



40th year
1983 - 2023

ELECTROPHORESIS SYSTEMS

BIOTECH YERCAUD



BIOTECH YERCAUD

ELECTROPHORESIS SYSTEMS

(April, 2023)



Biotech was functioning in a small hut in 1983.
One of the 1st batch of instruments is in the foreground.

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Hands on training programs

On

Electrophoresis Techniques



The Electrophoresis Institute
Biotech - Yercaud

Introduction

We are very glad that Biotech is entering in to the **40th** year of service. I am deeply indebted to all those who help us to serve in the field of electrophoresis so long. And wish the same kind of support & cooperation to serve you better.

All our products right from Paper electrophoresis system up to soft-wares for gel analysis are categorically listed in this Catalog. Customers are requested to use specific CODE numbers for convenience.

The Electrophoresis Institute is our sister concern. Training programs are periodically conducted. So far, 11 summer courses and 65 short-term work-shops were conducted since, 1999. New suggestions raised by trainees during our training programs are constantly incorporated in our system. Thanks to trainees for their instant feed-back.

I am deeply indebted to my wife for her consistent help & suggestions in preparing this Catalog. Customers' feed-back, co-operation of my staff members, friends and dealers are always pillars behind this success so far !

General Information

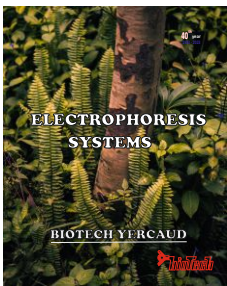
1. Special Trade Discount
2. Taxes – Extra (GST as applicable)
3. Supply – 2-4 weeks (Priority for orders with 100% advance payment)
4. Payment – 100% Advance
5. Freight & Delivery charges – Extra as applicable.
6. Other charges - Insurance, octroi & other charges will be extra.
7. Demo / Installation - if required at customers place will be charged extra.
8. Warranty – generally, 12 months. (No guarantee is given for glass / imported items)
9. Products specifications / prices are subjected to changes. Please contact us for current rates

For Biotech R & D Laboratories
Dr.K.Anbalagan



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Front Cover
Ferns at Manasy Estate, Yercaud
Photo Credits: Thillai Makadhan



Electrophoresis -

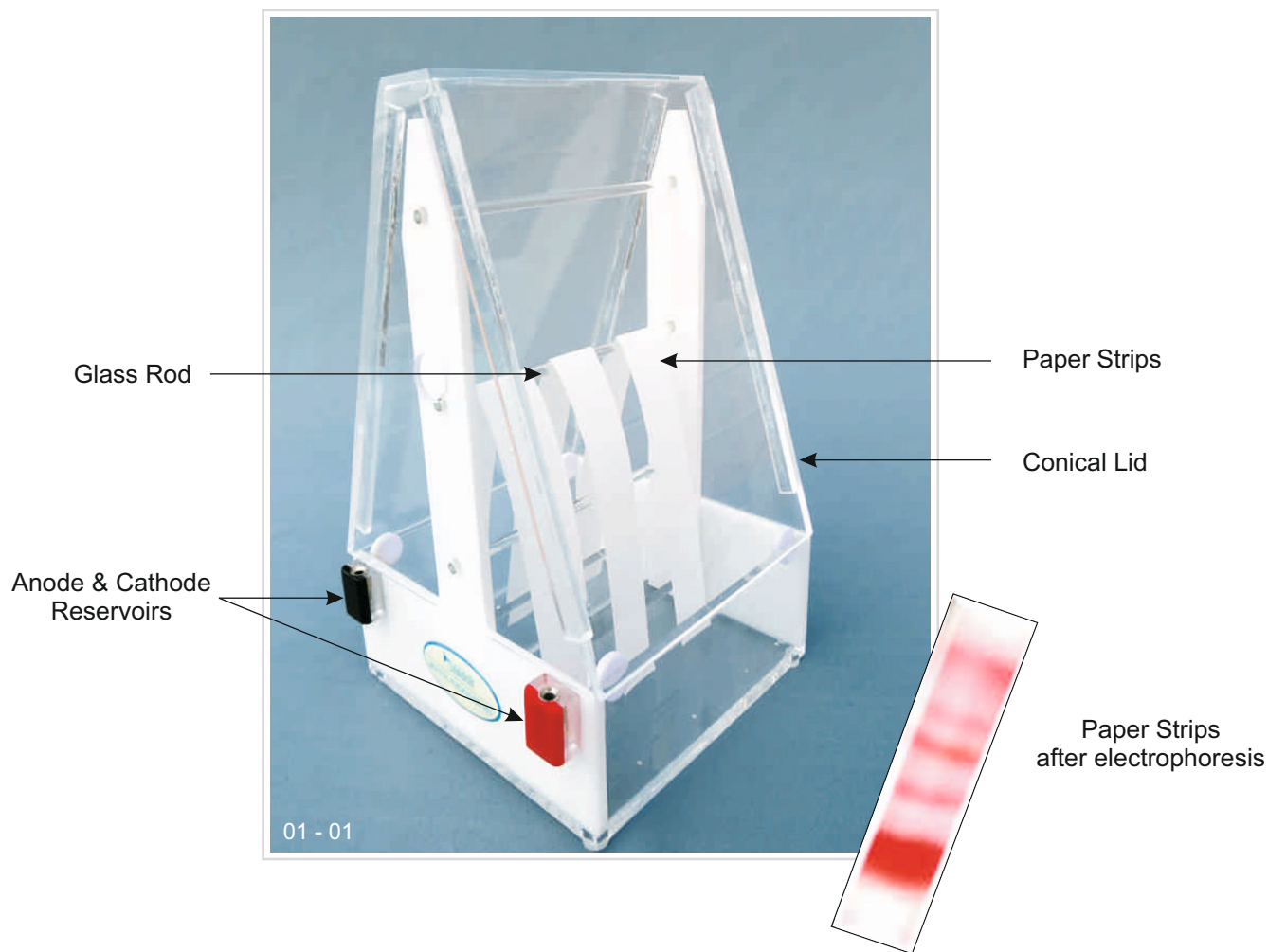
by

Dr.K.Anbalagan



The Electrophoresis Institute
Biotech - Yercaud

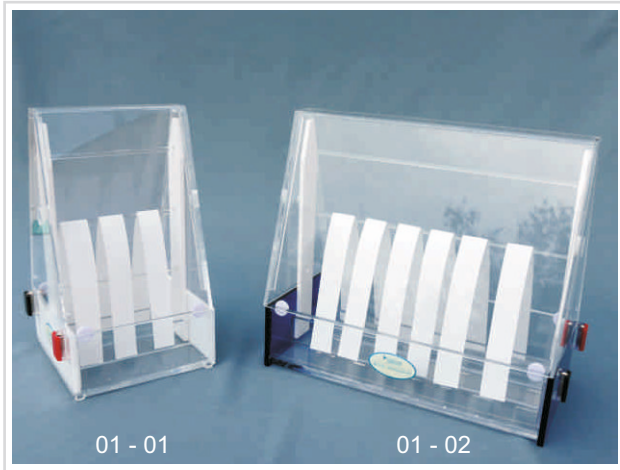
BIOTECH PAPER ELECTROPHORESIS SYSTEMS



Paper electrophoresis is a conventional technique of Protein analysis in clinical medicine. Certain blood cancers like myeloma, and sickle cell anemia are diagnosed by this method. Blood plasma, serum and urine samples are investigated in Whatman filter paper / Cellulose acetate strips. Agar or agarose gel prepared on glass slides also can be used in these systems.

BIOTECH manufactures different models of Vertical & Horizontal systems for conveniently performing paper electrophoresis.





01 - 01

Vertical Model - Small for 3 strips.

Basic unit with Platinum electrode assembly (2), Paper Supporting rods (2) and Power cord (1).

Size (lbh) : 15 x 15 x 27 cm; 0.75 kg; Buffer - 100 + 100 mL; Suitable Power Pack - Mini / analytical.

01 - 02

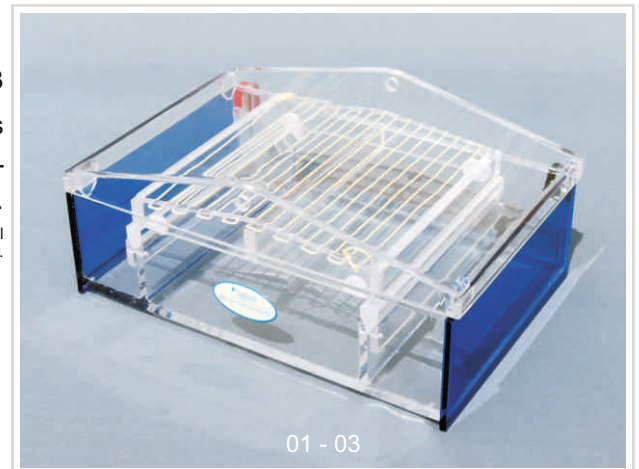
Vertical Model - Large for 6 strips.

Basic unit with Platinum electrode assembly (2), Paper Supporting rods (2) and Power cord (1).

Size (lbh): 30 x 15 x 27 cm; 1.5 kg; Buffer - 200 + 200 mL; Suitable Power Pack - Analytical / Versatile.

Horizontal Model – for 6 Paper Strips
 Basic unit with Platinum electrode assembly (2), Paper supporting frame (1), Clamping rods (2), and Power cord (1).

Size (lbh): 20 x 20 x 7 cm; 2 kg; Buffer – 200 + 200 mL; Operation by – Analytical / Versatile model
 Power pack – to be ordered separately.



01-03

01 - 03



01-04

Membrane System – Mini.

(for Two 3 x 1" Cellulose Acetate Strips)

Basic unit with Platinum electrode assembly (2), Paper supporting frame (1), and Power cord (1).

Size (lbh): 15 x 7 x 6 cm; 0.3 kg; Buffer – 25 + 25 mL; Operation by – Mini model Power pack – to be ordered separately.

01-05

Membrane System – Large.

