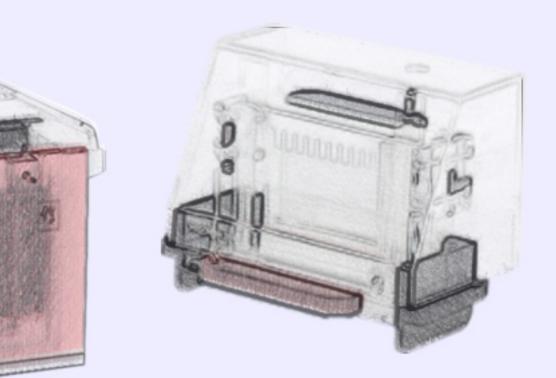
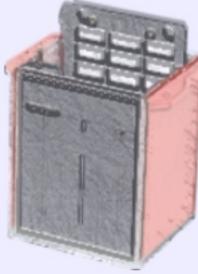
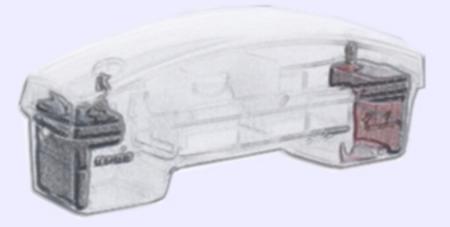


Over two decades in Biotechnology







TechnoSource Product Catalog 2014-15



# PRODUCT CATALOGUE APRIL 2014



#### What you should know about TECHNOSOURCE products!

- 1. TechnoSource is the *Sole Manufacturer* of all its products and issues a Sole Manufacturing Certificate to facilitate purchasing formalities.
- 2. TechnoSource will make customer designed products in PMMA as per user specifications.
- 3. *Patents and Industrial design registrations* cover TechnoSource products.
- 4. Electrophoresis and Electroblotting apparatus carry a *Three-Year Warranty* against manufacturing defects. Power supplies and other equipment carry a *One-Year Warranty* against manufacturing defects.
- 5. Systems marked *'Ready-to-use'* include all essential components required to use the Apparatus (Power supply not included).
- 6. Spares and accessories are available with us
- 7. *Repairs resulting from manufacturing defects will be done free of cost* during the warranty period. In the event that any repairs are required the product can be shipped to TS office in Mumbai where it will be attended to and returned to the user.
- 8. Do not use chemicals that react with acrylic (PMMA).
- 9. Please visit the website www.technosource.biz for further details
- 10. Enquiries may be sent online to ts1@vsnl.com
- 11. Design and specifications of the apparatus can be changed from time to time to reflect improvements in design, manufacturing methods and the economical availability of inputs

#### ORDERING INFORMATION

- 1. Make sure Catalogue Numbers for ordered items are correct.
- 2. Prices are subject to change without notice.
- 3. Prices are for ex-sellers place. Freight is charged on actuals or on a TO-PAY basis.
- 4. Taxes & Levies applicable at the time of dispatch will be borne by the Client.
  - a. Present VAT @ 12.5%
  - b. Order accompanied by 'C'/'D' form Present CST @ 2%.
  - c. Octroi/LBT as per local rates.
- 5. Quotations are valid for a period of 90 days.

#### PAYMENT TERMS

- 1. 100 % Payment ON DELIVERY by Demand Draft, NEFT, or by crossed Account Payee cheque drawn on any nationalized bank in favor of TechnoSource and payable at par at Mumbai.
- 2. Interest @ 15% per annum will be charged if payments are not received as per stipulated Terms of Payment.
- 3. Exemptions of taxes and levies can be availed of ONLY if valid forms are submitted along with the Order.

#### SHIPPING

- 1. Products are shipped via a reliable courier service by surface transport on a TO-PAY basis.
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#### DISCLAIMER

- 1. TechnoSource products are designed and made for research and educational purposes and are to be used for the same. TechnoSource will accept no liabilities arising out of product misuse or abuse.
- 2. The firm is not bound to provide live demonstrations and installations.
- 3. Product repair is not done on-site.
- 4. To and fro a transportation cost, to the TechnoSource office in Mumbai, for repairs is to be borne by the client when warranty is not applicable.





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PRODUCT CATALOGUE April 2014 Performance Comparable To Imported Equipment



# **RESEARCHER RANGE** Vertical Gel Apparatus Special Features

# LEAK-PROOF

No leakage of upper tank buffer as silicone gasket is tough & resilient

No buffer leaks from plastic joints as sticking is done with special glues

Leak-proof sealing using agarose in lower tank trough & slotted spacers

# Error Minimization

No slippage of gel sandwich due to in-situ gel casting

No migration of samples in wrong direction due to unidirectional feature

Wells not at a slant as combs sit well levelled on spacers

# ECONOMICAL

Run upto two gels per side Short and defined run times as gels can be run at constant current

Can be run in the refrigerator due to its small footprint

Saves reagent & operator cost as leakage and errors are prevented

# RUGGED

Breakage resistant Teflon combs, spacers & fibre-glass notched plate

*Electrodes do not break as they are thick and platinum is >99.9% pure* 

No electrolytic corrosion of male connector as base is resin filled

# HIGH RESOLUTION

Sharper bands because of thin glass plates and deep cathodic tank ensures that the entire gel-sandwich being in contact with buffer

*Low positioned electrodes stir buffer to cool gel-sandwich plates* 

No artefacts as gel sticks to spacers; the electric field is uniform; and the gel cooling is effective



# **RESEARCHER RANGE** Vertical Gel Apparatus Selection Guide

Model	Single / dual			Gel siz	ze	No. of wells/	Vol/ well	Buffer require-	Run	Recommended
Model	sided	at a time	width (cm)	length (cm)	thickness (mm)	comb	wen (μL)	ment (mL)	time ¤	Power supply*
MICROKIN	Single	1, 2	8.5	7.5	1, 1.5	10	<b>50, 75</b>	150	45 m	
MICKOKIN	Single	1, 2	0.5	7.5	1, 1.3	13	<b>30, 50</b>	150	45 III	Electragel 100
MONOKIN	Single	1, 2	8.5	12	<b>1</b> , <b>1.5</b>	10	75, 112	350	1 h 10 m	Incola uger 100
Monomit	Single	1, 2	0.5	12	1, 110	13	<b>50, 66</b>	550	1 11 10 11	
MACROKIN-S	Single	1, 2	18.5	18	115	23	75, 112	750	1 h 50 m	
MACKOKIN-5	Single	1, 2	10.5	10	<b>1</b> , <b>1</b> .5	30	50, 66	750	1 11 50 111	Electrapage 200
						23	75, 112			
MACROKIN	Single 1,	1, 2	18.5	24	<b>1</b> , <b>1</b> .5	30	50, 66	900 2 h 30 r		
			10	10		12	<b>45, 66</b>			
MINIKIN	Dual	1, 2, 3, 4	10	12	<b>1</b> , <b>1.5</b> , 3	16	<b>75</b> , <b>112</b>	1000	1 h 10 m	Electragel 100
		3, 4	bread	th and lth can aried		user de	efined^			

\*Power supply unit is not included in the ready-to-use systems.

h – hours, m – minutes

The thickness of the gel and the corresponding volume/ well is kept of the same color font for easy perusal.

¤Run time is approximate for 10 % SDS page run at constant current of 1.67 mA/cm width of gel/ mm thickness of gel ^ Preparative comb – Well size can be defined by the user at the time of ordering

# MICROKIN

Gel size: 8.5 (w) x 7.5 (l) cm

- Single sided, runs one or two gels
- ✓ In-situ gel casting
- ✓ Designed for effective gel cooling
- No sample loss in uni-directional migration model
- ✓ Gel thickness: 1/1.5 mm
- ✓ Wells per gel: 10/13
- ✓ Buffer requirement: 150 mL
- ✓ 10% SDS-PAGE run in 45 min

#### Ready-to-use system includes

- 1. Lower anodic tank fitted with male connector and electrode
- 2. Cathodic electrode unit for *in situ* gel casting fitted with male connector and electrode
- 3. Resilient silicone gasket for cathodic electrode unit
- 4. One notched and one rectangular glass plate
- 5. Two 1.5 mm thick, breakage resistant, slotted spacers
- 6. One PTFE comb (1.5 mm thick, 10 wells, est. vol. 75  $\mu L/well)$
- 7. Set of clamps with screws
- 8. Agarose dispenser for filling slot in spacers
- 9. Gel-sandwich opener
- 10. Lid
- 11. Electrical cords with male & female connectors designed for user safety (1 pair)
- 12. Instruction manual

#### Ordering description

**Microkin**: Vertical electrophoresis single sided system of gel size 8.5 (w)  $\times$  7.5 (l) cm, with male connectors, in situ gel casting, slotted spacers, un-directional migration and capable of accepting two gels

*Microkin-BD*: Vertical electrophoresis single sided system of gel size 8.5 (w) x 7.5 (l) cm, with male connectors, in situ gel casting, slotted spacers, bi-directional migration and capable of accepting two gels

