperature near a constant 37°C for 4 hours. Each pad measures 8" x 8" x 0.75".

Based on fundamental thermodynamics, completely safe even with flammable gases. Uses no electricity, wires, or control box. Reusable.

Why you need them

Normal biochemical functions are based on the temperature of 37°C. In conscious animals, core temperature is maintained. During anesthesia, body temperature falls. Normal chemistry is disturbed, surgical tolerance is reduced, and recovery is slow.

Studies of mammalian cell biology are conducted at 37°C. in expensive incubators in order to maintain normal function. However, the manipulation of cultures in a clean hood or on the bench top almost always leads to significant cooling. At the least, this results in the displacement of growth curves. At worst it can lead to significant cell mortality.

To maintain temperature during experimental procedures, many methods are used. Coverings help, but are impractical during most procedures and cannot replace heat already lost. Electrical heaters must be carefully monitored to prevent overheating or oscillation. Electrical devices often interfere with recording equipment. They are a shock hazard in the presence of urine, blood, or culture media, and the spark of a thermostat might ignite a flammable anesthetic or solvent.

The Deltaphase Isothermal Pad is a unique approach to temperature stabilization. It is a source of heat which cannot overheat once it enters its phase change. It is economical in that it needs no tubes, wires or electricity. It is also safer than other devices because it needs no thermostat or controller and does not generate electrical signals. But it can maintain a small animal or a culture bottle at near normal and constant temperature for several hours.

The concept of the Deltaphase Isothermal Pad is derived from the basic thermodynamic principle that a phase change occurs at constant temperature.

A unique chemical solution, contained within a durable pouch, is in solid form at room temperature. When heated, the solution becomes fluid and the pad is ready to use.

When an animal or container is placed in contact with an activated pad, heat is transferred and the solution slowly undergoes a phase change. During this change, over 30 calories are available per gram of solution and the temperature remains constant. The pad remains isothermal until all of the liquid phase has solidified.

Experimental studies have shown that the pad temperature of 39°C is ideal for maintaining animal or cultures at 37°C . If desired, one or more pads may be placed within a foam box to create a bench top or portable incubator.



MODEL DESCRIPTION

39DP 3 Pads and 3 Insulators, 8" x 8"

DPIP 1 Pad, 6" x 7.5" DP-SASB 1 Pad, 4" x 6" DP-PAD 1 Pad, 8" x 8"

Deltaphase® Operating Board



This compact operating board takes advantage of the Deltaphase principle to maintain animal body temperature during surgical or experimental procedures. An 8.5" square stainless steel operating surface lies in contact with an activated Deltaphase isothermal pad. The underside of the pad is insulated to provide a longer isothermal period. Molded wells are provided for sponges, instruments and anesthetic apparatus.

This board was designed by research scientists to be functional, durable, and easy to clean. Its low cost and safety make it appropriate for use in student laboratories. The unit is supplied with two Deltaphase pads, each pad measures $8" \times 8" \times 0.75"$.

MODEL DESCRIPTION

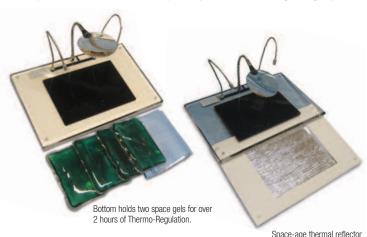
390P	Operating Board, 2 Deltaphase Pads and 2 Insulators
39DP	3 Deltaphase Pads and 3 Insulators only (no board)
390M	Operating Board, 2 Deltaphase Pads and 2 Insulators
	with magnetic board

Instruments shown not included.



Thermo Controlled Surgery Platform

Easily maintain animal body temperature during surgery!



- ► Two flexible LED lights provide direct illumination with no shadows and no heat
- ► Flex arm, non-obstructive rimless magnifying glass, 2.3 X main lens, 4.0 X inset lens. Allows continuous eye contact with object when moving into magnification area
- Limb restraints.
- ► 4 Space Gels for continuous heat or 2 Deltaphase® pads
- ► 2 Space Blankets to retain heat
- ► Thermo reflector and turbo heat sink to maximize heat transfer
- Non-skid feet for added stability
- Universal input power supply
- ► Size: 13.5"L x 9"W

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MODEL	DESCRIPTION
ASS7T	Thermo Control Surgery Platform with 4 Space Gels
SPGL-S	Space Gel Pad 4"x6"
SPGL-M	Space Gel Pad 5.5"x10"
SP-DR	Space Drape 3.5" x 10", (2 drapes per pack)
ASS7D	Thermo Control Surgery Platform with Deltaphase Pads
DPIP	Deltaphase Isothermal Pad, 6" x 7.5"

See microscope section for digital microscope attachments.

SpaceDrapes[™]

SpaceDrapes provide heat-retention capabilities while doubling as surgical drapes. They decrease recovery time and improve recovery prospect for animals that are under anesthesia by reducing radiant heat loss. They can be fenestrated and used as standard drapes. Available pre-packaged and pre-sterilized, or in rolls that can be sterilized by the user.



maximizes heat transfer

MODEL	DESCRIPTION
SP-TS SP-DR SP-MPS SP-RPS	Space Drape 12" x 16", Flat (2 per pack) Space Drape 3.5" x 10", (2 drapes per pack) 4" x 5" Mouse Pouches (1 sterilized package of 5 pouches) 9" x 12" Rat Pouches(1 sterilized package of 5 pouches)

Thermo Controlled Recovery Pad

Animal recovery made simple and easy!

- ► Convenient size 13.5"L x 7.5"W
- ► 3 space gels for continuous heat
- ► 2 space blankets to retain heat
- ➤ Thermo reflector and turbo heat sink to maximize heat transfer
- ► Non-skid feet for added stability
- ► Fits into a standard 18"L x 9"W

Ultra-Safe Thermo Regulation:

- ► Will not over heat or burn animal
- ► No electricity used

Shoe box cage not included.



Place animal on pad for recovery. Recovery pad will provide over 2 hours of Thermo-Regulation.



MODEL	DESCRIPTION
TCRP	Thermo Control Recovery Pad (3 pads) (shoe box cage not included)
SPGL-S	Space Gel Pad 4"x6"
SPGL-M	Space Gel Pad 5.5"x10"
SP-DR	Space Drape 3.5" x 10", (2 drapes per pack)
DPIP	Deltaphase Isothermal Pad, 6" x 7.5"

SpaceGels[™]

SpaceGels heating pads are formed by sealing a supersaturated liquid solution in a pouch similar to an IV bag. The pouch also contains a small metal activator disc. When the disc is flexed, the solution "freezes" and solidifies, giving off heat in the process. The



heating pads reach a maximum temperature of about 130°F. Because the heating process is physical, not chemical, the pouches can be reused several hundred times. To reset a SpaceGel heating pad, simply heat through steaming or boiling until all crystals have dissolved. Once cooled, it can be reactivated and used again.

SpaceGels have many uses. A SpaceGel can be placed between a cage containing a recovering animal and the table to provide heat during recovery. Small animals can be placed on the heating pads with some sort of barrier (towel, cloth, etc.) A SpaceGel can be wrapped and placed on a part of the animal to be warmed, or on the arteries if warming a large animal.

MODEL	DESCRIPTION
SPGL-S	Space Gel Pad 4" x 6"
SPGL-M	Space Gel Pad 5.5" x 10"



Water Heated Hard Pads

Connects to Gaymar, Hamilton and other pumps



Durable polycarbonate construction. Scalpel, needle, and towel clamp proof. Smooth surfaces are easy to clean helping to prevent nosocomial infection. Highly puncture resistant.

MODEL	DESCRIPTION
HHP-05 HHP-1	6"W x 8"D Heated Hard Pad 9"W x 12"D Heated Hard Pad
HHP-2 HHP-3	15"W x 24"D Heated Hard Pad 21"W x 24"D Heated Hard Pad
HHP-3 HHP-ADP-G	Adapter to connect to Gaymar Pump
HHP-ADP-A	Adapter to connect to Adroit Pump

Heated Work Stand Kit





Heated hard pad kit converts user's workstand into a heated workstand. Unit installs quite easily and can be ready for use in minutes with new or existing Rodent Work Stand and circulating pump. Unit is also designed to be used as a stand-alone heated hard pad. Work stand not included.

MODEL	DESCRIPTION
RW-HHP	Heated Rodent Work Stand Kit



MODEL	DESCRIPTION
RW-Δ3467	Rodent Work Stand

Heat Therapy Pump

The safest, most accurate localized heat therapy system available. Bright, easy-to-read display provides continuous real-time temperature. Digital controller uses proprietary software to manage users prescribed set-point temperature to within 1°F. Three temperature safety limits guard against possibility of overheating and Hi Limit Switches can be tested without taking unit apart! Mercury free! Uses tap water.

Specifications

Set-point range: 75°F (Off) to 107°F

Set-point accuracy: 0.5°F

Flow rate: ≥15gph

Reservoir: 50 oz (1,500 ml) **Approvals:** μL 2601, CSA C22.2

No. 601-1 51DF

MODEL	DESCRIPTION	UNITS
HTP-1500 AP-RC-26E	Heat Therapy Pump	
AP-RC-22G	Reusable Pad, 14" x 20"	

Additional sizes available online at braintreesci.com.

Soft-Temp Reusable Veterinary Heating Pads

Soft-Temp reusable pads are the perfect solution for veterinary warming.

- ➤ Available in four sizes, pads fit table-tops, surgery tables and in kennel cages
- ➤ Soft-Temp pads work best with Adroit's HTP-1500 pump, but adapters are available for use with different pumps
- Pads may be used directly against the skin or covered with pillow cases or light-weight fabric for added protection against damage
- ► Heavy-duty pads can be patched if needed

skin pight piage ded	Willy >
	SIZE
ng Pads nting Pads	20" X 29"

MODEL	DESCRIPTION	SIZE
AP-AV-016	Small Soft-Temp Veterinary Heating Pads	16" x 20"
AP-AV-029	Medium Soft-Temp Veterinary Heating Pads	20" X 29"
AP-AV-044	Large Soft-Temp Veterinary Heating Pads	20" X 44"
AP-AV-057	X-Large Soft-Temp Veterinary Heating Pads	20" X 57"
AP-AV-PATCH	Heating Pad Patch Kit	

T/Pump[®] Call for availability

Provides safe and effective core body warming and cooling therapy with precise temperature control. Helps prevent body heat loss and hypothermia during surgery and recovery. Cooling setting delivers 50°F (10°C) therapy.

- ► For warming therapy: low (100°F/38°C) or high (107°F/42°C)
- ➤ Three-layer safety system with dual temperature sensors, dual microprocessors and a mechanical thermostat to ensure patient safety
- ► Illuminated LED control panel, comfortable handle, built-in hose, cord storage and translucent water reservoir designed for ease of use
- ► Uses tap water (and ice cubes if cooling)

'	()	
MODEL	DESCRIPTION	UNITS
TP-700 TP-D-26E TP-R-22G TP-D-12E	Gaymar Heating/Cooling Water Pump Multi-T Pad, 18" x 26" Single Patient Multi-T Pad, 15" x 22" Reusable Multi-T Pad, 13" x 18" Single Patient	10/case each



Temperature Measurement and Control

Rodent Warmer

Minimize heat loss and improve surgical outcome

Can be used as a general warming system or with rectal probe (sold separately) for more accurate. core temperature monitoring. Heating



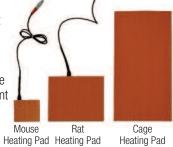


53850

pads are constructed of silicone rubber heaters.

Pre-Op: Can be placed underneath an induction chamber to reduce heat loss during anesthetic administration.

During: Place heating pad on a rodent surgery table or stereotaxic instrument to maintain and monitor temperature during surgical procedures. Mouse heating pad for use with Just for Mouse and Just for Mice Stereotaxic Instrument or Mouse and Neonatal Rat Adaptor. Rat heating pad for use with Lab Standard or New Lab Standard



Heating Pad Heating Pad

Stereotaxic Instrument.

Post-Op: Cage heating pads can be placed in the animal's home cage for faster recovery following surgical procedures.

Three Operating Settings: Select from preprogrammed animal temperatures, countdown timer or use with thermal rectal probe



Thermal Rectal Probe (sold separately)

- Preprogrammed animal temperatures
- ► Heating pad included (mouse, rat or home cage)
- ► Warmer X1 controls a single heating pad,
- ► Warmer X2 controls two independent heating pads simultaneously

Specifications:

Temperature Control Range: 25-45°C Temperature Resolution: 0.1°C Heater Power: 24VDC@3Amax

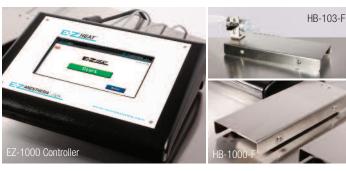
Power Requirements: 120/240VAC (switchable), 50/60Hz, 75VA

Probe Dimensions: 0.62" (1.6mm) tip diameter Control Box Dimensions: X1 5"L x 3.8"W x 1.5"H X2 5.5"L x 5"W x 1.6"H

Mouse Heating Blanket Dimensions: 2.75" x 2.75" (7 x 7cm) **Rat Heating Blanket Dimensions:** 6" x 6" (15.25 x 15.25cm) **Cage Heating Blanket Dimensions:** 6.25" x 15" (16 x 38cm)

MODEL	EL DESCRIPTION	
53800	Rodent Warmer Control Box X1 with cable	
53851	Rodent Warmer Control Box X2 with cable	
53800C	Rodent Warmer X1 with Cage Heating Pad	
53800M	Rodent Warmer X1 with Mouse Heating Pad	
53800R	Rodent Warmer X1 with Rat Heating Pad	
53850	Rodent Warmer Control Box X2 with cable	
53850C	Rodent Warmer X2 with Cage Heating Pad	
53850CC	Rodent Warmer X2 with Two Cage Heating Pads	
53850M	Rodent Warmer X2 with Mouse Heating Pad	
53850MC	Rodent Warmer X2 with Mouse and Cage Heating Pads	
53850MM	Rodent Warmer X2 with Two Mouse Heating Pads	
53850R	Rodent Warmer X2 with Rat Heating Pad	
53850RC	Rodent Warmer X2 with Rat and Cage Heating Pads	
53850RM	Rodent Warmer X2 with Rat and Mouse Heating Pads	
53850RR	Rodent Warmer X2 with Two Rat Heating Pads	
53810	Mouse Heating Pad, 7x7cm for 53800/53851 with cable	
53812	Rat Heating Pad, 15.25x15.25cm for 53800/53851 with cable	
53814	Cage Heating Pad, 16x38cm for 53800/53851 with cable	
50304	Rodent Warmer Rectal Probe	

EZ-Heat Surgical Bed **Warming System**



E-Z Heat is an extremely user-friendly system that accommodates up to four connected beds to help maintain the patients' body temperature during surgical procedures. Patented warming system allows users to heat the induction chamber and warming beds simultaneously. Warming bed temperature ranges from 85°-104°F. Bed temperatures can be adjusted in the administrator options. Each warming circuit displays elapsed time and set temperature, which can be set individually. All settings made in the administrator options are password-protected to ensure security from tampering. Heating bed also allows option to mount MicroFlex Breather and works in harmony with all E-Z Anesthesia systems.

- ► 7" touch screen control display
- ► Stainless steel heating beds 10" x 4" (25.4cm x 10.2cm)
- ► Multiple languages available
- ► Remote access for added support
- ► Optional EZ-103H Microflex Breather easily attaches to bed with bracket

MODEL	DESCRIPTION
EZ-1000	EZ-1000 Controller
HB-1000-F	Heating Bed, Flat (10" x 4" x 1")
HB-1000-V	Heating Bed, V-shaped (10" x 4" x 1")
HB-103-F	Heating Bed, Flat, with EZ-103-H Microflex Breather
HB-103-V	Heating Bed, V-shaped with EZ-103-H Microflex Breather
EZ-103-H	Microflex Breather for Heating Bed

Portable Small Animal Warming Plate

Use under animal to prevent hypothermia during surgery, post-surgery recovery and anesthesia induction. Small enough to place under animals during stereotaxic surgery.



- ► Can be placed on bench or in cage
- Non-skid feet for added stability
- ► HD power supply with universal input for use in any country (100 - 240 VAC)50-60 Hz)
- ➤ 7" x4", stainless steel



Shop online at www.braintreesci.com

Temperature Measurement and Control



Single Temp Warming/ Induction Chamber



Post-surgery warming chamber/pre-surgery warming induction chamber provides continuous warmth to animals being anaesthetized before surgery or recovering from surgery.

Warming Chamber

- Standard small shoe box cage, 7" x 11" x 5", standard large shoe box cage, 10" x 19" x 8"
- ► Inlet/outlet port for gas anesthetic when used as an induction chamber
- Heavy duty power packs provide preset temperature. Universal input (110-220V)
- Warming element sealed under stainless steel floor. Bedding material can be used in cage
- Variable temp chambers: 30°C, 36°C, 38°C, 42°C, 49°C

Location of Warming Elements Under Stainless Steel Plate







Filter Top

- ► Allows animal to fully recover in chamber while unattended
- ► Includes membrane for sealing filter top and outlet port to exhaust gas when used as an induction chamber

Chamber includes one single temp UIHD-power pack, induction conversion kit and operating instructions.

Important Note: Cage floor temperatures were measured with an ambient room temperature of 70°F (21°C). Room conditions and table temperature will slightly increase/decrease cage floor temperature.

MODEL DESCRIPTION

Small Chamber 7" x 11" x 5", Full-Floor Warming

WC-S4 34°C Single Temp Small Warming/Induction (Chamber
WC-S8 38°C Single Temp Small Warming/Induction (Chamber
WC-S9 Variable Temp Small Warming/Induction Char	nber*

Large Chamber 10" x 19" x 8", Full-Floor Warming

WC-L0	30°C Single Temp Large Warming/Induction Chambe
WC-L4	34°C Single Temp Large Warming/Induction Chambe
WC-L8	38°C Single Temp Large Warming/Induction Chambe
WC-L9	Variable Temp Large Warming/Induction Chamber*

Large Chamber 10" x 19" x 8", Half-Floor Warming

WC-H0	30°C Single Temp Large Warm	ing/Induction Chamber
WC-H4	34°C Single Temp Large Warm	ing/Induction Chamber
WC-H8	38°C Single Temp Large Warm	ing/Induction Chamber
WC-H9	Variable Temp Large Warming/I	Induction Chamber*

Extra Power Packs

WCPP-30	30°C Single Temp, UIHD-Power Pack
WCPP-34	34°C Single Temp, UIHD-Power Pack
WCPP-38	38°C Single Temp, UIHD-Power Pack

WCPP-VT Variable Temp, UIHD-Power Pack (30°C, 36°C, 38°C, 42°C, 49°C)

Universal Input 110-220V, can be used with any warming chamber *Actual temperatures are dependent on room conditions

TCAT-2 Temperature Controller

TCAT-2 general purpose PID autotuning controller provides accurate temperature control in a variety of laboratory applications. Combined with a heat lamp or heating pad, TCAT-2 may be used to maintain the body temperature of anesthetized animals during surgery or stereotaxic procedures. Small animal cages



are easily warmed with a heat lamp. TCAT-2 may also be used in cooling applications, such as to control independent perfusate cooling systems.

Realizing that laboratory applications are diverse, TCAT Controller is provided in several versions. The model specified depends upon whether a laboratory has a general or specific need for the controller.

MODEL DESCRIPTION

All TCAT-2 versions may be used with any of our extensive line of accurate Type T thermocouple probes, which act as the temperature feedback sensor. Most commonly used are the RET series of animal rectal probes, but the IT series of implantable flexible probes and MT series of needle probes may also be used depending upon the specific application. All instruments are designed to operate on a 110V or 230V AC supply.

Heat Lamp

Optional infrared heat lamp is table mounted with a standard "u" screw clamp that expands to fit tables up to 2.25" deep. An 18" adjustable swing arm provides easy adjustment of radiant heat to specimen. The lamp is supplied with a 250w (infrared) heat lamp bulb and a built in reflector. A chrome bulb guard is also provided and easily snaps onto the lamp housing after the bulb is installed. Fits standard 110v AC socket. Power: 10 watts.

MODEL DESCRIPTION

HL-1	Heat Lamp with table clamp
HI -1B	Heat Lamn with base

Heating Plate

Optional direct current heating plate for small rodents (mice and rats). Standard plates are black anodized aluminum.

- ► HP-1M measures 4.375"W x 8.5"L
- ► HP-4M measures 1.5"W x 4"L
- ➤ Both models have small feet attached giving them an elevation of .25" above the surface it sits on
- ► Easily cleaned with alcohol
- Provided with a feedback sensor to prevent overheating when used with TCAT-2 series of controllers
- ► Custom sizes are also available with longer lead times

MODEL	DESCRIPTION	DIMENSIONS
HP-1M HP-4M	Heating Plate Heating Plate	4.375" W x 8.5" L 1.5" W x 4" L



Temperature Measurement and Control

Warming Blanket

Flexible blankets for use with TCAT-2LV and TCAT-2DF controllers. Blankets use far infrared radiation to penetrate deep into the body.

Small blanket (8" x 6") suitable for mice and small rats

► Large blanket (14" x 14") suitable for adult rats and guinea pigs

Specifications:

Power: 9.5 V @ 1.5 amps

Over Temperature Protection: 100 Ohm RTD

Lead Length: 3'

Material: Antibacterial washable surface

MODEL	DESCRIPTION
WB-1	Small Warming Blanket 8" x 6"
WB-2	Large Warming Blanket 14" x 14"

MTC-1 Animal Micro Temperature Controller

- Control warming blankets and heat plates
- ► Control Range of ambient to 99.9°C
- ► Resolution 0.1°

Recent interest in a simple low cost temperature controller to maintain small animal temperatures was the reasoning behind the development of the MTC-1 micro temperature controller. Utilizing a precision highly stable platinum RTD as the feedback



sensor, this controller will display and maintain a set temperature within $\pm 0.1^{\circ}$ C. Controller is designed to operate from a 12VDC supply and can control an output current up to 4 amperes (50 watts). Can also be used with an input voltage between 6 and 24VDC for both lower and higher power applications (up to 90 watts). ½" backlit LCD readout provides continuous display of temperature with 0.1° resolution. Set point is easily adjusted from just above room temperature up to 99.9°C via a 20 turn potentiometer. A momentary switch allows user to toggle display between the set and run temperatures. Controller combined with either a heat plate or warming blanket is ideal for maintaining temperature of mice, rats and small animals.

MODEL	DESCRIPTION
MTC-1	Animal Micro Temperature Controller
MTC-HP-1M	Heating Plate for MTC, 4.375" W x 8.5" L
MTC-HP-4M	Heating Plate for MTC, 1.5" W x 4" L

MicroTherma 2T

Compact, easy to operate, reliable. Self-diagnostic recalibration takes place when meter is powered on.

Each time the user checks the calibration of MicroTherma against an external standard, finding will be within spec – no adjustments required. Includes a traceable cal certificate with actual test data.

- ► Accepts type T thermocouples
- ► ±0.2°C meter accuracy, self-calibrating circuitry
- ► Includes hold, max and min functions switchable °C or °F

MODEL	DESCRIPTION
TW2-107	Microtherma 2 Type "T" Thermometer
TW2-205	Protective PVC Boot
TW2-100	Small Attache Case, fits 1-2 probes



Thermalert Monitoring Thermometer

- ► Large digital display Reads to 0.1°C in clinical range 25-45°C
- ► High stability no calibration necessary
- ➤ Safe, low voltage battery operation
- ► Long battery life 1200 hours

This economical, easy to use thermometer is intended for continuous monitoring in the laboratory. The digital display reads to 0.1°C. For safety, the unit is battery

operated. Batteries last for 1200 hours. A variety of fast reading microprobes and special animal probes are available for the TH-5. TH-5 can be supplied with analog output for lab applications where strip chart recording is needed.

Specifications:

Temperature range: 25 to 45°C

Resolution: 0.1°C

Instrument accuracy: 0.1°C ± 1 digit

Calibration: Conforms to National Bureau of Standards tables

Monograph 125 **Readout:** 0.5" liquid crystal **Batteries:** 4 "C" cells

Battery life: 1200 hours continuous

Analog output: Available at extra cost. Approx. IOmV per °C

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MODEL	DESCRIPTION
TH-5 TH-5A TT-S-5	Thermalert Monitoring Thermometer Thermalert Monitoring Thermometer with analog output Thermalert Stand

Hand Held Rodent Thermometer

- ► 1 T1 channel
- ► Resolution: 0.1°C
- ► Functions: records max, records min, hold
- ► 2.5 measurements/sec refreshing screen
- ➤ Time measurement display from start with dedicated key
- ► Includes carry case and batteries
- ► Rectal probe sold separately
- ► Accepts all type "T" thermocouple probes
- ➤ RS-232 output exports data to programs such as Excel (software not included)

TK-8851 thermometer combines electronic

accuracy and simplicity of reading with a large readable screen. Ideal for temperature measurements on rodents (rats or mice). Features a large backlit digital display and time measurement.

LCD display features timer and rubber keys making it easy to use.

Specifications:

Temp Range: -200°C to 390°C (according to probe) (for 18 to 28°C ambient temp.)

Temp Accuracy: +/- (0.1% reading + 0.7°C) (for 18 to 28°C ambient temp.)

LCD Size: 30mm x 51mm (H x W) Operating Temp: 0 to 50°C Operating RH: Humidity <80%

Battery: 9V

MODEL	DESCRIPTION
TK-8851	Hand Held Temperature Measurement Thermometer



Animal Rectal Probes



For fast intermittent measurements. The isolated sensor can be used with monitoring equipment where electrical interference from other electrodes may be present. Reinforced strain relief for applications where probe is in more frequent use. Smooth ball tip, 1" long stainless steel shaft, 0.059" dia. 0.125" tip diameter, 5' lead length. Time constant 0.8 secs.

The RET-4 and RET-5 rectal probes are for very small animals and neonatal mice. Flexible polyurethane sheath with smooth rounded tip. 36" long (can be made longer). Time constant 0.18 seconds. Max temp. 140°C. May be sterilized by Gas (ETO), gluteraldehyde solution or autoclave.

MODEL	DESCRIPTION
RET-1	Rectal Probe for Rabbits
RET-2	Rectal Probe for Rats - 1" long, 0.59" dia., 0.125" tip dia.
RET-3	Rectal Probe for Mice - 0.75" long, 0.028" dia., 0.065" tip dia.
RET-4	Rectal Probe for Very Small Animals, 0.032" dia.
RET-5	Rectal Probe for Neonatal Mice, 0.02" dia.
RET-2-ISO	Rectal Probe for Rats with isolated sensor
RET-3-ISO	Rectal Probe for Mice and Neonatal Rats with isolated sensor
DSP-1	Disposable probe sheaths, 1,000/pk

Flexible Implantable Probes - IT Series

IT series flexible microprobes can be used for tissue implantation, measurement of small volume liquid samples, rectal temperatures in baby mice, etc. Totally sheathed in chemical resistant Teflon. Quite rugged. Max temp. 150°C. Isolated. Type # designates needle gauge. (Or one gauge smaller in thin wall).