(for Four 3 x 1" Cellulose Acetate Strips)

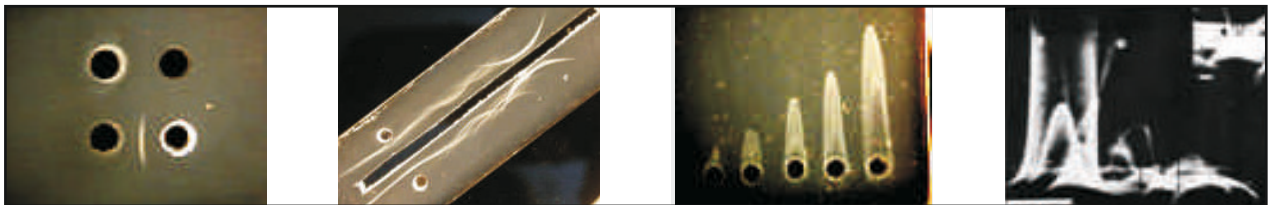
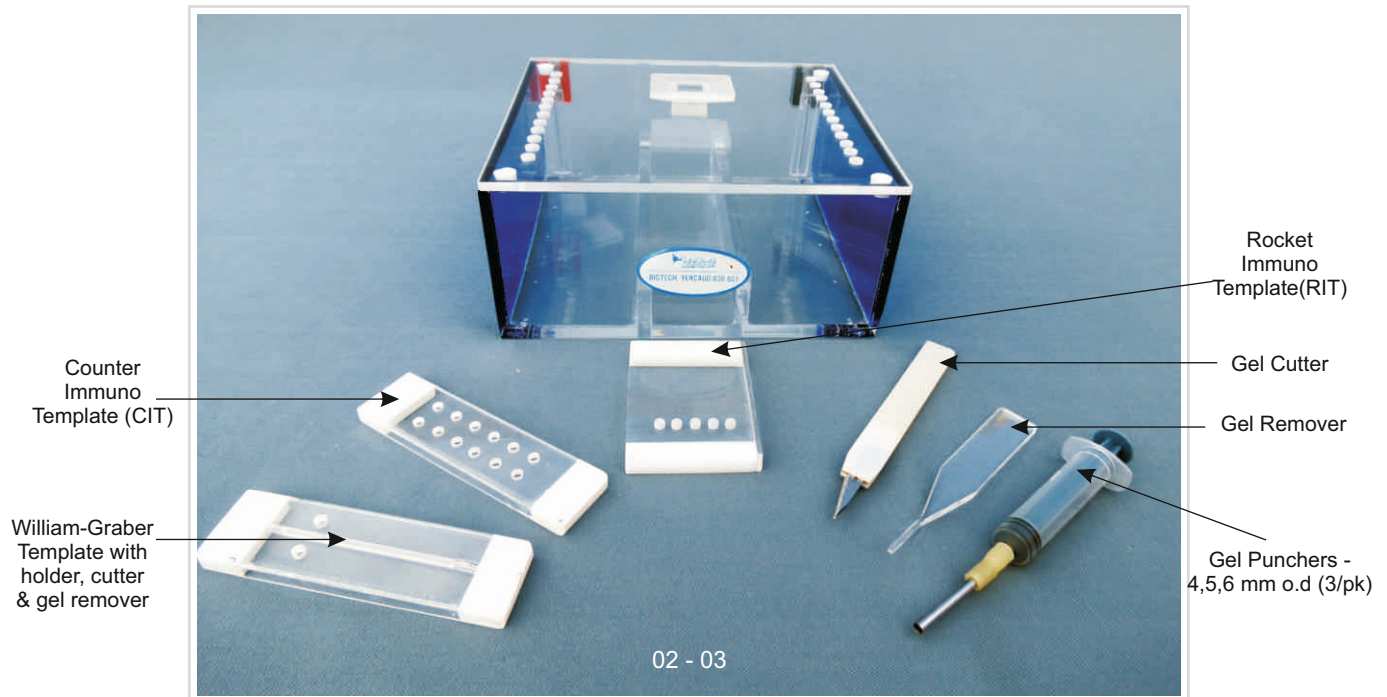
Basic unit with Platinum electrode assembly (2), Paper supporting frame (2), and Power cord (1).

Size (lbh): 15 x 7 x 15 cm; 0.7 kg; Buffer – 100 + 100 mL; Operation by – Mini model Power pack – to be ordered separately

01 - 04

01 - 05

BIOTECH HORIZONTAL (*Immuno*) ELECTROPHORESIS SYSTEMS



All kinds of immunoelectrophoresis are done horizontally in agar / agarose gel slides. Paper wick connectivity is necessary for gel – buffer contact.

Biotech manufactures different models of horizontal systems to perform all methods. Recently new clinical gel systems are also available for using pre-cast plastic gels of different sizes..



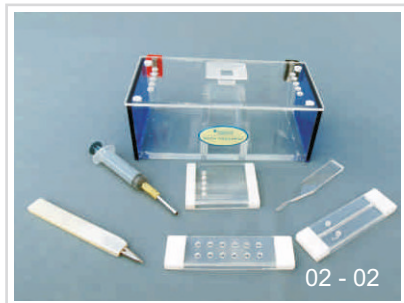


02-01

Immuno System - Baby (2 slides)

Basic unit with Platinum electrode assembly (2), Gel Puncher, 3.0 mm dia (1) and Power cord (1).

Size (lbh): 13 x 6 x 6 cm; 0.3 kg; Buffer – 25 + 25 mL; recommended- mini pack.



02-02

Immuno system - Mini - 2 slides

Basic unit with Platinum electrode assembly (2), Templates for counter, rocket & William-Graber (3); Gel Puncher, 3.0 mm dia (1) and Power cord (1).

Size (lbh): 13 x 8 x 6 cm; 0.5 kg; Buffer – 50 + 50 mL; recommended - minipack

02-03

Immuno system - Large - 5 slides

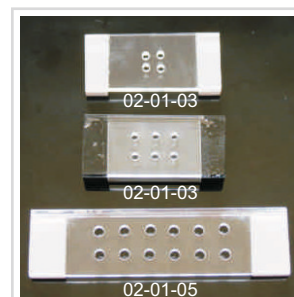
Basic unit with Platinum electrode assembly (2), Templates for counter, rocket & William-Graber (3); Gel Puncher, 3.0 mm dia (1) and Power cord (1).

Size (lbh) 13 x 15 x 6 cm; 0.75 kg; Buffer – 100 +100 mL; recommended, minipack

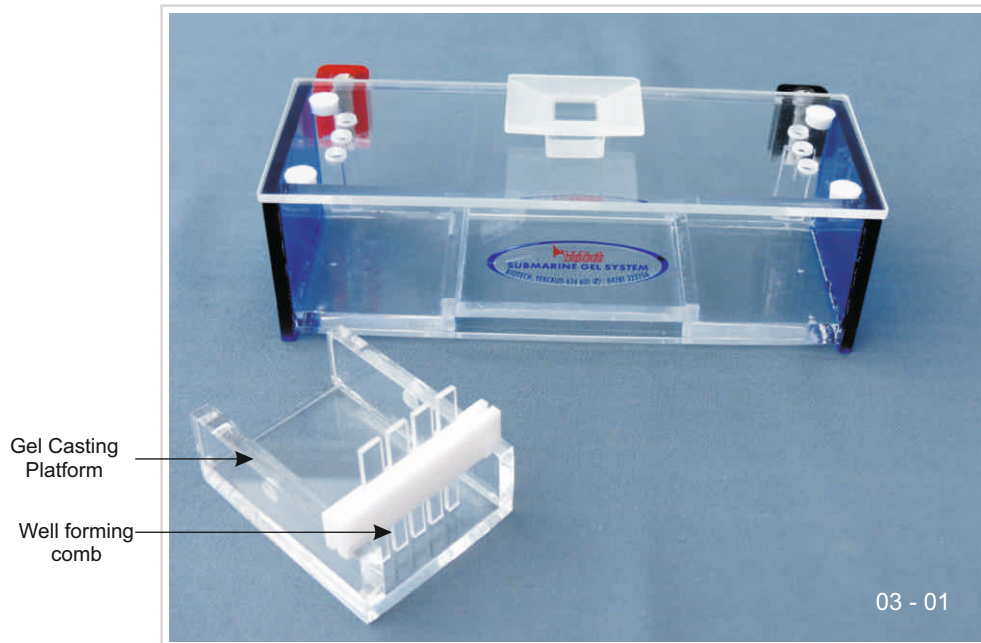
(Accessories - extra)

suitable for all the above systems.

- 02-01-01 Gel Punchers - 4,5,6 mm o.d (3/pk)
- 02-01-02 William-Graber Template with holder, cutter & gel remover
- 02-01-03 Counter Immuno Template (CIT)
- 02-01-04 Rocket Immuno Template(RIT)
- 02-01-05 Double diffusion Template (7.5 x 2.5 cm)
- 02-01-06 Acrylic leveling Table with leveling feet – 25 x 15 cm
- 02-01-07 Glass slides for CIT & RIT, 1.5 x 1" (12/pk)
- 02-01-08 Glass slides for WG Template, 3x1" (12/pk)
- 02-01-09 Glass slides for rocket gels, 5 x 5 cm (6/pk)
- 02-01-10 CA Supporting frame – small
- 02-01-11 CA Supporting frame – large

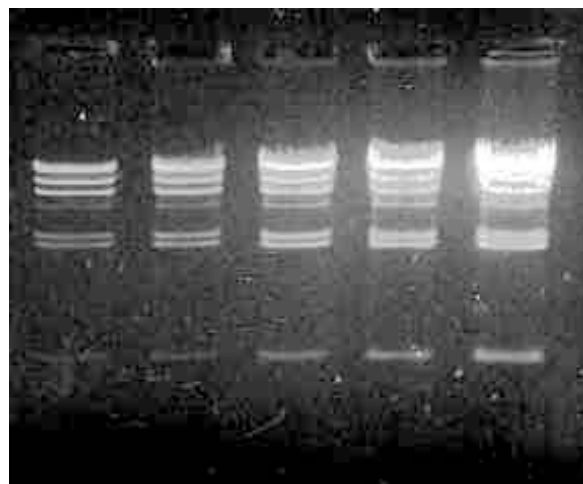


BIOTECH SUBMARINE (*Horizontal*) GEL SYSTEMS



Nucleic Acids (DNA / RNA) fragments are routinely separated in agarose gels under (buffer) submerged conditions. This process, known as Submarine Gel Electrophoresis – maintains ***temperature & pH*** during electrophoresis.

BIOTECH manufactures different models of submarine gel systems from baby to maxi models to resolve 4 to 100 samples at a time. Every system has been devoted to achieve maximum efficiency in terms of low buffer consumption, fast run and better separation.

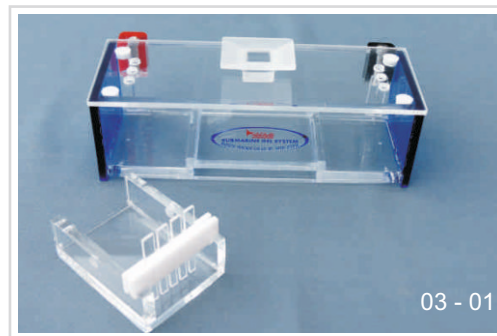


03-01

Baby - Gel 7 x 3.5 cm

Basic unit with Platinum electrode assembly (2),
Gel platforms: 10x7 cm (1); 4/5 -well comb, 1.5 mm (1),
and Power cord (1).

Size (lbh): 18 x 6.5 x 6 cm; Buffer – 160 mL; recommended - mini power pack



03-02

Mini - Gels 10x7; 5x7 cm

Basic unit with Platinum electrode assembly (2),
Gel platforms: 10x7 cm (1); 7x5 cm (2), 8-well comb, 1.5 mm (2)
and Power cord (1).

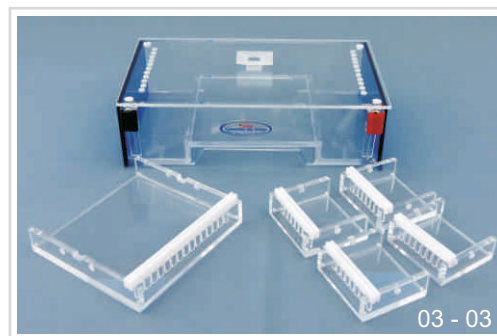
Size (lbh): 21 x 10 x 6.5 cm; Buffer – 250 mL; recommended - mini power pack

03-03

Analytical Model - Gels 13x13, 6x6 cm

Basic unit with Platinum electrode assembly (2),
Gel platforms : 13 x 13 cm (1); 6x6.5 cm (4),
15-well comb, 1.5 mm (1), 8-well comb, 1.5 mm (4),
and Power cord (1).

Size (lbh): 27.5 x 15.5 x 7 cm; Buffer – 700 mL; recommended - analytical power pack



03-04

Preparative Model - Gel 25x13 cm

Basic unit with Platinum electrode assembly (2),
Gel Platforms : 25 x 13 cm (1), 15-well comb, 1.5 mm (1)
Preparative combs: 3.0 mm (1); 6.0 mm (1) and Power cord (1).