#### Microkin and its spares and accessories

Item Description	Cat. No.	Unit
Microkin, ready-to-use system for uni-directional migration	02-00142	System
Microkin, ready-to-use system for bi-directional migration	02-00143	System
Clamps 8.5 (l) cm with screws (one pair)	02-05085	Set
Screws for clamps and cathodic electrode unit (two of each)	02-06148	Packet
Resilient silicone gasket for cathodic electrode unit	02-08264	Piece
Comb 1 mm thick, PTFE, 10 wells, 10 mm deep, est. vol. 50 µL/well	02-14101	Piece
Comb 1.5 mm thick, PTFE, 10 wells, 10 mm deep, est. vol. 75 µL/well	02-14102	Piece
Comb 1 mm thick, PTFE, 13 wells, 10 mm deep, est. vol. 30 µL/well	02-14131	Piece
Comb 1.5 mm thick, PTFE, 13 wells, 10 mm deep, est. vol. 45 µL/well	02-14132	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	02-17081	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	02-17082	Set
Notched and rectangular glass plate, 12.5 (w) x 8.5 (l) cm (one of each)	02-28072	Set
Rectangular glass plates, 12.5 (w) x 8.5 (l) cm (two)	02-28082	Set
Notched fibreglass plate (breakage resistant), rectangular glass plate and gel detacher (one of each)	02-29071	Set
Gel-detacher for fibreglass plate	02-30105	Piece
Gel-casting stand with binder clips	02-33075	Piece
Glass plate stand	02-35085	Piece
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Pair
Penta-legged levelling table (21 x 21 cm) with spirit-level	69-41219	Set







A set of notched fibreglass plate, rectangular glass plate and gel detacher (02-29071), Gel-casting stand (02-33070), Glass plate stand (02-35085)



### MONOKIN

Gel size: 8.5 (w) x 12 (l) cm

- Single sided, runs one or two gels
- ✓ In-situ gel casting
- ✓ Designed for effective gel cooling
- ✓ No sample loss in uni-directional migration model
- ✓ Gel thickness: 1/1.5 mm
- ✓ Wells per gel: 10/13
- ✓ Buffer requirement: 350 mL
- ✓ 10% SDS-PAGE run in 1 hr 10 min

#### Ready-to-use system includes

- 1. Lower anodic tank fitted with male connector and electrode
- 2. Cathodic electrode unit for *in situ* gel casting fitted with male connector and electrode
- 3. Resilient silicone gasket with insert for cathodic electrode unit
- 4. One notched and one rectangular glass plate
- 5. Two 1.5 mm thick, breakage resistant, slotted spacers
- 6. One PTFE comb (1.5 mm thick, 10 wells, est. vol. 112  $\mu L/well)$
- 7. Set of clamps with screws
- 8. Agarose dispenser for filling slot in spacers
- 9. Gel-sandwich opener
- 10. Lid
- 11. Electrical cords with male & female connectors designed for user safety (1 pair)
- 12. Instruction manual

#### Ordering description

**Monokin:** Vertical electrophoresis single sided system of gel size 8.5 (w) x 12 (l) cm, with male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting two gels

**Monokin** -**BD**: Vertical electrophoresis single sided system of gel size 8.5 (w) x 12 (l) cm, with male connectors, in situ gel casting, slotted spacers, bi-directional migration and capable of accepting two gels

#### Monokin and its spares and accessories

Item Description	Cat. No.	Unit
Monokin, ready-to-use system for uni-directional migration	03-00182	System
Monokin, ready-to-use system for bi-directional migration	03-00183	System
Clamps 13 (l) cm with screws (one pair)	03-05130	Set
Screws for clamps and cathodic electrode unit (two of each)	03-06148	Packet
Resilient silicone gasket with insert for cathodic electrode unit	03-09364	Piece
Comb 1 mm thick, PTFE, 10 wells, 15 mm deep, est. vol. 75 µL/well	03-14101	Piece
Comb 1.5 mm thick, PTFE, 10 wells, 15 mm deep, est. vol. 112 µL/well	03-14102	Piece
Comb 1 mm thick, PTFE, 13 wells, 15 mm deep, est. vol. 45 µL/well	03-14131	Piece
Comb 1.5 mm thick, PTFE, 13 wells, 15 mm deep, est. vol. 66 µL/well	03-14132	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	03-17131	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	03-17132	Set
Notched and rectangular glass plates, 12.5 (w) x 13 (l) cm (one of each)	03-28122	Set
Rectangular glass plates,12.5 (w) x 13 (l) cm (two)	03-28132	Set
Notched fibreglass plate (breakage resistant), rectangular glass plate and gel detacher (one of each)	03-29121	Set
Gel-detacher for fibreglass plate	03-30105	Piece
Gel-casting stand with binder clips	03-33125	Piece
Glass plate stand	03-35085	Piece
Gel-sandwich opener	61-30182	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 14 mL. Accommodates magnetic spin-bar of $\leq$ 10 mm length	67-50167	Piece
Penta-legged levelling table (21 x 21 cm) with spirit-level	69-41219	Set



Suggestion Order along with ready-to-use system

A set of notched fibreglass plate, rectangular glass plate and gel detacher (03-29121), Gel-casting stand (03-33115), Glass plate stand (03-35084)

# MACROKIN-S

Gel size: 18.5 (w) x 18 (l) cm

- ✓ Single sided, runs one or two gels
- ✓ In-situ gel casting
- ✓ Designed for effective gel cooling
- No sample loss in uni-directional migration model
- ✓ Gel thickness: 1/1.5 mm
- ✓ No. of wells: 23/30
- ✓ Buffer requirement: 750 mL
- ✓ 10% SDS-PAGE run in 1 h 50 min

#### Ready-to-use system includes

- 1. Lower anodic tank fitted with male connector and electrode
- 2. Cathodic electrode unit for in situ gel casting fitted with male connectors and electrode
- 3. Resilient silicone gasket with insert for cathodic electrode unit
- 4. One notched and one rectangular glass plate
- 5. Two 1.5 mm thick, breakage resistant, slotted spacers
- 6. One PTFE comb (1.5 mm thick, 23 wells, est. vol. 112  $\mu$ L/well)
- 7. Set of clamps with screws
- 8. Agarose dispenser for filling slot in spacers
- 9. Gel-sandwich opener
- 10. Lid
- 11. Electrical cords with male & female connectors designed for user safety (1 pair)
- 12. Instruction manual

#### Ordering description

*Macrokin-S*: Vertical electrophoresis single sided system of gel size 18.5 (w) cm x 18 (l), with male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting two gels

*Macrokin-S(BD)*: Vertical electrophoresis single sided system of gel size 18.5 (w) cm x 18 (l), with male connectors, in situ gel casting, slotted spacers, bi-directional migration and capable of accepting two gels

#### Macrokin-S and its spares and accessories

Item Description	Cat. No.	Unit
Macrokin-S, ready-to-use system for uni-directional migration	04-00192	System
Macrokin-S, ready-to-use system for bi-directional migration	04-00193	System
Clamps 19 (l) cm with screws (one pair)	04-05190	Set
Screws for clamps and cathodic electrode unit (two of each)	04-06148	Packet
Resilient silicone gasket with insert for cathodic electrode unit	04-09544	Piece
Comb 1 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 75 µL/well	04-14231	Piece
Comb 1.5 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 112 µL/well	04-14232	Piece
Comb 1 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 45 µL/well	04-14301	Piece
Comb 1.5 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 66 µL/well	04-14302	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	04-17191	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	04-17192	Set
Notched (3 mm) and rectangular glass plates, 23.5 (w) x 19 (l) cm (one of each)	04-28182	Set
Rectangular glass plates, 23.5 (w) x 19 (l) cm (two)	04-28192	Set
Gel-casting stand with binder clips	04-33185	Piece
Glass plate stand	04-35176	Piece
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors design for user safety	66-40124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 22 mL. Accommodates magnetic spin-bar of $\leq$ 14 mm length	67-50207	Piece
Penta-legged levelling table (28 x 45 cm) with spirit-level	69-41319	Set







Gel-casting stand (04-33185) Glass plate stand (04-35176)



### MACROKIN

Gel size: 18.5 (w) x 24 (l) cm

- ✓ Single sided, runs one or two gels
- ✓ In-situ gel casting
- ✓ Designed for effective gel cooling
- No sample loss in uni-directional migration model
- ✓ Gel thickness: 1/1.5 mm
- ✓ Wells per gel: 23/30
- ✓ Buffer requirement: 900 mL
- ✓ 10% SDS-PAGE run in 2 hr 30 min