MODEL	DESCRIPTION
IT-14	0.050" diameter, constant 0.3 seconds, 3' lead length
IT-18	0.025" diameter, constant 0.1 seconds, 3' lead length
IT-21	0.016" diameter, constant 0.08 seconds, 1' lead length
IT-23	For ultra fast measurements and use on micro-size
	specimens. Sensor lead only 0.009" dia. Tissue implantable
	with 23ga needle (supplied). Rather fragile. Max. temp. 150°C.
	Time constant 0.005 secs. 3' lead. Teflon coated, isolated.
IT-1E	IT-18 with sensor bead exposed. Combines the ultra-fast
	response of IT-23 with the Teflon sheath strength of IT-18.
	Time constant 0.005 seconds, isolated.

Close Focus Infrared Thermometer

- ➤ 0.7" (18mm) measurement distance
- ► 0.1" (2.5mm) spot size
- ► Dual laser
- ► Maximum temperature and hold features, easily switches from °C to °F

Measure temperature precisely to 0.1" (2.5mm) with the CF-IR Close Focus Infrared Thermometer. Measures tiny areas with precision.

CF-IR multi-line display includes a real-time clock and measurement of ambient temperature for convenience. Other features include Min/Max, Hold, adjustable emissivity, clock and built-in stop watch. Measure temperatures from - 67°F to 428°F at 0.7" (18mm) distance.

MODEL	DESCRIPTION
IR-CF	Close Focus Infrared Thermometer

Infrared Thermometer

Measures cutaneous temperature of small rodents (mouse and rat) **very fast and contactless.** Reliable and noninvasive method to measure skin temperature and can then be correlated to rectal temperature.



Optical dimension and position

of IR sensor allows measurements on very small surfaces without allowing sensor to get wrong values arrived from integration of environment temperature. Allows **easy measurements even on mice tails** - with high accuracy and repeatability.

This thermometer does not replace a rectal one: cutaneous measurement should be correlated with usual rectal temperatures (see our RET-2 and 3 Rectal Probes for rodents). IR-B153 thermometer is especially accurate on a temperature range from 25-40°C and proves to be useful for other lab applications as well. Please note: it is impossible to provide correlation tables between skin and rectal temperatures, as the correlation depends on the animals, their stress, etc.

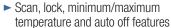
MODEL	DESCRIPTION
IR-R153	Infrared Thermometer

Pocket Infrared Thermometer

Measures surface temperatures and has a non-contact design.

► Temperature range: -67°F / 428°F and -55°C/ 220°C with accuracy of ± 1.1°F (0.6°C)

- ► One second response time
- ► Resolution 0.1°F / 0.1°C from 14 to 390°F (-9.9 to 199.9°C), otherwise 1°F/1°C
- ➤ Safe, non-contact infrared thermometer measures surface temperatures



- ► F°/ C° selectable
- ► Min/max/lock modes
- ► Auto-off after 15 seconds
- ► Emissivity range is 0.95 (default) and adjustable to 0.005 to 1 (step 0.1)
- ► Quick response at 1 second
- ► Low battery indicator
- ► Protective rubber boot and lanyard included
- ► CR2032 battery included

MODEL DESCRIPTION

IR-9527 Pocket Infrared Thermometer



CELEBRATING 2020 HALF-CENTURY SCIENTIFIC ANNIVERSARIES

150TH ANNIVERSARY

Thomas Edison – Discoveries leading to the electric light bulb

TAYLOR

AIMS Neonate and General Rodent Tattoo Systems

Simple, quick and easy permanent animal identification

Convenient comprehensive kits for the humane tattoo identification of neonate or adult mice and rats. Each kit is provided with a comprehensive training guide and instruction DVD and all the tools needed to safely and efficiently tattoo rodents. For over 25 years, AIMS tattooing techniques are performed on unanesthetized animals and produce easy-to-read permanent ID's. AIMS tattoo pigments and supplies have been demonstrated to be *safe* and *non-toxic*. Tattoo identification is cost effective with an average disposable cost of about 2¢ per neonate and 5¢ per adult rodent.

The NEO-9 Neonate Tattooing System

For tattooing P0-P15 neonate rodents of any color/strain.





Kit includes:

- ► Micro controller with HDUI power supply
- ► Foot pedal (on/off) and finger guards
- ► Preset speeds
- ► Ultra light tattoo machine
- ► Non-skid machine platform with pigment holder
- ► AIMS certified safe tattoo pigment
- AIMS skin prep (reduces fading)
- ► Standard/fine tip tattoo needles
- ► Micro tattooing station (light, skin prep holder, 4x magnification)
- ► Needle scanning scope
- ► Comprehensive DVD instructions and carrying case
- ▶ Detailed training guide provides step-by-step guidance and detailed illustrations on multiple ID schemes with large number ranges (>9,000).

Neonate tattoo identification is a practical and humane alternative to toe clipping (non-invasive). Toe tattoos allow user to use existing numbering system without removing the toe. Included supplies will tattoo 2000 neonates.

For additional supplies visit braintreesci.com





The AIMS ATS-3 General Rodent Tattoo System

Supplies and accessories to tattoo 3,000 weanling rodents and larger. The detailed training guide and instruction DVD provide step-by-step guidance with detailed illustrations. Use numbers, letters, lines, dots, and/or colors to permanently ID any color/strain mouse or rat.

Kit includes:

- ► AIMS standard tattoo machine with calibrated needle tube
- ► Micro controller with extended machine speed
- ► AIMS humane rapid mouse cup restraint system
- ► Tail tattoo reading light
- ► Certified safe/non toxic supplies and tattooing accessories
- ► 242B concentrated black pigment for C57 and B6 mice

Can be used for neonate rodent tattooing when purchased with the neonate accessory package.

Neonate accessory package includes:

- Micro Tattooing Platform (with light, 4x magnification, skin prep holder and DC power supply)
- ► Finger guards
- ► Neonate pigment
- ► Skin prep
- ► Fine tip needles
- ► Instruction book and DVD (Laboratory Animal Tattoo Identification Vol. 1, Neonate Mice and Rats)



Micro Tattooing Platform

Large Lab Animal Tattoo System

AIMS ATS-3L large lab animal tattoo system is a compact tattoo kit specifically developed for tattoo identification of large laboratory animals (hamsters, quinea pigs, ferrets, rabbits, NHP, swine — anything larger than a mouse/rat).

Kit includes:

- ► AIMS ultra-light tattoo machine
- ► Foot pedal on/off micro-controller
- ► AIMS small/large bore calibrated needle tube
- ► Select large animal tattoo needles
- ► Small equipment profile (quick setup/pickup)
- ► Reduced animal stress (quick tattooing)
- ► Easy cleaning and sterilization between animals
- ► Detailed operating and tattooing instructions
- ► Unlimited technical support from AIMS

Quiet Tattoo Machine version also available

Reduces noise level which leads to a calmer animal, 54% lighter, better balance, less hand fatigue.

MODEL	DESCRIPTION
NEO-9	Neonate Rodent Tattoo System Includes Lab Animal Tattoo Identification Vol. 1,
NEO-9Q	Neonate Mice & Rats and DVD Instruction Video Quiet version of the NEO-9
ATS-3	General Rodent Tattoo System
	Includes Lab Animal Tattoo Identification Vol. 2,
	Adult Mice & Rats and DVD Instruction Video
ATS-3Q	Quiet version of the ATS-3
ATS-3L	Large Lab Animal Tattoo System with instruction book
ATS-3LQ	Quiet version of the ATS-3L
NEO-AP	Neonate Accessory Package
NTS-01	Micro Tattooing Platform
Large Lab	Animal Ilnarado Packago

Large Lab Animal Upgrade Package

LLA-AP Adds custom accessories and detailed instructions to easily tattoo identify large lab animals.

Battery Operation Upgrade Package

BPO-AP Adds remote operation capabilities to the ATS-3
Eliminates need for electrical outlet. Allows extended operation in any location. Ideal for field work animal identification!

Aramis Micro-tattoo System

A revolutionary method for humane identification of laboratory animals



Micro-tattooing forceps with disposable hypodermic needle. Individual identification is essential for maintenance of health/study records and management of colonies of laboratory animals. This

instrument is in compliance with regulatory agencies and research protocol requirements for care and use of laboratory animals.

Advantages: Permanent mark is easily readable on pigmented or albino animals. Rapid and easy to apply. Almost infinite ID numbers. Sterile and disposable hypodermic needles prevent spread of potentially infectious disease. Inexpensive and humane.

Instructions: Choose the needle. Fill ink tank. Immobilize animal. Squeeze instrument. Identification with grid location

The needle is re-inked when it enters the ink tank on the other side.

Discomfort of animal is minimal and equivalent to a quick injection with a very fine needle.

Kit includes: 1 oz. of Ketchum green tattoo paste, 1 aluminium planchette, Plastic holding case, 2 practice hypodermic needles

MODEL	DESCRIPTION
MTK-ARAMIS	Complete Microtattoo Kit
MTP-1	Green Tattoo Paste, 1 oz.
MTP-5	Green Tattoo Paste. 5 oz.

Ear Punch





MODEL	DESCRIPTION
EP-S-901 EP-S-902 EP-T-900 EP-T-M900	1mm Punch (scissor style) 2mm Punch (scissor style) Ear Punch 2mm (thumb style) Miltex 2mm (thumb style)

Clipper Style Ear Punch

► 2mm

► Small animal ear punch



MODEL	DESCRIPTION
EP-900-CLP	Clipper Style Ear Punch

Small Animal Ear Tag

Stainless steel applicator is designed to seal tags with minimal pressure, while providing a secure seal. Applicator can be used with or without the spring. Spring applies slight closing pressure to help hold tag in applicator prior to sealing.





MODEL **DESCRIPTION** EP-1005-S1 Stainless Steel Small Animal Ear Tag Applicator

Small Animal Ear Tags (1,000 pieces) Custom numbering available. Visit braintreesci.com for details

Ear Puncher

EP-1005-1

A small and efficient ear puncher with spring action. Allows user to come closer when marking animal and is



also equipped with a sloped edge for a clean cut. Autoclavable, but should be lubricated afterwards for long and trouble free usage. 11cm long with a 2mm diameter hole.

MODEL	DESCRIPTION	HOLE DIAMETER
EP-A7020	Ear Puncher	2mm

Ear Punch Pincher

These pinchers were developed after having several testimonies from customers with sore wrists and thumbs from using small ID punchers. The Ear Punch Pincher relieves stress on user during ID marking as it requires a very gentle pressure to cut a hole.

Stainless steel puncher has a sloped edge which provides a cut rather than a punch, which minimizes animal discomfort. Autoclavable, but should be lubricated afterwards for long and trouble free usage.

MODEL	DESCRIPTION	HOLE DIAMETER
EP-SA7000	Ear Punch Pincher	2mm
EP-SA7075	Ear Punch Pincher	2.75mm

SMART Tager

Continuous Small Lab Animals Ear Tag Applicator for mouse and rats. SMART Tager is an innovative applicator, which



allows for continuous and fast application of ear tags to lab animals for the purpose of labeling, category and management. Unlike any other ear applicators, SMART Tager is specifically designed and built for continuous ear tagging. One single load of ear tag strip is able to label 10 animals. Easy, fast and efficient!

- ► SMART Tager and tags can be sterilized at 135°C for one hour. Tags are made of clinically proven metals, and ear tag strips are adhered with medical grade epoxy resin, which will not cause allergy, or tissue damage
- ➤ Single ear tag inside: 7/16" length x 9/64" height
- ➤ Single ear tag outside: 9/16" length x 3/16" height x .140" width

MODEL	DESCRIPTION	
ST-201 ST-205	SMART Tager Continuous Applicator Small Animal Ear Tags, 1,000 tags	



La Pias Ear Tags

Animal identification made easy

Specially suited for use with small lab and research animals (mice, rats and other rodents). Light weight easy-to-read tags allow for trouble-free identification.

- Ear tags are individually numbered (additional numbering online)
- ► Available in 5 colors
- Once applied, they cannot be easily removed
- Laser-etched number provides durability
- Stainless steel (non-colored) and customized tags available – call or visit braintreesci.com





Ear tag applicator required for attachment

MODEL	DESCRIPTION	COLORS	NUMBERS
567-7920	Ear Tag, Mouse	5 colors	1-20
567-7940	Ear Tag, Mouse	5 colors	21-40
567-80100	Ear Tag, Mouse	Red	1-100
567-80200	Ear Tag, Mouse	Red	101-200
567-81100	Ear Tag, Mouse	Green	1-100
567-81200	Ear Tag, Mouse	Green	101-200
567-82100	Ear Tag, Mouse	Blue	1-100
567-82200	Ear Tag, Mouse	Blue	101-200
567-83100	Ear Tag, Mouse	Light blue	1-100
567-83200	Ear Tag, Mouse	Light blue	101-200
567-84100	Ear Tag, Mouse	Black	1-100
567-84200	Ear Tag, Mouse	Black	101-200
567-8520	Ear Tag, Rat	5 Colors	1-20
567-8540	Ear Tag, Rat	5 Colors	21-40
567-86100	Ear Tag, Rat	Red	1-100
567-86200	Ear Tag, Rat	Red	101-200
567-87100	Ear Tag, Rat	Green	1-100
567-87200	Ear Tag, Rat	Green	101-200
567-88100	Ear Tag, Rat	Blue	1-100
567-88200	Ear Tag, Rat	Blue	101-200
567-89100	Ear Tag, Rat	Light blue	1-100
567-89200	Ear Tag, Rat	Light blue	101-200
567-90100	Ear Tag, Rat	Black	1-100
567-90200	Ear Tag, Rat	Black	101-200
56791	Ear Tag, Applicator		
56792	Ear Tag, Backing only, 100/pack		

RFID Transponders for Animals

Radio frequency identification provides laboratories with a secure method to identify animals. Unified information devices (UID) provides implantable transponders, readers, and multiple tag programming that is compatible with any LIMS system. UID also creates customized software solutions based on individual laboratory processes in order to computerize Excel sheets. UID transponders and readers integrate flawlessly with Provantis®, Pristima™, PDS, Topaz, and many others for easy and secure data collection. UID also has a complete line of Trovan and ISO Standard compatible transponders available. Implantable

Each transponder is supplied in a triple ground cannula for easy insertion.

Implantable RFID Chips for Mice

- ► Smallest transponder on the market
- ► 1.4mm x 8.5mm in a sharp cannula
- Sterile and individually packaged



Implantable RFID Chips for Rats

- ► The most widely used size for rodents and other animals
- ► 2.1mm x 12mm in a sharp cannula
- ► Sterile and individually packaged
- ► Temperature available

Hand Held Transponder Reader

- ► USB or Bluetooth connectivity
- ► Battery powered
- ► Available protective case

UID readers are designed to work with the secure UID transponders. All UID Readers are fully compatible with any LIMS or other software that allows input of Identification Data.

LF Desktop Reader

- ► Frequency: 124 kHz, 134.2 kHz
- ► Reading Systems: ASK, ISO FDX-B, ISO KDX, PSK
- ► Interface: USB. HID
- ► Size: 110mm diameter x 30mm height
- ► White LED indicator lights
- ► Works with all UID transponders

UID LF Desktop reader combines the functionality of a handheld reader in a stationary desktop model. This LF Desktop reader connects directly to a PC and can operate in USB or HID mode for simple communication to most any software platform. LF Desktop reader works with UID transponders. Simple low cost desktop reader for transponder/microchip identification. White light ring illuminates when it is powered and it flashes when a chip is present.



CENTIMETERS

RFID-UTD-100



RFID-HRH1-HP

Base Station High Power Reader

High powered reader with read distances of up to 9". With 6' antenna cable and loop antenna reading the microchips of all animals is easy. Communication is via Serial or HID Keyboard output and compatible with any software system.



-		
MODEL	DESCRIPTION	QTY
RFID-UBS-200	Base Station Reader	
RFID-UC-1485	Mouse Glass with cannula	24
RFID-UC-1485Q	Mouse Glass with cannula	198
RFID-UC-1485R	Mouse Glass with cannula	990
RFID-UC-2112	Rat Glass with cannula	24
RFID-UC-2112Q	Rat Glass with cannula	198
RFID-UC-2112R	Rat Glass with cannula	990
RFID-UPGI	Plastic Pistol Grip Injector	
RFID-UPGI-SS	Stainless Steel Injector Surgical Ready	
RFID-USI-1	Syringe Injector with Spring	5
RFID-URH1-1L-12	Hand Held Transponder Reader with charger	
RFID-URH1-HP	High Powered Handheld Reader -	
	temperature compatible	
RFID-UDT-100	LF Desktop Reader	
RFID-UCT-2112	Temperature Microchip	198
RFID-URH-1*	Hand Held Reader Case	

*BK = black, R = red, O = orange, BL = blue



CoreMarket Compact Portable Balances



Lock down mounting slot for Kensington[™] type

lock and cable. Dual tare keys, lightweight and portable, modern low profile design. Color coded, sealed keypad. Low cost and simple to use. External calibration. Battery power (6 x AA batteries) and includes AC adapter. Auto sleep/power down function to save battery life.

MODEL	CAPACITY	PLATFORM SIZE	READABILITY
CQT 202	200g	4.7 Ø/120mm Ø dia	0.01g
CQT 251	250g	4.7 Ø/120mm Ø dia	0.1g
CQT 601	600g	4.7 Ø/120mm Ø dia	0.1g
CQT 1501	1500g	4.7 Ø/120mm Ø dia	0.1g
CQT 2601	2600g	5.7 Ø/145mm Ø dia	0.1g
CQT 2000	2000g	5.7 Ø/145mm Ø dia	1g
CQT 5000	5000g	5.7 Ø/145mm Ø dia	1g

Specimen Box with cover



Specimen box holds rodents for weighing purposes.

Specifications: Dimensions: 4"H x 9"W

Weight: 157g

MODEL	DESCRIPTION
SR-8053	Specimen Boy with cover

CB Compact Portable Scale

- ► Portable with battery power
- ► Stainless steel pan
- ► q, oz and lb

Ideally suited for a variety of uses and applications, small and easy to use. Bright green backlit LCD display shows clear results. with a simple to use keyboard and Grade 304 stainless steel removable top pan for easy

cleaning. Weigh units: grams, ounces and pounds, selectable. Batteries included. Optional mains adaptor can be purchased.

MODEL	CAPACITY	PLATFORM SIZE	READABILITY
CB-501	500g	5.1" Ø/130mm Ø	0.1g
CB-1001	1000g	5.1" Ø/130mm Ø	0.1g
CB-3000	3000g	5.1" Ø/130mm Ø	1g

Anti-Vibration Table



Ergonomically styled, table offers a solid, stable surface developed specifically to help decrease vibration during measurement. When used with a weighing balance, it allows the balance to perform with marked precision, despite air currents or movements that might cause readings to fluctuate.

Easy to assemble, with all necessary tools supplied. Internal working surface measures 15.7" x 17.7" (400 x 450mm),

allowing ample space for a balance. Large, scratch-resistant dark granite slab sits on shock-absorbing rubber mounts, while leveling feet accommodate uneven surfaces. The balance fits in the middle of the granite surface, stabilizing the base and enabling greater precision.

MODEL	DESCRIPTION
AD-VT	Anti-Vibration Table

Perfusion System 5



AutoMate In Vivo Manual Gravity **Perfusion System**

Take the guesswork out of your new animal fixation system

Providing an option for scientists who would rather do science than design a system and source parts. Let AutoMate take the quesswork out of your new animal fixation system. Steady gravity-fed delivery of buffer and fixative, results in complete perfusion. Easy to set up, use and clean. Complete system with everything down to the needles. Fits in standard hoods at a fraction of the cost of a peristaltic pump and more reliable. One or two users can perfuse two mice simultaneously with the Double In Vivo system.



- ► Four reservoirs and two stopcocks are mounted for two independent wash buffer and fixative deliveries on the same ringstands
- ► 2-way manual stopcock makes for easy one-handed operation to switch solutions
- ► Consistent results steady gravity-fed delivery of buffer and fixative results in complete perfusion
- ► Easy to set up, use and clean complete system with everything down to the needles. Fits in standard hoods
- Fraction of the cost of a peristaltic pump and more reliable

MODEL	DESCRIPTION
IV-140	InVivo Perfusion System 140ml - Mouse
IV-800	InVivo Perfusion System 800ml - Rat
IV-4140	Double InVivo Perfusion System 4x 140ml - Double Mouse



ALZET® Osmotic Pumps



ALZET pumps are miniature delivery systems designed to provide constant, accurate administration of test agents. These self-powered pumps offer a convenient and efficient method for long-term dosing of mice and rats. Pumps are sold empty, and are easily filled with your test agent via syringe. Self-powered pumps are then implanted either subcutaneously or intraperitoneally. Twelve pump models offer a range of release rates and durations to meet your specific research needs. Continuous delivery of up to 4 weeks is feasible with a single pump, and even longer durations can be achieved through serial implantation of pumps.

Pumps sold in multiples of 10. Each package comes complete with one filling tube, 10 flow moderators and detailed instructions.

,	
MODEL	DESCRIPTION
AP-1003D	1µL/hr, 3 days, 100µL
AP-1004	0.11µL/hr, 28 days, 100µL
AP-1007D	0.5µL/hr, 7 days, 100µL
AP-1002	0.25μL/hr, 14 days, 100μL
AP-2001D	8μL/hr, 1 day, 200μL
AP-2001	1μL/hr, 7 days, 200μL
AP-2002	0.5μL/hr, 14 days, 200μL
AP-2004	0.25μL/hr, 28 days, 200μL
AP-2006	0.15μL/hr, 42 days, 200μL
AP-2ML1	10μL/hr, 7 days, 2ml
AP-2ML2	5μL/hr, 14 days, 2ml
AP-2ML4	2.5µL/hr, 28 days, 2ml

Filling Tubes

Filling Tubes supplied in multiples of 10.

	_	
	MODEL	DESCRIPTION
	A-FT100	Filling tube for 100 microliter pumps
	A-FT200	Filling tube for 200 microliter pumps
	A-FT2	Filling tube for 2 milliliter pumps
For prioring vioit braintraggal com		

For pricing visit braintreesci.com

Brain Infusion Kits

Many agents do not cross the blood-brain barrier sufficiently to evaluate their effects on the brain without administration directly into brain. Often local infusion directly into brain is only way to generate reliable data. For use with ALZET pumps for targeted delivery to the central nervous system.

- ► Infusion into cerebral ventricles exposes a wide variety of brain regions to infusate via cerebrospinal fluid which bathes brain
- ➤ Direct microperfusion of discrete brain structures results in localized distribution of infusate in target tissue

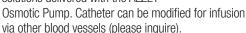
Includes materials for 10 brain infusions: 10 brain infusion cannulae, 10 vinyl catheter tubes, 40 depth-adjustment spacers, and instruction sheet.

MODEL	DESCRIPTION
BIF KIT1 BIF KIT2	28g, 3-5mm L 28g, 3-mm L, low profile, wide pedestal
BIF KIT3	30g, 1-3 mm L, low profile, wide pedestal

Intravenous Osmotic Pump Catheter



Braintree Scientific's Micro-Renathane® based catheter for the continuous, intravenous (via the jugular vein) administration of drug solutions delivered with the ALZET®



Supplied non-sterile

MODEL	DESCRIPTION
R-JVC-7710	Rat Intravenous Osmotic Pump Catheter
M-JVC-7700	Mouse Intravenous Osmotic Pump Catheter



Peristatic Pump

BS-900 Programmable Peristatic Pump

Have a need to accurately fill multiple bottles, vials or other containers with a liquid? The learn and repeat mode of the BS-900 Peristaltic Pump makes even the smallest of businesses highly productive right from day one. Pump can be integrated into existing production lines or simply stand alone.



BS-900 comes fully programmable and can be operated manually or with a PC through a RS-232 communication port at no extra cost.

Flow rates vary from a minimum of 0.5ml/hr to a maximum of 1250ml/min. The pump's specialty is its small scale production dispensing. It will fill numerous bottles, vials, etc. with fluids of all types. Equipped for mass production dispensing.

Easy-to-use keypad interface, space saving chassis: Foot print size of only 7.75" x 7".

Kit includes head, 4 ft. of tubing, nylon clamp ties and a vial of lubricant.

- Dispense and withdrawal pumping
- ► Dispense and withdrawal volumes separately accumulated
- ► Programmable dispense volumes
- ► Non-volatile memory of all operating parameters and pumping program
- ➤ Programmable phases allow complex pumping applications and interaction with external devices. RS-232 bi-directional control
- ► Built-in pump network driver. Pump network supports up to 100 pumps and other devices
- ► Two modes of RS-232 control: Basic and Safe. Safe mode provides communication error detection, loss of communication detection, and automatic transmitting of alarm conditions
- ► TTL I/O with software filtered control inputs to eliminate glitches and ringing on control inputs. Configurable TTL operational trigger
- ► Power Failure Mode: Restarts pumping program after a power interruption
- ► Audible alarm

MODEL DESCRIPTION BS-900P-B W/2 Roller Pumping Head, 1/4" tubing	
BS-900P-B W/2 Roller Pumping Head, 1/4" tubing	
BS-900P-C W/4 Roller Pumping Head, 1/4" tubing BS-900P-G W/4 Roller Pumping Head, 1/16" tubing	

BS-8000 and BS-9000 Programmable Syringe Pumps

Built for Automation

- ► Stand-alone or from a computer
- ► Infusion and withdrawal. Set a single pumping rate, set a dispensing volume, or program up to 41 pumping phases that change pumping rates, set dispensing volumes, insert pauses, control and respond to external signals, sound the buzzer





➤ Create expandable and reconfigurable multisyringe systems by attaching pumps to each other

General Features:

- Infuses and withdraws
- ► Accepts small syringes or large syringes, up to 60cc
- ► Dispense continuously at a fixed pumping rate as low as 6µL/hr or as high as 1200ml/hr
- ► Change pumping rate and direction while pumping
- ► Selectable rate units: µL/hr, µL/mn, ml/hr, ml/mn
- ► Dispense a specified volume
- ► Dispense according to a pumping program to:
 - ▶ Pre-program dispense volumes. Each volume can be different
 - ► Automatically change pumping rates or pumping direction
 - ► Ramp up or down the pumping rate
 - ► Timed delays between dispensers
 - ► Automatically pause program and wait for user to continue the dispense
 - Synchronize dispenses with other equipment or pumps to change pumping rates in reaction to a sensor or signals from other pumps
 - Send logic signals to other equipment. Change pumping rates in reaction to a sensor
 - ► Program audible alarm to beep at any time to alert operator
 - ► Enter pumping program from keypad or download from a computer
- ➤ Operates stand-alone, from RS-232 computer port or TTL logic interface
- ► Total volume pumped separately accumulated for infusion and withdrawal

Programming Features:

- ► 41 programmable phases
- Set event interrupts from external signals to cause automatic jumps to another part of the program
- ► Conditional jumps based on external inputs

Nested Loops:

► Repeat a section of the program continuously or a set number of times

Program Editing Functions:

- Insert and delete program phases
- ► Simplifies program development and updating
- ► Allows quick removal or addition of program phases
- ► Enter programs from keypad or computer
- ▶ Download or upload pumping programs from or to a computer. Store dispensing programs in a file, then download to one or more pumps. Specify in file to send a different pumping program of each pump in pump network
- ► Automatically change pumping rates
- ► Insert timed delays between dispenses

Multi-syringe pump has all programming features of single syringe pump with either 6 or 8 syringes.