Size (lbh): 39 x 16 x 9 cm; Buffer – 1250 mL; recommended - analytical power pack

03-05

Maxi Model - 20x25cm Gels with UVT platform for PCR samples up to 104 samples.

Basic unit with Platinum electrode assembly (1),
UV Transparent Gel Platform : 20x25 cm (1),
26-well comb 1.5 mm(4), and Power cord (1).

Size (lbh): 39.5 x 23 x 9 cm; Buffer – 2000 mL; recommended - versatile power pack



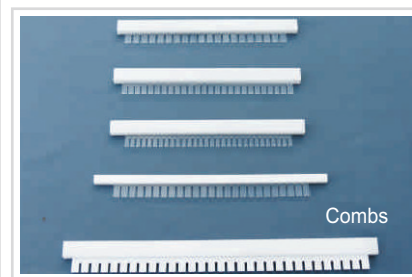
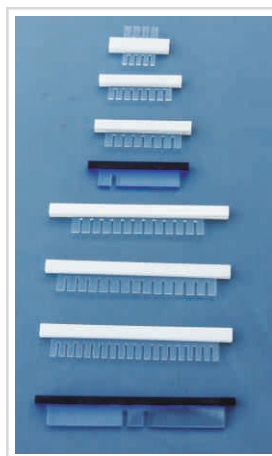
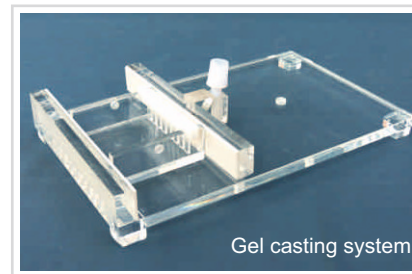
(Accessories - extra)

- 03-01-01 Gel casting system - Baby
- 03-01-02 Gel Platform – 7 x 4 cm Ordinary
- 03-01-03 Gel Platform – 7 x 4 cm **UVT**
- 03-01-04 Dual Comb, 4/5 wells, 1.0 mm
- 03-01-05 Dual Comb, 4/5 wells, 1.5 mm
- 03-01-06 Gel Scoop, Ordinary
- 03-01-07 Gel Scoop, **UVT**

- 03-02-01 Gel Casting system – Mini
- 03-02-02 Developing Chamber - light-proof
- 03-02-03 Gel Platform – 5 x 7 cm, Ordinary - (2/pk)
- 03-02-04 Gel Platform – 10 x 7 cm, Ordinary
- 03-02-05 Gel Platform – **UVT** - 5x7 cm (2/pk)
- 03-02-06 Gel Platform, **UVT** - 10x7 cm
- 03-02-07 8-well comb, 1.0 mm
- 03-02-08 8-Well comb, 1.5 mm
- 03-02-09 2-well Preparative comb, 3.0 mm
- 03-02-10 Gel Scoop, Ordinary
- 03-02-11 Gel Scoop, **UVT**

- 03-03-01 Gel Casting System – Medium
- 03-03-02 Gel Developing Chamber, light proof
- 03-03-03 Gel Platform – 6 x 6.5 cm, Ordinary-2/pk)
- 03-03-04 Gel Platform – 13 x 6 cm, Ordinary
- 03-03-05 Gel Platform - 13 x 13 cm, Ordinary
- 03-03-06 Gel Platform – 6 x 6.5 cm **UVT** – (2/pk)
- 03-03-07 Gel Platform – 13 x 6 cm, **UVT**
- 03-03-08 Gel Platform – 13 x 13 cm **UVT**
- 03-03-09 8-well comb, 1.0 mm
- 03-03-10 8-well comb, 1.5 mm
- 03-03-11 15-well comb, 1.0 mm
- 03-03-12 15-well comb, 1.5 mm
- 03-03-13 20-well comb, 1.0 mm
- 03-03-14 20-well comb, 1.5 mm
- 03-03-15 2-well Preparative comb, 3.0 mm
- 03-03-16 2-well Preparative comb, 6.0 mm
- 03-03-17 Gel Scoop, Ordinary
- 03-03-18 Gel Scoop, **UVT**

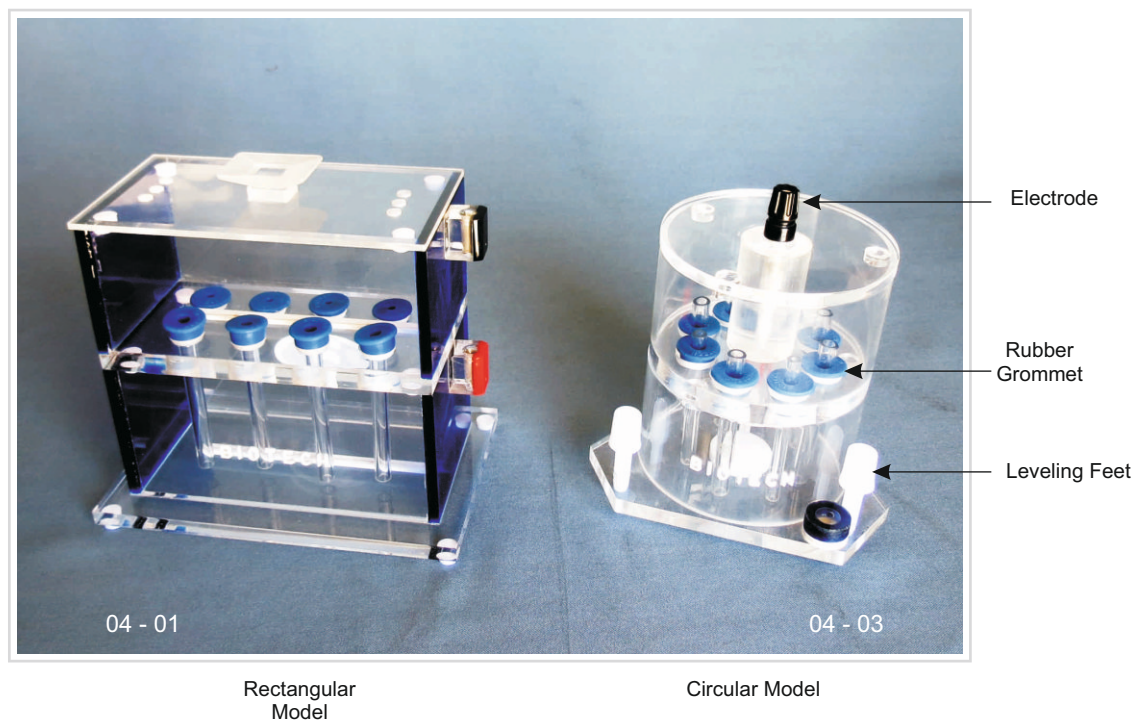
- 03-04-01 Gel Casting System, Large
- 03-04-02 Gel Developing Chamber, light proof
- 03-04-03 Gel Platform, 25 x 13 cm, Ordinary
- 03-04-04 Gel Platform, 25 x 13 cm, **UVT**
- 03-04-05 2-well Preparative comb, 3.0 mm
- 03-04-06 2-well Preparative comb, 6.0 mm
- 03-04-07 Gel Scoop, Ordinary
- 03-04-08 Gel Scoop, **UVT**



- 03-05-01 Gel Casting System, Maxi
- 03-05-02 Gel Developing Chamber, light proof
- 03-05-03 Gel Platform – 20 x 15 cm UVT
- 03-05-04 Gel Platform – 20 x 20 cm UVT
- 03-05-05 Gel Platform – 20 x 25 cm UVT
- 03-05-06 20-well comb, 1.0 mm
- 03-05-07 20-well comb, 1.5 mm
- 03-05-08 26-well comb, 1.0 mm
- 03-05-09 26-well comb, 1.5 mm
- 03-05-10 30-well comb, 1.0 mm
- 03-05-11 30-well comb, 1.5 mm

* We also take customisable orders with various specifications

BIOTECH ROD (Tube / Disc) GEL SYSTEM



PolyAcrylamide Gel Electrophoresis (PAGE) was first practiced in glass tubes.

It has been conveniently employed for separation of native (enzyme) or denatured proteins. It is useful for smaller volumes of radio labeled samples as well as larger volumes. 2D PAGE employs capillary tubes for the 1st isoelectricfocusing.

BIOTECH manufactures different models - circular and rectangular models with different tube capacity. Both are proved to perform equally well.



04-01

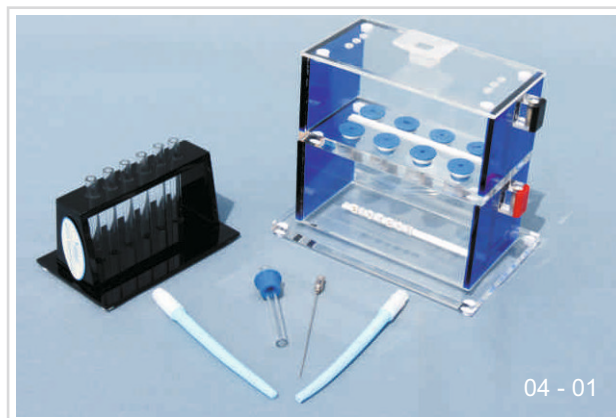
Rectangular Model – Small, 6 Gel Tubes Basic unit with upper cathode and bottom anode chambers, Platinum electrode assembly (2), Glass tubes -14 cm long x 5 mm i.d (6 nos); 7.5 cm long x 5 mm i.d (6 nos), Rubber grommets (6), Adjustable tube stand (1), Long needles (2) and Power cord(1).

Size: (lbh) 13 x 13 x 7 cm; 0.75 kg; Buffer, 250 + 250 mL; recommended power pack - analytical model

04-02

Rectangular Model – Large, 12 Gel Tubes Basic unit with upper cathode and bottom anode chambers, Platinum electrode assembly (2), Glass tubes -14 cm long x 5 mm i.d (12 nos); 7.5 cm long x 5 mm i.d (12 nos), Rubber grommets (12), Adjustable tube stand (1), Long needles (2) and Power cord(1).

Size: (lbh) 24 x 10 x 25 cm; 1.5 kg; Buffer, 500 + 500 mL; recommended power pack - analytical model



04 - 01

04-03

Circular Model – small, 8 Gel Tubes Basic unit with upper cathode and bottom anode chambers, Platinum electrode assembly (2), Glass tubes -7.5 cm long x 5 mm i.d (8 nos); Gel Tube stand, fixed (1), Rubber grommets (8), Long needles (2) and Power cord(1).

Size: (idhx) 10 x 14 cm; 0.5 kg; Buffer, 250 mL; recommended power pack - analytical model

04-04

Circular Model – Large, 12 Gel Tubes Basic unit with upper cathode and bottom anode chambers, Platinum electrode assembly (2), Glass tubes -14 cm long x 5 mm i.d (12 nos); Gel Tube stand, fixed (1), Rubber grommets (12), Long needles (2) and Power cord(1).