#### Ready-to-use system includes

- 1. Lower anodic tank fitted with male connector and electrode
- 2. Cathodic electrode unit for in situ gel casting fitted with male connectors and electrode
- 3. Resilient silicone gasket with insert for cathodic electrode unit
- 4. One notched and one rectangular glass plate
- 5. Two 1.5 mm thick, breakage resistant, slotted spacers
- 6. One PTFE comb (1.5 mm thick, 23 wells, est. vol. 112 μL/well)
- 7. Set of clamps with screws
- 8. Agarose dispenser for filling slot in spacers
- 9. Gel-sandwich opener
- 10. Lid
- 11. Electrical cords with male & female connectors designed for user safety (1 pair)
- 12. Instruction manual

#### Ordering description

**Macrokin**: Vertical electrophoresis single sided system of gel size 18.5 (w)  $\times$  24 (l) cm, with male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting two gels

*Macrokin BD*: Vertical electrophoresis single sided system of gel size 18.5 (w) x 24 (l) cm, with male connectors, in situ gel casting, slotted spacers, bi-directional migration and capable of accepting two gels

#### Macrokin and its spares and accessories

Item Description	Cat. No.	Unit
Macrokin, ready-to-use system for uni-directional migration	04-00312	System
Macrokin, ready-to-use system for bi-directional migration	04-00313	System
Clamps 25 (l) cm with screws (one pair)	04-05250	Set
Screws for clamps and cathodic electrode unit (two of each)	04-06148	Packet
Resilient silicone gasket with insert for cathodic electrode unit	04-09664	Piece
Comb 1 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 75 µL/well	04-14231	Piece
Comb 1.5 mm thick, PTFE, 23 wells, 15 mm deep, est. vol. 112 µL/well	04-14232	Piece
Comb 1 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 45 µL/well	04-14301	Piece
Comb 1.5 mm thick, PTFE, 30 wells, 15 mm deep, est. vol. 66 µL/well	04-14302	Piece
Spacers, slotted, 1 mm thick, breakage resistant (one pair)	04-17251	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (one pair)	04-17252	Set
Notched (3 mm) and rectangular glass plates, 23.5 (w) x 25 (l) cm (one of each)	04-28242	Set
Rectangular glass plates, 23.5 (w) x 25 (l) cm (two)	04-28252	Set
Gel-casting stand with binder clips	04-33245	Piece
Glass plate stand	04-35178	Piece
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with male & female connectors design for user safety	66-40124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 22 mL. Accommodates magnetic spin-bar of $\leq$ 14 mm length	67-50207	Piece
Penta-legged levelling table (28 x 45 cm) with spirit-level	69-41319	Set

d electrode

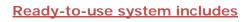
Order along with Ready-to-use system Gel-casting stand (04-33245), Glass plate stand (04-35178)



# MINIKIN

Standard gel size: 10 (w) x 12 (l) cm Allows variation of gel size in length, width and thickness

- ✓ Dual sided model
- Runs one/ two/ three/ four gels at a time
- ✓ In-situ gel casting
- ✓ Designed for effective gel cooling
- No sample loss due to uni-directional migration
- ✓ Gel thickness: 1/1.5/3mm
- ✓ Wells per gel: 12/16
- ✓ Buffer requirement: 1000 mL
- ✓ 10% SDS-PAGE run in 1 hr 10 min



- 1. Lower anodic tank
- 2. Central electrode unit for *in situ* gel casting fitted with electrodes and gold plated male connectors
- 3. Two resilient silicone gaskets with inserts for central electrode unit
- 4. Two notched and two rectangular glass plates
- 5. Four 1.5 mm thick, breakage resistant, slotted spacers
- 6. Two PTFE combs (1.5 mm thick, 12 wells, est. vol. 112  $\mu L/well)$
- 7. Four clamps with screws and a clamp opener
- 8. Agarose dispenser for filling slot in spacers
- 9. Vented lid
- 10. Glass plate stand
- 11. Gel-sandwich opener
- 12. Two buffer savers
- 13. Electrical cords with gold plated male & female connectors for user safety (1 pair)
- 14. Instruction manual

# Ordering description

*Minikin*: Vertical electrophoresis dual sided system of gel size 10 (w) x 12 (l) cm, with gold-plated male connectors, in situ gel casting, slotted spacers, uni-directional migration and capable of accepting four gels

# Minikin and its spares and accessories

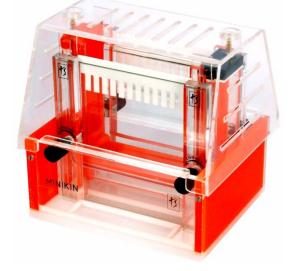
Item Description	Cat No.	Unit
Minikin, ready-to-use system	01-00000	System
Clamps 13 (l) cm with screws (2 No.)	01-05130	Set
Clamps 13 (l) cm with screws for gel partitioning spacers (2 No.)	01-05131	Set
Screws for clamps (6 No.)	01-06209	Packet
Clamp opener	01-07152	Piece
Resilient silicone gaskets with inserts for central electrode unit (2 No.)	01-09354	Piece
Comb 1 mm thick, PTFE, 12 wells, 15 mm deep, est. vol. 75 µL/well	01-14121	Piece
Comb 1.5 mm thick, PTFE, 12 wells, 15 mm deep, est. vol. 112 µL/well	01-14122	Piece
Comb 1 mm thick, PTFE, 16 wells, 15 mm deep, est. vol. 45 µL/well	01-14161	Set
Comb 1.5 mm thick, PTFE, 16 wells, 15 mm deep, est. vol. 66 µL/well	01-14162	Piece
Spacers, slotted, 1 mm thick, breakage resistant (two pairs)	01-17131	Set
Spacers, slotted, 1.5 mm thick, breakage resistant (two pairs)	01-17132	Set
Spacers, preparative, slotted, 3 mm thick, 13 (l) cm	01-17134	Piece
Spacers, gel partitioning, 1 mm thick, 12 (l) cm (2 No.)	01-18131	Set
Spacers, gel partitioning, 1.5 mm thick, 12 (l) cm (2 No.)	01-18132	Set
Notched and rectangular glass plates, 14 (w) x 13 (l) cm (two of each)	01-28122	Set

Manufactured and Marketed by TechResource

188, Nagdevi Street, 2<sup>nd</sup> Floor, Mumbai 400003. www.technosource.biz, Email: ts1@vsnl.com; Tel: (022) 28937286

Nuggestion Order along with ready-to-use system

A set of notched fibreglass plate, rectangular glass plate and gel detacher (01-29121), Gel-casting stand (01-33125), Acrylic dam (01-27144)



#### RESEARCHER RANGE - VERTICAL GEL APPARATUS PERFORMANCE COMPARABLE TO IMPORTED EQUIPMENT



	Ove	er Two Decade
Item Description	Cat No.	Unit
Rectangular glass plates, 14 (w) x 13 (l) cm (four)	01-28132	Set
Acrylic dam (14 x 14 cm)	01-27144	Piece
Notched fibreglass plates [breakage resistant] (2 No.), rectangular glass plates (2 No.) and gel detacher (one)	01-29121	Set
Gel-detacher for fibreglass plate	01-30115	Piece
Gel-casting stand with binder clips	01-33125	Piece
Glass plate stand	01-35104	Piece
Buffer savers (2 No.)	01-37981	Set
Gel-sandwich opener	61-30257	Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece
Agarose dispenser for filling slot in 1.5 mm spacer	62-36182	Piece
Electrical cords with gold plated male & female connectors designed for user safety	66-41124	Pair
Gradient mixer with triple-barrel and plunging stopper. Volume per chamber 14mL. Accommodates magnetic spin-bar of $\leq$ 10 mm length	67-50167	Piece
Penta-legged levelling table (21 x 21 cm) with spirit-level	69-41219	Set

PRODUCT CATALOGUE April 2014 Performance Comparable To Imported Equipment



# **RESEARCHER RANGE BLOTTING APPARATUS SPECIAL FEATURES**

# EFFICIENCY OF TRANSFER

Hi-fidelity of transfer as large open surface area in cassette frame allows unhindered passage of current

Short transfer times as low resistance to passage of current due to cassette frame design and sponge quality

# Error Minimization

No migration of samples in wrong direction due to unidirectional feature

No wrong assembly of gel sandwich as engraved markings and unidirectional insertion prevent mistakes

# ECONOMICAL

Lesser requirement of buffer

Short run times as better efficiency of transfer current

No cold room required as it can be run in the refrigerator due to its small footprint

Saves reagent & operator cost as leakage and errors are prevented

# RUGGED

No buffer leakage through plastic joints as bonding is done with special glues

*Electrodes do not break as they are thick and platinum is >99.9% pure* 

No electrolytic corrosion of male connector as base is resin filled

# VERSATILE

Besides western blotting, Southern & northern transfer of bio-molecules from fragile (agarose) gels possible as innovative cassette design prevents crushing of gels

# Ferna Jourse PRODUCT CATALOGUE APRIL 2014



# **RESEARCHER RANGE ELECTROBLOTTING APPARATUS SELECTION GUIDE**

All our systems

- Have uni-directional migration.
  Cassette and electrode plate insertion in the correct direction only
- ✓ Sample loss due to user error prevented