MODEL	DESCRIPTION
BS-8000	Holds 1 Syringe up to 60cc
BS-9002	Holds 2 Syringes up to 60cc
BS-9006	Holds 6 Syringes up to 50cc
BS-9008	Holds 8 Syringes up to 10cc
BS-9012	Holds 12 Syringes up to 3/5cc

BS-500 OEM Application Syringe Pump

Specifically built for automation, this OEM pump operates from a computer

► Does not have a built-in user interface

► Chassis mountable: 9.5"L x 4.25"W x 4.125"H (23.5 x 10.8 x 10.5cm)

Operates from a 12V DC power source

► Holds one syringe up to 60cc

► Infusion rates from 0.73µL/hr (1cc syringe) to 2100ml/hr (60cc syringe)

- ► Includes all advanced functions and programming features of BS-8000 family
- ► Download free pump terminal emulator
- ► Custom modifications to the mechanics and firmware are available
- ► Computer controllable: networkable up to 100 pumps

Stand-alone operation: pre-program the pump with a dispensing program, then operate the pump from an attached foot switch, button, or I/O controller. Add the OEM Starter Kit to run as a fully functional, stand-alone pump. Open chassis design easily mounts into your system.

Features include infuse and withdraw, holds syringes 60 cc and below. Set a single pumping rate and/or dispensing volume. Program up to 41 pumping phases that change pumping rates, set dispensing volumes, insert pauses, control and respond to external signals, sound the buzzer. Network, control, and monitor up to 100 pumps from one computer. Dispensing accuracy of $\pm 1\%$. Motor stall detection available in the BS-501 model. Typically used in high pressure applications where there is a risk of exceeding the maximum force specified.

OEM Starter Kit

Allows user to interactively communicate with the pump from a computer.

Foot Switch

Allows user to start, stop, or trigger the next phase on syringe pump. Attach to a BS-500 to allow stand-alone operation. Utilizes TTL logic port on syringe pump.





MODEL	DESCRIPTION
BS-500	OEM Syringe Pump
BS-501	OEM Syringe Pump with Stahl Detection
	Includes an optical encoder that will detect and stop the
	motor during a Stahl
OEM-STARTER	OEM Starter Kit
	Includes power supply, pump-to-PC network cable and
	user manual
ADPT-2	Foot Switch

Braintree Scientific has low cost syringe pumps in stock for use in biomedical research laboratories!

BS-300 "Just Infusion"™ Syringe Pump

Just the features that you want, and none that you don't want to pay for

- Holds small or big syringes up to 60ml
- Pump continuously until user stops pump
- Infusion rate can be changed while pumping
- Remembers previous settings on power up
- ► Power failure mode allows pump to continue pumping after a reset
- Syringe purge mode
- ► Displays total volume dispensed in ml or µL units
- ► Maximum pumping rate of 1500ml/hr with a 60ml syringe
- Precise reproducible flow rates
- ► Selectable infusion rate units: ml/hr, µL/hr, ml/min, µL/min
- "Infuses only!"

MODEL	DESCRIPTION
BS-300	"Just Infusion" Syringe Pump™

Programmable Microfluidics Syringe Pump

- Smoothest microfluidic syringe pump on the market.
 Holds 1 syringe up to 60ml
- ► Advance per step: 4.252232 nanometers
- Infusion rates from 0.008nl/hr (0.5ml syringe) to 2545µl/min (140ml syringe)
- ► Available in double syringe (BS-8004X) version
- ► Easy-to-use keypad interface
- ➤ Space saving chassis: foot print size of only 5.75" x 8.75" won't take up unnecessary space on laboratory or production bench
- ► Includes all advanced functions and programming features of BS-8000 family
- ► Includes X upgrade smooth linear/gradient increasing and decreasing pumping feature

MODEL	DESCRIPTION
BS-8002X	Single Syringe Pump
BS-8004X	Dual Syringe Pump

Syringe Heater

Heating device for syringes that require temperature-controlled dispensing. Heats syringe to over 100°C. Temperature sensor in heating pad. Digitally set heater setpoint, setpoint is retained in memory. Controller will heat syringe and hold set temperature using an on/off or PID control algorithm. Multiple syringe heater pads can be



attached to the control unit. Pump sold separately.

	·
MODEL	DESCRIPTION
BS-SYRH	Syringe Heater Kit includes Control Unit, power cable and Primary Syringe Heater pad
BS-SYRH2	Pad2 Kit for attaching a second heating pad
BS-SYRH3	Pad3+ Kit for adding three or more pads
Temperature sensed in primary heating pad only	

Model BSP-99M Multi-Speed



Multi-speed pumps infuse for times ranging from 20 minutes to 2 weeks! Model BSP-99M syringe pump has 99 speeds and is designed for use with readily available glass and plastic syringes (up to 50ml).

- ► Built in flow chart
- ► 99 equally spaced infusion speeds
- ► Calibrated sheet providing flow rates for the major brand syringes
- ► Automatic shut-off
- ► Sound alarm to signal an empty syringe

MODEL	DESCRIPTION
BSP-99M	(0.145 to 140ml/hr)

Micro-Syringe Adapter

Micro-Syringe Adapter is designed to be used in BSP syringe pumps when using syringes of 5ml or smaller. It is possible to insert two micro-syringes into the adapter.

Note: Rates specified obtained with a 50ml syringe

MODEL	DESCRIPTION
BSP-ACC	Micro-Syringe Insert

Model BSP Single-Speed

Single speed pumps provide from 40 minutes to 3 days of continuous infusion with flow rate dependent on syringe size.

Model BSP single speed syringe pump is specifically designed to infuse fluids at an exact and reproducible flow rate from either glass or plastic syringes. Model BSP syringe pumps are equipped with:

- ► Automatic shut-off switch (disconnects power at end of syringe)
- ► Indicator on light

A calibration index is provided for infusion rates with different size syringes.

MODEL	DESCRIPTION
BSP-1	0.01ml/min; duration = 3 days +
BSP-2	0.12ml/min; duration = 6.9 hrs. +
BSP-3	1.21ml/min; duration = 41 minutes +
BSP-4	0.04ml/min; duration = 20 hrs. +
BSP-5	6ml/min; duration = 8 minutes +
BSP-6	36.2ml/min; duration = 1 minutes +

Special order interchangeable motors to achieve different rates.

Anesthesia and Euthanasia



Small Animal Anesthesia Systems that evolve with your needs

Safe, easy-to-use anesthesia systems for small animals

E-Z Anesthesia customizes systems to integrate seamlessly with your existing equipment. These systems can be customized to satisfy your current needs while providing the flexibility to expand and meet future requirements.

An innovative solution that offers the ultimate in user-friendly, simple operation with a level of precise automation that minimizes operator error. Each system incorporates a breathing valve that controls gas flow to the nosecone and protects both animals and technicians from overexposure to gas. Switching from working with mice to rats is as easy as changing a nosecone.

Most E-Z systems are expandable to accommodate up to four breathers. The system is adaptable to a wide range of procedures from Stereotaxic, MRI, X-Ray, PET, simply by interchanging a breather.

New! AD-5000 Digital Anesthesia System

Digital flow control and heating beds



This system takes the vaporizer to the next level, merging the best of both worlds with a very reliable, user-friendly, state-of-the-art system. Other systems that rely on a fully electronic vaporizer limit the user to a single output and require constant monitoring for optimal results. Digital Anesthesia System uses the always reliable TEC 3 vaporizer as the cornerstone and enhanced its features with a digital interface.

require constant monitoring for optimal results.

Digital Anesthesia System uses the always reliable TEC 3 vaporizer as the cornerstone and enhanced its features with a digital interface.

Digital Anesthesia System incorporates a vivid touch screen that allows operator to have a full

range of features. Exclusive digital flow control gives user a precise range of 0.5 to 2.5 lpm flow rate per connection. Digital Anesthesia System is not limited to a single output — user can run an induction chamber with two additional breathing circuits simultaneously. Allows the user to choose any combination of outputs while our digital flow control automatically adjusts for correct flow rates. Induction chamber incorporates an automatic flush button to prevent undesired exposure when transferring animals. Induction chamber and breathing circuits include individual timers for accurate monitoring and prevention of over exposure to the patients.

System includes all new digital warming beds to help maintain the patient's body temperature during surgical procedures. Patented warming system allows user to heat the induction chamber and breathing circuits. Warming beds range from 95°-105°F or 35°-40°C with easy adjustability to maintain desired temperature. Each warming circuit displays the set temperature and can be independently adjusted. When all procedures are complete, simply press "Done" button to systematically shut down in the proper sequence to ensure a longer life for the system.



Warming Beds to Suit Your Needs

Choose from flat or V-shape warming beds (XL flat beds available upon request). Constructed of heavy gauge stainless steel. Heat evenly distributes throughout the bed surface. Beds range from 95°-105°F or 35°-40°C.

Features:

- ► Complete turnkey system
- ► Simple to set up and use
- ► Multiple languages
- ► Digitally control 3 warming beds
- ► Individual temperature control with Fahrenheit or Celsius option
- ► Temperature safety monitoring
- ► High quality brass vaporizer
- ► Digitally control flow rates
- ► Easy flow rate adjustments
- ► Independent timers for each breathing circuit
- ► Chamber flush button
- ► Gas tank monitoring option
- ► Remote access available
- ► "Done" button (systematic shutdown)
- ► 0.5 2.5 LPM flow range

System includes:

MODEL

- ► Digital anesthesia vaporizer machine
- Oxygen or air regulator
- ► 1 EZ-178 induction chamber
- ► 1 HB-163 chamber warmer
- ► 2 surgery beds with breathers flat or V-shaped
- ► 2 mouse and 2 rat nosecones with plugs

DESCRIPTION

► 1 case of refresh charcoal filters

AD-5000V AD-5000F	Digital Anesthesia System with V-Shaped Bed Digital Anesthesia Systen with Flat Bed
Optional Acces	sories
HB-1000-F	Heating Bed, Flat (10" x 4" x 1")
HB-1000-V	Heating Bed, V-shaped (10" x 4" x 1")
HB-103-F	Heating Bed, Flat, with EZ-103-H Microflex Breather
HB-103-V	Heating Bed, V-shaped with EZ-103-H Microflex Breather
HB-163	Heating Bed, (11" x 6" x 1")
EZ-103-H	Microflex Breather for Heating Bed
EA-350	Tank Talker Wireless Tank Monitor System



Single Animal System

Single Animal System is designed as an economical alternative when a simple, entry-level system is sufficient.



Accommodates animals ranging in

size from neonate mice to rabbits. Designed for treatment of one animal at a time. Y-splitter valve directs anesthetic output to either induction chamber or breathing circuit. Oxygen flush purges induction chamber before removing animal. Carry handle facilitates safe, easy transport of unit.

System includes:

- ► EZ-108SA Single animal vaporizer unit
- EZ-103A Microflex mouse/rat non-rebreathing device plus 2 plastic surgery beds
- ► EZ-178 mouse/rat Sure-Seal induction chamber
- EZ-258 charcoal filters (8)
- ► O₂ Regulator specify which oxygen regulator is required: EZ-320 industrial CGA540 or EZ-330 medical yoke fitting
- ► Mouse/rat nosecones, nosecone plugs and all connecting tubes

Single Animal System with heat includes everything above plus:

- ► EZ-1000 E-Z heat controller
- ► HB-1000V heated bed, V-shaped
- ► EZ-163 chamber warmer

MODEL	DESCRIPTION
EZ-SA800 EZ-SA800-H	Single Animal System Single Animal System with heat

Classic Small Animal System

Classic starter system includes core EZ Anesthesia components without heating system.



Featuring the Microflex Breather,

a low profile breather

is suitable for work under microscopes and other applications where a smaller breather is required. Also available in plastic for MRI use.

System includes:

- ► EZ-150C Classic vaporizer unit
- ➤ (2) EZ-103A Microflex mouse/rat non-rebreathing devices plus (2) plastic surgery beds per breather
- ► EZ-178 Mouse/Rat Sure-Seal Induction Chamber
- ► EZ-258 charcoal filters (8)
- ▶ O₂ regulator specify which oxygen regulator is required: EZ-320 industrial CGA540 or EZ-330 medical yoke fitting
- ► Mouse/rat nosecones, nosecone plugs and all connecting tubes

Classic Small Animal System with heat includes above plus:

- ► EZ-1000 E-Z heat controller
- ► (2) HB-1000V heated bed, V-shaped
- ► EZ-163 chamber warmer

MODEL	DESCRIPTION
EZ-7000	Small Animal Anesthesia System no heat
EZ-7000-H	Small Animal Anesthesia System with heat

Multi-Animal System

Featuring the Multi-Animal Breather for use with x-ray, MRI and PET imaging equipment

Breather incorporates five ports that can accommodate five mice or three rats simultaneously from a single gas line. Custom breathers can also be made to integrate with existing

be made to integrate with existing equipment. Breather is supplied with five mouse nosecones and three rat nosecones. Tight fitting nosecones eliminate gas leakage and protect personnel from gas exposure.

System includes:

- ► EZ-150C Classic vaporizer unit
- ► EZ-109 Multi-animal non-rebreathing unit
- ► EZ-178 Mouse/rat sure-seal induction chamber
- ► EZ-258 Charcoal filters (8)
- ► O₂ Regulator specify which oxygen regulator is required: EZ-320 industrial CGA540 or EZ-330 medical yoke fitting
- ► Mouse/rat nosecones, nosecone plugs and all connecting tubes

Multi-Animal System with heat includes everything above plus:

- ► EZ-1000 E-Z heat controller
- ► (3) EZ-163 heated bed, XL size

MODEL	DESCRIPTION
EZ-7109	Multi- Animal Anesthesia System no heat
EZ-7109-H	Multi-Animal Anesthesia System with heat

EZ-AF9000 Auto Flow System

Precise, consistent, preset flow rate from each outlet, no variables. Offers highly efficient, precise gas flow that is easy to use.



- Fixed flow rates are set specifically for mice and rats
- ► Each output is individually controlled with simple on/off switch
- ▶ 5 outputs supply anesthesia to induction chamber and up to 4 breathers
- ► Preset flow rates eliminate need for flowmeters and manual adjustments
- Protocols are easily followed without calculations
- ► Flow rate is not impacted by the accessories connected
- ► Precise, low flow gas saves money and protects personnel
- ► Pushbutton oxygen flush purges induction chamber before removing animals

System includes:

- ► EZ-190F Auto-flow vaporizer unit
- ► (2) EZ-103A Microflex mouse/rat non-rebreathing devices plus (2) plastic surgery beds per breather
- ► EZ-178 Mouse/Rat sure-seal induction chamber
- ► EZ-258 Charcoal filters (8)
- ► O₂ Regulator specify which oxygen regulator is required: EZ-320 industrial CGA540 or EZ-330 medical yoke fitting
- ► Mouse/Rat nosecones, Nosecone plugs and all connecting tubes.

Auto Flow System with heat includes everything above plus:

- ► EZ-1000 E-Z heat controller
- ► (2) HB-1000V heated bed, V-shaped
- ► EZ-163 chamber warmer

MODEL	DESCRIPTION
EZ-AF9000 EZ-AF9000-H	Auto Flow System Auto Flow System with heat



Single Animal Vaporizer Unit



An economical choice for single animal treatment.

MODEL	DESCRIPTION
EZ-108SA	Single Animal Vaporizer Uni

Classic Vaporizer Unit



Unit incorporates a manual fiveoutput manifold that includes a new flowmeter configuration that improves upon the original E-Z Anesthesia design.

MODEL	DESCRIPTION
EZ-150C	Classic Vaporizer Unit

Auto Flow Vaporizer Unit



Featuring an automatic five-output manifold that does not require flowmeters.

MODEL	DESCRIPTION
EZ-190AF	Auto Flow Vaporizer Unit

Vaporizers

Calibrated 0.25 to 5% using a laser refractometer for the specified anesthetic drug. Complete with safety lock to help prevent accidental turn-on of dial. Fluctuations in temperature, flow rate and duration of use is automatically compensated for during use. When used with I.P.P.V. the variation in output is negligible.

Other drug type vaporizers available for Halothane, Sevoflurane, Enflurane, call for pricing. Drug not included.

,	
MODEL	DESCRIPTION
VP-I	Cage Mounting/Well Fill, Isoflurane

Coaxial Breathing Apparatus

COAX-4 (made from durable Delrin) is a co-axial anesthesia breathing apparatus for maintaining the surgical plane that can be used for mouse to rat sized animals. Fresh anesthetic gas enters side barbed



fitting set with 1/16" tubing that limits dead space. Waste Anesthetic Gas (WAG) is scavenged by end barbed fitting to the WAG site. Masks (two included) utilize a replaceable and transparent silicone diaphragm to seal nose. Accepts standard 1/4" tubing. Ten feet of silicone tubing is included.

MODEL	DESCRIPTION
COAX-4M	COAX-4 with 2 mouse sized masks
COAX-4R	COAX-4 with 2 rat sized masks
COAX-4MR	COAX-4 with 2 mouse and 2 rat sized masks
VM-33-S	Replacement transparent silicone diaphragms (7/cs)
COAX-4M2M	2 mouse sized masks only
COAX-4R2R	2 rat sized masks only

Rodent Anesthesia Face Mask Kit

- ► Fits mice and rats of all sizes. anatomically correct fit
- ► Zero leakage or dead space
- ► Gas flow range of 200 up to 1000cc/min
- ► Easy to customize
- ► Versatile for a wide variety of applications
- ► Quick change between masks
- ► Access eyes and head of the rodent while sealing nose and mouth
- ► Reinforced stress points for increased durability
- ► Mask provides stability of animal for examinations and surgery
- ► Can be easily incorporated in existing examination procedures
- ► Waste-line connects to gravity or vacuum filters
- ► Swiveling ports for greater flexibility in positions
- ► Adaptable to stereotaxic systems

DESCRIPTION

► Pre-heat air with heating pad

Kit includes:

MODEL

- ► Two 6' tubing
- ► Two 1/4" adapters
- ► Two 3/8" adapters

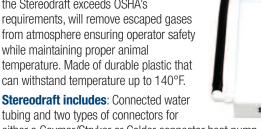
	MODEL	DESCRIFTION
	XENO-CO-KIT	Complete Rodent Face Mask Kit includes small, medium, large and extra large face masks
	XENO-MI-KIT XENO-LR-KIT	Mouse Face Mask Kit includes small and medium face masks Rat Face Mask Kit includes large and extra large face masks
Individual Face Mask Kit		e Mask Kit
	XENO-S	Small Face Mask Kit
		mask fits a less than 2 month old mouse
		Weight: 1.5g to 15g
		Mask measures: 8mm aperture x 25mm overall length
	XENO-M	Medium Face Mask Kit
		mask fits 2 months and older mouse or a small rat
		Weight: Mouse - 15g to 26g, Rat - 3g to 20g
		Mask measures: 10mm aperture x 30mm overall length
	XENO-L	Large Face Mask Kit
		Weight: Mouse - 26g and greater, Rat - 20g to 250g
		Mask measures: 13mm aperture x 35mm overall length
	XENO-XL	Extra Large Face Mask Kit
		Weight: Rat - 250g to 750g
		Mask measures: 18mm aperture x 42mm overall length





Stereodraft

Stereodraft (patent pending) is the first heated surgical table with bi-level vacuum designed specifically for standard stereotaxic frames using gas anesthesia. Bi-level vacuum, independent studies show the Stereodraft exceeds OSHA's requirements, will remove escaped gases from atmosphere ensuring operator safety while maintaining proper animal temperature. Made of durable plastic that can withstand temperature up to 140°F.



tubing and two types of connectors for

either a Gaymar/Stryker or Colder connector heat pump, 90°F, luer lock quick disconnect and T adapters, three adhesive backed velcro tubing holders, 10' medical grade white tubing.

MODEL	DESCRIPTION
SD-M-01	Stereodraft, mouse 3.5"W x 6"L x .75"H
SD-R-01	Stereodraft, rat 3.5"W x 10"L x .75"H

Manifold

Manifold supports multiple procedures while utilizing only one vaporizer. While offering individual shut-offs, manifold provides intake of new gas to designated locations while opposite side provides output for used gases to a scavenger unit. Accepts 1/4"-3/8" tubing.



MODEL	DESCRIPTION
MAN-2	2 Station Manifold
MAN-3	3 Station Manifold
MAN-4	4 Station Manifold

One Directional Manifold



One directional manifold works like traditional two directional manifold but allows placement versatility. One directional manifold can be used to deliver fresh anesthetic gases or collect waste anesthetic gases (WAG). Gray standard, white recommended for WAG. Accepts 1/4"-3/8" tubing.

7' clear tubing with gray plate or 7' white tubing with white plate included

MODEL	CONFIGURATION
M1-2	One directional manifold for 2 anesthetic devices, gray
M1-3	One directional manifold for 3 anesthetic devices, gray
M1-4	One directional manifold for 4 anesthetic devices, gray
M1-P	One directional manifold plate with feet only, gray
Add M at and	d of model number for white plate. Example: M1. 2M would be a one directions

Add W at end of model number for white plate. Example: M1-2W would be a one directional manifold for 2 anesthetic devises with white plate.

Shop online at www.braintreesci.com

VentStar Small Animal Ventilator



- ► Suitable for mice, rats, guinea pigs and animals weighing 10g-1kg
- ► Input power range: 100 ~ 240V, 50 /60Hz, 24V, 40W, 1.67A adapter DC power supply
- ► Provides safe, effective intermittent positive pressure ventilation (IPPV)
- ► Volume and pressure modes
- ➤ Sound, intelligent text, error code and other fault alarm alerts
- ► Small, compact layout, flexible operation, 7" LCD touch screen, wideangle visual
- ► Pressure-time graph can be displayed in real time in volume and pressure modes
- ▶ 10 groups of different respiratory parameters can be stored and recalled
- ► Breathing frequency can be switched between 10 ~ 300bpm
- ► Tidal volume range:0.05ml ~ 5ml
- ► Airway pressure range: 1~50cmH **2**0, the accuracy range: ±0.7 cmH 2 O; positive end; expiratory pressure (PEEP) range is 0~10cmH 20
- ► Set the respiratory parameters such as PIP/PEEP/Sigh/INSP.Hold/EXP.Hold
- ► After submitting the animal weight, device automatically sets the reference breathing parameters
- ► Adjustable range of I:E ratio is from 20% to 80%; sigh increases tidal volume from 0 to 20%, and can set auto-sigh once after every 10 to 999 breaths or manual control

MODEL	DESCRIPTION
R415	VentStar Small Animal Ventilator

Vacuum Control Station



Designed to regulate a vacuum source while scrubbing scavenged waste anesthetic gases before re-entering the atmosphere. Comes complete with 0-5 lpm flowmeter, F/AIR canister holder, two 90-degree adapters for canister, 15' medical grade white tubing, and both DISS 1/4" hose barb connectors for vacuum source. Tabletop or wall mountable, 9"L x 6"W x 11"H, Charcoal canisters not included.

MODEL	DESCRIPTION
VCS-01	Vacuum Control Station

Vacuum Pump

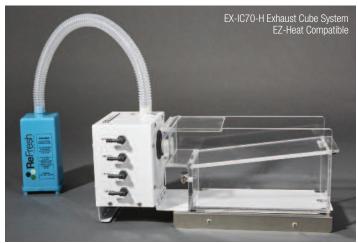
- ► Top mounted power switch
- ► Whisper quiet and very low vibration
- ► Maintenance-free drive system and proven long diaphragm life
- ► Ultimate vacuum (abs.) mbar/torr 100/75
- ► Sized: 9.75"L x 4.75"W x 5.75"H

ME 1 diaphragm pump offers a compact, high performance and easy-to-use solution vacuum source. PTFE diaphragm and valves are rugged and provide high chemical resistance. Requires minimal bench top space.

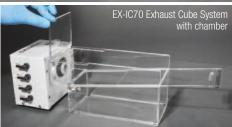
MODEL	CONFIGURATION
ME-1	Vacuum Pump 120V



New! EX-IC Exhaust Cube







EX-IC Exhaust Cube is the latest active waste gas solution from E-Z Anesthesia. EX-IC features an internal blower that captures waste gas from the vented chamber and up to four breathing devices. Calibrated specifically for small animal anesthesia applications, EX-IC will safety capture waste gas without pulling fresh gas away from animal. Device has a 22mm exhaust port that can be used with a charcoal filter or routed to a fume hood.

MODEL	DESCRIPTION
EX-IC70	Exhaust Cube System: Cube and Chamber
EX-IC70-H	Exhaust Cube System, E-Z Heat Compatible:
	Cube, Chamber, Adaptor Plate, Charcoal Filter and Tubing
EX-IC	Exhaust Cube

New! EZ-170 Vented Chamber

EZ-170 vented chamber is used with the EX-IC exhaust cube. This chamber is designed to control waste gas without a "chamber flush".

As chamber is opened, EX-IC cube will capture any waste gas that escapes.



MODEL	DESCRIPTION
EZ-170	Vented Chamber



Anesthesia Gas Filter

An effective device for the removal of excess halogenated anesthetic gases (after patient inhalation) in the operating room. Removes no less than 50 grams of anesthetic gas.

- ► 12-15 hour use life
- ► Made in the USA



MODEL	DESCRIPTION
BSCI-AIR-EA	Anesthesia Gas Filter
RSCI-AIR-CS	Anesthesia Fas Filter - case of 8

F/AIR Canister



A sensible answer to anesthesia gas problems in the operating room, the F/AIR anesthesia gas filter was specifically designed to remove waste anesthesia gases from the operating room environment. Economical to use, with an average useful life of 12 to 15 hours, F/AIR is easily adaptable to anesthesia machines. F/AIR can remove no less than 50 grams of pure halogenated anesthetic gases and can then be conveniently discarded.

MODEL	DESCRIPTION
F-AIR-EA F-AIR-CS F-AIR-KIT	F/Air Canister F/Air Canister - case of 8 F/Air Kit - Includes holder, scavenger tube and one canister

Vertical Canister Holder





Vertical canister holder ensures proper canister position. A canister on its side will allow waste gases to travel across the top, limiting its effectiveness, while a canister on a table will block waste gases from exiting. Vertical canister holder accepts any canister 3" dia. or smaller. Model FC-A is included and connects standard 1/4" tubing to the canister.

The vertical holder is for passive systems only and can be tabletop or wall mountable

MODEL	DESCRIPTION
CHU-FC CHU-1 FC-A	Vertical canister holder, wall mountable (FC-A included) Vertical canister holder, wall mountable (FC-A not included) 90 Degree Adapter

ReFresh™ Anesthetic Waste Gas Canister

Save time and money

Refresh Canisters last twice as long, capture twice the amount of Isoflurane with less waste and increased safety. With a decrease in canister changeovers there is potential for cost savings up to 40%.



MODEL	DESCRIPTION
EZ-258	ReFresh™ Gas Canister - case of 8

Anesthesia and Euthanasia



CO₂ Chamber

The cleanest CO2 induction chamber on the market!





- ► For mice and rats
- ► Simple, quick and easy to use!
- ► Small foot print 9" diameter, easy to keep on bench
- Quick connect with valve closes when disconnected, keeps CO₂ in tube and chamber
- ▶ Door allows user to place animals in chamber without losing CO₂. Provides for ultra quick animal induction
- ► 7' tube easily connects to CO₂ source
- ➤ Disposable bag liner animal feces and urine remain in bag with animal Chamber is always clean
- ➤ Delivery tube within chamber fills chamber from bottom, decrease induction time, "more humane"
- ► Clear acrylic top easy to see animals in chamber
- ➤ Solid sides prevents viewing of animals during the process
- ► Includes see thru acrylic lid with door and quick connect with valve, 7' tubing, 50 disposable insert bags

MODEL	DESCRIPTION
COIC	CO ₂ Chamber
COBL	Disposable Liner Bags (50 bags/pk)

Induction Chamber



Clear, durable, acrylic constructed induction chamber. Fresh anesthetic gas from vaporizer or manifold enters a barbed fitting and is directed to the bottom of chamber. Scavenged gas exits the opposite fitting to waste gas site.