Size: (idhx) 15 x 24 cm; 1.5 kg; Buffer, 500 mL; recommended power pack - analytical model



04 - 03

04 - 04



Tube Stands



Destainer



Gel Slicer



Rubber Grommets

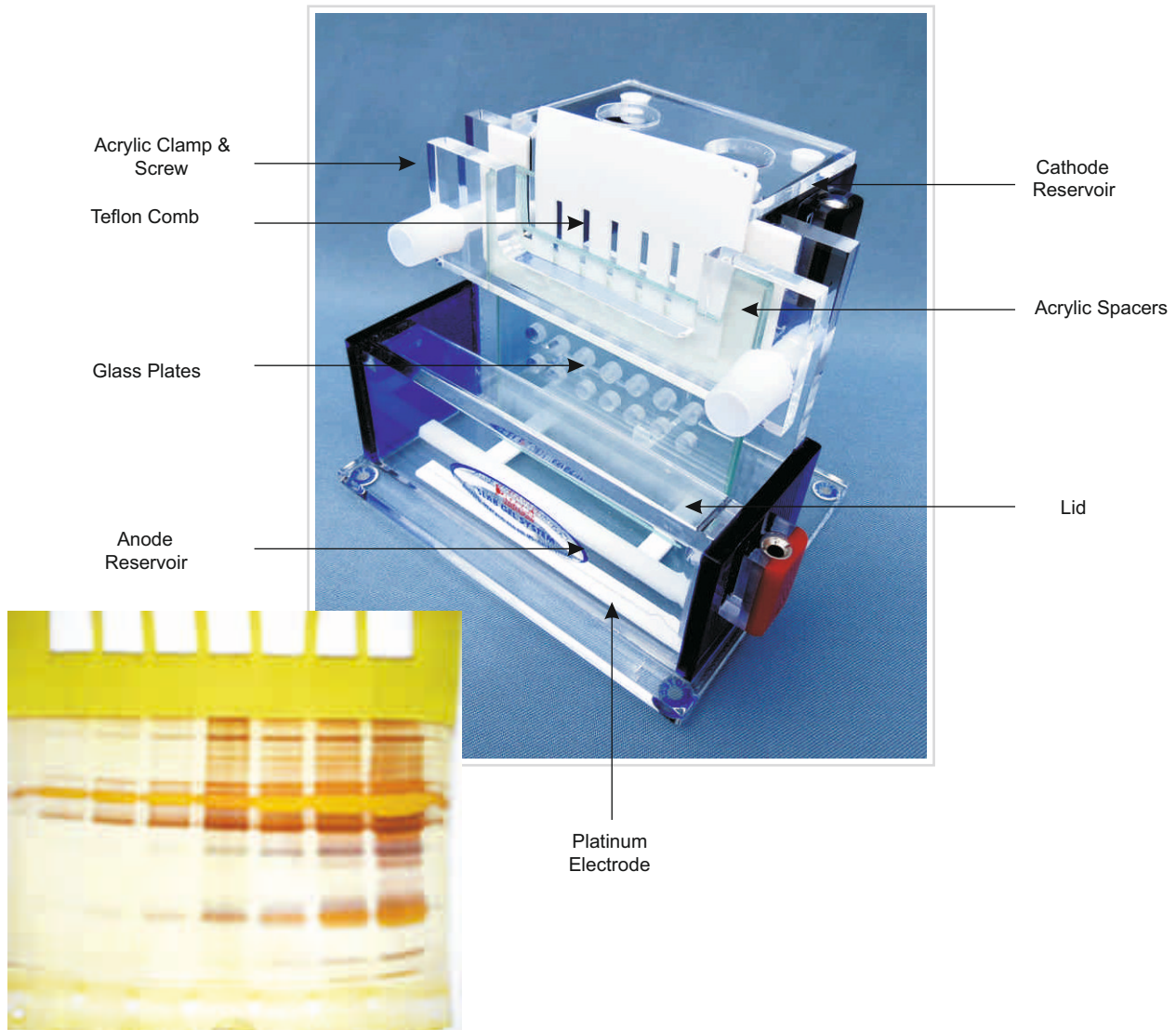
(Accessories - extra

04-01-01	Gel Destainer - diffusion type - Small
04-01-02	Gel Destainer - diffusion type - Large
04-01-03	Gel Slicer
04-01-04	Tube Stand
04-01-05	Glass Tubes 7.5 cm x 3 mm (length x id)
04-01-06	Glass Tubes 7.5 cm x 4 mm
04-01-07	Glass Tubes 7.5 cm x 5 mm
04-01-08	Glass Tubes 7.5 cm x 6 mm

04-02-01	Gel destainer, diffusion type, large
04-02-02	Gel slicer
04-02-03	Gel Tube stand, adjustable height
04-02-04	Gel Tube stand, fixed height, large
04-02-05	Glass Tubes 14 cm x 3 mm id
04-02-06	Glass Tubes 14 cm x 4 mm
04-02-07	Glass Tubes 14 cm x 5 mm
04-02-08	Glass Tubes 14 cm x 6 mm
04-02-09	Rubber Grommets, 3.0 mm(12/pk)
04-02-10	Rubber Grommets, 4.0 mm (12/pk)
04-02-11	Rubber Grommets, 5.0 mm (12/pk)
04-02-12	Rubber Grommets, 6.0 mm (12/pk)
04-02-13	Rubber Grommets, without holes (12/pk)
04-02-14	Long Needles (2/pk)

* We also take customisable orders with various specifications

BIOTECH VERTICAL SLAB GEL SYSTEM



PolyAcrylamide Gel Electrophoresis (PAGE) in Slabs is a widely used techniques. Molecular size of Polypeptides can be determined by SDS PAGE. They can be transferred on to membranes for antibody detection.

Biotech manufactures mini / regular size gel apparatus. Dual models are dedicated for enzymes studies at controlled temperatures. New baby model is very efficient in resolution.

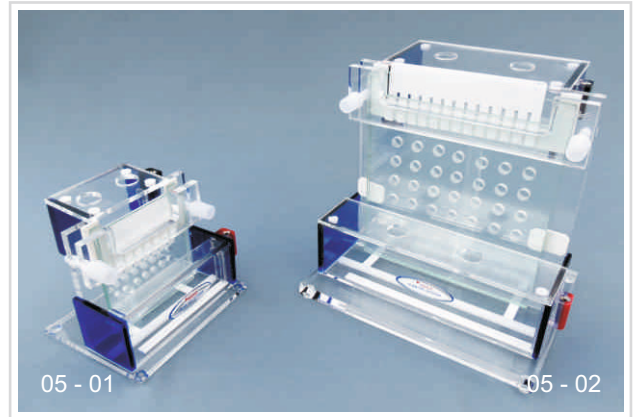


05-01

Mini Model - One 8x7cm Gel

Basic unit with Platinum electrode assembly (2), Glass Plates - notched & rectangular (2sets), Teflon comb, 1,1.5 mm (1+1), Spacers, 1,1.5 mm (3+3),Single gel casting stand (1set), Metal Clips (2), Plastic pouch (1pk) Clamp & screws (1set) and Power cord (1).

Size: (lbh) 15 x 13 x 13 cm; 0.75 kg; Buffer, 100 + 100 mL; recommended power pack - analytical model

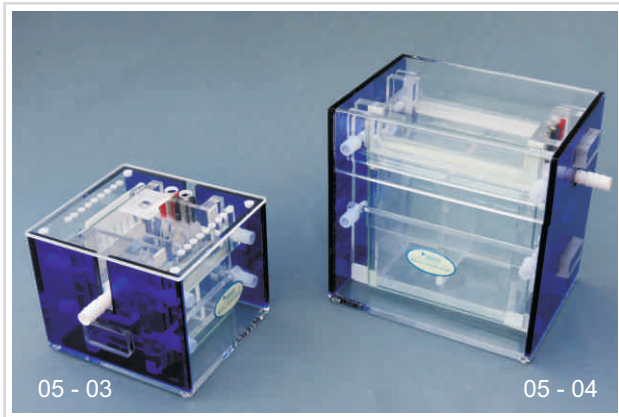


05-02

Regular Model - One 16x14 cm Gel

Basic unit with Platinum electrode assembly (2), Glass Plates - notched & rectangular (2sets), Teflon comb, 1,1.5 mm (1+1), Spacers, 1,1.5 mm (3+3), Single gel casting stand(1set),Metal clips (4), Plastic pouch (1pk) Clamp & screws (1set) and Power cord (1).

Size: (lbh) 20 x 20 x 23 cm; 1.5 kg; Buffer, 250 + 250 mL; recommended power pack - analytical model



05-03

Dual Model - Mini - Two 8x7 cm

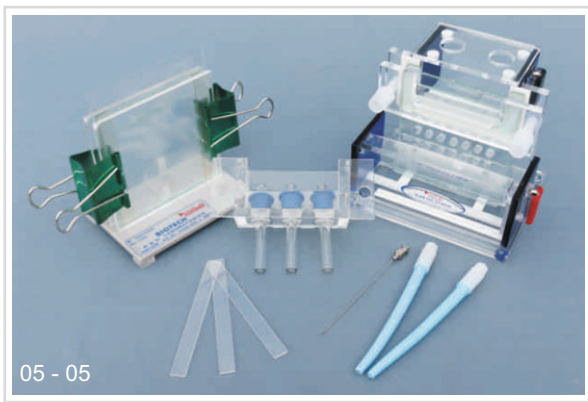
Basic unit with Platinum electrode assembly (2), Glass Plates - notched & rectangular (2sets), Teflon comb, 1 mm (2), Spacers (6), Dual Gel casting stand (1set), Metal Clips (4), Plastic pouch (1pk) Clamp & screws (4sets) Power cord (1) and Water circulation facility is available.

Size: (lbh) 16 x 16 x 13 cm; 1.5 kg; Buffer, 150 + 150 mL; recommended power pack - analytical model

05-04

Dual Model - Regular- Two 16 x14 cm Gels Basic Unit with Platinum electrode assembly (2), Glass Plates - notched & rectangular-(2sets), Teflon comb, 1.0 mm (2), Spacers, 1.0mm (6), Clamp & screws (4 sets) Dual gel casting stand (1set), Metal Clips (4), Plastic pouch (1pk), Power cord (1) and water circulation provision is available.

Size: (lbh) 20 x 20 x 23 cm; 1.5 kg; Buffer, 250 + 250 mL; recommended power pack - analytical model



05-05

2D PAGE System, Mini for 8 x 7 cm gel

Basic Unit with Platinum electrode assembly (2), Glass Tubes – 3 mm id. 7.5 cm length (6 nos), Glass Plates – beveled notched plate and rectangular (2 sets), Spacers, 1 mm (6 nos), Tube Gel adaptor (1), Gel Casting system (1set), Metal Clips (4 nos) and Power cord (1 set)

Size: (lbh) 15 x 13 x 13 cm; 0.75 kg; Buffer, 100 + 100 mL; recommended power pack - analytical / versatile models

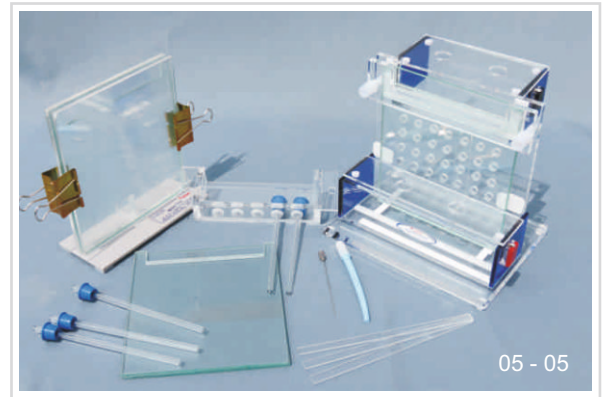
05 - 05

05-06

2D PAGE System, Regular for 16 x 14 cm gel

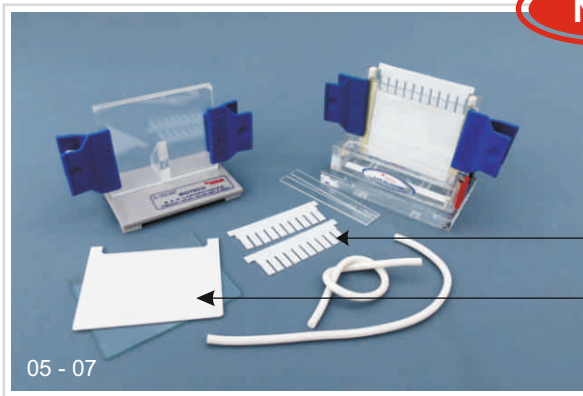
Basic Unit with Platinum electrode assembly (2), Glass Tubes – 3 mm id. 14 cm length (6 nos), Glass Plates – beveled notched plate and rectangular (2 sets), Spacers, 1 mm (6 nos), Tube Gel adaptor (1), Gel Casting system (1set), Metal Clips (4 nos) and Power cord (1 set)

Size: (lbh) 20 x 20 x 23 cm; 1.5 kg; Buffer, 250 + 250 mL; recommended power pack - analytical / versatile models



05 - 05

New



05 - 07

Comb & spacers
Alumina inner plate

05-07

New BABY Model - One 8 x 7 cm Gel.