Model	Description	Cassettes	No of gels transferred at a time	Gel size (w) x (l) (cm)	Buffer Requi- rement	Recommended power supply
TECHNOBLOT	For western, northern and Southern blotting	Two	Four	10 x 10.5	1900 mL	Electracomet
MICROBLOT	For western blotting	One	Two	8 x 5	450 mL	Electragel-100
MICROBLOT-SP	For western blotting	One	Two	8 x 7	600 mL	Electragel-100



#### **MICROBLOT**

Gel size: 8 (w) x 5 (l) cm For western blotting

- Single cassette  $\checkmark$
- ✓ Uni-directional insertable cassettes and electrode plates
- Uni-directional migration  $\checkmark$
- ✓ Transfer one or two gels at a time
- Buffer capacity: 450 mL  $\checkmark$

#### Ready-to-use system includes

- 1. Tank
- 2. Lid
- 3. Gel & membrane holding cassette with guide pins, stoppers and locking nuts insertable in only one manner
- 4. Two sponge pads
- 5. Cathode and anode plates insertable in only one manner, with electrodes for uni-directional migration and male connectors (2 mm)
- 6. Electrical cords with female (2 mm) & male connectors designed for user safety (1 pair)
- 7. Instruction manual

#### Ordering description

**Microblot**: Single cassette western blotting system, can accommodate two gels (gel size 8 (w) x 5 (l) cm), with uni-directional migration and constructed for cassette and electrode plate insertion in the correct direction only

#### Microblot and its spares and accessories

Item Description	Cat No.	Unit
Microblot, ready-to-use system	15-00000	System
Cathode and anode plates with male connectors (2 mm), uni-directional insertion and migration feature	15-03083	Set
Gel membrane-holding cassette for transfer of <i>anions</i> with guide-pins, stoppers and locking-nuts	15-08504	Set
Sponge pads (four)	15-10095	Packet
Guide pins with stoppers and locking nuts (two of each)	15-21304	Packet
Electrical cords with female (2 mm) & male connectors designed for user safety	66-40122	Pair



# **MICROBLOT-SP**

Gel size: 8 (w) x 7 (l) cm For western blotting

- Single cassette  $\checkmark$
- ✓ Uni-directional insertable cassettes and electrode plates
- ✓ Uni-directional migration
- ✓ Transfer one or two gels at a time
- Buffer capacity: 600 mL  $\checkmark$

#### Ready-to-use system includes

- 1. Tank
- 2. Lid
- 3. Gel & membrane holding cassette with guide pins, stoppers and locking nuts insertable in only one manner
- 4. Two sponge pads
- 5. Cathode and anode plates insertable in only one manner, with electrodes for uni-directional migration and male connectors (2 mm)
- 6. Electrical cords with female (2 mm) & male connectors designed for user safety (1 pair)
- 7. Instruction manual

#### Ordering description

Microblot: Single cassette western blotting system, can accommodate two gels (gel size 8 (w) x 7 (l) cm), with uni-directional migration and constructed for cassette and electrode plate insertion in the correct direction only

#### Microblot and its spares and accessories

Item Description	Cat No.	Unit
Microblot, ready-to-use system	16-00000	System
Cathode and anode plates with male connectors (2 mm), uni-directional insertion and migration feature	16-03083	Set
Gel membrane-holding cassette for transfer of <i>anions</i> with guide-pins, stoppers and locking-nuts	16-08504	Set
Sponge pads (four)	16-10095	Packet
Guide pins with stoppers and locking nuts (two of each)	16-21304	Packet
Electrical cords with female (2 mm) & male connectors designed for user safety	66-40122	Pair



# TECHNOBLOT

Gel size: 10 (w) x 10.5 (l) cm For western, northern and Southern blotting

- ✓ Dual cassette
- Uni-directional insertable cassettes and electrode plates
- ✓ Uni-directional migration
- Transfer one to four gels at a time
- ✓ Buffer requirement: 1900 mL

### Ready-to-use system includes

- 1. Tank
- 2. Lid
- 3. Two gel & membrane holding cassettes with guide pins, stoppers and locking nuts insertable in only one manner
- 4. Four sponge pads
- 5. Eight push screws for locking cassettes
- 6. Cathode and anode plates insertable in only one manner, with electrodes for uni-directional migration and gold plated male connectors
- 7. Electrical cords with gold plated male & female connectors for user safety (1 pair)
- 8. Instruction manual

#### Ordering description

**Technoblot**: Dual cassette blotting system for western, northern and Southern blotting, can accommodate two/four gels (gel size 10 (w) x 10.5 (l) cm), with uni-directional migration and constructed for cassette and electrode plate insertion only in the correct orientation

#### Technoblot and its spares and accessories

Item Description	Cat No.	Unit
Technoblot, ready-to-use system	13-00000	System
Cathode and anode plates with male connectors for uni-directional insertion and migration feature	13-03115	Set
Cathode plate with male connector for uni-directional insertion and migration feature	13-04115	Piece
Anode plate with male connector for uni-directional insertion and migration feature	13-05115	Piece
Gel membrane-holding cassette for transfer of anions with push-nut locking adapters and guide pins	13-06734	Piece
Gel membrane-holding cassette for transfer of <i>cations</i> with push-nut locking adapters and guide pins	13-07734	Piece
Sponge pads (six)	13-10115	Packet
Push screws (eight)	13-20210	Packet
Guide pins with stoppers and locking nuts (eight of each)	13-21304	Packet
Buffer saver (25 mm thick)	13-37121	Piece
Electrical cords with gold plated male & female connectors designed for user safety	66-41124	Pair
Penta-legged levelling table (21 x 21 cm) with spirit level	69-41219	Set

PERFORMANCE COMPARABLE TO IMPORTED EQUIPMENT



# **RESEARCHER RANGE** Horizontal Gel Apparatus Special Features

### **LEAK-PROOF**

*No buffer leakage through plastic joints as bonding is done with special glues* 

Crazing of plastic minimized as high quality plastic tolerates short exposure to cleaning reagents used in RNA analysis

# ERROR MINIMIZATION

Closely spaced wells do not break as comb-stand will not move sideways during comb withdrawal

Samples migrate in right direction due to uni-directional migration feature and colour coding

Sample migration is always straight as comb-stand & tray are aligned & locked in place



Run greater number of samples using two/four combs per tray

Can be run higher voltages

Saves reagent & operator cost as leakage and errors are prevented

# RUGGED

*Electrodes do not break as they are thick and platinum is >99.9% pure* 

No electrolytic corrosion of male connector as base is resin filled

Metal screws do not break with extensive usage

# SENSITIVITY & RESOLUTION

UV-transparent tray gives enhanced sensitivity of DNA detection

Improved band resolution as wells can be cast near the starting edge for longer running length

# CONVENIENT

Multichannel micropipette compatible combs available

*Cast lower percentage gels as comb height can be adjusted* 

*Gels do not slip out in UVtransparent gel -gripping tray* 

Techno Source PRODUCT CATALOGUE April 2014



# **RESEARCHER RANGE**

HORIZONTAL GEL APPARATUS SELECTION GUIDE

All our Ready-to-use systems:

- ✓ Have uni-directional migration.
- ✓ UV transparent trays

Model	Description	Gel size (w x l) cm	No. of combs / gel	No of wells/ comb	Max. samples at a time	Running length (cm)	Buffer require ment	Recommended power supply		
		7 x 5	1	10	10	4.5				
	DNA & protein/			15	15					
SLEEKSUB/ SLEEKSUB-R	RNA, DNA & protein	7 x 10	2	10	20	4.5	270 mL	ELECTRAGEL - 100		
SLEEKSUD-K	electrophoresis			15 10	30 20			100		
		7 x 15	2	10	30	7				
					_	_	_			
		10 x 10	2	15 20	30 40	4.5				
CELMADINED /	DNA & protein/			20 15	40 30					
GELMARINER/ GELMARINER-R	RNA, DNA & protein	10 x 15	2	20	40	7	400 mL	ELECTRAGEL - 100		
GLEMININER R	electrophoresis			15	45			100		
		10 x 20	3	20	60	6.2	6.2	6.2		
		15 x 10 15 x 20	2	24	48	4.5				
				32∞	64					
<b>GREYHOUND</b> /	DNA & protein/		x 20 4	24	96	4.7		ELECTRAGEL -		
GREYHOUND-R	RNA, DNA & protein electrophoresis			32∞	128	4.7	1000 mL	100		
	electrophoresis	45 05		24	96	ć				
		15 x 25	4	32∞	128	6				
				54	54					
		30 x 10	1	64∞	64	9.5				
		20 - 15	2	54	108	7				
GREYWHALE-R	DNA & protein/	30 x 15	2	64∞	128	/	2200 mL	ELECTRAPAGE -		
GRETWHALE-R	RNA, DNA & protein electrophoresis	30 x 20	4	54	216	4.7	2200 IIIL	200		
	· · · · · · · · · · · · · · · · · · ·			64∞	256	4.7				
		30 x 30	5	54	270	5.8				
		50 A 50	5	64∞	320	5.0				

Model	Description	Gel size (w x l) cm	No. of combs / gel	No of wells/ comb	Max. samples at a time	Running length (cm)	Buffer require ment	Recommended power supply
KOMET	For single cell comet assay & DNA electrophoresis	Tray (size 21 x 22 )	4	30	16 slides/ 120	5.2	850 mL	ELECTRACOMET
BI-STRIP	For protein (slides/ CA strip)	16 x 8	-	-	16 on strips / 6 slides	7.5	400 mL	ELECTRAGEL - 100

\*Power supply unit not included.