Routered top ensures perfect fit. No corners facilitate easy proper cleaning. Stainless steel false floor and 10' blue tubing provided. Accepts tubing from 0.25" - 0.375" inner dimension.

Inner Dimensions: 7.5"W x 8"H • Overall Dimensions: 10"W x 10"H

MODEL	DECORIDATION	
MODEL	DESCRIPTION	
IC6X4	Small Induction Chamber Inner Dimensions: 5.25"W x 3.5"H ◆ Overall Dimensions: 7"W x 7"H	
IC8X8	Large Induction Chamber	

Gas Anesthetizing Box

For use with rodents



Laboratory rodents are largely color blind, so a red box merely acts as a non-threatening shelter.

The Red anesthetizing box allows for observation while anesthetizing.

- ► For use with rats and mice
- ► Sliding, machine tooled top allows for easy access
- ➤ Removable interior, perforated floor permits the rodent to be elevated off the floor allowing for a cleaner environment
- ► Made of durable plastic, this box should last for years
- ► Not for use with liquid organic solvents

MODEL DESCRIPTION

AB-RED-1 Red Gas Anesthetizing Box (25.4cm L x 10.16cm W x 10.16cm H)

Gas Anesthetizing Box

For use with rodents

The 0.25" thick transparent plastic anesthetizing box allows for constant observation while anesthetizing. Helps protect against accidental overdosing

For use with rats and mice. Easy to move machine tooled sliding top.

Made of durable plastic, this box should last for years.

Not for use with liquid organic solvents.

MODEL DESCRIPTION

AB-1 Small Box 10"L x 4"W x 4"H
(25.4cm L x 10.16cm W x 10.16cm H)
AB-2 Large Box 10"L x 8"W x 8"H
(25.4cm L x 20.3cm W x 20.3cm H)

Additional sizes are available, please call for a quote





Quietek™

Automated euthanization device ensures AVMA compliance



Ensure that laboratory rodents are humanely euthanized without disrupting laboratory workflow. Quietek is an affordable, fully-automated device specifically designed to comply with 2013 AVMA guidelines

- ➤ Adheres to stringent new guidelines The 2013 AVMA Guidelines for Euthanasia of Animals state that flow rate for lab rodent CO₂ euthanasia systems should displace 10% to 30% of chamber or cage volume/minute. NIH requires all new research plans and renewals be evaluated using these guidelines.
- ► Takes the guesswork out of euthanasia Designed by animal research facility managers and scientists, easy to use, accurate system ensures that users correctly administer CO₂ by automatically calculating gas delivery for cage volume and desired fill rate. CO₂ conditions will be consistent every time, thereby eliminating a source of variation.
- ► Fail-safe and easy to operate Simply push start. There are no valves to turn (or accidentally leave open) between runs and no regulators to adjust. Quietek also features a key lock that prevents unwanted or accidental tampering with settings.
- Reduces impact on lab Quietek seamlessly integrates into current protocols. Use it with most common chambers or cages. Lids are available in several sizes.
- ➤ Works on wide range of chamber sizes models are available for chamber sizes as small as 0.5L to as large as 200L providing flow rates from 0.05 LPM to 60 LPM

HOIH 0.03 LEIVI to 60 LEIVI.		
MODEL	DESCRIPTION	
QTK-1	Quietek 1 Carbon Dioxide delivery system. Single port system will deliver CO ₂ to a 3-30L rodent cage	
QTK-2	Quietek 2 Carbon Dioxide delivery system Dual port system will deliver CO ₂ to 2 separate 3-30L rodent cages	
QTK-SC	Single port system will deliver CO ₂ to a 0.5-10L chamber	
QTK-SCT	QTK-SC with RapidFill option for fastest results	
QTK-XL	Single port system will deliver CO ₂ to a 30-200L chamber	
QCVR-13x9	Cage Lid - Small rodent cage lid for use with Quietek system. 13" x 9"	
QCVR-16x11	Cage Lid - Medium rodent cage lid for use with Quietek system. 16" x 11"	
QCVR-18x14	Cage Lid - Medium/wide rodent cage lid for use with Quietek system. 18" x 14"	
QCVR-21x11	Cage Lid - Medium/large rodent cage lid for use with Quietek system. 21" x 11"	
QCVR-24X17	Cage Lid - Large rodent cage lid for use with Quietek system. 24" x 17"	
QT6-B	Quietek Tubing 6 feet of tubing to connect Quietek to a cage lid. Comes with a quick connect fitting. Blue hose	

CO₂ Flowmeter

Compliance made easy

- Calibrated to accurately deliver CO₂ to chamber
- ► Easy to connect to any chamber
- ► Small profile
- ➤ Three-way ball valve offers quick chamber fill when needed
- ► Easy to set CO₂ flowrate
- ► Wall mount option

2013 AVMA Guidelines for CO₂ Euthanasia

"General recommendations-carbon



dioxide is acceptable...using a gradual fill method is less likely to cause pain due to nociceptor activation by carbonic acid prior to onset of unconsciousness; a displacement rate from 10% to 30% of the chamber volume/min is recommended...The practice of immersion, where conscious animals are placed directly into a container prefilled with 100% CO₂, is unacceptable."

Which CO₂ flowmeter to use?

Calculate the total volume of your chamber in cubic inches (in³). Your chamber volume should fall between the min and max of the selected CO₂ flowmeter for the selected chamber displacement rate.

CO ₂ FLOWMETER MODEL/RANGE	CHAMBER VOLUME (in³)	CHAMBER 10%	R DISPLACE 20%	MENT RATE 30%
XL900	max	15,156	7,500	5,040
3 - 25 l/min	min	1,838	925	612
LC500	max	6,120	3,022	2,012
1 - 10 l/min	min	598	290	210
SC100	max	3,060	1,537	1,001
0.5 - 5 l/min	min	315	150	96

Example Calculations for 20% Chamber Vol/min

Large Rat Cage

19" x 10" x 8" = 1520 in³

 $1520 \text{ in}^3 \times 0.20 = 304 \text{ in}^3 \text{ (flow rate wanted } 304 \text{ in}^3\text{/min)}$

 $304 \text{ in}^3/\text{min divided by } 61.024 = 4.98 \text{ l/min AIMS } CO_2 \text{ flowmeter setting.}$

COIC CO2 Chamber (cylinder)

Л x Radius² x Height

 $3.14 \times 4^{11/2} \times 7^{11} = 352 \text{ in}^3$

 $352 \text{ in}^3 \times 0.20 = 70 \text{ in}^3 \text{ (flow rate wanted } 70 \text{ in}^3\text{/min)}$

70 in³/min divided by 61.024 = 1.15 l/min CO₂ flowmeter setting

MODEL	DESCRIPTION
C02-SC100	flow rates 0.5 - 5 I/min
C02-LC500	flow rates 1 - 10 I/min
CO2-XL900	flow rates 3 - 25 I/min
CO2-WMB2	wall mount brackets (only)
CO2-FMT2	10 ft. tubing only, 5/16" id x 1/16" od





Tank Talker Wireless Tank Monitor System



Avoid gas shortages and IACUC guideline violations with the Euthanex Tank Talker. Tank Talker is a wireless monitor for single tank or tank farms. Tank Talkers work with any gas cylinder and integrates with the SMARTBOX® Touch Screen Systems. Fully adjustable alarm settings connects to wifi for email alert notifying user of the location and remaining pressure. Remotely access your tank levels. Visual and audio alarm displayed on 7"

monitor/touch screen (works in conjunction with SMARTBOX Touch Screen controllers). Will adapt to existing regulators (regulator not included), ¼" NPT thread. Monitors two gas sources simultaneously.

EA-350 Tank Talker Wireless Tank Monitor System

Flow Restrictor

When used with a Euthanex lid, avoids need to adjust flow rate due to a change in cage number. For use with any size Euthanex lid between lid and lid stem.



MODEL	DESCRIPTION
FR-SA	Flow Restrictor

SMARTBOX® Lab Control Unit

Compliant with AVMA Guidelines

Controller automates on/off gas flow at the push of a button, delivering CO₂ to individual cage or Euthanex lid. Designed for small scale use. Operates at a fixed flow rate based on the external



CO₂ source. Lids and chambers sold separately.

- ► Treats animals at individual cage level
- ► Designed for investigators that need to retrieve animals guickly
- ► Utilizes full range of Euthanex cage lids or existing induction chamber
- ► Minimizes operator error and excessive gas use
- ► Automatic shut-off saves gas and protects personnel
- ► Easily attaches to wall

-	
MODEL	DESCRIPTION
EA-31000 EA-32000	1 Programmable timing preset and 1 Gas Output 2 Programmable timing presets and 1 Gas Output
	0 01
EA-34000	4 Programmable Timing Presets and 4 Gas Outputs includes: four EA-1130 lab unit hoses
EA-32002	Programmable Timing Presets and Individual Start Times, Gas Outputs, includes: two EA-1130 lab unit hoses
EA-34004	4 Programmable Timing Presets and Individual Start Times includes: four EA-1130 lab unit hoses

SMARTBOX® Prodigy

- ➤ Touch screen control displays flow, cage type, stage, and times
- Automatically calculates your cage type/total volume
- ► Automatically controls flow rates
- Administrator can set cage flow rate and times for each cage type
- ➤ Treats animals at individual cage level
- ► Euthanize up to 3 cages at a time
- Secondary charge and dwell for neonates
- ► Unlimited amount of users with password protection
- ► Allows user-level permissions
- ► Users can only access their permitted cage types
- ► Designed for investigators that need to retrieve animals guickly

SMARTBOX Prodigy from Euthanex surpasses the competition by allowing administrators to program an unlimited number of cages and sizes. Administrator only needs to select flow rate percentage. EA-33000TS will automatically calculate the required flow rate. An unlimited number of password-protected users adds even more flexibility. Each user can only see cages authorized by administrator. User can connect up to 3 cages at one time. Touch screen display shows the cycle, cycle time, and total time remaining.

MODEL	DESCRIPTION
EA-3300TS	SMARTBOX Prodigy

Euthanex Lids





Euthanex Lid system has become an industry standard. Simply by removing the water bottle from the wire cage cover and placing Euthanex Lid over the host cage, user is ready to perform euthanasia. Eliminates the need to transfer animals.

Lids are available in a variety of sizes to accommodate virtually all-plastic cage sizes designed for small lab animals. Heavy-duty stainless steel lids have a stem for easy connections to the regulator hose. A foam lid gasket assures a good seal. Multiple lids may be used to treat several cages at once.

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MODEL	DESCRIPTION	
E-20027	Super Small Lid (13" x 9") - Stainless Steel	
E-20028	Small Lid (16" x 10") - Stainless Steel	
E-20030	Square Lid (13" x 13") - Stainless Steel	
E-20032	Medium Lid (20.5" x 11") - Stainless Steel	
E-20033	High Density Mouse Lid (13" x 17") - Stainless Steel	
E-20034	Large Lid (23" x 16.5") -Stainless Steel	
E-20029	Lid Storage Bracket - Wall mounted bracket holds	
	up to four lids	
E-20035	Thoren Rat Lid (24" x 12.5")	
E-20039	Opti Mouse Lid	
E-20040	Opti Rat Lid	
EP-1130	6' Hose with quick disconnect	



Oxygen Regulators





Z-320	EZ-330

MODEL	DESCRIPTION
EZ-320	Oxygen Regulator with H-Cylinder fitting (preset at 50 psi)
EZ-330	Oxygen Regulator with E-Cylinder fitting (preset at 50 psi)

Tamper-Proof Dual Flow Regulator

Compliant with AVMA Guidelines

- ► Factory preset to your specific cage size
- Easy operation with simple on/off valve
- ► 0.5 to 12 liter per minute (LPM) range
- ► Visual indicator ensures correct gas flow
- ► Simultaneously operate two different size cages
- ► Connects directly to CO₂ cylinder with CGA-320 fitting
- ► Includes two 6' hoses with quick disconnect fitting

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MODEL **DESCRIPTION**

EP-3300 Tamper-Proof Dual Flow Regulator

Low Pressure Regulator with Flowmeter

0.5-12 LPM

AVAAA compliant Dracing control

AVIVIA compilant. Precise control	11
of CO2 flow. Calibrated specifical	ly
for CO_2 gas. 0.5-12 LPM range.	
Connects directly to CO2 cylinder	
with CGA-320 fitting. Optional	
CGA-970 yoke fitting available.	land to the
Includes a six foot hose with	
quick-disconnect fitting that	
attaches to stainless steel lids.	77
	H

MODEL	DESCRIPTION
EP-1305	Low Pressure Regulator with Flowmeter

Adjustable Flow Meter

Compliant with AVMA Guidelines

► 0.5 - 12 LPM

MODEL

► Manually adjust flow rate for cage size

DESCRIPTION EP-512A1-DS EP-5000 Adjustable Flow Meter with DISS

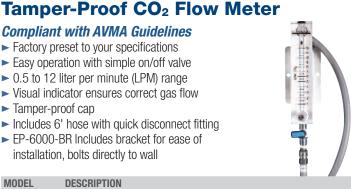
- ► Connects directly to house gas source with standard CO₂ DISS 1080 female connection (other connections available upon request)
- ► Includes 6' hose with quick disconnect fitting



bolts directly to wall

Compliant with AVMA Guidelines

- ► Factory preset to your specifications
- ► Easy operation with simple on/off valve
- ► 0.5 to 12 liter per minute (LPM) range
- ► Visual indicator ensures correct gas flow
- ► Tamper-proof cap
- ► Includes 6' hose with quick disconnect fitting
- ► EP-6000-BR Includes bracket for ease of installation, bolts directly to wall



MODEL **DESCRIPTION**

EP-512T1-DS Tamper-Proof Flow Meter with DISS EP-512T1-BR Tamper-Proof Flow Meter with wall bracket

Tamper-Proof Dual CO₂ Flow Meter

Compliant with AVMA Guidelines

- ► Factory preset to your specific cage size
- ► Easy operation with simple on/off valve
- ► 0.5 to 12 liter per minute (LPM) range
- ► Visual indicator ensures correct gas flow
- ► Tamper-proof flow adjustment
- ► Includes 6' hose with quick
- disconnect fitting
- ► Simultaneously operate two different size cages



MODEL **DESCRIPTION**

Tamper-Proof Dual Flow Meter with bracket EP-3300-BR

Adjustable Tabletop Flow Meter

Compliant with AVMA Guidelines

- ► 0.5 12 LPM
- ► Adjustable flow rate for different cage sizes
- ► Tabletop stand for easy placement
- ► Includes two 6' hoses with quick disconnect fitting

To determine AVMA compliant flow rates, use the equation below:

Height (in) x Width (in) x Length (in)

= Liters x 20% = flow rate

The 2013 AVMA Euthanasia Guidelines recommend 10 - 30% fill rate.

MODEL	DESCRIPTION
EP-1500	Adjustable Tabletop CO ₂ Flow Meter



Pureline® OC4000

This revolutionary Pureline® OC4000 O2 concentrator provides on-demand oxygen to any existing anesthesia system. While similar machines have been in use in Europe for years, Scivena Scientific has perfected the technology, added safety features, and now is making this moneysaving equipment available in the USA. The Pureline® OC4000 O2 Concentrator is FDA approved, UL tested, and backed by a three year warranty.

- Ready for use with existing anesthesia equipment
- ➤ Extracts FDA-approved USP 93% pure O₂ from the air and delivers on demand-up to 5 LPM
- Uses industry standard DISS male thread connection
- ► Includes 10' of high pressure O₂ hose with female DISS end fittings
- ► FDA approved, UL tested
- Oxygen purity and flow safety alarms
- ► Quiet 40-dBA operation
- ► Made in USA, state-of-the-art manufacturing with ISO quality and TUV SUV safety certifications

Specifications:

Dimensions: 14" x 9" x 23"

Electrical Power Supply: Rating: 115/230V 60Hz
Average Power: 330W(avg)

Protection Class: Class II

Mains Protection: 5A

Coarse cabinet filter should be cleaned as needed in your environment. (Part number OC4000-1)

Change fine intake filters during yearly anesthesia service call or every two years. (Part number OC4000-2)

MODEL	DESCRIPTION
OC4000	Pureline OC4000
0C4000-1	Coarse Cabinet Filter
0.01000^{-3}	Fine Intake Filter

EZ Oxygen Concentrator

Eliminates the need for oxygen tanks or an in-house oxygen source.

- ► Extracts nitrogen from room air, outputs oxygen at 90% minimum purity
- Saves money in oxygen costs
- ► Eliminates labor costs and inconvenience of tank changes
- Quiet operation at 49-dBA
- ► Easy portability with rollerbase design
- Maximum output flow rate of up to 10LPM and fixed pressure of 20psi
- ► Weight is manageable at 54 lbs
- Able to supply oxygen to multiple systems simultaneously
- ► Well-suited for use in barrier facilities

MODEL	DESCRIPTION
EZ02-20	Oxygen Concentrator



Pureline® OC6000 Oxygen Concentrator with E-tank Back-Up

Works with any existing anesthesia system!

Provides on-demand oxygen to any existing anesthesia system. Built in E-tank manifold allows mobile use of the machine without power and protects your subject in case of power failure. FDA approved, UL tested and includes three year warranty.

- ► Ready for use with existing anesthesia equipment
- ➤ Complete oxygen concentrator, frame and valve assembly
- ► Extracts medical grade oxygen (USP 93%) from the air and delivers on demand-up to 5 LPM
- ➤ Uses industry standard DISS male thread connection
- Safety back-up oxygen supply (standard E tank) with fully integrated O₂ flush with industry standard 30 LPM maximum flow
- ► Ability to use oxygen flush with simple built in switch
- Oxygen purity and flow safety alarms
- ► Quiet 40-dBA operation
- ► Made in USA with ISO quality and TUV SUV safety certifications

Specifications:

Footprint: 18" x 18"

Shipping Box Dimensions: Concentrator - 19" x 14" x 27"

Frame - 36" x 23" x 27"

Shipping Weights: Concentrator - 38lbs. Frame - 55lbs.

MODEL	DESCRIPTION
006000	Pureline OC6000

Pureline® OC8200 Oxygen Concentrator

Oxygen is on demand – never run out!



Designed specifically for use with veterinary anesthesia machines and oxygen therapy.

Built-in E-tank manifold allows mobile use. It also protects patients in case of a power failure.

- ► Delivers USP 93% oxygen up to 8 LPM
- Connects with industry standard oxygen DISS fittings
- Safety backup oxygen supply
- ► Energy efficient, made in USA
- Built specifically for anesthesia machine use
- Oxygen purity safety alarm
- ► Virtually maintenance free
- ► Quiet 53dBA operation
- ► Includes one high pressure "E" tank for backup and oxygen flush (back up e-tank is not filled by machine)

MODEL	DESCRIPTION
C8200	Pureline 0C8200





Anesthesia Pole Stand



- ► For portable transport of E-Z Anesthesia systems with a minimal footprint.
- Accommodates each of our three New Generation E-Z Anesthesia systems
- ► Convenient, slide-on mounting
- ► Swivel top allows precise positioning
- Accommodates two E-tanks
- ➤ Stable five-wheel base
- Optional Mayo Tray for surgical tools available call for pricing

MODEL	DESCRIPTION
E-28000	Anesthesia Pole Stand

Stainless Steel Mobile Workstation



(Components shown sold separately)



duty stainless steel with locking casters, can easily move to multiple locations.

Work surface of 3.5' x 2' Open side shelves accommodate up to 2 CO₂ tanks and 2 O₂ tanks. Below work surface is an open shelf and a 2-door locking cabinet. System can be conveniently set up for maximum flexibility and mobility.

Small Mobile Workstation integrates all E-Z anesthesia components into one

E-27000 (Components shown sold separately)

convenient mobile workstation. Half the size of the EZ-25000 constructed of the same materials. The top work surface measures 22" x 21" and comes with a locking cabinet and interior shelves.

MODEL	DESCRIPTION
E-25000	Mobile Workstation
E-27000	Small Mobile Workstation

Nemi Guillotine

- ► Easy blade replacement
- ► Mounting plates for all models (optional)
- ► Manufactured using only the finest materials
- ► Built to stay in your lab
- ► Extremely cost effective

Nemi Guillotine Maintenance Kit:

Includes all the tools needed to service your quillotine; wrenches screwdrivers, sharpening stone, sharpening oil, lubricating oil and spare hardware all housed in a tool box along with instructions.



MODEL	DESCRIPTION
NS-801 NS-802	Nemi Guillotine, Mouse, 1.5" opening along side Nemi Guillotine, Rodent, 2" opening along each side
NS-803	Nemi Guillotine, Rodent, 3" opening along side
NS-801-RB	801 Replacement Blades
NS-802-RB	802 Replacement Blades
NS-803-RB	803 Replacement Blades
NS-80-KIT	Nemi Guillotine Maintenance Kit

DecapiCones®

Economical mouse and rodent restrainer





Make injections and decapitation quicker and easier with Braintree's DecapiCones®. Tapered plastic film tubes provide quick and easy restraint of rats, mice and other small animals. I.P. injections can be made directly through the film! DecapiCones® restrain post-decapitation kicking and prevent personal contact with feces or urine.

A unique dispenser holds DecapiCones® open and ready for use. Simply hold DecapiCone in one hand and introduce the animal with the other. Animals enter readily, heading for the breathing hole at the small end. Then roll and squeeze the large end closed.

May be used repeatedly for injections and discarded when soiled. For decapitation, hold at the rear and insert the small end into decapitator.

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MODEL	DESCRIPTION
MDC-200	DecapiCones® for Mice (Includes: 2 dispensers, 100 bags each. Total 200 cones)
DC-200	DecapiCones® for Rats
DCL-120	(Includes: 4 dispensers, 50 bags each. Total 200 cones) DecapiCones® for Large Rats (500-800g) (Includes: 4 dispensers, 30 bags each. Total 120 cones)





Armour Touch Metal Mesh® Gloves

Protects hands from teeth and claws when handling small animals



Don't be fooled by imitations!

YES! You have seen this material used for anti-shark suits.

Braintree Scientific's metal mesh gloves provide security and a sure grip. This is the original and only metal mesh glove for rodent handling.

Experience shows animals are easier to control when handlers are relaxed and confident. Much better than leather since metal mesh is more flexible, is readily cleaned, won't stain or corrode and doesn't carry odors.

Gloves may be worn over surgical gloves. Adjustable buckle wrist band prevents slipping. Convert right to left by turning inside out. Order by size. *Please note these gloves run large.*

MODEL	DESCRIPTION	SIZE	
MMG-XS	Armour Touch Metal Mesh Gloves	Extra Small	7
MMG-S	Armour Touch Metal Mesh Gloves	Small	8
MMG-M	Armour Touch Metal Mesh Gloves	Medium	9
MMG-L	Armour Touch Metal Mesh Gloves	Large	10

^{*}Price per glove - ambidextrous (approximate surgical glove size)

T/FLEX® Plus Gloves

Cut resistant gloves for animal handling



Gloves are suitable for the safe handling of small laboratory animals including rodents. T/FLEX® PLUS gloves are a 13 gauge seamless knit shell; material is Dyneema® engineered fibers plated with Lycra® -

Spandex®, Thermax® and the antimicrobial treatment Alphasan® combine to provide a comfortable glove featuring the highest cut resistance. Gloves conform to international safety standards for cut resistance.

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MODEL	DESCRIPTION	SIZE
TFL-13G6	T/flex Plus handling gloves	Extra Small
TFL-13G7	T/flex Plus handling gloves	Small
TFL-13G8	T/flex Plus handling gloves	Medium
TFL-13G9	T/flex Plus handling gloves	Large
TFL-13G10	T/flex Plus handling gloves	Extra Large

Kevlar Goatskin Handling Gloves

Black goatskin leather glove, lined with 100% fine knit Kevlar. May be worn on their own for handling small animals. Fabricated for flexibility, comfort and safety during long periods of wear. Sold as pairs.



MODEL	DESCRIPTION	SIZE
KVL-LTH-S KVL-LTH-M KVL-LTH-L	Kevlar Deerskin Handling Gloves	Medium
KVL-LTH-X	Kevlar Deerskin Handling Gloves	0



Sample Prep and Collection

Blood Collection for Facial Vein (Submandibular) Blood Samples



GoldenRod Animal Lancet allows user to take multiple blood samples from small animals in the same day and never lose or hurt an animal. Speed up the blood collecting process with this specially designed and sterile, disposable blood lancet that is inexpensive, easy, and fast to use. Available in a wide variety of point sizes for various size animals and volumes required.

Developed for researchers that requested a shorter point for use on very young mice and mice of all ages where only one or two drops of blood are needed. The shorter the point length, the less pain and trauma for the animal, and the quicker the healing.

- ► Safe won't hurt the animal
- ► Easy to use works every time
- ► Consistent amounts of blood each test
- ► Rapid collection blood flow stops in seconds
- ► Allows multiple tests of the same animal
- ► Fast Sterile ready for use
- ► Disposable no cross contamination
- ► Humane similar lancets are used on humans
- ► Inexpensive reduce research costs

Goldenrod Lancets come in several point lengths for various size animals and blood volumes required. Choose the proper lancet point length corresponding to the age of the mouse and the volume of blood needed.

Point Length Recommendations:

For Mice: 3mm - for only 1 or 2 drops 4mm - under 2 months 5mm - 2 to 6 months 5.5mm - over 6 months

For Rats: 5.5mm - 6 mm under 3 months 6mm or 7mm - 3 to 4 months

7mm or 8mm - over 5 months

Always use the shortest point possible to draw the amount of blood required.

Always be careful when doing multiple bleedings in one day, or daily bleedings, that the volume of blood harvested does not exceed the total volume recommended for that size animal's safety and health.

MODEL	DESCRIPTION
GR-3MM GR-4MM GR-5MM GR-5.5MM GR-6MM GR-7MM GR-8MM	Goldenrod Animal Lancet 3mm Sterile, 5 trays of 200 Goldenrod Animal Lancet 4mm Sterile, 5 trays of 200 Goldenrod Animal Lancet 5mm Sterile, 5 trays of 200 Goldenrod Animal Lancet 5.5mm Sterile, 5 trays of 200 Goldenrod Animal Lancet 6mm Sterile, 5 trays of 200 Goldenrod Animal Lancet 7mm Sterile, 5 trays of 200 Goldenrod Animal Lancet 8mm Sterile, 5 trays of 200 Goldenrod Animal Lancet 8mm Sterile, 5 trays of 200



Microvette® CB 300

Capillary collection and sample container in one unit



The Microvette® CB 300 capillary tube, along with its attached push cap, is supplied complete with a carrier tube that is also suited for transport and centrifugation. Cylindrical outer tube is ideal for attachment of a barcode label for direct sample analysis.

Extremely slim design of the Microvette® CB 300's capillary tube ensures optimum serum/plasma recovery following centrifugation.