Basic Unit with Platinum electrode assembly (2), Glass Plates - notched Alumina (1) & rectangular (2sets), Teflon comb - 1.0 mm (2), Spacers - 1.0mm (6), Plastic clips (2), Gel casting system (1set), Plastic pouch (1pk), Power cord (1).

Size: (lbh) 11 x 5 x 11 cm; 0.25 kg; Buffer, 35 + 40 mL; recommended power pack - analytical model.

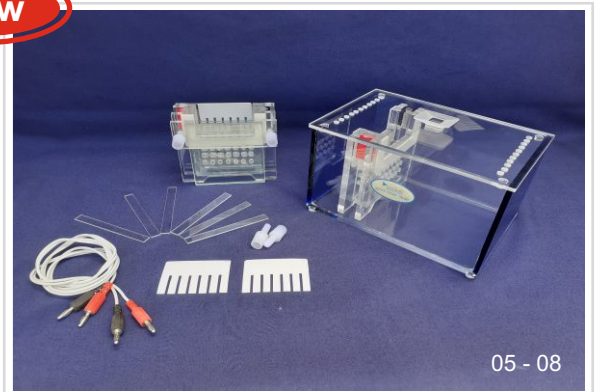
New

05-08

Mini Protein Tetra Model - Four 8x7 cm

Basic unit with Platinum electrode assembly (4), Glass Plates - notched & rectangular (4 sets), Teflon comb, 1 mm (4), Spacers (12), Dual Gel casting stand (2 set), Metal Clips (8), Plastic pouch (2pk) Clamp & screws (8sets) Power cord (2)

Size: (lbh) 20 x 16 x 13 cm; 2.5 kg; Buffer, 150 + 450 mL; recommended power pack - magnum model



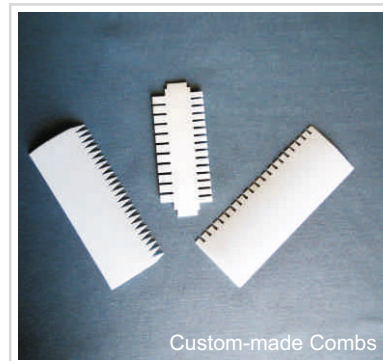
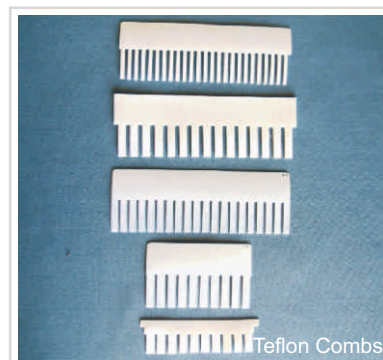
05 - 08

(Accessories - extra)

- 05-01-01 Glass Plates - notched & rect. - 8x7 cm gel
- 05-01-02 Gel Casting Unit for **single** gel
- 05-01-03 Gel Casting Unit for **dual** gels
- 05-01-04 Teflon Combs - 0.5, 1.0, 1.5 mm (3/pk)
- 05-01-05 Teflon spacers - 0.5, 1.0, 1.5 mm (9/pk)
- 05-01-06 Teflon Comb 7-wells, 0.5 mm
- 05-01-07 Teflon Comb 7-wells, 1.0 mm
- 05-01-08 Teflon Comb 7-wells, 1.5 mm
- 05-01-09 Teflon comb 10-well, 1.0 mm
- 05-01-10 Teflon comb 10-well, 1.5 mm
- 05-01-11 Teflon spacers 0.5 mm (6/pk)
- 05-01-12 Teflon spacers 0.5 mm 1.0 mm (6/pk)
- 05-01-13 Teflon spacers 0.5 mm 1.5 mm (6/pk)
- 05-01-14 Acrylic Clamp & Screws (1set)
- 05-01-15 Acrylic spacers, 1.0 mm (6/pk)
- 05-01-16 Acrylic spacers, 1.5 mm (6/pk)
- 05-01-17 Metal Clips - small No.
- 05-01-18 Metal Clips - large
- 05-01-19 Nylon Screws (6/pk)
- 05-01-20 Gel sealing Plastic Pouches
- 05-01-21 Gel Developing Tray



- 05-02-01 Glass plates, notched & rectangular- 16x14 cm gel
- 05-02-02 Casting Unit for **single**, regular gel (New model)
- 05-02-03 Casting Unit for **dual** regular gels (New model)
- 05-02-04 Gel Developing Tray with transparent base, gel holder
- 05-02-05 Gradient maker - cylindrical of total 50 ml capacity
- 05-02-06 Gradient maker - conical of total 50 ml capacity
- 05-02-07 Teflon Combs, 13 wells, 0.5, 1.0, 1.5 mm (3pk)
- 05-02-08 Teflon spacers 3-each of 0.5, 1.0, 1.5 mm (9/pk)
- 05-02-09 Teflon Comb 13-wells, 0.5 mm
- 05-02-10 Teflon Comb 13-wells, 1.0 mm
- 05-02-11 Teflon Comb 13-well, 1.5 mm
- 05-02-12 Teflon spacer 0.5 mm (6/pk)
- 05-02-13 Teflon spacer 1.0 mm (6/pk)
- 05-02-14 Teflon spacer 1.5 mm (6/pk)
- 05-02-15 Acrylic spacers 1.0 mm (6/pk)
- 05-02-16 Acrylic spacers 1.5 mm (6/pk)
- 05-02-17 Gel Sealing Pouches (50/pk)



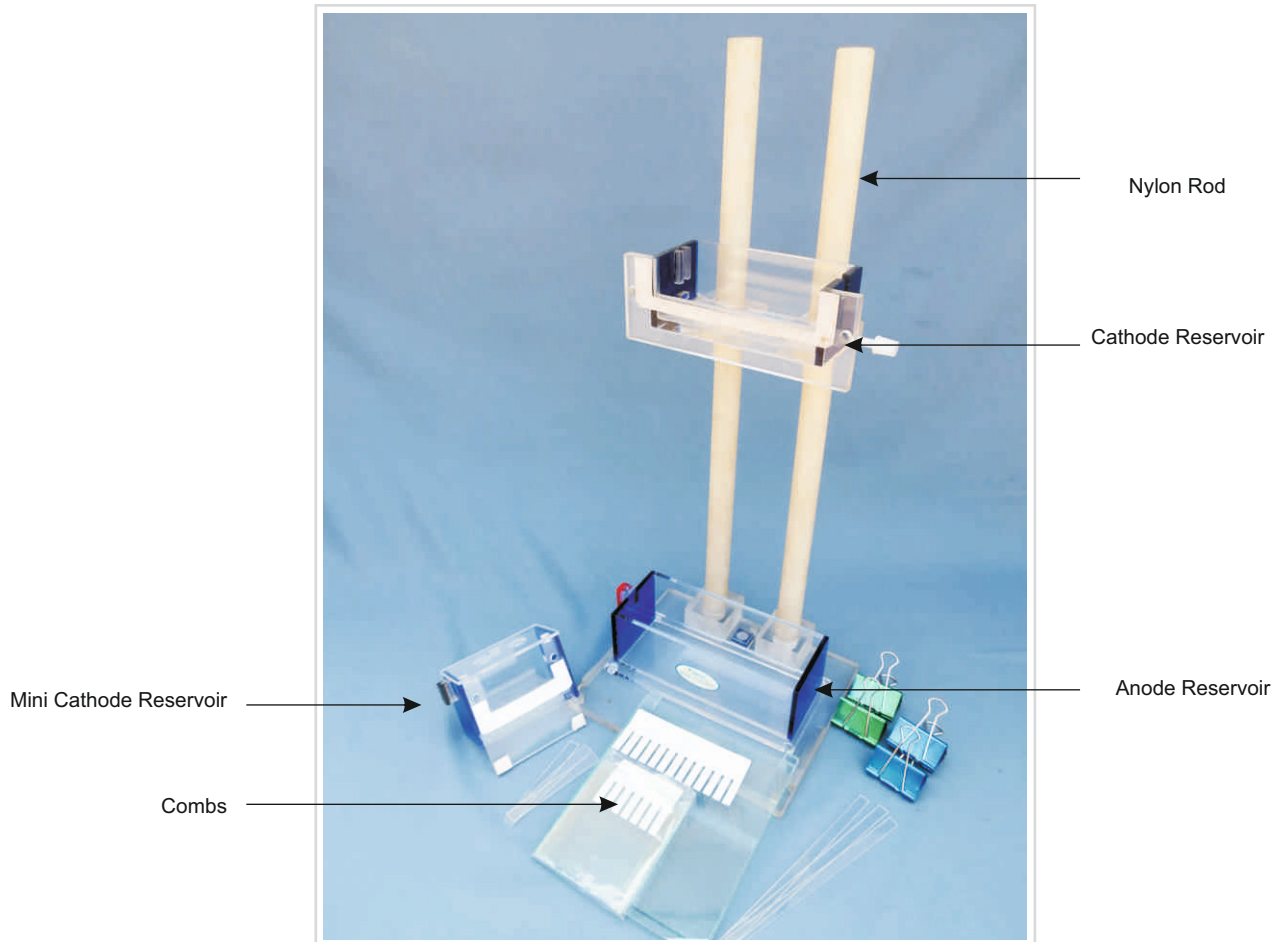
(05-02- Accessories are suitable for 05-04 systems)

- 05-05-01 Glass plates for mini 2D PAGE, Beveled
- 05-05-02 Glass tubes, 3.0 mm diameter.
- 05-05-03 Tube Gel adaptor
- 05-05-04 Rubber grommets, with holes (6/pk)
- 05-05-05 Rubber grommets, without holes (6/pk)
- 05-06-01 Glass plates for regular 2D PAGE, Beveled
- 05-06-02 Glass tubes, 3.0 mm dia
- 05-06-03 Tube gel adaptor
- 05-06-04 Rubber grommets (6/pk)
- 05-06-05 Rubber grommets , without holes (6/pk)
- 05-06-06 Long needles (2/pk)

- 05-07-01 Alumina notched plate
- 05-07-02 Rectangular glass plate (5/pk)
- 05-07-03 Plastic clips (4/pk)
- 05-07-04 Silicone sponge rubber gasket (2/pk)
- 05-07-05 410-well comb, 1.0 mm
- 05-07-06 Spacers, 1.0 mm (6/pk)

* We also take customisable orders with various specifications

BIOTECH SEQUENCING GEL SYSTEM



PolyAcrylamide Gel Electrophoresis (PAGE) is widely used for Proteins as well as nucleic acids samples. The Variable gel apparatus can be conveniently used to perform a variety of jobs in a single apparatus. Different size of gels, from mini to long gels are used depending on the number of fragments to be resolved. Mini gels are generally used for separating about 25 bands whereas, long gels are employed to resolve up to about 500 bands. In sequencing, to maintain uniformity in gel temperature, aluminum back plate is attached.