 $^{\infty}$  Teeth spacing of comb is compatible with multi-channel micropipettes

The number of *combs per gel* and *wells per comb* are for our standard range of products User defined trays, combs and accessories can be custom fabricated. Please enquire for further details



# SLEEKSUB

For DNA and protein separation

# **SLEEKSUB-R**

For RNA, DNA and protein separation System has higher resistance to cleaning agents

- UV-transparent tray with gel gripping design
- Uni-directional migration  $\checkmark$
- ✓ Gel sizes: 7 (w) X 5, 10, 15 (l) cm
- ✓ No. of samples: [1-15] x 2 combs
- ✓ Buffer requirement: 270 mL

### Ready-to-use system includes

- 1. Tank with electrodes and male connectors mounted at an angle
- 2. UV-transparent tray with gel gripping design, 7 (w) x 10 (l) cm
- 3. Comb stand with positioning pins and metal screws for adjusting comb height
- 4. PMMA comb (10 wells, 1.5 mm thick)
- 5. Gel slicer
- 6. Niche cleaner
- 7. Lid
- 8. Electrical cords with male & female connectors designed for user safety (one pair)
- 9. Instruction manual

#### Ordering description

**Sleeksub:** Horizontal apparatus for DNA and protein separations: with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 7 (w) x 10 (l) cm.

Sleeksub-R: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 7 (w) x 10 (l) cm.

#### Sleeksub and its spares and accessories

Item Description	Cat No.	Unit
Sleeksub, ready-to-use system	08-00102	System
Sleeksub-R, ready-to-use system	08-00105	System
UV-opaque tray [gel size 7 (w) x 5 (l) cm]	08-02051	Piece
UV-transparent tray of gel gripping design [gel size 7 (w) x 5 (l) cm]	08-02052	Piece
UV-opaque tray [gel size 7 (w) x 10 (l) cm]	08-02101	Piece
UV-transparent tray of gel gripping design [gel size 7 (w) x 10 (l) cm]	08-02102	Piece
UV-transparent tray of gel gripping design [gel size 3 (w) x 10 (l) cm]	08-03104	Piece
UV-opaque tray [gel size 7 (w) x 15 (l) cm]	08-02151	Piece
UV-transparent tray of gel gripping design [gel size 7 (w) x15 (l) cm]	08-02152	Piece
Comb stand with positioning pins and metal screws for adjusting comb height	08-07870	Piece
Comb 1 mm thick , PMMA, 10 wells/ 68 mm	08-09101	Piece
Comb 1.5 mm thick , PMMA, 10 wells/ 68 mm	08-09102	Piece
Comb 2 mm thick , PMMA, 10 wells/ 68 mm	08-09103	Piece
Comb 1.5 mm thick , PMMA, 16 wells/ 68 mm	08-09162	Piece
Comb, winged, 1.5 mm thick, 4 wells/ 68 mm	08-10042	Piece
Gel casting chamber for tray 7 cm (w) and varying length upto 15 cm	08-25152	Piece
Screws for gel casting chamber (2 No.)	08-26088	Packet
Gel slicer, breakage resistant, 6.5 (w) x 15 (l) cm	63-05150	Piece
Niche cleaner	64-06075	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Pair
Penta-legged levelling table (21 x 21 cm) with spirit-level	69-41219	Set

User defined trays, combs and accessories can be custom fabricated. Please enquire for details.

Manufactured and Marketed by TechResource



Order along with ready-to-use system

*Gel-casting chamber (08-25152), Extra combs, Extra Trays* 

188, Nagdevi Street, 2<sup>nd</sup> Floor, Mumbai 400003. www.technosource.biz, Email: ts1@vsnl.com; Tel: (022) 28937286

# GELMARINER

For DNA and protein separation

### **GELMARINER-R**

For RNA, DNA and protein separation System has higher resistance to cleaning agents

- ✓ UV-transparent tray with gel gripping design
- Uni-directional migration
- ✓ Gel size: 10 (w) x 10, 15, 20 (l) cm
- ✓ No. of samples: [1-20] x 2 combs
- ✓ Buffer requirement: 400 mL

#### Ready-to-use system includes

- 1. Tank with electrodes and male connectors mounted at an angle
- 2. UV-transparent tray with gel gripping design, 10 (w) x 15 (l) cm
- 3. Comb stand with positioning pins and metal screws for adjusting comb height
- 4. PMMA comb (15 wells, 1.5 mm thick)
- 5. Gel slicer
- 6. Niche cleaner
- 7. Lid
- 8. Electrical cords with male & female connectors designed for user safety (1 pair)
- 9. Instruction manual

#### **Ordering description**

**Gelmariner:** Horizontal apparatus for DNA and protein separations: with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 10 (w) x 15 (l) cm. **Gelmariner-R**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and unidirectional migration, gel size 10 (w) x 15 (l) cm.

#### Gelmariner and its spares and accessories

Item Description	Cat No.	Unit
Gelmariner, ready-to-use system	10-00152	System
Gelmariner-R, ready-to-use system	10-00155	System
UV-opaque tray [gel size 10 (w) x 10 (l) cm]	10-02101	Piece
UV-transparent tray of gel gripping design [gel size 10 (w) x 10 (l) cm]	10-02102	Piece
UV-opaque tray [gel size 10 (w) x 15 (l) cm]	10-02151	Piece
UV-transparent tray of gel gripping design [gel size 10 (w) x 15 (l) cm]	10-02152	Piece
UV-opaque tray [gel size 10 (w) x 20 (l) cm]	10-02201	Piece
UV-transparent tray of gel gripping design [gel size 10 (w) x 20 (l) cm]	10-02202	Piece
Comb stand with positioning pins and metal screws for adjusting comb height	10-07116	Piece
Comb 1 mm thick , PMMA, 15 wells/ 98 mm	10-09151	Piece
Comb 1.5 mm thick , PMMA, 15 wells/ 98 mm	10-09152	Piece
Comb 2 mm thick , PMMA, 15 wells/ 98 mm	10-09153	Piece
Comb 1.5 mm thick , PMMA, 20 wells/ 98 mm	10-09202	Piece
Gel casting chamber for tray 10 cm (w) and varying length up to 20 cm	10-25202	Piece
Screws for gel casting chamber (2 No.)	10-26088	Packet
Gel slicer, breakage resistant, 9.5 (w) x 20 (l) cm	63-05200	Piece
Niche cleaner	64-06075	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Pair
Penta-legged levelling table (23 x 31 cm) with spirit-level	69-41319	Set

User defined trays, combs and accessories can be custom fabricated. Please enquire for details.

Manufactured and Marketed by TechResource





Suggestion Order along with ready-to-use system

*Extra comb stand (10-07116), Gel-casting chamber (10-25202), Extra combs, Extra trays* 



# GREYHOUND

For DNA and protein separation

# **GREYHOUND-R**

*System has higher resistance to cleaning agents For RNA, DNA and protein separation* 

- VUV-transparent tray with gel gripping design
- Uni-directional migration
- Comb with teeth spacing compatible with multi-channel micropipettes available
- ✓ Gel size: 15 (w) x 10, 20, 25 (l) cm
- ✓ No. of samples: [1-32] x 4 combs
- ✓ Buffer requirement: 1000 mL

### Ready-to-use system includes

- 1. Tank with electrodes and male connectors mounted at an angle
- 2. UV-transparent tray with gel gripping design, 15 (w) x 20 (l) cm  $\,$
- 3. Comb stand with positioning pins and metal screws for adjusting comb height
- 4. PMMA comb (24 wells, 1.5 mm thick)
- 5. Gel slicer
- 6. Niche cleaner
- 7. Lid
- 8. Electrical cords with male & female connectors designed for user safety
- 9. Instruction manual

### Ordering description

**Greyhound:** Horizontal apparatus for DNA and protein separations with gel gripping UV-transparent tray, male connectors mounted at an angle, and uni-directional migration, gel size 15 (w) x 20 (l) cm.