MODEL DESCRIPTION U	UNITS
MV-CB300-16440-BX Serum/Clotting activator 1 MV-CB300-16440-CS Serum/Clotting activator 10 MV-CB300-16443-BX Lithium-Heparin 1 MV-CB300-16443-CS Lithium-Heparin 10 MV-CB300-16444-BX Hematology/Potassium EDTA 1 MV-CB300-16444-CS Hematology/Potassium EDTA 10	000/cs 100/pk 000/cs 100/pk

Microvette® 100/200

Provides all the benefits of a universally suitable capillary blood collection system



The Microvette® 100/200 offers the ideal solution for collection of even the smallest blood volumes. Preassembled end-to-end capillary ensures a controlled collection to capillary technique. The Microvette® enables blood sampling using either the special rim or gravity-flow principle without any problem.

Depending on individual requirements, the Microvette® is available with a cylindrical inner tube for optimum mixing results or a conical inner tube for a high serum/plasma supernatant. Cylindrical outer container is ideal for barcodes and patient labels. Special cap design minimizes aerosol effect when tube is opened and provides safe sealing features.

MODEL	DESCRIPTION	UNITS	
MICROVETTE 100 -10	ΟυμL, Conical inner tube		
MV-100-201280-BX	Serum	100/pk	
MV-100-201280-CS	Serum	1,000/cs	
MV-100-201282-BX	Lithium-Heparin	100/pk	
MV-100-201282-CS	Lithium-Heparin	1,000/cs	
MICROVETTE 100 -10	ΟυμL, Round bottom inner tube		
MV-100-201278-BX	Potassium EDTA	100/pk	
MV-100-201278-CS	Potassium EDTA	1,000/cs	
MICROVETTE 200 -20	ΟύμL, Conical inner tube		
MV-200-201289-BX	Glucose	100/pk	
MV-200-201289-CS	Glucose	1,000/cs	
MV-200-201290-BX	Serum	100/pk	
MV-200-201290-CS	Serum	1,000/cs	
MV-200-201292-BX	Lithium-Heparin		
MV-200-201292-CS	Lithium-Heparin	1,000/cs	
MICROVETTE 200 -20	ΟΟμL, Round bottom inner tube		
MV-200-201288-BX	Potassium-EDTA	100/pk	
MV-200-201288-CS	Potassium-EDTA	1,000/cs	
MV-200-201291-BX	Serum-Gel	100/pk	
MV-200-201291-CS	Serum-Gel	1.000/cs	

Microvette® 300/500

Blood collection with collection rim

These Microvette® tubes are ideal for collection of blood using gravity-flow principle of collection. Any part of the entire rim can be used. The special conical design of the Microvette® 300's inner tube enables thorough mixing, even with small sample volumes. Microvette® offers all the advantages of a modern blood collection system:



- ► Choice of different inner tube designs with 300 or 500 µl volume capacity and corresponding graduation
- ► Special twist cap design is easy to open and minimizes aerosol effect
- ► Cylindrical outer container is ideal for barcode or patient labels

MODEL	DESCRIPTION	UNITS	
Microvette 300			
MV-300-201308-PK	Serum	. 100/pk	
MV-300-201308-CS	Serum	. 1,000/cs	
MV-300-201309-PK	Lithium-Heparin	. 100/pk	
MV-300-201309-CS	Lithium-Heparin		
Microvette 500			
MV-500-201341-BX	EDTA	. 100/pk	
MV-500-201341-CS	EDTA	. 1,000/cs	
MV-500-201343-BX	Serum	. 100/pk	
MV-500-201343-CS	Serum	. 1,000/cs	
MV-500-201344-BX	Serum-Gel	. 100/pk	
MV-500-201344-CS	Serum-Gel	. 1,000/cs	
MV-500-201345-BX	Lithium-Heparin	. 100/pk	
MV-500-201345-CS	Lithium-Heparin	. 1,000/cs	
MV-500-201346-BX	Lithium-Heparin Gel	. 100/pk	
MV-500-201346-CS	Lithium-Heparin Gel	. 1,000/cs	

Multivette® 600

Capillary and venous blood collection in one system



The unique Multivette® 600 is the only product that can collect both venous and capillary blood. For venous blood collection, a Luer needle is connected to the capillary tube of the Multivette®, which automatically fills by normal venous pressure. Capillary blood is performed using the end-to-end principle. The special pre-assembled capillary tube is designed to hold 600µL of blood.

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MODEL	DESCRIPTION	UNITS
MV-600-151670-BX	Serum/Clotting Activator	100/pk
MV-600-151670-CS	Serum/Clotting Activator	1000/cs
MV-600-151671-BX	Hematology/Potassium EDTA	100/pk
MV-600-151671-CS	Hematology/Potassium EDTA	1000/cs
MV-600-151672-BX	Glucose/Flouride	100/pk
MV-600-151672-CS	Glucose/Flouride	1000/cs
MV-600-151673-BX	Plasma /Lithium-Heparin	100/pk
MV-600-151673-CS	Plasma /Lithium-Heparin	1000/cs
MV-600-151674-BX	Serum Gel/Clotting Activator	100/pk
MV-600-151674-CS	Serum Gel/Clotting Activator	1000/cs
MV-600-151675-BX	Plasma Gel/Lithium-Heparin	100/pk
MV-600-151675-CS	Plasma Gel/Lithium-Heparin	1000/cs

A full selection of Sarstedt tubes is available, please email info@braintreesci.com for details and pricing.

Sample Prep and Collection

Prepared Micro Tubes with Attached Push Cap Closure

- ► Skirted, conical base and label
- Preparations: Serum clotting activator, plasma lithium heparin, hematology potassium EDTA and coagulation citrate



MODEL	DESCRIPTION	UNITS
PMT-1500-PK	Serum-Gel, 1.1 ml	100/pk
PMT-1500-CS	Serum-Gel, 1.1 ml	1,000/cs
PMT-1501-PK	Serum, 1.3 ml	100/pk
PMT-1501-CS	Serum, 1.3 ml	1,000/cs
PMT-1503-PK	Lithium-Heparin, 1.3 ml	100/pk
PMT-1503-CS	Lithium-Heparin, 1.3 ml	1,000/cs
PMT-1504-PK	EDTA, 1.3 ml	100/pk
PMT-1504-CS	EDTA, 1.3 ml	1,000/cs
PMT-1506-PK	Citrate, 0.5 ml	100/pk
PMT-1506-CS	Citrate, 0.5 ml	1,000/cs

Minivette® POCT

Easy sample recovery due to optimal capillary features

- Precise dispensing of small whole blood volumes
- Prevents spillage during transfer to test card
- Available in 20µl and 50µl volumes
- Preparations: Neutral, heparin and EDTA





MODEL #	DESCRIPTION	COLOR CODE	UNITS
MP10-2111-PK	10 μl, neutral	White	200/pk
MP10-2111-CS	10 μl, neutral	White	1,000/cs
MP20-2111-PK	20 μl, neutral	White	200/pk
MP20-2111-CS	20 μl, neutral	White	1,000/cs
MP50-2111-PK	50 μl, neutral	White	200/pk
MP50-2111-CS	50 μl, neutral	White	1,000/cs
MP20-2112-PK	20 μl, Lithium-Heparin	Orange	200/pk
MP20-2112-CS	20 μl, Lithium-Heparin	Orange	1,000/cs
MP50-2112-PK	50 μl, Lithium-Heparin	Orange	200/pk
MP50-2112-CS	50 μl, Lithium-Heparin	Orange	1,000/cs
MP20-2113-PK	20 μl, EDTA	Red	200/pk
MP20-2113-CS	20 μl, EDTA	Red	1,000/cs
MP50-2113-PK	50 μl, EDTA	Red	200/pk
MP50-2113-CS	50 μl, EDTA	Red	1,000/cs

Prepared Micro Tubes with Screw Cap Closure

- ► Closure contains integral O-ring
- ➤ Sample volume 1.3ml
- ► Skirted, conical base
- ► Label



MODEL	DESCRIPTION	UNITS
MT-1350	Micro Tube, 1.3ml, Citrate	1,000/cs
MT-1378	Micro Tube, 1.1ml, Serum/Gel	1,000/cs
MT-1392	Micro Tube, 1.3ml, Serum/Clotting Activator	1,000/cs
MT-1393	Micro Tube, 1.3ml, Plasma /Lithium-Heparin	1,000/cs
MT-1395	Micro Tube, 1.3ml, Hematology/Potassium EDTA	1,000/cs

Stainless Steel Brain Matrices



Highly polished, high quality stainless steel matrices are precisely machined to ensure reproducible sections. Brain matrices allows users to slice either coronal (perpendicular to center line) or sagittal (parallel to center line) sections through the brain at 1mm or 0.5mm intervals.

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MODEL	DESCRIPTION
BS-SS-500C	Mouse 40-75gr, 1mm Coronal
BS-SS-500S	Mouse 40-75gr, 1mm Sagittal
BS-SS-505C	Mouse 40-75gm, 0.5 mm Coronal
BS-SS-505S	Mouse 40-75gr, 0.5 mm Sagittal
BS-SS-600C	Rat 175-300gr, 1 mm Coronal
BS-SS-600S	Rat 175-300gr, 1 mm Sagittal
BS-SS-605C	Rat 175-300gr, 0.5 mm Coronal
BS-SS-605S	Rat 175-300gr, 0.5 mm Sagittal
BS-SS-700C	Rat 300-600gr, 1 mm Coronal
BS-SS-700S	Rat 300-600gr, 1 mm Sagittal
BS-SS-705C	Rat 300-600gr, 0.5 mm Coronal
BS-SS-705S	Rat 300-600gr, 0.5 mm Sagittal

Precision Brain Slicer

Aids users in free hand dissection of discrete regions of rodent brain. Allows user to slice either coronal or sagittal sections through brain (including olfactory bulbs) at intervals as small as 1 mm. All PBS's are





identical to insure reproducible sections on a day to day, year to year basis.

Order S for a sagittal style, and C for a coronal style.

MODEL	SPECIFICATIONS	CAVITY DIMENSIONS
BS-Z-2000C	Adult Mouse, 30gm	13.9 x 9.9 x 7.5mm
BS-Z-2000S	Adult Mouse, 30gm	13.9 x 9.9 x 7.5mm
BS-Z-3000C	Rat, 125-185gm	20 x 13 x 6.8mm
BS-Z-3000S	Rat, 125-185gm	20 x 13 x 6.8mm
BS-Z-4000C	Rat, 200-400gm	25.5 x 16 x 11.2mm
BS-Z-4000S	Rat, 200-400gm	25.5 x 16 x 11.2mm

Tissue Slicer Blades

MODEL	DESCRIPTION
BS-BLADES	25 count Steel Blades

NSET Non-Surgical Embryo Transfer Device for Mice

- ► Quick and effective procedure
- ► Reduces pain and suffering
- ► Humane alternative to surgery
- ► Clear tip

Allows non-surgical embryo transfer for the production of research (transgenic or knock-out) mice. Eliminates pain and stress of surgery and anesthesia. Enables



non-surgical unilateral transfer of mouse embryos into the uterine horn. A novel method for effective transfer of substances for studies of uterine physiology and bacterial infection. Easy to learn, rapid and economical. Can also replace oviduct surgery for the production of transgenic mice via microinjection.

MODEL	DESCRIPTION
NSET	NSET Non-Surgical Embryo Transfer Device for Mice



Sterile Disposable Biopsy Punch with Plunger



"Blue Wax" Dissection Tray

Add a dissection tray with a wax base pinning surface for detailed dissections!

Specially formulated to provide proper consistency to allow pins to stick firmly and be easily removed. Environmentally safe wax - no toxic chemicals and no fire, health or reactivity hazards with this product. "Blue Wax" can be heated to renew surface and dissection tray can be reused several times.



MODEL	DESCRIPTION

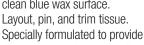
DTW-1 Dissection Tray 9" x 6.5" x 1" (each)

Large Dissection Tray 12.25" x 8.25" x 1.25" (each) DTI -1I

"Blue Wax" Tissue Processing Disc

Makes tissue processing easy and quick

Process tissue using a clean blue wax surface. Layout, pin, and trim tissue.





the proper consistency to allow pins to stick firmly and be easily removed.

MODEL	DESCRIPTION	QTY/PK
TPD-L	Large Tissue Processing Disc (4" dia., 0.25" thick)	. 10
TPD-M	Medium Tissue Processing Disc (2.75" dia., 0.25" thick)	. 10
TPD-S	Small Tissue Processing Disc (2" dia., 0.25" thick)	. 10
TPIN	Ball Head Tissue Pins, S/S (1.5" long)	. 50

Hybex™ Reusable Media Bottles

Manufactured from high quality, borosilicate 3.3 glass. With their superior chemical resistance, these bottles are ideal for storage of reagents, culture media, biological fluids and a variety of other aqueous and nonaqueous solutions.



A low coefficient of thermal expansion (3.3),

provides temperature resistance that is far superior to that of standard lab glass (or soda lime glass). Hybex glass can withstand temperatures from -70 to 500°C, permitting repeated use in freezers, microwaves, autoclaves and dry heat sterilization chambers.

All hybex media bottles include a drip-free sealing ring as well as a standard blue polypropylene (GL45) sealing cap. Bottles are also available with green, purple, white and yellow caps, or in an assortment pack containing two of each color.

Specifications:

Material: Hybex[™] borosilicate glass (3.3)

Cap thread size: GL45*

Temperature range: -70° to 500°C Sterilization: Autoclave or dry heat Cap material: Polypropylene (140°C)

Cap colors: Standard blue, green, purple, yellow, white, assorted Please replace -X with (-B) for blue, (-G) for green, (-P) for purple, (-Y) for yellow, (-W) for white or (-AS) for assorted caps (2 of each color)

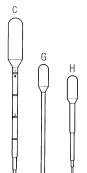
MODEL	DESCRIPTION
B3000-50-X	Bottle, 50ml (GL32), 10/pk.
B3000-100-X*	Bottle, 100ml (GL45) 10/pk.
B3000-250-X*	Bottle, 250ml (GL45) 10/pk.
B3000-500-X*	Bottle, 500ml (GL45) 10/pk.
B3000-1000-X*	Bottle, 1000ml (GL45) 10/pk.
B3000-2000-X*	Bottle, 2000ml (GL45) 5/pk.
B3000-SP-X*	Bottle, StarterPack (GL45) (pack of 10 bottles,
	includes 2 x 100ml, 3 x 250ml, 3 x 500ml, and 2 x 1L)
B3000-CAP-X*	Replacement cap, (GL45), 10/pk.
B3000-RIN	Replacement sealing ring (GL45), 10/pk.
B3000-CAP2	Replacement cap, blue (GL32), 10/pk.
B3000-RIN2	Replacement sealing ring (GL32), 10/pk.
B3000-CAP-R	High Temperature Cap, red, up to 180°C, 10/pk.
* 50ml bottles are	only supplied with GL32 sealing caps

Urine Collection



Transfer Pipettes

Single-use Pasteur pipettes



Our range includes a large variety of transfer pipettes for safe and convenient application when transferring liquids in laboratories.

Disposable Pasteur pipettes are suited for versatile application without any risk of injury or infection from broken glass.

As single-use products, pipettes safely prevent carry over or cross-contamination.

Practical graduations are ideally suited for sample measurement and transfer. Pipettes can be heat-sealed to store residual volumes.

For a sterile transfer of liquids, our range includes sterile options either individually wrapped or 20 pipettes per pack.

Polyethylene material is environmentally neutral thereby ensuring non-toxic disposal.

MODEL	DESCRIPTION	LENGTH		DROP SIZE	TYPE GRAD
PIP-2020	5 Packs of 20 Pipettes Sterile	156mm	3.5ml	30-45µL	C/1:0.25ml
PIP-2001	100 pieces individually wrapped Sterile	156mm	3.5ml	30-45µL	C/1:0.25ml
	100 pieces - Non Sterile 100 pieces - Non Sterile	115mm 104mm		45-55μL 17-22 μL	

Techniplast® Metabolic Cage Systems

Meticulously engineered cages feature a unique funnel and cone design that effectively separates feces and urine into tubes outside the cage. No urine washover and no chance for urine to enter the feces tube, so separation is immediate and complete. For untainted and reliable samples. All cage parts and stands are autoclavable. Replacement parts available.



- Cover Large, vented, keeps animal securely in cage. Can be removed for easy access to animal
- ▶ Upper Chamber Made of transparent PC. Surface is smooth, gnaw-proof, noiseless. Cleans with warm soapy water or detergent solution
- Feeder Chamber Located outside cage. Size discourages rodent from nesting or sleeping inside
- ► Feed Drawer PC drawer slides out for easy filling without disturbing animal. Ideal for slurries, liquids or powders. Not designed for food in pellet form. Rear portion helps to catch spilled food to prevent contamination of feces
- ► Feces Collection Tube Made of non-wetting PMP. Pellets roll down sides of funnel to be collected in tube. Unlocks with single twist from outside of cage without disturbing animal
- ► Urine Collection Tube PMP Graduated in cubic centimeters. Unlocks from outside cage without disturbing animal. Can be cooled with ice bath
- ► **Lower Chamber PC** Can be removed without disturbing animal. Cleans with warm soapy water or detergent solution
- Stand SS stand or rack must be used with any rodent metabolic cage. Stand supports one cage and provides easy access to all parts. 12-cage racks and refrigerated collection racks are also available. All stands and racks are sold separately
- ➤ Collection Funnel and Separating Cone Unique design and nonwetting PMP ensure immediate, complete separation of feces and urine
- Support Grid SS grid lets excreta pass through the widely-spaced bars; mouse cage includes mouse-size grid. Grids have handles for easy transport of cage without stand
- ▶ Water Bottle Calibrated PC bottle with SS cap and sipper tube.
- ➤ Water Spillage Tube Collects any water that animals spill. Facilitates accurate collection of fluid intake data
- ► Each cage includes complete assembly and use instructions, replacement parts list and warranty card

Designed for rats, guinea pigs and hamsters. Includes same fluid collection tubes and rings as the smaller rodent cages and the following components sized for larger rodents: upper chamber, water bottle and support, feeder assembly and urine collection tube.

Includes appropriate feeder drawer and chamber, four fluid collection tubes with funnels (two water spillage tubes and two urine collection tubes), two feces collection tubes and two urine rings.

All cages require support stand.

MODEL	DIMENSION
360-0M021 360-3M020	Single Mouse Metabolic Cage Single Mouse Cage support plate (only required if purchasing a rack)
370-0M022 370-0M061 370-0M071 370-1M081	Metabolic Cage for groups of 3 mice Metabolic Cage for rats <150g Metabolic Cage for rats 150-300g Metabolic Cage for rats >300g

Contact us if you would like to modify your existing cage to house smaller rodents.

Diuresis Metabolic Cage for Rodents

These meticulously engineered cages feature a unique funnel and cone design that effectively separates feces and urine into tubes outside the cage. There's no urine wash-over and no potential for urine to enter the feces tube, so separation is immediate and complete. The results are untainted and reliable samples. The cage has only 14 parts. The components are designed for simplicity of operation and total part interchangeability, major consideration in multi-unit testing programs. All parts below the cage floor are removable without disturbing the test animal, allowing tests to be conducted over a prolonged period of time without interruptions caused by animal re-acclimation. The cage performs well with either mice (in groups) or rats; only the feeders and floor grids must be changed.

All cages require support stand.

MODEL	DIMENSION
3700D-000 3701D-000	For Rats up to 300g For Rats >300g

Cage Stands and Racks

Cage Stands

- ► Stainless steel; nylon supports
- ► Holds one rodent metabolic cage

Vertical Metabolic Cage Rack

- Holds up to 12 Techniplast metabolic cages for small rats and mice,
 3 x 4 configuration
- Can also be adjusted to hold eight cages for large rodents. Rack is mounted on swivel casters; two lock for safety.



MODEL	DIMENSION
3M01D100	Metabolic Cage Support Stand for Single Cage
3M12D100	Metabolic Cage Rack Vertical, 12-Cage Rack

LabSand®

Easy collection of rodent urine samples

- ► Suitable for testing all parameters
- ► Clean, uncontaminated samples
- ► Reduce animal stress
- ► Non-invasive, easy to use
- ► 100% natural





LabSand® is a revolutionary biodegradable hydrophobic sand that has a natural nontoxic urine-repelling coating. Use it to quickly collect urine samples from laboratory rodents without resorting to metabolic caging protocols or invasive procedures. To use, simply spread LabSand® onto a clean

surface or substitute as cage bedding in home cage and let mice, rats, hamsters, gerbils, etc. roam freely and urinate spontaneously. Urine stays on top of LabSand® and can be easily collected with a pipette, or sampled directly with a urine test strip. Depending upon species, hydration status, and sensitivity of analyses, 30-60 minutes is usually sufficient for collection of a STAT urine sample, and 1-3 hours for a more robust quantitative collection. Dispose used LabSand® with laboratory waste.

MODEL	DESCRIPTION		
LABSAND-3PK	Urine Sample Collection Sand, 3/pk		
LABSAND-CS	Urine Sample Collection Sand, six 3/pks		



Kit4Cat

Cat Urine Sample Collection Kit



Kit4Cat is revolutionary biodegradable hydrophobic sand that has a natural non-toxic urine repelling coating. It allows veterinarians and technicians to quickly and easily collect urine samples without resorting to invasive procedures such as Cystocentesis. Simply spread a bag of Kit4Cat sand into a clean, empty tray and let animal urinate freely on sand. Cat's urine will stay on top, allowing user to collect the urine sample using a pipette and vial that are included. Collecting a urine sample with Kit4Cat is non-invasive, keeping the cat happy and the vet and technician scratch free. Kit4Cat feels and smells just like regular sand, so cats are very cooperative patients when you need to collect a urine sample. Veterinarian approved.

Benefits for Veterinarians and Technicians:

- ► Kit4Cat and Cystocentesis test results are the same
- ► Easy urine collection saves time, remain bite and scratch free
- ► Obtain a clean uncontaminated sample
- Collect urine from older and obese cats with ease
- ► Biodegradable for easy disposal
- ► 100% natural and non-toxic

MODEL	DESCRIPTION
KIT4CAT	3/pack
KIT4CAT	Six 3/packs

New! Innovive Metabolic Cage

The industry's first disposable metabolic cage that dramatically simplifies storage and assembly

Specifically designed for mice, this unit arrives irradiated and ready to use. Made from 100% PET SPA-free plastic. Single-use components eliminate variability due to degradation of collection surface from repeated washings. Single-use hydrophobic collection element assures complete sample collection. Can stand alone or be docked in an Innovive rack. Uses standard size 15ml conical tubes for collection (sold separately).



- ► Utilizes less storage space, easy to assemble, fewer pieces to clean
- ► Recyclable, single-use components reduce contamination
- ► Designed for convenience and reproducibility

Components:

- ► Lid with a large Manniweb® filter media and metal grate
- ► Innocage® mouse cage bottom
- ➤ 300ml Aquavive® water bottle
- ► Sipper tube and bottle seal system
- ► Drip receptacle for water and crumb receptacle for food
- ► Food and bottle wire bar-hopper
- ► Wire bar platform
- ► Support cone with hydrophobic single-use liner
- ► Collection separator

Coming soon - call for pricing and availability



Pipette Checkit® Pro

Verification on the spot



- ▶ User-friendly operation
- Certified and traceable
- ► Easy to read markings indicate volumetric accuracy
- ► ISO 8655 calibration standards indication
- ► Elegant design
- Minimal evaporation
- ► Made in the USA

Whenever you need a fast, quantitative assessment of a pipette's accuracy, just pull out Pipette Checkit® Pro. Available for various size pipettes, Checkit Pro checks the pipette's accuracy at the bottom, middle and top of its range.

Be confident in your results. Rest assured that your pipettes are delivering accurate volumes while you conduct experiments.

Get instant, easy verfication. Anywhere! Evaluate pipette accuracy on the spot in just seconds – no matter where you are. For low volumes, outperforms a 5-digit balance.

Maintain proper pipette technique. Use the Checkit Pro as a training tool with students and technicians to verify proper pipette technique. The Checkit Pro requires no special training and is easy to use even for novice lab members.

	- 	
MODEL	DESCRIPTION	QTY/PK
CP-C02	Pipette Checkit Pro model for 2uL pipettes	5/pk
CP-C05	Pipette Checkit Pro model for 5uL pipettes	5/pk
CP-C10	Pipette Checkit Pro model for 10uL pipettes	5/pk
CP-C20	Pipette Checkit Pro model for 20uL pipettes	5/pk
CP-C50	Pipette Checkit Pro model for 50uL pipettes	5/pk
CP-C100	Pipette Checkit Pro model for 100uL pipettes	5/pk
CP-C200	Pipette Checkit Pro model for 200uL pipettes	5/pk

Labnet Excel[™] Multifunctional Electronic Laboratory Pipettes

Designed to fit comfortably in right or left hand. Lightweight and well balanced. Plunger button, located on back side of instrument, requires only small movement of index finger to activate, reducing risk of Repetitive Strain Injuries (RSI). Pipette tip ejector slides easily with slight pressure from thumb. Powered by a small removable, rechargeable,



lithium-ion battery. Complete charge is achieved in eight hours and last for 2000 pipetting cycles. Ensures many hours of performance between charges. Multifunctional units with operational modes for standard and reverse pipetting as well as multiple and sequential pipetting, mixing of samples and serial dilutions. All functions are easily programmed with one hand on well positioned display and keypad. Fully motorized piston drive and auto-calibration guarantee excellent accuracy and reproducibility.

MODEL	DESCRIPTION
P3600L-10	Single Channel, 0.5-10µl
P3600L-20	Single Channel, 2-20µl
P3600L-200	Single Channel, 10-200µl
P3600L-1200	Single Channel, 100-1200µl
P3608L-10	8 Channel, 0.5-10µl
P3608L-20	8 Channel, 2-20µl
P3608L-200	8 Channel, 10-200µl
P3608L-1200	8 Channel, 100-1200µl
P3612L-10	12 Channel, 0.5-10µl
P3612L-20	12 Channel, 2-20µl
P3612L-200	12 Channel, 10-200µl
P3612L-1200	12 Channel, 100-1200µl

Solution Reservoirs

For multi-channel pipetting

- ▶ Graduated* polystyrene
- ► Sharp "V" bottoms
- ► Pouring spout on all 4 corners
- ► Sterile and disposable

Designed for use with all multichannel pipettes. Standard 4 channel, 8 channel, 12 channel and various special purpose



pipettes are all compatible with these disposable polystyrene reservoirs. To facilitate easy, dripless pour-off of unused reagents and solutions, all versions have indented "spouts" in each corner. Bottoms are formed with a sharply tapered "V" shape to minimize waste and reagent consumption. Packed in environmentally friendly packaging.

*Graduations on 50ml reservoirs: 5, 10, 25, 50ml, Graduations on 25ml reservoirs: 15, 25ml

MODEL	DIMENSION	CAPACITY	QTY/PK
P8025-B	Solution Reservoirs, bulk pack	25ml	100
P8025-1S	Solution Reservoirs, sterile,	25ml	100
	individually wrapped		
P8025-5S	Solution Reservoir, 5 per sterile bag	25ml	200
P8050-B	Solution Reservoirs, bulk pack	50ml	100
P8050-1S	Solution Reservoirs, sterile,	50ml	100
	individually wrapped		
P8050-5S	Solution Reservoir, 5 per sterile bag	50ml	200

BioPette™ Plus

Autoclavable pipettes designed for exceptional comfort and accuracy

Precision pipettes are designed for exceptional comfort and accuracy. Lightweight and well balanced, they fit comfortably in either right or left hand with large digital display visible to user. Chemically resistant,



maintenance-free seals and finely polished pistons provide unsurpassed accuracy sample after sample.