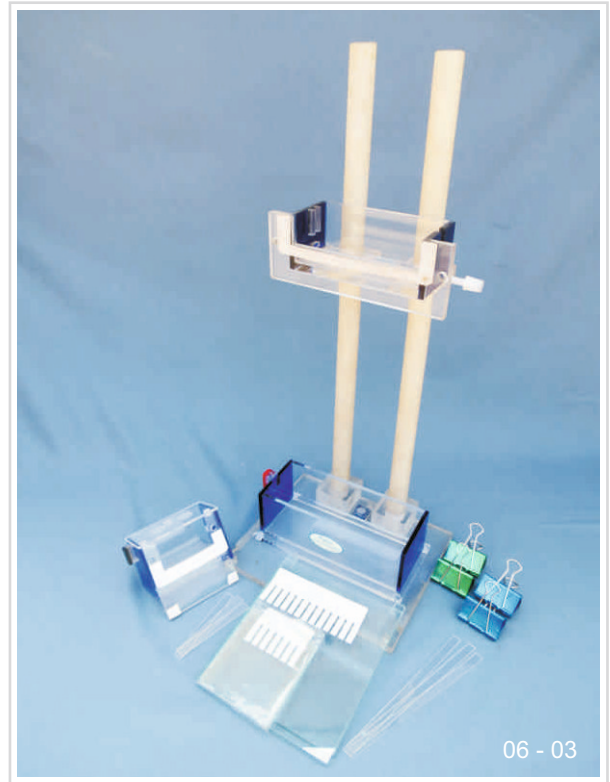


06-03

Slab Gel System - Variable Model (Size & thickness)

Basic unit with Platinum electrode assembly- fixed to anode & cathode reservoirs (3), basal acrylic plate (1), nylon rods (2), Common anode reservoir (1), regular cathode reservoir (1), mini cathode reservoir (1), sliding sheet(1), Glass plates - notched & rectangular : 8x7 cm, 8x16 cm, 8x14 cm, 16x14cm, 32 x 14 cm (one set each), Teflon combs : mini, 0.5,1.0,1.5mm (one each); Regular, 0.5,1.,1.5 mm (one each), Spacers: mini, 0.5,1.0,1.5 mm (3each); Regular, 0.5,1.0,1.5 mm (3 each), acrylic clamp & screws, mini (1set), regular (1set) Metal clips (4) and Power cord (1).

Size (lbh) : 20 x 20 x 50 cm; 2.5 kg; Buffer – 250 + 250 mL; recommended power pack – analytical / versatile.



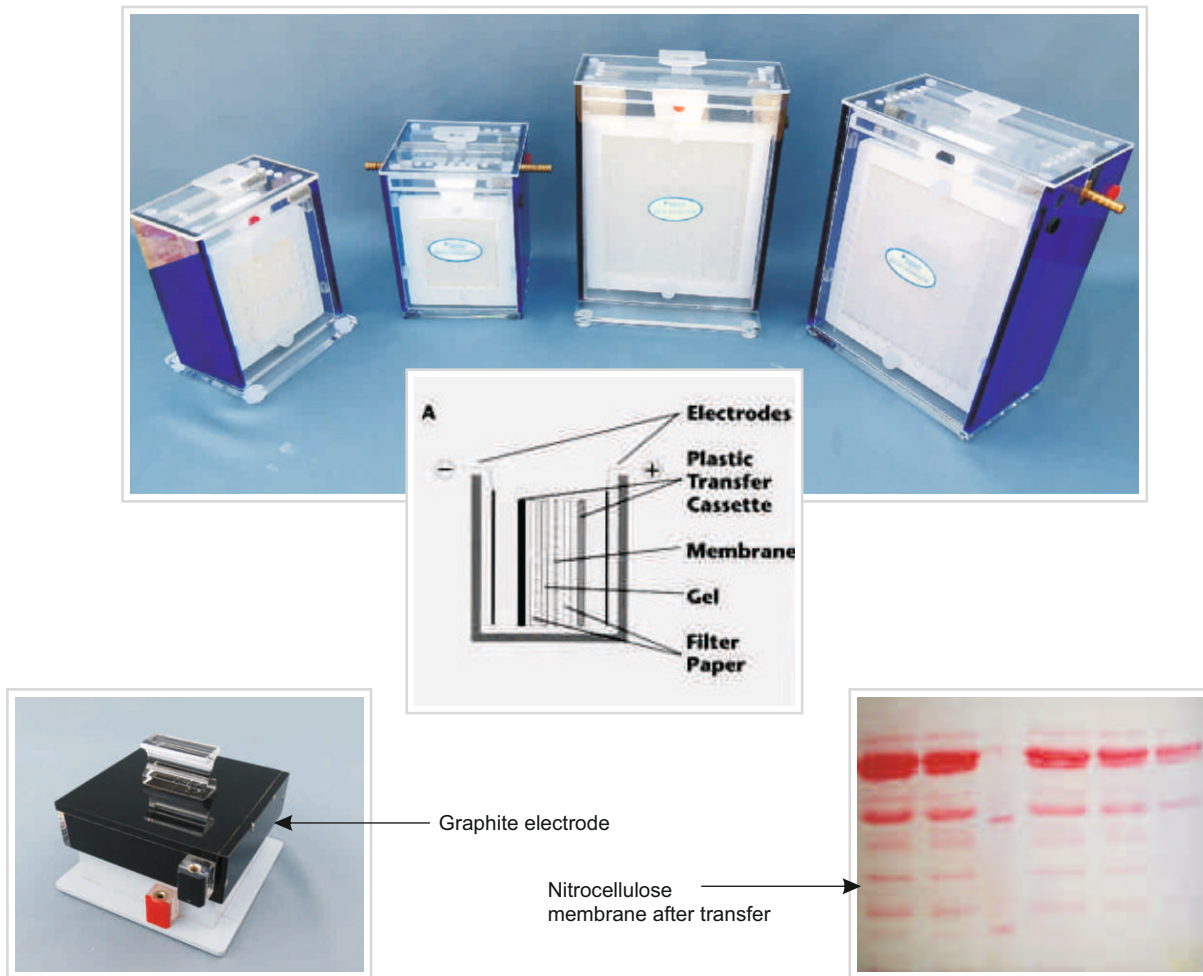
(Accessories - extra)

- 06-03-01 Glass plates notched & rectangular- 20 x 41cm gel
- 06-03-02 Teflon Comb-rectangular wells - 0.5 mm
- 06-03-03 Teflon Comb -Shark-tooth 0.5 mm
- 06-03-04 Teflon spacers 0.5 mm (4/pk)

(For mini / regular gel accessories, please refer to Vertical Slab Gel System's accessories)

* We also take customisable orders with various specifications

BIOTECH
ELECTRO TRANSFER (Blotting) SYSTEMS



Biotech manufactures different models of Blotting apparatus for electrophoretic transfer of Proteins / nucleic acids from gels on to membranes. This process is known as '**Western / Northern blotting**'. It is essential for detection / identification of fragments.

BIOTECH also manufactures '**Semi Dry**' blotters to save buffer. Blotting is rapid and efficient too. They are available in mini as well as regular sizes. Graphite electrodes are used, hence cheaper.



08-02

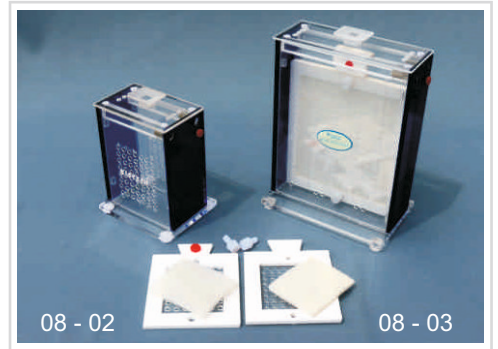
Bioblot - Mini SINGLE- Gel cassettes - One 8x7 cm gel Basic unit with Platinum electrode cells (2), Gel Cassettee (1), Scotch Brite Pads (1pk), Cushion Pads (1pk) and Power cord(1).

Size:15 x 11.5 x 7 cm; 0.75.0 kg; Buffer – 750 mL; Recommended power pack – Hi-Current model.

08-03

Bioblot - Mini Dual - Gel cassettes – Two, 8x7 cm gel Basic unit with Platinum electrode cells (2), Gel Cassettee(2), Scotch Brite Pads (1pk), Cushion Pads (1pk), heat exchanger and Power cord(1).

Size:13 x 11.5 x 15 cm; 1.5.0 kg; Buffer – 1.50 L; Recommended power pack – Hi-Current model.



08-04

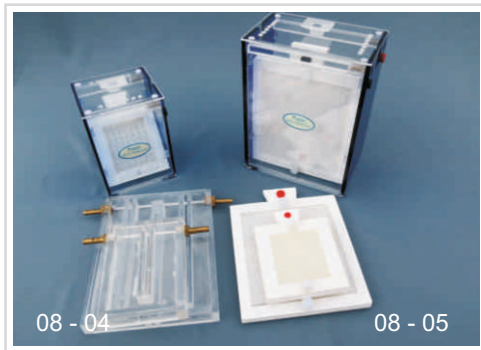
Bioblot - Regular – Single - Gel cassettes – One 16 x 14 cm gel Basic unit with Platinum electrode cells (2), Gel Cassettee(1), Scotch Brite Pads (1pk), Cushion Pads (1pk) and Power cord(1).

Size:17 x 7 x 23 cm; 1.5 kg; Buffer – 2. L; Recommended power pack – Hi-Current model.

08-05

Bioblot - Regular – Dual - Gel cassettes – Two 16 x 14 cm gels Basic unit with Platinum electrode cells (2), Gel cassettes (2), Scotch Brite Pads (1pk), Cushion Pads (1pk) heat exchanger and Power cord(1).

Size:17 x 11.5 x 23 cm; 2.0 kg; Buffer – 2.5. L; Recommended power pack – Hi-Current model.



08-06

Bioblot - Semi Dry, 10 x 10 cm with Graphite electrodes

Basic unit with Graphite electrode assembly (2), non-conducting masking sheets (2) and Power cord (1).

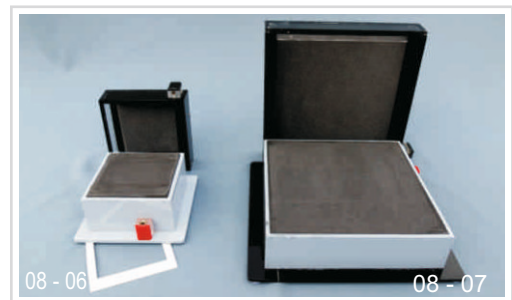
Size: 11 x 11 x 8 cm; 0.75 kg; Buffer – 50 mL; Recommended power pack – Hi-Current model.

08-07

Bioblot -Semi Dry, 20 x 20 cm with Graphite electrodes

Basic unit with Graphite electrode assembly (2), non-conducting masking sheets (2) and Power cord (1).

Size: 22 x22 x 8 cm; 1.5 kg; Buffer – 75 mL; Recommended power pack – Hi-Current model.