**Greyhound-R**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, gel size 15(w) x 20 (l) cm.

### Greyhound and its spares and accessories

Item Description	Cat No.	Unit
Greyhound, ready-to-use system	09-00202	System
Greyhound-R, ready-to-use system	09-00205	System
UV-opaque tray [gel size 15 (w) x 20 (l) cm]	09-02201	Piece
UV-transparent tray of gel gripping design [gel size 15 (w) x 20 (l) cm]	09-02202	Piece
UV-opaque tray [gel size 15 (w) x 10 (l) ]	09-02101	Piece
UV-transparent tray of gel gripping design [gel size 15 (w) x 10 (l) ]	09-02102	Piece
UV-opaque tray [gel size 15 (w) x 25 (l) cm]	09-02251	Piece
UV-transparent tray of gel gripping design [gel size 15 (w) x 25 (l) cm]	09-02252	Piece
UV-opaque tray [size 15 (w) x 22 (l) cm stringed at 2.5 cm intervals] and replacement lid for paper electrophoresis	09-02223	Set
Comb stand with positioning pins and metal screws for adjusting comb height	09-07171	Piece
Comb 1 mm thick , PMMA, 24 wells/ 148 mm	09-09241	Piece
Comb 1.5 mm thick , PMMA, 24 wells/ 148 mm	09-09242	Piece
Comb 2 mm thick , PMMA, 24 wells/ 148 mm	09-09243	Piece
Comb 1.5 mm thick , PMMA, 32 wells/ 148 mm	09-09322	Piece
Gel casting chamber for tray 15 cm (w) and varying length up to 25 cm	09-25252	Piece
Screws for gel casting chamber (2 No.)	09-26088	Packet
Gel slicer, breakage resistant, 14.5 (w) x 25 (l) cm	63-05250	Piece
Niche cleaner	64-06075	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Pair
Penta-legged levelling table (28 x 45 cm) with spirit-level	69-41459	Set

User defined trays, combs and accessories custom fabricated

Manufactured and Marketed by TechResource

Order along with ready-to-use system

Extra comb stands (09-07171), Gel-casting chamber (09-25252), Extra combs, Extra Trays



# **GREYWHALE -R**

System has higher resistance to cleaning agents For RNA, DNA and protein separation

- $\checkmark$  UV-transparent tray with gel gripping design
- ✓ Uni-directional migration
- Comb with teeth spacing compatible with multi-channel micropipettes available
- ✓ Gel size: 30 (w) x 10, 15, 20, 30 (l) cm
- $\checkmark$  No. of samples: [1-64] x 5 combs
- ✓ Buffer requirement: 2200 mL

### Ready-to-use system includes

- 1. Tank with electrodes and male connectors mounted at an angle
- 2. UV-transparent tray with gel gripping design, 30 (w) x 30 (l) cm
- **3.** Comb stand with positioning pins and metal screws for adjusting comb height
- 4. PMMA comb (54 wells, 1.5 mm thick)
- 5. Gel slicer
- 6. Niche cleaner
- 7. Lid
- 8. Electrical cords with male & female connectors designed for user safety (1 pair)
- 9. Instruction manual

### Ordering description

**Greywhale-R**: Horizontal apparatus for nucleic acid and protein separations: fabricated to tolerate cleaning reagents used in RNA analysis, with gel gripping UV-transparent tray, male connectors mounted at an angle and uni-directional migration, gel size 30 (w) x 30 (l) cm.

### Greywhale and its spares and accessories:

Item Description	Cat No.	Unit
Greywhale-R, ready-to-use system	12-00305	System
UV-transparent tray of gel gripping design [gel size 30 (w) x 10 (l) cm]	12-02102	Piece
UV-transparent tray of gel gripping design [gel size 30 (w) x 15 (l) cm]	12-02152	Piece
UV-transparent tray of gel gripping design [gel size 30 (w) x 20 (l) cm]	12-02202	Piece
UV-transparent tray of gel gripping design [gel size 30 (w) x 30 (l) cm]	12-02302	Piece
Comb stand with positioning pins and metal screws for adjusting comb height	12-07171	Piece
Comb 1 mm thick , PMMA, 54 wells/298 mm	12-09541	Piece
Comb 1.5 mm thick , PMMA, 54 wells/ 298 mm	12-09542	Piece
Comb 2 mm thick , PMMA, 54 wells/ 298 mm	12-09543	Piece
Comb 1.5 mm thick , PMMA, 64 wells/ 298 mm, well spacing compatible with multi-channel micropipette	12-09642	Piece
Gel casting chamber for tray 30 cm (w) and varying length up to 30 cm	12-25302	Piece
Screws for gel casting chamber (2 No.)	12-26088	Packet
Gel slicer, breakage resistant, 29.5 (w) x 30 (l) cm	63-05300	Piece
Niche cleaner	64-06075	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Pair
Penta-legged levelling table (38 x 52 cm) with spirit-level	69-41529	Set

User defined trays, combs and accessories can be custom fabricated. Please enquire for details.

Order along with ready-to-use system

Extra Comb stands (12-07171), Gel-casting chamber (12-25302), Extra combs, Extra trays



# **BI-STRIP**

For cellulose acetate strips and agarose slides

- Accommodates CA strip of size 8
  (w) x 6, 8, 14 (I) cm
- ✓ Six 1 x 3 inch glass slides
- ✓ Buffer requirement: 150 mL

### Ready-to-use system includes

- 1. Lid
- 2. Tank with platform 8 (l) x 16 (w) cm, having male connecors and electrodes for uni-directional migration
- 3. Holder for CA strips
- 4. Electrical cords with male & female connectors designed for user safety (1 pair)
- 5. Instruction manual

### Ordering Description

**Bi-strip**: Horizontal electrophoresis system for cellulose acetate strips and agarose slides with CA strip holder, capacity for six 1 x 3 (inch) glass slides, male connectors and uni-directional migration.

### **Bi-strip and its Spares and Accessories**

Item Description	Cat No.	Unit
Bi-Strip, ready-to-use system	11-08168	System
Hol-der for CA strips	11-10163	Piece
Electrical cords with male & female connectors designed for user safety (one pair)	66-40124	Set
Penta-legged levelling table (21 x 21 cm) with spirit level	69-41219	Set





### **KOMET**

For single cell comet assay

- Removable buffer circulation cassettes
- ✓ Inbuilt levelling mechanism
- ✓ Buffer requirement:
  950 mL
- Can be used for DNA and protein separation (with accessories)



#### Ready-to-use system includes

- 1. Lid
- 2. Tank with two dual male connectors per electrode and a levelling arrangement
- 3. Two trays with slot to lift slides [each of size 21 (w) x 9 (l) cm for 8 slides] and made of breakage resistant plastic
- 4. Two buffer distribution cassettes marked 'Withdrawal' and 'Deliver' with attached tubing connectors
- 5. Two connecting cords (each with one male and two female connectors)
- 6. Instruction manual
  - \* Peristaltic pump to be ordered separately

#### **Ordering description**

Order along with ready-to-use system

Peristaltic pump (07-02100), Tray (07-02202), Comb stand (07-07193) Gel slicer (63-05300) Niche cleaner (64-06075) Extra combs

*Komet*: Horizontal apparatus for single cell comet assay with removable buffer distribution cassettes fitted with tubing and connectors. Tray size; 21 (w) x 22 (l) cm (16 slides)

**Peristaltic pump:** Peristaltic pump with variable speed, bi-directional continuous operation, LED display and timer, flow rate: 14-450 mL/min

#### Komet and its spares and accessories

Item Description	Cat No.	Unit
Komet, ready-to-use system	07-00001	System
Peristaltic pump with variable speed, bi-directional continuous operation, LED display and timer, flow rate: 14-450 mL/min	07-02100	Unit
Trays of breakage resistant plastic (combined size 21 (w) x 22 (l) to accommodate 16 slides (2 No.)	07-03091	Set
Connecting cords, each with a male and two female connectors	07-40225	Pair
*UV-transparent tray of gel gripping design [gel size 20 (w) x 22 (l) cm	07-02202	Piece
*Comb stand with positioning pins and metal screws for adjusting comb height	07-07193	Piece
*Comb, 1 mm thick, PMMA, 30 wells/202 mm	07-09301	Piece
*Comb, 1.5 mm thick, PMMA, 30 wells/ 202 mm	07-09302	Piece
*Comb, 2 mm thick, PMMA, 30 wells/ 202 mm	07-09303	Piece
*Gel slicer, breakage resistant, 13.5 (w) x 30 cm	63-05300	Piece
*Niche cleaner	64-06075	Piece

\* Indicates accessories for using KOMET for DNA and protein separation





# **RESEARCHER RANGE UV-TRANSILLUMINATORS SPECIAL FEATURES**

# RUGGED

Non-brittle filter made of plastic which does not crack easily

No solarization i.e., UV-transparency of UV-transparent diffuser window is unchanged over time

# SAFETY

No skin burns or damage to normal retina's as UVA tubes emit light similar to light found outdoors