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

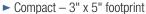
Discovery pipettes have a universal shaft that accepts most pipette tips. Tip ejector is adjustable to accommodate various styles of tips and removable for pipetting into narrow tubes. Made from stainless steel, it will not rust, corrode or break. Discovery pipettes are fully autoclavable.

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MODEL	DESCRIPTION		
P3942-2	BioPette Plus Discovery Pipette, 0.1 - 2µL		
P3942-10	BioPette Plus Discovery Pipette, 0.5 - 10µL		
P3942-20	BioPette Plus Discovery Pipette, 2 - 20µL64		
P3942-100	BioPette Plus Discovery Pipette, 10 - 100μL		
P3942-200	BioPette Plus Discovery Pipette, 20 - 200µL		
P3942-1000	BioPette Plus Discovery Pipette, 100 - 1000μL		
P3942-5000	BioPette Plus Discovery Pipette, 1000 -5000μL		
P3942-10000	BioPette Plus Discovery Pipette, 1000 - 10000μL		
P4808-10	BioPette Plus Discovery Eight-Channel Pipette, 1 - 10µL		
P4808-50	BioPette Plus Discovery Eight-Channel Pipette, 5 - 50µL		
P4808-200	BioPette Plus Discovery Eight-Channel Pipette, 20 - 200µL		
P4808-300	BioPette Plus Discovery Eight-Channel Pipette, 50 - 300µL		
P4812-10	BioPette Plus Discovery Twelve-Channel Pipette, 1 - 10μL		
P4812-50	BioPette Plus Discovery Twelve-Channel Pipette, 5 - 50μL		
P4812-200	BioPette Plus Discovery Twelve-Channel Pipette, 20 - 200μL		
P4812-300	BioPette Plus Discovery Twelve-Channel Pipette, 50 - 300μL		
P3942-SK4	BioPette Plus Discovery 4 Pack Plus, Includes 4		
	Pipettes (P3942-10, -20, -200, -1000) One Carousel		
	Stand and 3 Racks of BioFree Tips		

Benchtop Bag Holder

Perfect benchtop disposal container for tips, tubs, gloves, plates, etc.

Tailor-made for 8.5" x 11" autoclave bags, providing the perfect disposal container for all the contaminated or expended materials in your lab.



- ► Autoclavable sturdy, steel contruction
- ► Biohazard bags feature printed marking area







Labnet BioFree™ Pipette Tips



Designed to fit a wide variety of single and multi-channel pipettes. Flexible walls and a series of internal sealing rings ensure a secure fit and minimal force to eject.

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. Each lot of tips is tested for accuracy and precision, and carefully inspected for uniformity and manufacturing irregularities.

MODEL	DESCRIPTION
P1000-10	Labnet, BioFree Pipette Tips, 0.5-10µL, bulk pack of 1000
P1000-1000	Labnet, BioFree Pipette Tips, 1000µL, bulk pack of 1000
P1000-1000-R	Labnet, BioFree Pipette Tips, 1000µL, 10 racks of 96
P1000-10-R	Labnet, BioFree Pipette Tips, 0.5-10µL, 10 racks of 96
P1000-10X	Labnet, BioFree Pipette Tips, 0.5-10µL, Extended Length,
	bulk pack of 1000
P1000-10X-R	Labnet, BioFree Pipette Tips, 0.5-10µL, Extended Length,
	5 racks of 960,4800/case
P1000-1200-R-F	Labnet, BioFree Filtered Pipette Tips, 1200µL,
	10 racks of 96
P1000-200	Labnet, BioFree Pipette Tips, 200µL, bulk pack of 1000
P1000-200-R	Labnet, BioFree Pipette Tips, 200µL, 10 racks of 96
P1000-300	Labnet, BioFree Pipette Tips, 300µL, bulk pack of 1000
P1000-300-R	Labnet, BioFree Pipette Tips, 300µL, 10 racks of 96

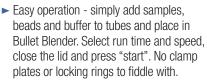
Sample Processing



Bullet Blender® Homogenizer

Aim for higher efficiency, superior results and greater value

Ideal for a wide range of laboratory tasks, including disrupting, homogenizing, dissociating or lysing cells, tissues and plant matter. Achieves consistent results while saving time, effort and money.





- ► High-efficiency technology using patented striking technology, "bullets" in the Bullet Blender repeatedly strike tubes resulting in vigorous agitation of samples and collisions between samples and beads inside tubes.
- ► High yields delivers high efficiency under microprocessor-controlled conditions for consistent results. Due to unique design, minimal heat preserves sample quality.
- ► High throughput runs up to 24 samples in parallel. No probes to clean between samples so there is no cross contamination.
- Choose from a variety of beads including RNase free, covering a wide array of applications and samples, packaged in bulk or pre-loaded in tubes. Bullet Blender comes with a starter pack sampling of beads.*

Specifications:

Capacity: Process up to 24 samples in 1.5 or 2ml tubes, up to 12 samples in 5ml tubes, or up to 8 samples in 50ml tubes

Tubes: Uses commonly available tubes

Environment: Operational in constant 4°C to 50°C. Use in refrigerator/cold room or an incubator

Air cooling option: Keeps samples near ambient temperatures
 4C cooling option: Use dry ice to keep samples near 4C while processing
 Speed control: Adjustable to handle gentle vortexing to homogenization of bones

Dimensions: Most models have a small footprint:

9" W x 10" D/22cm x 25cm

Largest model is 13" W x 14" D/33cm x 35cm

MODEL	DESCRIPTION	SAMPLE CAPACITY	TUBE/ SAMPLE SIZE
BBX-24 BBY-24	Bullet Blender Bullet Blender Storm (Air cooling, accepts snap-cap or screw-cap tubes, bigger motor for tough samples)	1-24 1-24	1.5ml tubes (up to 0.3g) 1.5ml tubes (up to 0.3g)*
BB24-AU	Bullet Blender Gold (4C cooling, accepts snap-cap or screw-cap tubes, bigger motor for tough samples)	1-24	1.5ml tubes (up to 0.3g)*
BBY-5E	Bullet Blender 5E (Air cooling, bigger motor for tough samples)	1-12	5ml tubes (0.1g - 1.0g)
BB50-DX	Bullet Blender 50-DX (Air cooling)	1-8	50ml tubes (0.1g - 13.5g)
BB50-AU	Bullet Blender 50 Gold (4C cooling)	1-8	50ml tubes (0.1g - 3.5g)

Prefilled Lysis Tube Kits

MODEL	DESCRIPTION	QTY
Prefilled with	Stainless Steel Beads	
NAVYE1	1.5mL Eppendorf Safe-Lock tubes	50
NAVYE1-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free	50
NAVYE5	1.5mL Eppendorf Safe-Lock tubes	250
NAVYE5-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free	250
NAVYR1	1.5mL RINO screw-cap tubes prefilled	50
NAVYR1-RNA	1.5mL RINO screw-cap tubes, RNase free	50
NAVYR5	1.5mL RINO screw-cap tubes	250
NAVYR5-RNA	1.5mL RINO screw-cap tubes, RNase free	250
Prefilled with	Beads	
GREENE1	1.5mL Eppendorf Safe-Lock tubes	50
GREENE1-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free	50
GREENE5	1.5mL Eppendorf Safe-Lock tubes	250
GREENE5-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free	250
GREENR1	1.5mL RINO screw-cap tubes	50
GREENR1-RNA	1.5mL RINO screw-cap tubes, RNase free	50
GREENR5	1.5mL RINO screw-cap tubes	250
GREENR5-RNA	1.5mL RINO screw-cap tubes, RNase free	250
*Call for addition	not boads and boad kits	

*Call for additional beads and bead kits

BeadBug™ Microtube Homogenizer



- Extremely powerful mixing for lysis, grinding or homogenization
- ► Faster and more effective than tissue grinders
- Mix 1, 2 or 3 tubes simultaneously
- Extremely compact, less than 7" wide
- ► Eliminates cross contamination associated with hand held homogenizers

BeadBug $^{\text{TM}}$ is a high energy benchtop homogenizer that sets the performance standard for personal sized cell disruption and lysis instruments.

Simultaneous homogenization of up to 3 samples takes place (often within 45 seconds) inside disposable 2ml screw cap microtubes. Optimized mixing motion causes rapid cell disruption through constant high velocity impact from hardened micro-beads chosen specifically for your sample type.

Developed for samples too tough to be homogenized in a common lab vortexer, BeadBug provides a convenient and economical alternative to traditional homogenizers. With up to three tube capacity and a foot print of just 7" x 8", BeadBug is the ideal homogenizing instrument for low to medium throughput laboratories.

Specifications:

Speed range: 2,700 to 4,000rpm **Capacity:** 3 x 2ml (screw cap/non-skirted)

Timer: 3 sec. to 3 min.

Operating temperature range: +4°C to +65°C **Dimensions:** 6.9" x 8.3" x 5.3"/17cm x 21cm x 13.5cm

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MODEL	DESC	RIPTIO	V		
D1030	Beadl	Bug Micr	otube Ho	omogenizer	



Prefilled Tube Kits, non-skirted with caps

MODEL	DESCRIPTION	BEAD SIZE	QTY
D1031-01 D1031-05 D1031-10 D1032-01 D1032-05 D1032-10 D1032-15	Standard Glass Beads Standard Glass Beads Standard Glass Beads Standard Glass Beads Triple-Pure High Impact Zirconium Beads	Ø: 0.1mm Ø: 0.5mm Ø: 1mm Ø: 0.1mm Ø: 0.5mm Ø: 1mm Ø: 1.5mm	50/pk 50/pk 50/pk 50/pk 50/pk 50/pk 50/pk 50/pk
D1032-30 D1033-28 D1032-SK	Triple-Pure High Impact Zirconium Beads Stainless Steel (Acid-Washed) Beads Triple-Pure High Impact Zirconium Beads Starter Kit, Ø: 0.1, 0.5, 1, 1.5 and 3mm	Ø: 3mm Ø: 2.8mm	50/pk 50/pk 10 each

Digital Dry Bath



- Single, dual and four block capacity
- ▶ Dual display
- ► USB connectivity enables traceability of data
- Molded block chamber
- ► Broad temperature range up to 150°C

Incorporates the best combination of features including block capacity, dual displays, and an external temperature probe giving life science researchers the confidence and efficiency needed when working with precious samples.

Specifications:

Temperature range/uniformity: Ambient +5° to 150°C/±0.2°C

Timer: 1 min - 99 hr 59 min or continuous

Digital increments: 0.1°C/1 min **Block capacity:** 1, 2 or 4 blocks

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MODEL	DESCRIPTION
D1301	Digital Dry Bath Single block capacity, 8.3" x 12.4" x 4.7"
D1302	Digital Dry Bath Dual block capacity, 8.3" x 12.4" x 4.7"
D1304	Digital Dry Bath Four block capacity, 8.3" x 16.3" x 4.7"
D1101	Solid block for machining (no holes)
D1102	Block, 48 x 0.2ml PCR tubes or 6 x 0.2ml
D1102A	Block, 24 x 2ml tubes
D1105	Block, 24 x 0.5ml tubes
D1105A	Block, 24 x 1.5ml tubes
D1106	Block, 35 x 6mm tubes
D1112	Block, 20 x 12mm tubes
D1115-TALL	2 x 15ml centrifuge tubes
D1196-PCR	Single Block 96 Well Pcr Plate
D1296	Dual Block, 96 well microtiter plate or 4 slides
	for dual block unit only
D1296-PCR	Dual Block, 96 well PCR plate, skirted or nonskirted
	for dual block unit only

My Block™

A personal sized Drybath



- ► Compact, fits in the palm of your hand
- ► Exchangeable blocks, for tubes 0.2 to 50ml
- Clear hinged cover ensures temperature uniformity
- Can be used "on-the-go" wherever a 12 volt power source is available
- Touch pad control with digital display for "set and walk away" temperature selection and unrivaled accuracy

Specifications:

Temperature range: Ambient +5 to 100°C in 0.1°C increments

Temperature accuracy: ±0.5°C **Temperature uniformity:** ±0.2°C

Dimensions: 4.4" x 5.9" x 4"/11cm x 15cm x 10cm

MODEL	DESCRIPTION
BSH200	MyBlock Mini Digital Dry Bath with block lifter
	(Blocks sold separately)
BSH200-02	Block, 40 x 0.2ml or 5 x PCR strips
BSH200-05	Block, 24 x 0.5ml
BSH200-15	Block, 15 x 1.5ml
BSH200-1520	Block, 15 x 1.5 or 2ml
BSH200-150	Block, 4 x 15ml*
BSH200-500	Block, 2 x 50ml*
BSH200-A12V	Vehicle power adapter (sold separately)

^{*}Not compatible with clear cover



MyBlock™ HL Mini Dry Bath



- Heated lid prevents evaporation and condensation
- ► Compact, fits in the palm of your hand
- ► Independent temperature control of lid and block
- ► Exchangeable blocks for 0.2 to 0.5ml tubes
- ► Room temperature to 37°C in just 2 minutes
- ► Ideal for temperature sensitive applications

Specifications:

Temperature range: Ambient +5 to 100°C in 0.1°C increments

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

Dimensions: 4" x 6" x 4.5"/10.5cm x 15cm x 11.5cm

MODEL DESCRIPTION

BSH200-HL MyBlock™ HL Mini Dry Bath with Heated Lid

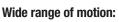
Additional blocks available, see BSH-200

Mini LabRoller™ Rotator

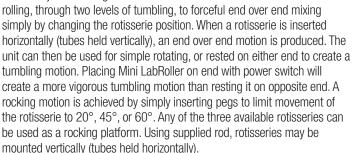
Economical solution for tube mixing

Compact and sleek design:

Fits easily into most incubators. Lightweight and portable, the unit is easily moved from the bench to a biological or chemical hood. Simple construction allows for easy cleaning and decontamination.



Uniquely designed so that the level of agitation can be adjusted from gentle



Interchangeable rotisseries hold numerous tube sizes: Supplied with a rotisserie for 36 x 1.5 or 2ml tubes. Two additional rotisseries are available separately.

Specifications:

Motion/speed: Rotating, rocking, tumbling

Speed: Fixed 24/20 rpm

Operating Temperature: 4° to 40°C

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MODEL	DESCRIPTION
H5500	Mini LabRoller Rotator with rotisserie for 36x1.5/2ml tubes
H5500-02	Rotisserie for 36x1.5ml tubes
H5500-15	Rotisserie for 10x15ml and 12x5ml tubes
H5500-50	Rotisserie for 6x50ml tubes

Revolver 360° Sample Mixer



Superior sample mixing

- ► Complete 360° rotation
- ► Adjustable 0-90° mixing angle

Accepts a variety of tube sizes and mixes them horizontally, vertically, or any position in between. Changing mixing angle is easy. No tools required.

Revolver with optional H5600-15 rotisserie

Interchangeable rotisseries accept tubes from 1.5ml to 50ml. Each rotisserie is split into two halves. Each half can be exchanged to mix more than one tube type at the same time and can be rotated independently from a center point on shaft. Placing the halves in line with shaft produces an end over end tumbling motion, similar to that used to mix blood tubes. Rotating rotisserie at a right angle to the shaft produces a gentle mixing motion, ideal for delicate samples. Rotation speed is fixed at 18 rpm.

Revolver with optional H5600-50 rotisserie

Molded housing, easy to clean and decontaminate. 36 x 1.5/2ml rotisserie is supplied. Other configurations available.

MODEL	DESCRIPTION
H5600	Revolver Tube Mixer w/rotisserie for 36 x 1.5 tubes
H5600-02	Rotisserie for 36 x 1.5/2ml tubes (included with unit)
H5600-15	Rotisserie for 10 x 15ml tubes and 16 x 5/7ml tubes
H5600-50	Rotisserie for 6 x 50ml tubes

Orbi-Shaker™

- ► Perfectly circular 19mm orbit for aeration and mixing
- ► Digital speed control up to 300 rpm

Features 9.5" x 8" non-slip, rubber coated platform for tissue culture flasks, petri dishes and staining trays. Additional platforms are available including the Magic Clamp™ platform for use with Erlenmeyer flasks and test tube racks.

Unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.

Specifications:

Speed range/increment: 50 to 300 rpm in 10 rpm increments

Orbit: 19mm (3/4")

Maximum capacity: 4 x 1L or 4 kg

Standard platform dimensions: 9.5" x 8"/24cm x 20cm Dimensions: 11" x 10.7" x 5"/28cm x 27cm x 13cm

Operating Temperature: 4° to 65°C

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MODEL	DESCRIPTION	
BT302-JR	Orbi-Shaker JR.	
BT302-MR	Magic Clamp™ universal platform (9.5x8")	
	for flasks and tube racks (clamps sold separately)	
BT302-MR-500	Clamp for Magic Clamp platform, 500ml (max. 5)	
BT302-MR-250	Clamp for Magic Clamp platform, 250ml (max. 8)	
BT302-MR-125	Clamp for Magic Clamp platform, 125ml (max. 12)	
BT302-MR-50	Clamp for Magic Clamp platform, 50ml	
BT302-MR-1550	Tube rack for Magic Clamp platform,	
	12x50 and 21x15ml conical tubes (max. 1)	
BT302-P-500	Dedicated platform with 5 x 500ml	
	Erlenmeyer flask damps attached	
BT302-P-250	Dedicated platform with 8 x 250ml	
	Erlenmeyer flask damps attached	
BT302-P-125	Dedicated platform with 12 x 125ml	
	Erlenmeyer flask clamps attached	
BT302-P-MP	Dedicated platform, 4 x microplates (standard or deepwell)	
BT302-P-SP	Spring rack platform, for uncommon vessels and containers	

Incu-Shaker Mini



- Exceptional temperature uniformity
- Extremely compact, just 11" wide
- Exchange flask clamps in one second with the MAGIC CLAMP™ magnetic system

Incu-Shaker[™] Mini is the most compact shaking incubator in its class. Despite the remarkably small footprint, a large 11.5" x 9.5" work space accepts several platforms for use with a variety of flasks, tubes and other common vessels.

Standard platform (included) features a non-slip, rubber coated surface, ideal for tissue culture flasks, petri dishes and staining trays.

Convenient MAGIC CLAMP $^{\text{\tiny M}}$ platform is also available for use with Erlenmeyer flasks and test tube racks. Unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.

Temperature, shaking speed and run time are displayed on large LED control panel. Integral microprocessor includes a constant monitoring system that verifies and maintains accuracy through duration of program. Sophisticated over-temperature and over-speed controls ensure long life, safety and sample integrity.

Specifications:

Temperature range: Ambient +5 to 60°C (Increments of 0.1°C)

Temperature uniformity: $\pm 0.25~\%$ Temperature accuracy: $\pm 0.1~\%$

Shaking speed range: 30 to 300 rpm (Increments of 1 rpm)

Shaking orbit: 19mm (3/4")

Platform dimensions: 9.5" x 11.5"/ 23.5cm x 29.2cm

Exterior dimensions: 11" x 15.7" x 10.5" (lid open, height = 25") 28cm x 40cm x 27cm (lid open, height = 63cm)

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MODEL	DESCRIPTION
H1000-M	Incu-Shaker™ Mini Shaking Incubator
H1000-MR	Magic Clamp™ universal platform for flasks and
	tube racks (clamps sold separately)
H1000-MR-500	Clamp for Magic Clamp platform, 500ml (max. 5)
H1000-MR-250	Clamp for Magic Clamp platform, 250ml (max. 8)
H1000-MR-125	Clamp for Magic Clamp platform, 125ml (max. 12)
H1000-MR-50	Clamp for Magic Clamp platform, 50ml
H1000-MR-1550	Tube rack for Magic Clamp platform,
	12 x 50 and 21 x 15ml conical tubes (max. 1)
H1000-P-500	Dedicated platform with 5 x 500ml
	Erlenmeyer flask damps attached
H1000-P-250	Dedicated platform with 8 x 250ml
	Erlenmeyer flask damps attached
H1000-P-125	Dedicated platform with 12 x 125ml
	Erlenmeyer flask clamps attached
H1000-P-MP	Dedicated platform, 4 x microplates
	(standard or deepwell)
H1000-P-SP	Spring rack platform, for uncommon vessels
	and containers

Other models and capacities available online or by email.

Please visit www.braintreesci.com or email
info@braintreesci.com for details and pricing.

AccuTherm[™] Microtube Shaking Incubator

Peltier Technology

AccuTherm[™] Microtube Shaking Incubator is a temperature-controlled vortexer using peltier technology to rapidly heat and cool important samples.

Bioscience Applications

Compact footprint incorporates an intuitive control panel with large multicolor display, allowing 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 combination block that holds both 0.5ml and 1.5ml tubes.



Specifications:

Temp Setting: Range 0 - 105°C **Temp Control Range**: Ambient -14°C

to 100°C

Timer Range: 1 min - 99h 59m **Mixing Speed:** 300 rpm - 1500 rpm

Mixing Orbit: 3 mm

Temp Control Accuracy: +/-0.5°C Temp Uniformity: +/-0.5°C Heating Time: 6.5°C/minute Cooling Time: 1.5°C/minute Noise Level: <60 dBA

MODEL	DESCRIPTION
I-4001-HCS	Accutherm Microtube Shaking Incubator
I-4000-A	Block, 40 x 1.5ml
I-4000-B	Block, 54 x 0.5ml
I-4000-C	Block, 96 x 0.2ml
I-4000-D	Block, 24 x 15ml
I-4000-E	Block, Water bath (ID: 115 x 73 x 38 mm)
I-4000-G	Block, 26 x 0.5ml and 24 x 1.5ml
I-4000-H	Block, 40 x 2.0ml
I-4000-J	Block, 96 Well ELISA Plate

Benchmixer



- ► Powerful motor for instant vortexing
- Q-Drive[™] dynamic balance system
- ► Touch or continuous operation
- ➤ Variable speed control from 200 to 3200 rpm

BenchMixer[™] sets the standard in vortex mixing. With advanced Q-Drive[™] technology, BenchMixer[™] provides smooth instant vortexing of even the largest sample sizes, including full 50ml tubes.

Unique counter balance system creates maximum vortexing action, while minimizing noise and excessive vibration.

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

MODEL	DESCRIPTION
BV1000	BenchMixer Vortex Mixer
BV1000-FLAT	Optional 3" flat head
BV1000-COMBO	Optional combination head for tubes and microplates
	Holds 66 tubes (38 x 1.5ml and 28x 0.5ml) or one microplate



Orbit™ 300 Multipurpose Vortexer

Three interchangeable platforms (available separately) accommodate a variety of sample containers. Flat platform, covered with a nonslip rubber mat, holds plates, dishes, boxes, etc. Microplate platform accommodates up to four microplates. Remaining platform has spring loaded retaining bars that adjusts to hold flasks, bottles, racks and other containers in place.

Time and speed are set and displayed digitally. Large, three digit LED. Constructed of heavy gauge, coated steel for reduced motor noise and unit stability. Can be used in temperature controlled environments making it ideal for cold room or incubator use.

Specifications:

Speed range: 100-1200 rpm for gentle mixing to vigorous agitation

Timer: 0 to 99 minutes or continuous **Motion/orbit size:** horizontally circular, 3mm

Maximum load: 12.3 lb/5.6 kg

Ambient operating range: +4° to 65°C

MODEL	DESCRIPTION
S2030-300	Orbit 300 Digital Multipurpose Shaker, base only
S2030-10	Platform for four microplates
S2030-12	Flat platform (30 x 30cm) with nonslip rubber mat
S2030-13	Spring loaded platform for flasks, bottles, etc.

Benchrocker





With adjustable speeds and tilt angles, user can set both parameters to match vessel size and volume of liquid being mixed. User can adjust both parameters to match vessel size and volume of liquid being mixed, yielding optimum results. Rocking speed and tilt angle are both easily adjustable in seconds. At low speeds and minimal tilt angles, both models (2D for "seesaw" motion or 3D for "gyratory" motion) provide a gentle wave effect for non-foaming mixing, as is required for most blot washing and gel work. When set to higher speeds and more extreme tilt angles, they produce aggressive agitation for vigorous sample mixing. Dual platform option expands workspace.

BenchRocker 2D and 3D can accept stackable platforms (2.75" clearance). All platform mats are autoclavable. Both models have maintenance free brushless motors and are safe for use in cold rooms and incubators.

MODEL	DESCRIPTION
BR2000	BenchRocker 2D variable speed rocker with flat mat platform
BR2000-SK	Optional stacking platform (14"x12") with flat mat
BR3D2300	BenchRocker 3D variable speed rocker with dimpled and flat mats
BR1000-SK	Optional stacking platform (12"x12") with flat mat
BR1000-SK-D	Optional stacking platform (12"x12") with dimpled mat
BR0718	LaBungee™ elastic tie downs with hooks, pack of 4

Vortex Mixer VX-200

Unique CombiCup™ head has a nonslip surface and accepts single or multiple tubes of various sizes



- Powerful, reliable motor
- ► Optimized counter balance system minimizes vibration
- ► Circular orbit for effective vortexing at any speed
- ► Standard CombiCup[™] accepts a variety of tube sizes
- ► Full range of accessories

Mix and vortex any size tube

Provides fast, efficient mixing with minimal vibration. Features a true circular orbit that allows for even distribution of vortexing across the entire speed range. A full range of accessories is available to accommodate most common laboratory tubes and plates. Continuously variable speed is useful for a variety of applications, from gentle mixing to resuspending pellets. The unit has a circular orbit, rather than elliptical allowing a vortexing motion to be achieved even at low speeds. Can be operated in either "touch" or continuous mode. When in "touch" mode, the motion is activated by depressing sample head and stopped by removing pressure. "On" position will operate continuously until turned off. CombiCup™ head can be used with a single tube or a whole handful. Unique over molding technology provides a sturdy plastic core surrounded with nonslip TPE. Optional heads available.

Specifications:

Speed range: 0-3, 400 rpm Vortex a single tube or a handful with the operating modes touch or continuous

Ambient operating range: 4° to 65°C Nonslip TPE

MODEL	DESCRIPTION
S0200	Vortex Mixer
Optional Heads	S
S0200-21	24 x1.5/2ml tubes, 24 x 0.5ml tubes and
	32 x 0.2ml tubes (or 4 PCR strips)
S0200-22	1 microplate or 64 x 0.2ml tubes or 8 PCR strips
S0200-23	8 x 15ml and 8 x 12/13mm diameter tubes continuously
S0200-24	6 x 50ml tubes adjustable variable
S0200-25	12 x 1.5/2ml tubes, held horizontally
S0200-26	4 x 15ml tubes, held horizontally
S0200-27	2 x 50ml tubes, held horizontally

Other models and capacities available online or by email.

Please visit www.braintreesci.com or email
info@braintreesci.com for details and pricing.

Multi-Therm[™] Temperature Controlled Vortexer

Cool - Heat - Shake

- ► Temperature control from 0° to 100°C
- Exchangeable blocks for tube sizes 0.2 to 50ml
- Precision contoured wells for uniform thermal transfer
- ► Two models: heat/cool or heat only

All popular tubes and plates are compatible, including as many as six 50ml tubes. Speed,

time and temperature settings are continuously visible on the LCD, simultaneously showing both actual and selected values. Integral over-temperature control ensures long life, safety and sample integrity.