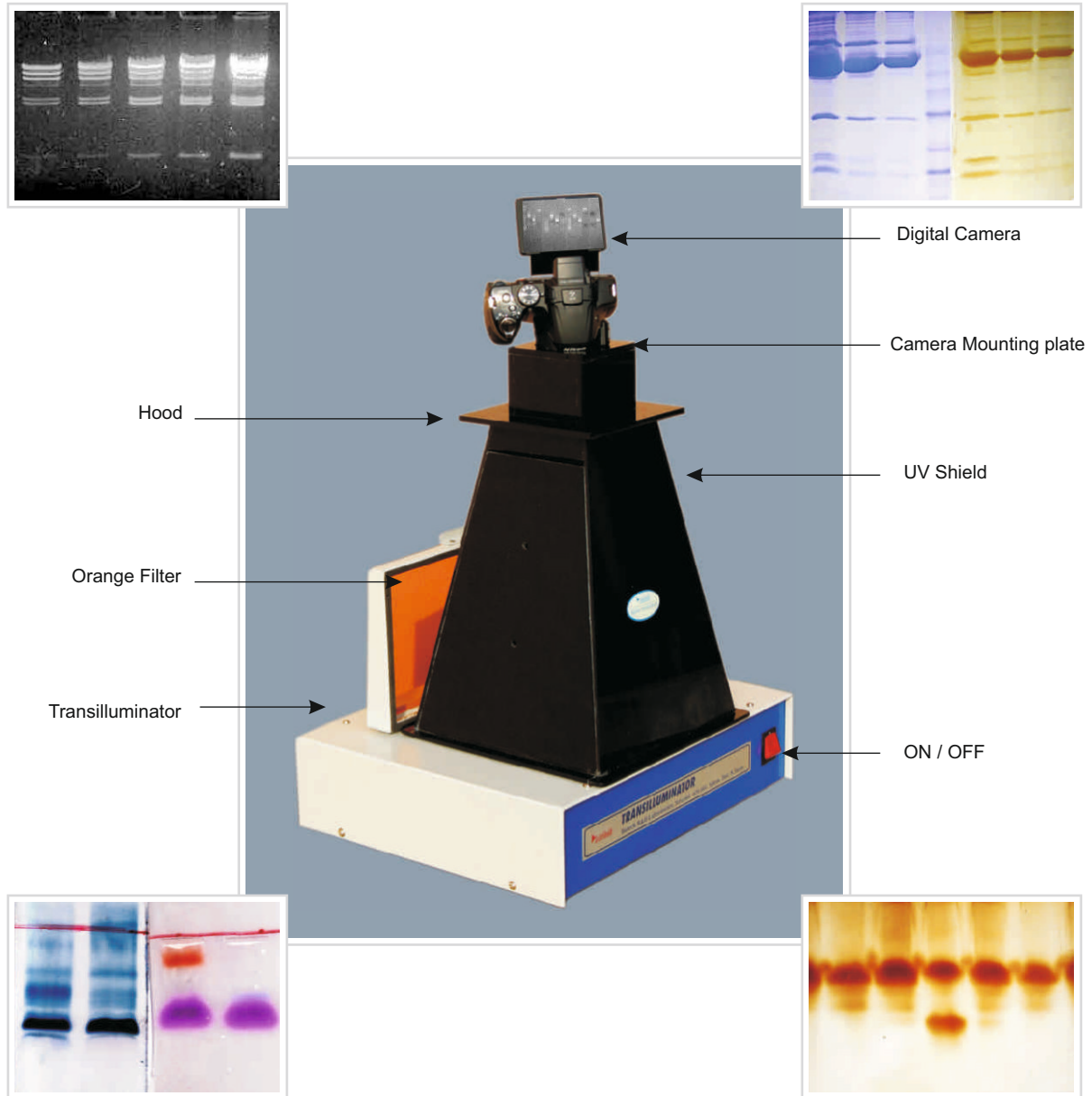


(Accessories - extra)

- 08-02-01 Scotch Brite pads, 8x7 cm (6/pk)
- 08-02-02 Cushion pads (12/pk)
- 08-04-01 Scotch Brite pads 16x14 cm gel (6/pk)
- 08-04-02 Cushion pads, 16x14 cm gel (12/pk)

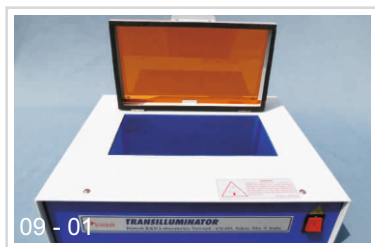
* We also take customisable orders with various specifications

BIOTECH TRANSILLUMINATORS



BIOTECH manufactures a wide of range of Transilluminators for Visual & UV light sources. They have been designed to provide uniform and high intensity light sources to detect even nanogram quantity bands. Durable high wattage lamps are housed in a sturdy metal boxes. Hot & stinky air generated during operation is removed by exhaust fan.





09-01

School Boy UV Transilluminator : View – 10 x 10 cm

Basic system with Satebeam filter, High range, 360 nm, Four x 4W UV lamps, air cooling fan, orange UV blocking shield.



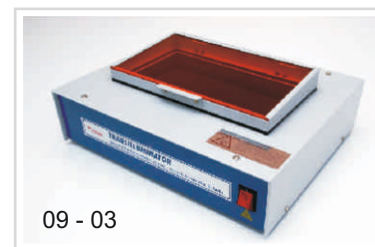
09-02

School Boy, Combined Tansilluminator: View - 10 x 10 cm

Basic system with Satebeam filter, High range, 360 nm, Four x 4W UV lamps, cool day light, cooling fan, orange UV blocking shield.

09-03
College Model UV Transilluminator : View – 25 x 13 cm

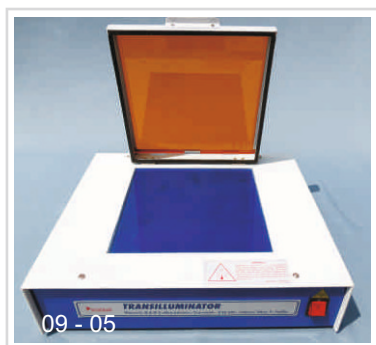
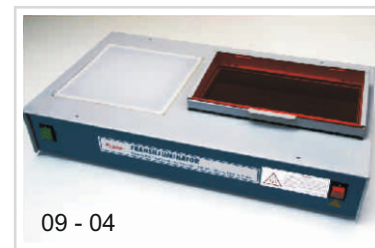
Basic system with Satebeam filter, High range, 360 nm, Four x 8W UV lamps, air cooling fan, orange UV blocking shield.



09-04

**College Model Combined Tansilluminator
 View - 25 x 13 & 20 x 20 cm**

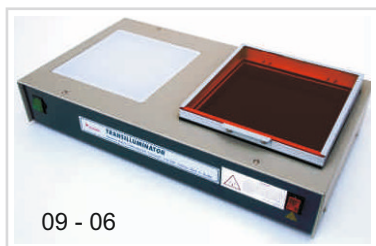
Basic system with Satebeam filter, High range, 360 nm, Four x 8W UV lamps, cool day light by LED, cooling fan, orange UV blocking shield.



09-05

UV Transilluminator Large view : View - 20 x 20 cm

Basic system with 20x20 cm viewing area, Sate beam filter, High range UV source, Eight x 8W tubes, air cooling fan and UV shield-cum-orange filter (1).



09-06

**UV Transilluminator Large view Combined :
 View - 20 x 20 cm, & 20 x 20 cm**

Basic system with Sate.beam filter, High range UV source, Eight x 8W tubes, cool day light by LED, air cooling fan and UV shield-cum-orange filter (1).

09-07
White light Transilluminator, View - 20 x 20 cm
 White light viewing area-20x20 cm, White light by LED
 source.



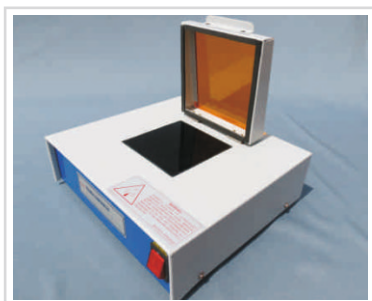
09 - 07

09-08 A
BIOTECH UV Torch - Indian UV filter, Two 4W mid-range
 (312) lamps. UV source: Two 4W high range UV tubes.

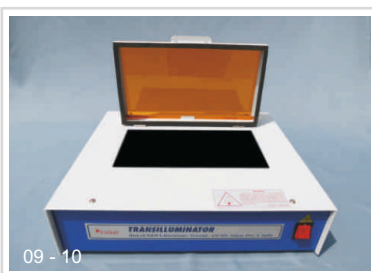


09 - 08

09-08 B
BIOTECH UV Torch - Advanced, Imported UV filter, Two
 4W mid-range (312) lamps. UV source: Two 4W high range
 UV tubes.



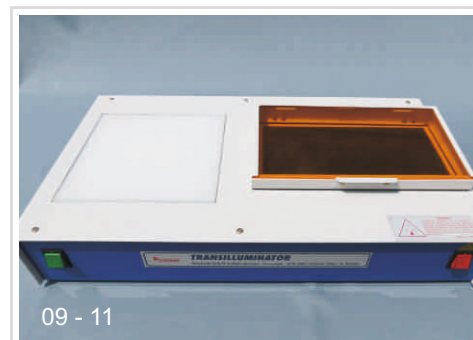
09-09
Advanced Model UV Transilluminator, MINI - view : 10 x 10
 cm, Basic system with imported UV filter, Mid-range UV
 source (312 nm), Four x 4W tubes, air cooling fan, and UV
 shield (1).



09 - 10

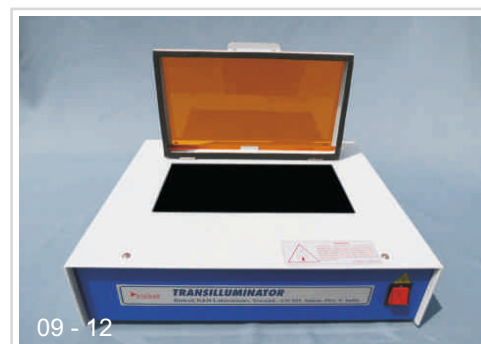
09 - 10
Advanced Model UV Transilluminator, Standard, view : 20 x 20
 cm, Basic system with imported UV filter, Mid-range UV
 source (312 nm), Eight x 8W tubes, air cooling fan, and UV
 shield (1).

09- 11
Advanced Model UV Transilluminator Combined
 view : 20 x 20 cm, Basic system with imported UV filter, Mid-
 range UV source (312 nm), Eight x 8W tubes, cool white
 light by LED, air cooling fan, and UV shield (1).

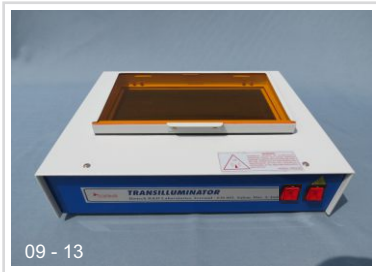


09 - 11

09 - 12
Advanced Model UV Transilluminator, Standard, view : 26 x 20
 cm, Basic system with imported UV filter, Mid-range UV source
 (312 nm), Eight x 8W tubes, air cooling fan, and UV shield (1)



09 - 12



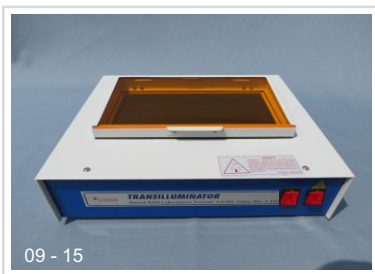
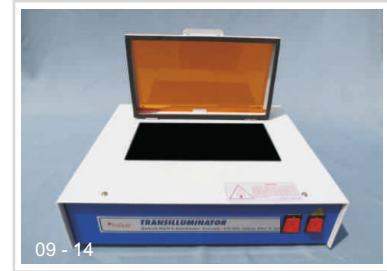
09 - 13

Advanced Model UV Transilluminator(Dual), View : 20 x 20 cm
 Basic system with imported UV filter, Mid-range UV source (312 nm) and High-range UV source (365 nm), Eight(4+4) x 8W tubes, air cooling fan, and UV shield (1).