Negligible photo-nicking or photobleaching of DNA due to use of lower energy UVA lights

Dual (Hi-lo) mode for viewing. Go to high mode only when required

# HIGH Sensitivity

Visual detection limit one ng per compact band of EtBr stained ds DNA due to intensity of UVA tubes

UV-transparent diffuser window allows 85-90% of the UV to pass through

# ECONOMICAL

Low capital cost and spares Does not need costly UV-transparent violet filter



Window size 10 x 10 cm 2 UVA tubes

GLOWORM-4 Window size 10 x 10 cm 4 UVA tubes

#### **GLOWORM-8**

Window size 20 x 20 cm 8 UVA tubes



- ✓ Chromafilter to improve contrast of fluorescent bands and filter UV-light
- ✓ Switch for dual intensity of UV-light
- ✓ Compact trapezoid dark viewing hood
- ✓ Negligible photo-bleaching and photonicking of DNA
- ✓ Sensitivity 1 ng per band
- ✓ 366 nm UVA is less hazardous to retina & skin than 302 nm UVB

#### Ready-to-use system includes

1. Housing unit with a diffusing UV-Transparent window

- 2. UV-protective cover
- 3. UV-tubes (2 tubes in Gloworm-2; 4 tubes in Gloworm-4; 8 tubes in Gloworm-8)
- 4. Compact trapezoid dark viewing hood with removable binocular chromafilter eyepiece
- 5. Instruction manual

#### **Ordering Description**

*For Gloworm-2*: UV-transilluminator with diffusing UV-transparent window (10 x 10 cm), two UVA tubes, Hi-Lo intensity control and trapezoid hood fitted with binocular chromafilter eyepiece.

**For Glowrom-4**: UV-transilluminator with diffusing UV-transparent window (10 x 10 cm), four UVA tubes Hi-Lo intensity control and trapezoid hood fitted with binocular chromafilter eyepiece.

*For GLoworm-8*: UV-transilluminator with diffusing UV-transparent window (20 x 20 cm), eight UVA tubes Hi-Lo intensity control and trapezoid hood fitted with binocular chromafilter eyepiece.

#### **Gloworm and its Spares and Accessories**

Item Description	Catalogue No.	Unit
Gloworm-2, ready-to-use system	31-61002	System
Gloworm-4, ready-to-use system	31-61004	System
Gloworm-8, ready-to-use system	31-62008	System
UVA tubes for Gloworm-2 (2 No.)	31-63092	Set
UVA tubes for Gloworm-4 (4 No.)	31-63094	Set
UVA tubes for Gloworm-8 (8 No.)	31-63128	Set
Compact trapezoid dark viewing hood (for window size 10 x 10 cm) of base size 12 (l) x 12 (b), height 15 cm with detachable binocular chromafilter eyepiece for GLOWORM-2 & GLOWORM-4	31-71500	Unit
Compact trapezoid dark viewing hood (for window size 20 x 20 cm) of base size 28 (l) x 24 (b), height 22 cm with detachable binocular chromafilter eyepiece for GLOWORM-8	31-72200	Unit
Compact trapezoid dark viewing hood (for window size 20 x 20 cm) of base size 28 (l) x 24 (b), height 22 cm with detachable binocular chromafilter eyepiece and ports to access gel for GLOWORM-8	31-72201	Unit
Detachable binocular chromafilter eyepiece for trapezoid dark viewing hood	31-81913	Piece



Order along with Gloworm-8

Compact trapezoid viewing hood with ports to access gel (31-84128)

# PRODUCT CATALOGUE APRIL 2014



# **GEL DOCUMENTATION SYSTEM**

**GELVIU SELECTION GUIDE** 

All our Ready-to-use systems have:

- ✓ Hi-lo intensity control for UV-transillumination
- ✓ Computer controllable camera

Model GelViu Cat. No.	Trans- illumination	Epi- illumination	Camera megapixels	Glove ports for accessing gel	Binocular eyepiece (for simustaneous viewing and cutting)
32-12001	Yes	No	12	No	No
32-12002	Yes	No	12	Yes	Yes
32-12003	Yes	Yes	12	No	No
32-12004	Yes	Yes	12	Yes	Yes
32-18001	Yes	No	18	No	No
32-18002	Yes	No	18	Yes	Yes
32-18003	Yes	Yes	18	No	No
32-18004	Yes	Yes	18	Yes	Yes

\*Power supply unit not included.

<sup>∞</sup> Teeth spacing of comb is compatible with multi-channel micropipettes

The number of *combs per gel* and *wells per comb* are for our standard range of products User defined trays, combs and accessories can be custom fabricated. Please enquire for further details



# GELVIU

#### Gel documentation system

- ✓ UV-transparent window, 20 x 20 cm
- ✓ Switch for dual intensity of UV-light
- ✓ Compact viewing hood
- ✓ Ports to manually access gel for band excision (optional)
- Trans-illumination and epi-illumination (optional) for taking images in the UV and visible range
- ✓ 366 nm UVA tubes

#### System with client customized features

- 1. Lower housing unit with a UV-transparent window
- 2. Eight UVA-tubes
- 3. Two white light tubes for epi-illumination (optional)
- 4. A compact hood with attachment for camera
- 5. Ports to manually access the gel for band exicision (optional)
- 6. Chromafilter for manual viewing (optional)
- 7. A digital colour camera with filters and CMOS sensor for capturing high resolution images in low light conditions
- 8. Instruction manual

\*Software to be ordered separately

#### GelViu ready-to-use systems

Item Description	Catalogue No.	Unit
GelViu, ready-to-use gel documentation system. Trans-illumination with UVA light source and hi-lo light intensity control, 20 x 20 cm illumination area. Hood fitted with computer controllable 12 MP DSLR camera and filters, and software adapted for GelViu.	32-12001	System
GelViu, ready-to-use Gel doc system. Trans-illumination with UVA light source and hi-lo light intensity control, 20 x 20 cm trans-illumination area, hood with glove ports for accesing gel and binocular eyepiece for viewing gel being manipulated. Hood fitted with computer controllable 12 MP DSLR camera and filters, and software adapted for GelViu.	32-12002	System
GelViu, ready-to-use gel documentation system. Trans-illumination with UVA light source and hi-lo light intensity control, white light epi-illumination, 20 x 20 cm trans-illumination area. Hood fitted with computer controllable 12 MP DSLR camera and filters, and software adapted for GelViu.	32-12003	System
GelViu, ready-to-use gel documentation system. Trans-illumination with UVA light source and hi-lo light intensity control, white light epi-illumination, 20 x 20 cm trans-illumination area, hood with glove ports to access gel and binocular eyepiece for viewing gel being manipulated. Hood fitted with computer controllable 12 MP DSLR camera and filters, and software adapted for GelViu.	32-12004	System
GelViu, ready-to-use gel documentation system. Trans-illumination with UVA light source and hi-lo light intensity control, 20 x 20 cm illumination area. Hood fitted with computer controllable 18 MPDSLR camera and filters, and software adapted for GelViu.	32-18001	System
GelViu, ready-to-use Gel doc system. Trans-illumination with UVA light source and hi-lo light intensity control, 20 x 20 cm illumination area, hood with glove ports for accesing gel and binocular eyepiece for viewing gel being manipulated. Hood fitted with computer controllable 18 MP DSLR camera and filters, and software adapted for GelViu.	32-18002	System
GelViu, ready-to-use gel documentation system. Trans-illumination with UVA light source and hi-lo light intensity control, white light epi-illumination, 20 x 20 cm illumination area. Hood fitted with computer controllable 18 MPDSLR camera and filters, and software adapted for GelViu.	32-18003	System
GelViu, ready-to-use gel documentation system. Trans-illumination with UVA light source and hi-lo light intensity control, white light epi-illumination, 20 x 20 cm illumination area, hood with glove ports to access gel and binocular eyepiece for viewing gel being manipulated. Hood fitted with computer controllable 18 MP DSLR camera and filters, and software adapted for GelViu.	32-18004	System

PRODUCT CATALOGUE April 2014 Performance Comparable To Imported Equipment



# **RESEARCHER RANGE POWERSUPPLIES: SPECIAL FEATURES**

# RUGGED

Reduced probability of transistor burnout due to the use of MOSFETs with high voltage and current capacity

Instantaneous voltage stabilization, input volatage spikes removed due to inbuilt constant voltage transformer

Can be used in low volatge and high current applications due to transistor load sharing circuitry in series and/or parallel



No shock from accidental contact with single output due to high insulation between primary and secondary windings of transformers

Short circuit proof due to special motherboard design

# **CONVENIENCE**

Small foot print due to the low EMI radiation of transformer

Voltage and current readings can be viewed simultaneously due to the independent displays

Independent monitoring of the two outputs by the use of selection switch

# ECONOMICAL

*Two apparatus of similar resistance can be run simultaneously* 

Reduced maintenance and repairing cost as low probability of burnouts and short circuits