Specifications:

Temperature range (HC): Ambient 20° to 100°C **Temperature range (H):** Ambient +5° to 100°C

Ramp rate: Heating: 5.0°C/min.; Cooling: 2.5°C/min. (HC only)

Temperature accuracy: ±1.0°C Speed range: 200 to 1500 rpm, or "off" Motion/orbit: Horizontally circular/2mm

Capacity: Per selected block

Dimensions: 8.25" x 11.5" x 8.25"/21cm x 29cm x 21cm

	MODEL	DESCRIPTION
	H5000-HC H5000-H	MultiTherm Shaker with heating and cooling MultiTherm Shaker with heating only
Blocks separately:		ately:
	H5000-02	Block, 96 x 0.2ml or one PCR plate
	H5000-05	Block, 54 x 0.5ml
	H5000-CMB	Block, combination 15 x 0.5ml and 20 x 1.5ml
	H5000-15	Block, 35 x 1.5ml
	H5000-20	Block, 35 x 2ml
	H5000-12*	Block, 24 x 12mm (200 to 1200 rpm/Ambient -10° to 100°C)
	H5000-150*	Block, 12 x 15ml (200 to 750 rpm/Ambient -10° to 100°C)

*Note: The larger mass of this block results in a reduced speed and temperature range.

H5000-500* Block, 6 x 50ml (200 to 750 rpm/Ambient -10° to 100°C)

GyroMini Nutating Mixer

Ideal for mixing samples in blood and centrifuge tubes. Combines motions of an orbital shaker and a rocker to produce a three dimensional action. The result is a thorough yet gentle mixing without foaming. Both speed and tilt angle of this small shaker are fixed to provide the optimal level of agitation for



Specifications:

be used in a cold room.

Speed range: 24 rpm Motion/ Pitch: 3-D/fixed 20° Maximum load: 1.75 lb/0.8 kg Ambient operating range: +4° to 65°C

Dimensions: 9.75" x 7.5" x 7"/24.8cm x 19.1cm x 17.8cm

MODELDESCRIPTIONS0500GyroMini Nutating Mixer with dimpled rubber mat

TC 9639 Thermal Cycler

- ► Intuitive touch screen control
- ► 0.2ml tubes or strips (96)
- ► Program Wizard quick, easy and foolproof
- ► 0.5ml tubes (39)
- ► Unique multi-format block
- ► 96 well plate (1)

Consistent, reliable results. Large, full-color, touch-screen. Program wizard and 10 preinstalled programs make it easy to get up and running.

From "Home" screen, simply touch an icon to view the last run program, enter the program library, or

use the program wizard to quickly enter a protocol. lcons for favorite programs can be added for faster access.

Program wizard guides user through quickly setting up a protocol in a single screen.

Fully adjustable heated lid prevents condensation and evaporation of samples. Programmable lid temperature. When block temperature is below 35°, lid automatically shuts off. Heating and cooling of block are controlled within exceptionally tight tolerances.

TC 9639 accepts 96×0.2 ml tubes, a 96 well plate or 39×0.5 ml tubes in the same sample block. An in-situ adapter is available for use with slides. May be purchased with a 384 well sample block.

MODEL	DESCRIPTION
T5000-96 T5000-384	TC 9639 with multi-format block TC 9639 with 384 well block
T5000-A-IS	In-Situ Adapter, for T5000-96

^{*}Includes US plug, for EU plug, please add (-E) to the item number.

myGel™ Mini

Accuris myGel Mini electrophoresis system includes gel box power supply and casting sets. Quick and easy gel casting, no clamps or spacers required.

Tttaches directly to power supply for a secure connection. Selectable parameters include 3 preset voltages - 35V, 50V or 100V - and a 99 minute timer.



Safety lid is vented to help dissipate heat generated during electrophoresis. Current runs through system only when lid is properly in place.

Includes trays and casting stands for both 10.5 x 6cm and 5 x 6cm gels and double-sided combs. Smaller tooth combs are compatible with multichannel pipettes. Trays feature a dark contrast strip to help visualize wells while loading and lines that fluoresce under UV and blue light to track progress of the run.

MODEL	DESCRIPTION	
E1101	MyGel Mini Electrophoresis System includes E1101-Cs1 and E1101-CS2	
E1101-SK	MyGel Mini Starter Kit, includes E1101	
	mini digital balance and 100g of LE agarose	
E1101-CS1	Casting set for 10.5 x 6cm gels, includes two trays	
	and two combs (22*/12 teeth)	
E1101-COMB1	Reversible combs, 22*/12 teeth for E1101-CS1 casting set (2/pk)	
E1101-CS2	Casting set for 5 x 6cm gels, includes four trays	
	and two combs (18*/10 teeth)	
E1101-COMB2	Reversible combs, 18*/10 teeth for E1101-CS2 casting set, (2/pk)	
*Multi-channel ninette comnatible		



Enduro® Gel XL

- Control set voltage, amperage and time
- ► Flexibility runs 6 x 6cm to 12.5 x 12cm gels
- ➤ Throughput up to 112 samples at once
- Convenience casting set and combs included



Includes gel trays, combs, casting stand, gel tank and digital power supply. Molded migration tank, gel trays and multichannel combs for leak-proof performance and long life. Direct connection of power supply into gel box eliminates need for power leads.

Pressing eject button separates the gel box and power supply. Power supply can be set to either constant voltage or constant current with automatic crossover between the two parameters. Large digital display. Cassettes protect fragile electrodes from damage and allow for easy replacement.

Magnetic sensor allows current to flow to electrodes only when lid is in place. Box lid is vented to dissipate heat produced during electrophoresis. Clear window over gel platform aids in visualizing gel while unit is running.

Specifications:

Output: voltage/current 10V to 150V/10 to 400 mA **Timer:** 0-99 hr or continuous, audible alert

Program memory: Last programmed parameters saved

Electrical universal: 100V- 240V, 50/60 Hz

Overall Dimensions: 10" x 6.7" x 2.5"/24.5cm x 17cm x 6.2cm **Gel Capacity:** 1 large (12.5 x 12cm), 2 small (12.5 x 6cm), 4 micro (6 x 6cm)

MODEL	DESCRIPTION	
E0160	Enduro Gel XL Electrophoresis System, includes gel tank, power supply and standard casting set	
E0161	Large Gel Tray Set (12.5 x 12cm), pack of 2	
E0162	Small Gel Tray Set (12.5 x 6cm), pack of 2	
E0163	Micro Gel Tray Set (6 x 6cm), pack of 4	
E0164	Large Comb Set, 14/28 teeth, reversible, pack of 2	
E0165	Small Comb Set, 5/8 teeth, reversible, pack of 2	
E0166	Micro Casting Set, includes 4 micro gel trays,	
	2 small combs and a casting stand	
E0167	Casting Stand, for all gel sizes	
E0168	Standard Casting Set, includes 1 large and 2 small gel trays,	
	4 large combs and a casting stand	

Mouse/Mammalian Genotyping Kit

- ▶ DNA extraction and amplification in 1 hour
- Optimize proprietary lysis buffer
- ➤ Single tube no organic solvents or clean up procedures
- ► Enhanced Accuris Hot Start Polymerase included

Quick and easy to use - add sample to the proprietary lysis buffer and incubate for 5-10 minutes, then add the deactivation buffer and incubate for 10 minutes. The crude lysate can then be amplified using fast PCR Accuris Hot Start Tag Master Mix with red loading dye (included).

Accurris™ 1 Hour Mammalian Genotyping Kit Workflow

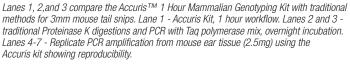












MODEL	DESCRIPTION	REACTIONS
	Accuris 1 Hour Mammalian Genotyping Kit Accuris 1 Hour Mammalian Genotyping Kit	80 400

Enduro® MiniMix

Perfect for western blots

- Designed for processing blots and staining gels
- Optimal fixed speed and tilt
- Enduro Blot boxes are perfect for protein gels



Combines motions of an orbital shaker and a rocker to produce three dimensional action which is gentle and thorough.

Tilt angle is large enough to provide thorough distribution of solutions, yet small enough to keep the center of blot from drying out. Minimal amounts of solution can be used, conserving valuable probes and antibodies.

Non-slip rubber mat helps keep boxes in place on platform. Housing and platform are easy to clean and decontaminate when needed. For temperature controlled incubations, the Enduro MiniMix may be used in a cold room or an incubator. Lightweight, compact and easily moved where needed.

Available in two sizes: Small boxes have a capacity for 3-5ml of solution and are perfect for mini protein gels, such as those used in the Enduro Mini PAGE System; Large boxes will hold 6-10ml and are sized for larger mini protein gels. Boxes are acrylic and feature a hinged lid with a positive catch. Supplied in packages of 10.

Specifications:

Speed: 18 rpm/20 rpm **Motion:** 3D, nutating

Angle: 5°

Ambient operating range: +4° to 65°C

Dimensions: 8" x 7" x 4.5"/20.3cm x 17.8cm x 10.5cm

MODEL	DESCRIPTION
S0600	Enduro MiniMix 3D Shaker with 20 x 16.5cm tray
	and non-slip rubber mat
E2110-BBS	Enduro Blot box, 9.1 x 6.6cm, 3-5ml capacity, 10/pack
E2110-BBL	Enduro Blot box, 11.7 x 8.9cm, 6-10ml capacity, 10/pack

Hot Start Taq DNA Polymerase and Master Mix

- ► Exceptional sensitivity for low copy PCR
- ► Ideal for multiplex PCR and amplification of GC-rich DNA
- ► Curis Tag Polymerase
- ► Buffer optimized for fast cycling and reproducibility

Engineered for controlled polymerase activity, Accuris Hot Start Taq is bound with a monoclonal antibody that blocks enzyme activity allowing reactions to be set up at room temperature without the risk of non-specific amplification. When samples are ready, reaction mixture is heated to 95°C to denature antibody and initiate reaction. Hot Start Taq is provided with a 5X buffer, or in a ready to use 2X Master Mix. Master Mix can be ordered with or without a red gel loading dve.



Gel image shows exceptional sensitivity of Accuris[™] Hot Start Taq Polymerase with 405bp plant mitochondrial DNA. Amplification was performed with decreasing amounts of starting material, from 500ng to 31.25ng.

MODEL	DESCRIPTION	VOLUME
PR1000-HS-500	Tag DNA Polymerase	500u (5u/µl)
PR1000-HS-1000	Taq DNA Polymerase	1,000u (5u/µl)
PR1000-HS-6000	Taq DNA Polymerase	6,000u (5u/µl)
PR1001-HS-200	2x Taq Master Mix	200 x 50µl Reactions
PR1001-HS-1000	2x Taq Master Mix	1,000 x 50µl Reactions
PR1001-HSR-200	2x Taq Red Master Mix	200 x 50µl Reactions
PR1001-HSR-1000	2x Taq Red Master Mix	1,000 x 50µl Reactions

Spectrafuge 24D Digital Microcentrifuge

- ➤ Complete with easy access, 24 x 1.5/2ml rotor
- Set and view speed in rpm or q-force
- Digital set and display of parameters
- Quiet and cool running

Easy-access 24 x 1.5ml rotor is supplied with the Spectrafuge 24D.



Innovative rotor places tubes on a plateau, where user can easily grip their tops. Powerful brushless motor quickly accelerates rotor to a maximum speed of 13,300 rpm/16,000 x g. Controls are simple, consisting of only two knobs. Speed knob is used to set speed in either rpm or g-force. Pressing knob toggles display between rpm and rcf. Turning timer knob sets time parameter, while pushing it starts and stops operation of unit. Last run settings remain in memory allowing for repetitive centrifuging without resetting of parameters. Available in five accent colors.

Specifications:

Speed range: 500 rpm to 13,300 rpm

Maximum RCF: 16,300 x g **Maximum capacity:** 24 x 1.5/2ml

Timer: 0-30 minutes or continuous "Quick" button for momentary operation

Dimensions: 9.25" x 11.5" x 8.5"/23.5cm x 29.3cm x 21.6cm

MODE	L	DESCRIPTION
C2400 C2400 C2400 C2400 C1205 C1206	-T -P -R	Spectrafuge 24D blue accents Spectrafuge 24D teal accents Spectrafuge 24D purple accents Spectrafuge 24D red accents Spectrafuge 24D red accents Adapters for 0.5/0.6ml tubes, pack of 8 Tube adapters for 0.4/0.25ml tubes, pack of 8 Tube adapters for 0.2ml, pack of 8
0.222		rase adaptice for ore-ring paint of o

Mini Micro-Centrifuge

Simple and convenient to operate, features capacity for 8 place MCT and 4 place PCR strip rotors. Once samples are loaded and lid is closed, rotor rapidly accelerates to 6,000 rpm, making it an ideal centrifuge for bringing small droplets to the bottom of tubes for micro-filtrations or basic separations.



- ► Quick release rotor system no tools needed to exchange rotors
- ► Electronic braking allows for more rapid deceleration, less waiting
- ► Dual lid switch and compact, rugged design

Specifications:

Maximum speed: 6000 rpm/2000 x g

Maximum capacity: 8 x 1.5/2ml tubes, 4 x 0.2ml strips **Dimensions:** 6.8" x 5.8" x 4.8"/17.2cm x 14.7cm x 12.2cm

Electrical: AC 100 - 240V, 50/60Hz

MODEL	DESCRIPTION
C1601-S	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor, 0.5 and 0.4ml adapters, smoke gray lid
C1601-B	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor,
	0.5 and 0.4ml adapters, blue lid
C1601-P	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor,
	0.5 and 0.4ml adapters, purple lid
C1601-R	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor,
	0.5 and 0.4ml adapters, red lid

Prism Mini

Self opening lid: Transparent lid for a clear view of samples. Start/stop can be controlled by either on/off switch or by activating self-opening lid.

Quick release rotors: Supplied with two rotors. 8 place tube rotor accommodates 1.5/2ml tubes and a 4 place strip rotor accommodates 4 x 0.2mL tube strips or 32 individual PCR tubes. Rotors have

a quick release hub design. No tools required to exchange the rotors.

Opening lid brings rotor to quick and soft stop without disrupting samples.

Specifications:

Maximum speed: 6000 rpm/2,000 xq

Capacity: 8 place tube rotor and 4 place PCR strip rotor **Dimensions:** 5.2" x 5.2" x 4.4" / 13.2cm x 13.2cm x 11.2cm

MODEL	DESCRIPTION
C1801	Prism Mini Centrifuge, 120V
C1205	8 Adapters for 0.5 ml tubes
C1206	8 Adapters for 0.4 ml tubes
C1222	8 Adapters for 0.2 ml tubes

My Fuge 12



- COMBI-Rotor™ can run 12 microtubes and 4 PCR strips simultaneously
- ► Twice the capacity of traditional mini centrifuges
- ► Near silent operation
- ► Starts and stops with opening/closing of lid
- ► Eliminates the need to change rotors when switching between microtubes and PCR strips

Specifications:

Speed: 5,500 rpm/2,000 xg, quick acceleration/deceleration **Capacity:** 12 x 1.5/2ml tubes, 32 x 0.2ml PCR tubes

4 x PCR strips (8 x 0.2ml)

Dimensions: 5.5" x 7.9" x 4.4"/14 cm x 20cm x 11.2cm

MODEL	DESCRIPTION
C1012	MyFUGE Mini Centrifuge, with COMBI-Rotor for microtubes and PCR strips/tubes
C1008-A5-6	Adapters, 0.5ml, pack of 6
C1008-A2-6	Adapters, 0,2ml, pack of 6

My Fuge Mini



- ► Eight position microtube rotor
- ► Storage compartment for PCR rotor
- Starts and stops in just seconds
- ► Ideal for quick spin downs

Includes increased capacity eight position microtube rotor. A second rotor for 0.2ml PCR tubes and strips is included and stored with rotor removal key in a convenient compartment on bottom of the centrifuge. *All include microtube rotor, PCR rotor, 0.5ml and 0.2ml adapter*

Specifications:

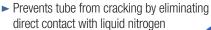
Speed: 6,000 rpm/2,000 xg, quick acceleration/deceleration **Capacity:** 8 x 1.5/2ml tubes, 16 x 0.2ml PCR tubes, 2 x 0.2ml PCR strips **Dimensions:** 4.5" x 5.9" x 4.5", 11.4cm x 15cm x 11cm

,	
MODEL	DESCRIPTION
C1008-B	MyFUGE Mini Centrifuge, blue lid
C1008-C	MyFUGE Mini Centrifuge, clear lid
C1008-G	MyFUGE Mini Centrifuge, neon green lid
C1008-P	MyFUGE Mini Centrifuge, purple lid
C1008-R	MyFUGE Mini Centrifuge, red lid

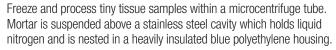


Liquid Nitrogen Cooled Mini Mortar and Pestle Set

► Permits grinding of smaller amounts of tissue right in a 1.5ml microcentrifuge tube resulting in reduced sample loss and collection time



- ► Includes 5" long stainless steel pestle with 4"W (10.2cm) x .75"D (1.9cm) polyethylene handle
- ► Removable, insulated mortar handle, 4"L (10.2cm)



MODEL	DESCRIPTION
372600100	Liquid Nitrogen Cooled Mini Mortar and Pestle Set

CoolCube[™]

Microtube and Microplate Cooler

Stores samples safely on lab bench without sample degredation due to temperature increase or fluctuation. Constructed of DuraStar (a high strength polymer) and a proprietary gel refrigerant, CoolCube maintains temperature at approximately 0°C for up to four hours.



Simply place the CoolCube in a freezer overnight and it's ready for use, keeping samples cool and safe at the bench, without messy ice buckets or wet tubes.

One side of CoolCube can be used as a convenient PCR workstation, with wells for 10 standard 1.5/2ml microtubes and one 96 well PCR plate or 0.2ml tubes/strips. The other side can be used to hold 36 standard 1.5/2ml microtubes.

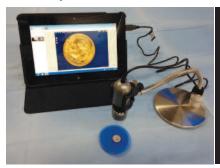
MODEL	DESCRIPTION
R-1000	CoolCube Microtube and PCR Plate Cooler

Magnification and Illumination



Portable Digital Microscope/Camera

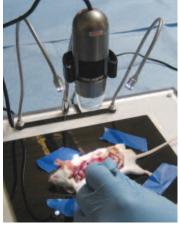
Equip your surgery platform with a portable digital microscope/camera



Capture a photo, real time video, time-lapsed video. project image.









Ideal for small rodent surgery, demonstrations, dissections and much more!

Features a 2.0 USB connection eliminating the need for interface cards or expensive software. Easy and convenient to load and use DinoCapture application software and user's manual are included for collection and processing of photos.

- ► Resolution: 640 x 480 pixels
- ► Magnification: 10~200x continuous
- ► Sensor: 1/4" Color CMOS
- ► Video frame rate: up to 30 frame-per second
- ► Illumination: built-in 8 white LEDs
- ► CD Content: DinoCapture application software, users manual
- ► Automatic or manual color balance and brightness control

System Requirements:

- ► Compatible Windows 2000/XP, Vista and most MAC OS
- ► Intel Pentium III 1 GHz processor or faster
- ► 256 MB RAM
- ► CD-ROM drive
- ► 16-bit color display monitor or higher
- ► Available hi-speed USB 2.0 port

MODEL	DESCRIPTION
PDMC	Digital Microscope/Camera includes mounting bracket (DMCB), DinoCapture software, USB 2.0 extension
DMCB	Bracket for Microscope/Camera (PDMC)
TSPCK	Thermo Surgery Platform/Camera Kit includes thermo surgery platform with gel-pads, digital microscope/camera, mounting bracket (DMCB), DinoCapture software, USB 2.0 extension
SSPCK	Standard Surgery Platform/Camera Kit includes standard surgery platform, digital microscope/camera, mounting bracket (DMCB), DinoCapture software, USB 2.0 extension



Magnification and Illumination

Zoom Stereo Microscope

ZM190 Series zoom stereo microscopes adapt multifunction design and excellent manufacturing technology. ZM190 Series has been built to meet customer demands for a reliable performance. Superb quality and affordable price makes ZM190



Series ideal instruments for a variety of industrial, medical, educational, and special OEM applications.

Binocular head features high eyepoint eyepieces, dual diopter control for sharp, clear focus control matched to individual eye differences.

Top and bottom light is a super bright LED designed to provide excellent lighting without giving off heat. Four-way lighting controls: off, top light only, bottom light only, both top and bottom light on.

- ► Binocular zoom stereo head
- WF10X paired eyepieces
- ▶ 07X-.5X continuous zoom body

MODEL	DESCRIPTION
ZM191	Binocular Zoom Stereo WF10X, 0.7X-4.5X, pole stand with top and bottom LED illumination
ZM191T	Trinocular Zoom Stereo WF10X, 0.7X-4.5X, pole stand with top and bottom LED illumination
ZM194	Binocular Zoom Stereo WF10X, 0.7X-4.5X, focusing rack stand with top and bottom LED illumination
ZM194T	Trinocular Zoom Stereo WF10X, 0.7X-4.5X, focusing rack stand with top and bottom LED illumination

Camera System with Mounting Brackets

Camera system mounts to a standard stereotaxic instrument via a standard V-mount. The camera enhances placement accuracy by allowing for a close-up view working area.



CMOS Sensor: 2.0M pixels **Still Image Resolution:** up to 1600x1200 pixels, Format: JPG, BMP

Video Resolution: up to 1600x1200 pixels,

Format: AVI. Frame Rate: up to 30FPS

Focal Distance: 5mm – infinity Magnification: 5X - 270X

Illumination: 6 white LEDs with adjustable brightness

PC Interface: USB 2.0 **USB Cable Length: 200cm**

MODEL	DESCRIPTION
CS-101	Camera System with Mounting Brackets







DermaScout[™] Used to view, measure and monitor skin lesions fungal infections, tumors, warts and other conditions that may affect the epidermis. ► 6x magnification with 40mm top lens

- ► Diopter focus control for sharp focusing
- ► 40mm field of view (flat field), 31mm working distance
- ► LED illuminated with an array of 9 LEDs
- Over 150 hours of battery power with included battery
- ► Reticule with dual measuring scales: millimeters and inches
- ▶ 20mm, 10 left of center/10 right of center
- ► Measure in 0.1mm/0.05"
- ► Durable locking transport and storage case

MODEL	DESCRIPTION
DS-6-02	DermaScout™

Magnifying Surgical Loupes

Quickly improves vision and corrects poor posture

To choose the right product:

A higher magnification surgical loupe reveals incredible detail but comes with small field of view. User should choose a higher magnification to focus on a narrow work area and to see details that a higher magnification affords.



Lower magnification results in wider field of view and enables user to monitor a broader work area. Because of the greater depth of field, the surgical loupe allows more freedom of movement as they are less sensitive to changes in working distance.



Working Distance: Working distance is approximate distance between users eyes and object user is working on. To choose a pair of surgical loupes with correct working distance, imitate the circumstances of a surgical procedure and try measuring working distance. Keep back straight and be in a comfortable working position. People below 5'7" usually need loupes with 340mm working distance while taller person needs loupe with 420mm working distance in a sitting position.

Illumination: Super bright LED light attaches to surgical loupes for hard to light areas. Two intensity levels and adjustable power at each level. User will find it hard to look into the illuminated area at maximum power setting. Battery can run for 7 hours continuously at lower level or 4 hours at high level. Light weighs only 11g and illuminates a spot with 70mm diameter from 400mm with 6000 K (pure white) color.

MODEL	DESCRIPTION	MAGNIFICATION	WORKING DISTANCE
ML-662	Clip-on surgical loupes double hinge, flip-up design (glasses not included)	2.5x	340mm
ML-672	Clip-on surgical loupes double hinge, flip-up design (glasses not included)	3.5x	340mm
ML-611	Sports frame with glasses double hinge, flip-up design	2.5x	340mm
ML-613	Sports frame with glasses double hinge, flip-up design	2.5x	420mm
ML-623	Sports frame with glasses double hinge, flip-up design	3.5x	340mm
ML-625	Sports frame with glasses double hinge, flip-up design	3.5x	420mm

51700

Motorized

New Standard™ Stereotaxic Instrument for Rat and Mouse

Revolutionary design eliminates the U-frame allowing for greater flexibility and access to the animal



- ▶ No U-frame maximizes operating space
- ► Designed for a rat or mouse on the same base
- ► Vertical and horizontal adjustment of ear and nose posts accommodates rodents of all sizes
- ► Scales at ear and nose posts allow for precise positioning
- ► Equipped with integrated warming base



MODEL	DESCRIPTION
51500	For Rat and Mouse
51503	Dual for Rat and Mouse
51500U	Ultra-Precise Rat and Mouse
51503U	Dual Ultra-Precise for Rat and Mouse
51500D	Digital for Rat and Mouse
51503D	Dual Digital for Rat and Mouse
51500UD	Digital Ultra-Precise for Rat and Mouse
51503UD	Dual Digital Ultra-Precise for Rat and Mouse
51500M	Motorized for Rat and Mouse

Shop online at www.braintreesci.com

Classic Lab Standard™ Stereotaxic **Instrument for Rats**

Multiple manipulator options available to increase resolution

- ► Classic U-frame design
- ► Interchangeable adaptors (for mice or rats)
- ► Gas anesthesia compatible
- ► Absolute lock at 90° vertical
- ► Available with integrated warming base

Time-proven U-frame design provides stability and adaptability while the instrument's triple-lead screws allow for smooth, consistent movements with rapid positioning. Includes

a 100 micron, 3-axes, left-handed manipulator arm. rat adaptor, traditional (18°) ear bars, and corner-clamp probe holder. Also available as dual, ultra-precise, digital or motorized. Non-puncture 45° ear bars available.

MODEL	DESCRIPTION
51600	For Rats
51603	Dual for Rats
51600U	Ultra-Precise for Rats
51603U	Ultra-Precise Dual for Rats
51900	Digital for Rats
51903	Dual Digital for Rats
51900U	Digital Ultra-Precise for Rats
51903U	Dual Ultra-Precise Digital for Rats
51600M	Motorized for Bats

Just for Mouse™ Stereotaxic **Instrument for Mouse**

- ► Dual-arm capable
- ► Ideal for knock-out and transgenic mice
- ► Multiple head-holding options
- Vertical post adjustment
- ► Gas anesthesia compatible
- ► Equipped with integrated warming base

Includes 10" x 10" (25cm x 25cm) square base, 100 micron, 3-axes, left-hand manipulator arm, triple-point mouse and ear bars, snout clamp, and corner clamp

probe holder. Also available as dual, ultra-precise, digital or motorized.

MODEL **DESCRIPTION** 51730 For Mouse 51733 **Dual for Mouse** 51730U Ultra-Precise for Mouse

51733U Ultra-Precise Dual for Mouse 51730D Digital for Mouse 51733D **Dual Digital for Mouse** Digital Ultra-Precise for Mouse 51730UD

51733UD Dual Ultra-Precise Digital for Mice

51730M Motorized for Mouse



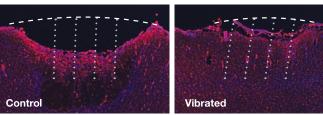
NeuralGlider-Cortical Neural Implant Insertion System

Reduces insertion trauma and improves placement accuracy of penetrating neural implants



accurate array insertions while minimizing displacement/dimpling of the cortical surface, preserving the integrity of the underlying neural tissue.