# **RESEARCHER RANGE Power supply unit Selection Guide**

Model	Max. rated voltage	Max. rated current	In-built stabilizer	Display	Application	Best with TS models				
					Small & medium vertical gels	Microkin, Monokin, Minikin				
Electragel-100	300 V	100 mA	YES	Separate for voltage and current	Small & medium horizontal gels	Sleeksub, Gelmariner, Greyhound, Bi-strip				
					Miniblots	Nanoblot, Microblot				
					All vertical gels	Microkin, Monokin, Minikin, Macrokin-S, Macrokin				
Electrapage-200	500 V	200 mA	YES	Separate for voltage and current	Horizontal gels	Sleeksub, Gelmariner, Greyhound, Greywhale, Bi-strip				
										All blots
Electracomet	200 V	500 mA	NO	Separate for	All blots	Nanoblot, Microblot, Technoblot				
Electracomet	200 V	500 IIIA	NO	voltage and current	All horizontal gels	Komet, Sleeksub, Gelmariner, Greyhound, Greywhale, Bi-strip				
Electrofeene	1000 V	100 mA	NO	Separate for	All vertical gels	Microkin, Monokin, Minikin, Macrokin-S, Macrokin				
Electrafocus	1000 V	100 IIIA	NO	voltage and current	2-D gel	Minikin, Macrokin-S				

In general it is not advisable to operate a power supply under conditions of low voltage and high current. The transistors will get hot and de-rated. This will make them vulnerable to damage and shorten their useful life.

### ELECTRAGEL-100 Cat No. 24-00100 Output range upto 300 V, 100 mA

#### **Features**

- ✓ Dual mode (CV and CC) with auto crossover
- ✓ Two outputs (independently monitored)
- Independent digital displays for mA and volts (resolution 1 mA, 1 V)
- ✓ Can be set to any desired value within range
- ✓ Special MOSFET load sharing circuitry in parallel

#### Safety features

- Inbuilt constant-voltage transformer to stabilize voltage, filter out spikes and shutdown in case of frequency changes
- Outputs protected against short-circuiting
- Over-voltage trip circuit to limit electronic component damage
- Active cooling of transistors

#### ELECTRAPAGE-200 Cat No. 25-00200 Output range upto 500 V, 200 mA

#### **Features**

- $\checkmark~$  Dual mode (CV and CC) with auto crossover
- ✓ Two outputs (independently monitored)
- ✓ Independent digital displays for mA and volts (resolution 1 mA, 1 V)
- ✓ Can be set to any desired value within range
- ✓ Special MOSFET load sharing circuitry in series

#### Safety features

- Inbuilt constant-voltage transformer to stabilize voltage, filter out spikes and shutdown in case of frequency changes
- Protection of outputs against short-circuiting
- Over-voltage trip circuit to limit electronic component damage
- Active cooling of transistors







ELECTRACOMET Cat No. 26-00500 Output range upto 200 V, 500 mA

#### **Features**

- ✓ Dual mode (CV and CC) with auto crossover
- ✓ Two outputs (independently monitored)
- ✓ Independent digital displays for mA and volts (resolution 1 mA, 1 V)
- ✓ Can be set to any desired value within range
- ✓ Special MOSFET load sharing circuitry

#### Safety features

- Protection of outputs against short-circuiting
- Over-voltage tripping circuit to limit electronic component damage
- Spike guard

#### ELECTRAFOCUS-100 Cat No. 28-00100 Output range upto 1000 V, 100 mA

#### **Features**

- ✓ Dual mode (CV and CC) with auto crossover
- ✓ Two outputs (independently monitored)
- ✓ Independent digital displays for mA and volts (resolution 1 mA, 1 V)
- ✓ Can be set to any desired value within range
- ✓ Special MOSFET load sharing circuitry in series and parallel

#### **Safety features**

- Protection of outputs against short-circuiting
- Over-voltage trip circuit to limit electronic component damage
- Active cooling of transistors



#### Anaerobic chamber

- ✓ Square design
- ✓ Accommodates
  - ... petri plates
  - ... 6/24/48/96 well plates
  - ... test tubes
- Additionally accommodates 100 mL flask with hydrogen and CO<sub>2</sub> generating reagent
- ✓ Body made of  $O_2$  and  $CO_2$  impermeable plastic
- Clamp for attaching pouch containing the catalyst on underside of the lid
- Internal dimension:
  14 (w) x 14 (l) x 18 (h) cm
- ✓ Vacuum cum pressure gauge:
  -30 to +15 psi

#### Ready-to-use system includes

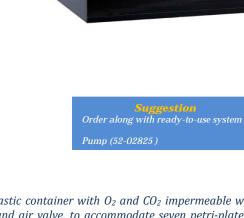
- 1. Chamber with internal dimension 14 (w) x 14 (l) x 18 (h) cm
- 2. Lid with vacuum cum pressure gauge and air valve
- 3. Gasket for leak proof sealing
- 4. Valve connector with tubing

#### **Ordering description**

**Noair:** Anaerobic system: 14 (w) x 14 (l) x 18 (h) cm, rectangular plastic container with  $O_2$  and  $CO_2$  impermeable walls. Fitted with gasketed lid, sturdy clamp, vacuum cum pressure gauge and air valve, to accommodate seven petri-plates or multiwell plates

#### Noair and its spares and accessories

Item Description	Cat. No.	Unit
Noair, ready-to-use system	52-01410	System
Pump, solvent resistant diaphragm, low noise, two Teflon coated diaphragm heads in series, with self-standing vacuum gauge. Max vacuum 710 mm Hg; power rating 1/3 hp	52-02825	Unit
Gasket for leak proof sealing	52-05706	Piece
Valve connector with tubing	52-06004	Set









### STAND FOR MICROPIPETTES Cat. No.51-01105

- ✓ Accomodates 4 micropipettes at a time
- ✓ Pippettes maintained at a convenient slant
- ✓ Holds box of 200 uL micropipette tips at the rear

### HOLDER FOR MICROTEST TUBES WITH CAP-OPENER Cat. No.51-02106

- ✓ For 1.5 and 2 mL microcentrifuge tubes
- ✓ Holds 10 tubes at a time
- ✓ Open caps easily

### TIP & TUBE DISCARD CONTAINER Cat. No.51-03810

- ✓ Rectangular box of thick clear acrylic
- ✓ Non-spill lid with 3 cm dia discard hole and flip-flop cover



#### **GEL-SANDWICH OPENER** Cat. No. 61-30257 ✓ For separating the notch plate and rectangular plate

# AGAROSE DISPENSER

#### ✓ For convenient sealing of vertical gel apparatus with agarose

Item Description	Cat. No.	Unit
Agarose dispenser for filling slot in 1.5 mm spacer		Piece
Agarose dispenser for filling slot in 1 mm spacer	62-36201	Piece

# **GEL SLICER**

- ✓ For horizontal gel electrophoresis
- ✓ Breakage resistant

Item description	Recommended for	Cat. No.	Unit
Gel slicer, breakage resistant, 6.5 (w) x 15 (l) cm	Sleeksub	63-05150	Piece
Gel slicer, breakage resistant, 9.5 (w) x 20 (l) cm	Gelmariner	63-05200	Piece
Gel slicer, breakage resistant, 14.5 (w) x 25 (l) cm	Greyhound	63-05250	Piece
Gel slicer, breakage resistant, 29.5 (w) x 30 (l) cm	Greywhale	63-05300	Piece

### NICHE CLEANER Cat. No. 64-06075

✓ For cleaning gel gripping niches in horizontal electrophoresis

# **ELECTRICAL CORDS**

- ✓ With male and female connectors
- ✓ Designed for user safety

Item description		Unit
Electrical cords with male & female (2mm) connectors designed for user safety	66-40122	Piece
Electrical cords with male & female connectors designed for user safety	66-40124	Piece
Electrical cords with gold plated male & female connectors designed for user safety	66-41124	Piece

LABWARE





### **GRADIENT MIXER**

- ✓ Triple-barrel
- ✓ Leak-proof plunging stopper
- ✓ Accomodates a magnetic spin-bar

Volume per chamber	Recommended for apparatus	Magnetic fly length	Cat. No.	Unit
14 mL	Monokin, Minikin	≤ 10 <b>mm</b>	67-50167	Piece
22 mL	Macrokin, Macrokin-S	≤ 14 <b>mm</b>	67-50207	Piece

### **LEVELLING TABLES**

- ✓ Novel penta-legged design for compactness
- ✓ With spirit-level
- ✓ Easy to level
  ✓ Stable, will not wobble

Size	Recommended for apparatus		Unit
21 x 21 cm	Microkin, Minikin, Monokin, Sleeksub, Bi-Strip, Technoblot	69-41219	Set
23 x 31 cm	Macrokin, Macrokin-S, Gelmariner	69-41319	Set
28 x 45 cm	Greyhound	69-41459	Set
38 x 52 cm	Greywhale	69-41529	Set