- ➤ Reduced insertion force and tissue dimpling yielding less insertion damage and neuron loss
- ► Integrated software for control of insertion velocity and depth
- Improved insertion of fixed microwire arrays



Compared to a standard control insertion (left), NeuralGlider reduced cortical surface damage and blood brain barrier leakage (lgG staining, red) at the microwire array insertion site (right). Images showed 20 µm rat cortical sections, 2 weeks after implantation with 2x4, 50 µm microwire arrays.

MUDEL	DESCRIPTION
NG-101	NeuralGlider-Cortical System

New! Manual Stereotaxic Injector

Stoelting's manual Stereotaxic Injector provides an economical means of injecting/withdrawing a calibrated volume with simple, precise manual control. Mounted directly on a stereotaxic frame, it allows precise injection directly through the needle into the tissue. This avoids compliance issues that arise when injections are forced through plastic tubing. Volumes as small as 200 picoliters may be infused or withdrawn.

MODEL	DESCRIPTION
51639	Manual Stereotaxic Injector



Mouse and Neonate Adaptors with Warming Pads



Stoelting's Mouse/Neonatal Rat Adaptors can be used to transform the Lab StandardTM (and other U-frame) stereotaxic for rats into an instrument appropriate for use with mouse and rat pup surgeries.



- ➤ Mouse and Neonates Adaptor with Warming Pad is designed to fit into traditional 'U-frame' stereotaxic instruments so that the stereotaxic can be used with mice or neonatal rats
- ► Elevated Platform for Mouse Lab Standard adapts the 'U-frame' stereotaxic instrument by elevating the mouse to the appropriate height so that bite and ear bars can be used. This adaptor is to be used with Non-Traumatic Mouse Adaptor kit sold separately
- ► Microscope Platform for Mouse and Neonates holds animal's head securely for procedures being done independent of a stereotaxic instrument

Adaptors are Warmer Ready – Stoelting adaptors are designed to be integrated with Stoelting Rodent Warmer System (sold separately) and are used to maintain body temperature throughout surgical procedures. Thermal heating pads are embedded into adaptor to avoid cross contamination with easy clean-up and maintain a sterile environment during stereotaxic surgery. In addition, it can be used as a general warming system or with a rectal thermal probe (sold separately) for homeothermic regulation

MODEL	DESCRIPTION
51625W	Mouse and Neonates Adaptor with Warming Pad
51625-1	Elevated Platform for Mouse Lab Standard
51625-2	Microscope Platform for Mouse and Neonates
51625	Mouse and Neonates Adaptor
53800	Stoelting Rodent Warmer Control Box X1 with cable
50304	Rectal Thermal Probe

New! QSI™ Stereotaxic Injector

A standard of versatility and control

Control one or two independent injections with Stoelting's QSI™ Stereotaxic Injector.

Automatic infusion or withdrawal of nL-µL volumes. Program injection parameters (volume, rate and syringe specifications) using the easy-to-use touch screen control box. Accommodates Hamilton syringes sized 0.5uL-250uL.

Available as single or dual injector

► Add a second injector to single model at any time

► Preprogrammed syringe specifications

Out-of-range warnings

MODEL	DESCRIPTION
53311	QSI Stereotactic Injector, Single
53312	QSI Stereotactic Injector, Dual
53316	Injector Head Only



Magnifier/Multi-Device Flex Arm

Ultra-strong magnetic base/puck system to anchor magnifier on non-metallic surfaces. Attaches directly to metallic surfaces. Small Base: 1.625" dia.

Kit includes:

MODEL

SMAG

SM-FA

SM-AB

SBLL

DESCRIPTION

Stereotaxic Magnifier

Steel Base for bench use

Stereotaxic Multi-Device Flex Arm Kit

it initiation	
9" flex arm with magnetic	
base/puck	
Storage pouch with 8 devices	
includes: large, small and micro	1
alligator clips, mini-grabber, card holder,	
universal velcro mount, Dino-Lite digital	20
microscope holder, universal digital camer	a holder

Stereotaxic Multi-Device Flex Arm, does not include devices

Lab Light

Unique magnetic base/puck system holds lab light firmly on base in any location. Ultra strong magnetic base/puck system allows lab light to attach to non-metallic surfaces. Plug lab light into the optional on/off plug switch for easy on/off operation.



- ► LED on 10" flex arm
- ► Attaches directly to metallic surfaces
- ► Universal power supply (110-220 V)
- ► Small base (1.625" dia.)

MODEL	DESCRIPTION
LL13	Lab Light
LLSW	On/Off Plug Switch

Physiology Equipment 5



MouseOx® Plus Pulse Oximeter

Non invasive, used with:

► Anesthetized and conscious subjects ► Animal sizes neonate to adult mice, rats and other small lab animals

Mice, rats and other small laboratory animals with pulse rate from 90-900 BPM such as marmosets, rabbits, guinea pigs, hamsters, voles, tree shrews, ferrets, opossum, rabbits Provides measurements oxygen saturation, heart rate, temperature*, pulse breath distention, activity	rate, breath distention,		STARR	
MODEL DESCRIPTION	N			

IIIODEE	DECOIL TION
SLS-015000	Mouse 0x Plus Base System, analog output for heart rate for anesthetized monitoring ONLY, USB, universal cable, power supply and 2 sensors
Additional Opt	ions
SLS-015010	Temperature measurement: includes 6' temperature
	probe and software
SLS-015007	Premium Recording Module (last 2 min. chart),
	recording and data analysis capabilities
SLS-015002	Conscious Monitoring Module
	(must have SLS-015000 and SLS-015007 to work)

Conscious Monitoring Enclosure, mouse

Conscious Monitoring Enclosure, rat

*Via a separate sensor

SLS-015003

SLS-015004

MouseOx® Plus Non-invasive Sensors

- ► Easily applied by one person
- ► Monitor both anesthetized and conscious unrestrained subjects
- ► Monitor hypothermic and hypovolemic animals

Five sensors per pack

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MODEL	DESCRIPTION	SIZE
SLS-015 020	CollarClip, conscious unshaved mice 1-20g	XS
SLS-015 021	CollarClip, conscious unshaved mice >15g, rats 5-30g	S
SLS-015 022	CollarClip, conscious rat 31-100	M
SLS-015 023	CollarClip, conscious rat 101-300g	L
SLS-015 024	CollarClip, conscious rat 301-500g	XL
SLS-015 025	CollarClip, conscious rat >500g	2XL
SLS-015 026	ThroatClip, anesthetized unshaved mice,	XS
	1-15g, shaved 1-20g	
SLS-015 027	ThroatClip, anesthetized unshaved >15g, shaved >20g, rat 5-30g	S
SLS-015 028	ThroatClip, anesthetized rat 31-100g	M
SLS-015 029	ThroatClip, anesthetized rat 101-300g	L
SLS-015 030	ThroatClip, anesthetized rat 301-500g	XL
SLS-015 031	ThroatClip, anesthetized rat >500g	2XL
SLS-015 032	Mouse Thigh Sensor, anesthetized mice and young rats	-
SLS-015 033	Rat Foot Sensor, anesthetized rats >100g	_

Original MouseOx® Systems and Sensors available online.

STARR-Link™ Analog Output Module

Output beat-by-beat MouseOx® data in analog form to another recording system.

Starr-Link[™] analog output module provides real-time analog voltage outputs of MouseOx® data. STARR-Link transmits all MouseOx® data at 15 Hz, using a 0-5 VDC



scale. Connects easily to computer with a USB cable. It has no external power supply and is automatically recognized by MouseOx® software. No additional software is needed.

MODEL	DESCRIPTION	
SLS-000003	STARR-Link	

MRI Compatible Sensor

MRI sensor plugs directly into MouseOx Plus and MRI sensor can be used in both small and large bore MRI. The sensor is 20' long enabling the MouseOx Plus and computer to be located a safe distance form the MRI



device. End of sensor contains 5' fiber optic portion to be inserted into bore. Sensor clips included to be used on animals foot or thigh.

MODEL	DESCRIPTION
SLS-001300 SLS-001304	Pulsar Small Bore MRI Compatible Sensor Replacement MRI Thigh Sensor
SLS-001304 SLS-001305	Replacement MRI Foot Sensor

Automated Milker for Rat and Mouse

Ideal for the analysis of breast milk composition





Automated milker provides researchers the ability to collect rat/mouse milk directly from the teat. Collects milk from lactating mothers by alternating negative and atmospheric pressures through two solenoid valves and a vacuum pump attached to a microcomputer.

Environmental pollutants, in particular carcinogenic substances and endocrine disrupting chemicals, are a worldwide concern. The influence that these substances have on babies and their development, through breast or cow milk,



is of great concern. The ability to gather milk from rats and mice, widely used experimental animals, will aid in advancement of research in this area.

MODEL	DESCRIPTION
59150	Automated Milker, Rat and Mice

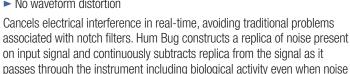


Noise and Vibration Monitoring

Hum Bug Noise Eliminator

- ► Eliminates 50/60 Hz noise and harmonics without filtering
- ► Eliminates electrical interference
- No waveform distortion

characteristics evolve over time.



Hum Bug is not a filter. It does not create phase delays, amplitude errors, DC shifts or waveform distortion. Simply connect it between your preamplifier and any analysis equipment and it will automatically eliminate 50/60 Hz noise and harmonics with frequencies up to several kHz. Noise is eliminated without altering signal of interest even when frequencies within signal overlap with noise components. No settings or adjustments are required.

Hum Bug can eliminate 50/60 Hz noise from virtually any analog signal. It is equally effective at removing noise associated with inadequate grounding, ground loops, and electrical pickup.

MODEL	DESCRIPTION
HUMBUG	Hum Bug Noise Eliminator

VivAlarm Mobile

A convenient, easy-to-use vibration. noise and ultrasonic noise measurement system for the lab animal research environment. Fully mobile, allowing you to measure anywhere in the lab animal space. Equipped to measure sounds humans can hear up to 20kHz to ultrasonic noises from 20khz-100khz, above human hearing range.



Ultrasonic frequencies can easily be monitored. Able to detect subtle vibrations in any animal environment (cages, hoods, vivarium rooms, etc.). Knowing what animals can hear makes reducing or mitigating ultrasonic noise possible. Species specific hearing range overlays and logging capabilities in the VivAlarm Mobile custom software package are an added benefit to understanding what your animals are experiencing. Allows personnel to measure from floor to ceiling, above a cage rack-to-inside a cage, or from the vivarium space to a treatment room and research laboratory.

- ► VivAlarm Mobile software is PC compatible
- ► Requires a PC laptop or tablet with USB port

	o taptop of tablet mail oop port
MODEL	DESCRIPTION
VIVALARM-N VIVALARM-V VIVALARM-NV	VivAlarm Mobile - Noise only VivAlarm Mobile - Vibration only VivAlarm Mobile - Noise and vibration

Rat Loft™

Perforated stainless steel platform that is bent to form a hook allowing loft to be hung from top lip of cage. Easy to install and can be left in cage for cleaning. Stainless steel will not rust, crack, or bend.

- ► Increases floor space per cage
- ► Stainless steel is easily cleaned and durable
- ► No replacement or disposal issues
- Less expensive over time than disposable and plastic devices
- ► Allows nursing mother rats a place of refuge from pups
- ► Seems to have a calming effect on rats
- ► Easy to install and remove
- ▶ New hinged floor design allows researcher to access rat if beneath it

MODEL	DESCRIPTION
RAT-LOFT-H	6.5"W x 3.5"D x 3.5"H, hinged perforated deck
RAT-LOFT-OS	Oversized, 6.5"W x 4.5"D x 3.5"H
RAT-LOFT-S	Small, 5"W x 3.5"D x 3.5"H, perforated deck
RAT-LOFT M	Standard, 6.5"W x 3.5"D x 3.5"H, perforated deck

Mouse Loft

The contoured tube mouse loft was developed to provide a place where the female can find relief from the frantic life on the cage floor with a litter of aggressive hungry individuals.



Contoured tube loft provides an elevated place of refuge where feed can be consumed without the constant bother of the litter. A preliminary study indicates that mice routinely using the contoured tube loft are less likely to eat the litters. Also it is anticipated that the loft will provide for the dam, freer access to the feeder resulting in less weight loss while lactating.

MODEL	DESCRIPTION
MOUSE-LOFT	Contoured Mouse Tube Loft

Cocoon Nesting Fibers



Cocoon is the latest environmental enrichment nesting and bedding product for rodents. Offers the animal an opportunity to fulfill their nesting instincts.

The fibers of the Cocoon product are very short which is safer for the

animal and allows it to create a soft nest, much like in its natural habitat. Cocoon is whitened without chlorine. Sold 6,000 cylinders per case.

MODEL	DESCRIPTION	UNITS
COCO-087	Cocoon Nesting Fibers	6,000/cs

Refuge Mouse Hut



A comfortable and quiet place to rest, or to climb on and explore.

- ➤ Material to shred (just for fun or to build a nest), usually last 7 to 30 days
- ► 4"W x 4"L x 2.5"H, 3 openings
- ► Environmentally safe, non-toxic

MODEL	DESCRIPTION	UNITS
REFUGE-087	Refuge Mouse Hut	600/cs

Modak's Mouse Tube

Developed in conjunction with Canada's leading cancer research hospital in Toronto. This polycarbonate tube can withstand the high temperatures of an autoclave and also maintain it's shape and color. To date there are over 40,000 tubes in the field. Three year warranty.



MODEL	DESCRIPTION

MOD-TUBE Modak's Mouse Tube

iso-PADS

Flat, compressed, rectangular pads of cotton fiber material can be conveniently dropped into standard shoebox rodent cages that are meant to be used as a contact bedding. Rodents enthusiastically shred pads into a soft, fluffy consistency which offers an unsurpassed enrichment aspect to this unique bedding product.



iso-PADS are perfect for post surgical applications. Bright white pad offers great visual monitoring of leaking and bodily functions.

- ► FDA-approved, hypoallergenic cotton-based cellulosic fibers
- ► Perfect companion for micro isolation units or standard shoebox cages
- Absorbs more than 400% its weight in water, enhanced evaporation of liquids
- ► Controls odors better and lasts longer than traditional bedding materials
- ► Biodegradable and environmentally friendly, reduced waste volume
- ► Improved observation of animals and their discharges due to light color
- ► Minimized dust
- ► No pouring and no dispensers greatly reduces airborne particulates

MODEL	DESCRIPTION
ISO-6105	6" x 10", non sterile, bulk, 500/case

Innorichment™ Package

Flat nesting enrichment that delivers consistent results while minimizing labor, storage and waste. Arrives irradiated and ready to use.



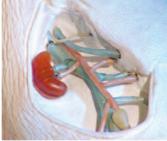
- ➤ Keeps rodents active and helps reduce aggressive behavior
- ► Helps regulate body temperature (thermoregulation)
- ➤ Zigzag strips of varying lengths allow for more complex foraging and nesting activity
- ► Multiple tear points make it easier for rodents to break apart
- ► Rounded corners of strips provide a gentler touch to rodents
- Control an exact quantity of material to reduce research variables, cost and waste
- ► Nests can be easily transferred to reduce animal stress
- ► Also available inserted into every pre-bedded disposable cage you order
- ► 100% virgin kraft paper
- ► 11.5"W x 6.75"H 3-ply sheets weigh only 7.2 grams

MODEL	DESCRIPTION
INNO-RICH	Innorichment, 500 3-ply shets per case

Models and Training Aids

MD PVC-Rat





Microsurgical Developments PVC-Rat is an example of the replacement of living animals.

Microsurgical Developments PVC-Rat is developed to master skills in microsurgery.

Using the model during training of scientists and animal technicians, the number of live-animals needed will be reduced drastically.

It gives the possibility of training approximately 25 different microsurgical techniques (i.e. anastomoses, cannulations, transplantations of vessels and organs).

MD-PVC-Rat comes in a carrying case, together with a video-user-guide and several spare parts.

Anastomosis - The MD PVC-RAT gives the possibility of training several anastomose-techniques in situ: end-to-end, end-to-side, side-to-side.

Cannulations - The MD PVC-RAT gives the possibility of training several cannulation techniques. As described in the Manual of Microsurgery on the Laboratory Rat, one can practice the cannulation of: Jugular vein, portal vein, renal vein, iliolumbar artery, thoracic duct, double bile fistula

In the Portal vein of the MD PVC-RAT one can practice the Porta Caval Shunt techniques, e.g. the button technique (acc. to Funovics) or the suture technique (acc. to Lee and Fisher).

Transplantations - The following transplantation techniques can be practiced in the MD PVC-RAT: heart, kidney, blood vessels, prostheses Most basic skills and experimental techniques are described in the Manual of Microsurgery on the Laboratory Rat.

MODEL	DESCRIPTION
MD-PVC	Model
MD-PVC	Parts

Mimolette Lab Rat

Perform endotracheal intubation, cardiac puncture, and blood collection from the saphenous vein



Mimolette lab rat was created with these key features to hopefully end the practice of using live rats for training. The laboratory rat has been used very widely in experiments. Following our ethos regarding humane

science, Mimolette is Rescue Critters'® proudest creation to date. Mimolette comes complete with her own carrying case, lungs, heart, veins, artificial blood and IV accessories.

MODEL	DESCRIPTION
MIMOLETTE	Mimolette (mee-moh-let) Lab Rat

KOKEN RAT

Experiment techniques training model



When various experimental procedures are conducted using laboratory animals, it is important to restrain the animal properly and to develop techniques that will meet the necessary experimental objectives. Beginnes can learn the techniques of proper

holding, peroral feeding, tail vein injection and blood collection, and endotracheal intubations.

- Pharynx, larynx, trachea, stomach, and tail vein are anatomically correct and replicated inside the model of the rat
- To achieve a texture similar to that of a live rat, original silicone and soft vinyl chloride are used
- ► When placed in position, the posture is the same as that of a live rat
- ▶ Dosage in stomach can be confirmed as part of abdomen is transparent
- ► Insertion of a needle into the tail vein can be confirmed by the reflux of the imitation blood
- ➤ Techniques include retention, peroral dosage, tail intravenous dosage and blood collection and endotracheal intubation

MODEL	DESCRIPTION	
KOKEN-MODEL KOKEN-TAIL KOKEN-BLOOD	KOKEN Rat Model Replacement Tail for KOKEN Rat Replacement Blood for KOKEN Rat	

Squeekums Rat Manikin



Allows students, lab technicians, and handlers to learn how to confidently handle and safely manage lab rodents. The tail of this rodent model can be conveniently detached and disposed of, while also having the capability of IV access at the caudal vein site. Tiny replaceable ears help students learn ear tagging procedures. Model is fully articulated and extremely realistic. Head, feet, and limbs move in a natural manner. Squeekums comes with its own protective case, IV accessories, artificial blood, and instructions.

MODEL	DESCRIPTION
SQUEEKUM-1	Rat Model
SQUEEKUM-2	Replacement Tail
SQUEEKUM-3	Replacement Ears

Skin Pads

MODEL

For training and practicing core skills associated with wound closure, making an incision, application of skin adhesives, interrupted suturing and knotting, stapling. Latex free. Works with all major topical skin adhesives. Excellent for displaying variety of sutures and skin adhesives. Two sizes available.

DESCRIPTION



ALT-00550	Skin Pad Jig
ALT-00091	Professional Skin Pad MK2, small 125mm x 72mm, pack of 4
ALT-00092	Professional Skin Pad MK2, large 145mm x 125mm, pack of 2



Natsume Rat

In hopes to contribute to a reduction in the number of experimental animals used, the Natsume Rat is used by those concerned with practical efforts for alternatives to animal experiments in medical, pharmaceutical, and



veterinary education and the education for practicing animal experiment techniques. The concept of 3Rs proposed by Russell and Burch (Replacement, Reduction, Refinement) in 1959 is currently the international principle on performing animal experiments, and this is an essential principle in the life sciences.

- ► Retention / holding oral administration
- ► Endotracheal intubation
- ► Tail vein injection
- ► Blood collection through tail vein
- Includes main body of rat model, tail, simulated blood and instruction manual

Specifications:

Length of body: 19cm Length of tail: 18cm

Sex: Male

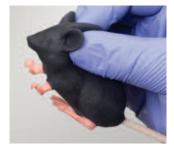
Body weight: about 200g

Options: Simulated blood (50mL), spare tail

MODEL	DESCRIPTION
NATSUME-1	Natsume Rat
NATSUME-SPB	Simulated Blood (50mL)
NATSUME-SPT	Replacement Tail

Mimicky® Mouse

Mimicky® assists in the training of mouse handling techniques and procedures. By using this mouse type simulator, users contribute to the realization of the philosophy of the 3 R's (Replacement, Reduction, Refinement). By using alternative training and treatment before use, more humane principles, can be achieved.



This is a simulator that mimics the experimental animals (mice) Mimicky (mimicking) the feel when dealing with biometric mice.

- ► Handling
- ► Restraint
- ► Physical assessment
- ▶ Oral administration
- ► Intravenous administration

Specifications:

Length of body: Approx. 70mm L x 39mm H x 31mm W - 25g **Length of tail:** Approx. 130mm (exposed section approx. 110mm) - 3g **Body weight:** Approx 28g

MODEL	DESCRIPTION
MIMICKY-1	Mimicky Mouse
MIMICKY-SPT	Replacement Tail

The CurVet™ Rat Training Simulator



Training aid designed to provide skills required for humane and ethical handling and procedural competencies, without the need to use a live animal. Made using a material that does not include latex, but gives a unique sensitivity of a living specimen.

Realistic dermatological skin, suitable for:

- ► Injections by most conventional routes
- ► Micro-chipping identification
- ► Handling and restraint (including the ability to scruff if required)
- ► The deliberate absence of fur enables this model to be cleaned and sanitized with an appropriate chemical sterilant

Head and spinal movement, including rear limbs

- ► Suitable for oral administration
- ► Lateral and ventral head movement
- ► Hard palate with incisors

Realistic removable tail with two lateral tail veins ideal for:

- ► Blood sampling
- ► Intravenous administration
- ► Insertion of a flexible catheter (Angiocath)
- ► Tail has a self sealing material hence long life span
- Additional tails can be purchased separately
- ► Artificial realistic non-toxic blood available

Realistic features such as:

- ► Eves
- ► Hard palate with incisors
- ► Pink extremities
- ► Fore and rear limbs
- ► Anus and rectum with limited aperture for thermoregulation monitoring i.e. clinical or digital thermometer
- ► Adult rat size and weight approximately 300g

This model is NOT a toy, but a well thought out training aid to replace the use of a live animal to gain manual skill and competence, thus avoiding stress to both animal and handler.

MODEL	DESCRIPTION
CURVET	CurVet Rat Ethical Training Simulator

Anatomical 3D Model of the Laboratory Rat

Can be used as a teaching aid





The model is 4 times life size (approximately 150 centimeters long), and shows the anatomy of the rat in many details. Organs can be lifted out and have fine structures.

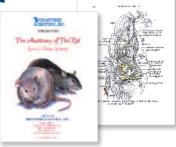
MODEL	DESCRIPTION
MD-AM-RAT	Anatomical Model of the Laboratory Rat0

Anatomy of the Rat

By Eunice Chace Greene

Available only from Braintree Scientific

This classic book offers basic reference for all researchers using laboratory rats. It includes 339 precisely detailed presentations of the rat - numerous colorful, hand sketched skeletal diagrams provide



a thorough analysis of the anatomy of a rat. The large format (8.5" x 11"), clarity of the presentations, and its spiral binding - allowing it to lay flat, contribute to this valuable researcher's assistant. Whether in the library or lying on a laboratory bench, this reference book is a valuable tool. In our opinion, no other textbook even comes close!

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MODEL	TITLE
AR	Anatomy of the Rat

The Laboratory Animal Pocket Reference Series

Created to assist anyone who works with laboratory animals. Provides the most humane and responsible care. 14 volumes are compact and combbound to lay flat for use in the laboratory (call to order). Contents of each includes important biological features, husbandry, management, veterinary care, regulatory concerns, and commonly used and new procedures.

MODEL	TITLE
LAB-MOUS LAB-RAT LAB-CCM	The Laboratory Mouse The Laboratory Rat Critical Care Management for Laboratory Mice and Rats

A Color Atlas of Sectional Anatomy

by Takamasa Iwaki, Hiroshi Yamashita, Toshiyuki Hayakawa Published in Japan, September 2001 • 185 pages hardcover

Available only from Braintree Scientific

Specimens were not fixed but kept in a frozen state so that photographic information close to the living state could be obtained. All photographs are in color for detailed observation. Each atlas has numerous color pages, 2 pages of black and white macro-anatomical photographs are provided. All pages consist of photographs making detail more comprehensive and three-dimensional than the usual pictorial atlas.



The anatomical terms used are in Japanese and English.

MODEL	TITLE
SECT-MOU	A Color Atlas of Sectional Anatomy of the Mouse
SECT-RAT	A Color Atlas of Sectional Anatomy of the Rat
Visit www.bra	aintreesci.com to see the new additions

Manual of Microsurgery on the **Laboratory Rat**

An up-to-date didactic manual describing experimental microsurgical techniques in great detail.

Includes general information about rat, i.e. anatomy, anaesthesia and sterility and a wide range of general techniques. Experimental techniques are covered in greatest depth. All essential steps taken during operations are shown in meticulously accurate drawings making the manual an accurate instrument in teaching/studying microsurgery and microsurgical techniques.

MODEL	TITLE
MICROSURG	Manual of Microsurgery on the Laboratory Rat



Meet our new HeroRat®, Chewa



corporate sponsor of "Chewa"

Our first HeroRAT, Sniffles, a mine sniffing rat, has recently retired. We are proud to announce, we are the new adoptive parents of Chewa, a TB sniffing HeroRAT.

Scientists envisioned the pre-dominant role of rodent species (rats and mice) in biomedical and veterinary research. Our mission is to provide new technology products, and supplies enabling its

vision. We embrace the HeroRat® concept as a novel embodiment and expansion of its central vision – the growing partnership between human and rodent species to advance scientific and biomedical knowledge. improve human and animal health, improve detection of disease and treatment options, and clean up our environment.

Braintree Scientific, Inc. is honored to be the first corporation to solely sponsor a HeroRat®. We proudly accept this leadership position and challenge others to do the same.

Why the African Pouched Rat?

- ► They are intelligent creatures, easily conditioned, and enjoy doing repetitive tasks when rewarded with food
- ► They have a highly developed sense of smell
- ► They have an 8-year lifespan and several productive years after the initial year of training
- ► They are lightweight, so they cannot set off a mine
- ► Compared to dogs: cheaper to breed, feed, house, maintain; and they don't get attached to one trainer.

Why sponsor a HeroRAT?

Landmines injure and kill innocent people every day, and every second someone new contracts tuberculosis. These are daunting numbers, but a cost effective (tax deductable) solution exists: HeroRats®!

A HeroRat® can screen 40 samples for tuberculosis in seven minutes, equal to what a skilled lab technician can do in a day. Alternatively, two men with metal detectors can clear an average of 200 square meters in an eight-hour day while the same two men using APOPO's mine detection rats can clear the same area in 1.5 hours.

To sponsor your own HeroRAT® and for more information, visit www.apopo.org.

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