09- 14

Research Model UV Transilluminator (Dual)

View : 20 x 20 cm, Basic system with imported UV filter, Low-range UV source (254 nm) and Mid-range UV source(312 nm) Eight(4+4) x 8W tubes, cool white light by LED, air cooling fan, and UV shield (1).



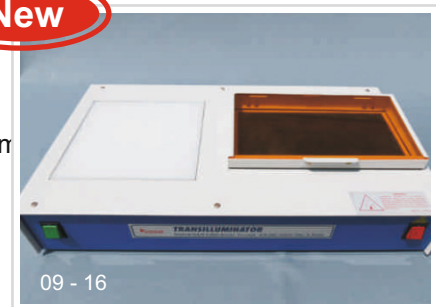
09 - 15

Ultra Model UV Transilluminator (Dual), View : 20 x 20 cm
 Basic system with imported UV filter, Low-range UV source (265 nm) and High-range UV source (365 nm), Eight(4+4) x 8W tubes, air cooling fan, and UV shield (1).

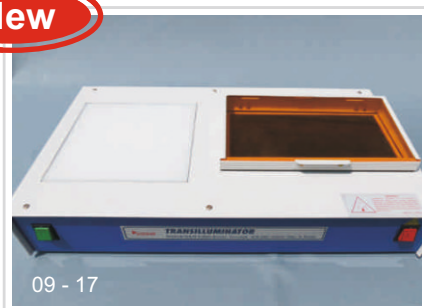
09 - 16

Advanced Model UV Transilluminator (Dual) - Combined, View:20x20cm
 Basic system with imported UV filter, Mid-range UV source (312 nm) and High-range UV source (365 nm), Eight(4+4) x 8W tubes, air cooling fan, and UV shield (1), LED White Light.

New



New



09 - 17

Research Model UV Transilluminator (Dual) - Combined, View:20x20cm
 Basic system with imported UV filter, Low-range UV source (254 nm) and Mid-range UV source (312 nm), Eight(4+4) x 8W tubes, air cooling fan, and UV shield (1), LED White Light.

New



09 - 18

Research Model UV Transilluminator (Dual) - Combined, View:20x20cm
 Basic system with imported UV filter, Low-range UV source (254 nm) and High-range UV source (365 nm), Eight(4+4) x 8W tubes, air cooling fan, and UV shield (1), LED White Light.

BIOTECH POWER PACKS



BIOTECH manufactures wide range of power packs for electrophoresis. Stabilized voltage / current output, sturdy cabinet, elegant color; overload / short-circuit protection & long standing performance are the salient features. Their upright designs occupy small foot area on working table.

Economy model minipack; Analytical model to perform all kinds of low voltage techniques ; Versatile model and HiCurrent power packs are specially manufactured to cater all demands of low / high intensity blotting techniques.





10-02

10-02

Mini pack

Output: 50, 100, 150, 200, 250 V DC

Size (lbh) : 17 x 9.5 x 8 cm; 1.5 kg; 220-230 VAC;
 Operation - Fixed Constant Voltages

10-03
Analytical Model
 Output: 0-300 VDC; 0-100 mA; Overload / short-circuit;
 automatic cross-over and timer

No. of Output Terminals - Two pairs of output terminals connected in parallel

Size (lbh) : 13 x 17.5 x 24 cm; 3 kg; 220-230VAC

Operation - Variable Constant Voltages / Current ; Safety - Short - Circuit / Over Load



10-03



10-04

10-04

Versatile Model:

Output Volt : 0-500 V ; Current 0-500 mA

No. of Output Terminals - Two pairs of output terminals connected in parallel

Size (lbh) : 18 x 32.5 x 25 cm; 7.5 kg; 220-230VAC

Operation - Variable Constant Voltages / Current ; Safety - Short - Circuit / Over Load

10-05
Hi-current Model - for low intensity Blotting
 Output Volt : 0-60 V ; Current 0-3 A

No. of Output Terminals - wo pairs of output terminals connected in parallel
 Size (lbh) : 17.5 x 28.x 25cm; 8.5 kg; 220-230VAC
 Operation - Variable Constant Voltages / Current ; Safety - Short - Circuit / Over Load



10-05

New



10-06

10-06
Professional Model

Output: 0-300 VDC; 0-200 mA; Overload / short-circuit;
 automatic cross-over and timer

No. of Output Terminals - Four pairs of output terminals connected in parallel
 Operation - Variable Constant Voltages / Current ; Safety - Short - Circuit / Over Load

New

10-07
Magnum Model

Output: 0-300 VDC; 0-400 mA; Overload / short-circuit;
 automatic cross-over and timer

No. of Output Terminals - Four pairs of output terminals connected in parallel
 Operation - Variable Constant Voltages / Current ; Safety - Short - Circuit / Over Load



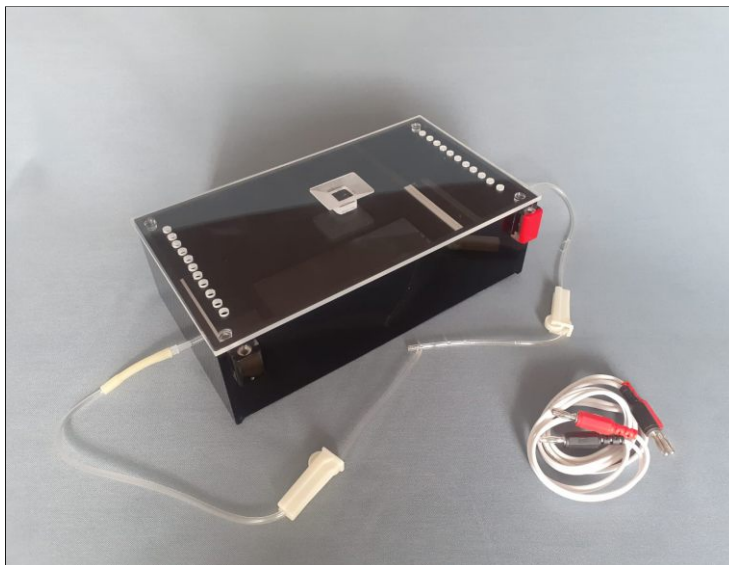
10-07

Accessories – Extra

- 10-01-01 Power cord (1set)
- 10-01-02 Power cord – imported model

BIOTECH

COMET ASSAY (*Single Cell*) ELECTROPHORESIS SYSTEM



Comet assay, or single cell gel electrophoresis assay, is a powerful technique for quantitating DNA damage and repair in eukaryotic cells and some prokaryotic cells. This technique uses cells that are embedded into agarose, placed on a slide, which is then immersed in lysis solution. After the cells are lysed, DNA is denatured and run through electrophoresis. The resulting image obtained resembles a comet that includes a distinct head and tail. The head of the comet is composed of intact DNA and the tail consists of the DNA damage.

BIOTECH offers a complete system to run a traditional comet assay. The system has been devoted to achieve maximum efficiency in terms of low buffer consumption, fast run and better separation.

11-01

Comet Assay: 10 Gel Slides

Basic unit with Platinum electrode assembly (2),
Slide area: 14 x 15 cm; can run upto 10 gel slides;
easy buffer removal mechanism and Power cord (1)

Size (lbh): 27.5 x 15.5 x 7 cm; Buffer – 700 mL; recommended - analytical power pack



BIOTECH GEL DOCUMENTATION SYSTEMS



BIOTECH has introduced a new Gel Documentation System with wide front door ; slide-in/out tray for easy handling of gels ; imported UV filter ; high intensity UV source (mid range) ; latest digital camera; cool white LED for high performance & advanced software for efficient analysis. They are housed in an ergonomically designed rugged metal boxes. Simplicity of operation, spares availability availability, prompt service and at affordable prices make them unique.





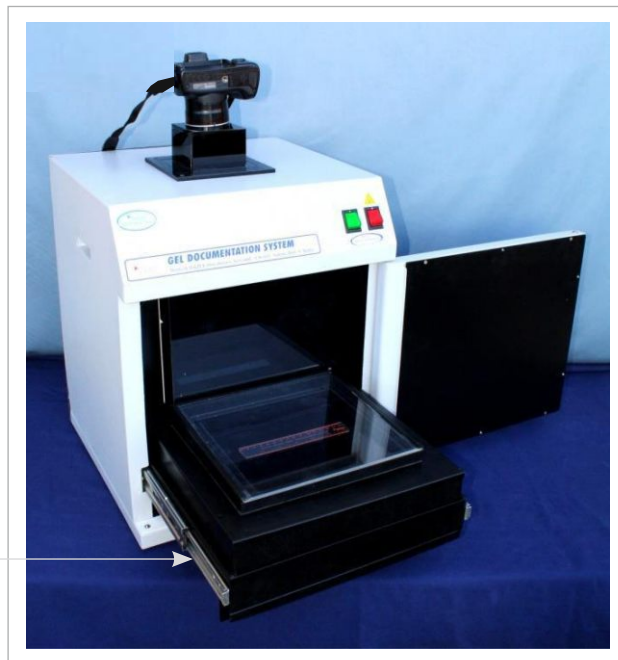
Digital Camera

13-01-03

Gel Documentation - Basic Model

Includes more than 16 megapixel digital camera; preferably Nikon Coolpix; compact dark room; wide dark room ; wide shutter for convenience; Transilluminator with 20x20 cm view area; imported UV filter; 8x8W mid-range(302 nm) UV lamps; cooling fan; sliding tray for easy handling of gel; UV shield; Foldable white light (LED) illuminator with 20x20 cm view area.

Size, (lbh): 40 x 39 x 40 cm; weight – 21 kg; 220/230 V AC



Sliding Tray

13-01-04

Gel Documentation - Advanced Model

Includes more than 24 megapixel digital camera; live image capture - camera can be controlled from from PC; live shooting from PC can be controlled; compact dark room; wide dark room; wide shutter convenience; UV Transilluminator with 20x20 cm view area; imported UV filter; 8x8W mid-range(302 nm) UV lamps; cooling fan; sliding tray for easy handling of gel; UV shield; Foldable White Light (LED) illuminator with 20x20 cm view area; Epi White illumination(20x20 cm)

Size, (lbh): 40 x 39 x 40 cm; weight – 21 kg; 220/230 V AC



New

Foldable White LED illuminator

13-02-01

1D Gel Analysis software-Basic

Image acquisition, crop, brightness, contrast, auto & manual lane forming, band detection, Rf, MW, BP determination, densitometry, quantitative analysis, report generation and presentation (Fig.1 & 2)

13-02-02

1D Gel Analysis software- Advanced

Same as above with dendrogram analysis; Phylogenetic Tree; UPGMA linkage, Jaccard & Dice methods; similarity & dissimilarity analysis (Fig.1, 2 & 3)

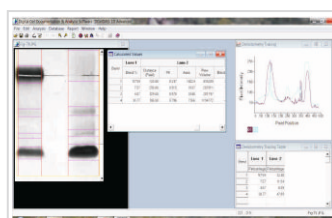


Fig. 1

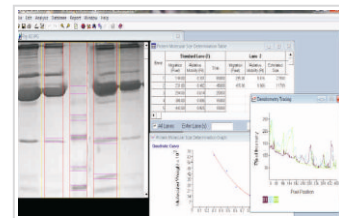


Fig. 2

The Electrophoresis Institute

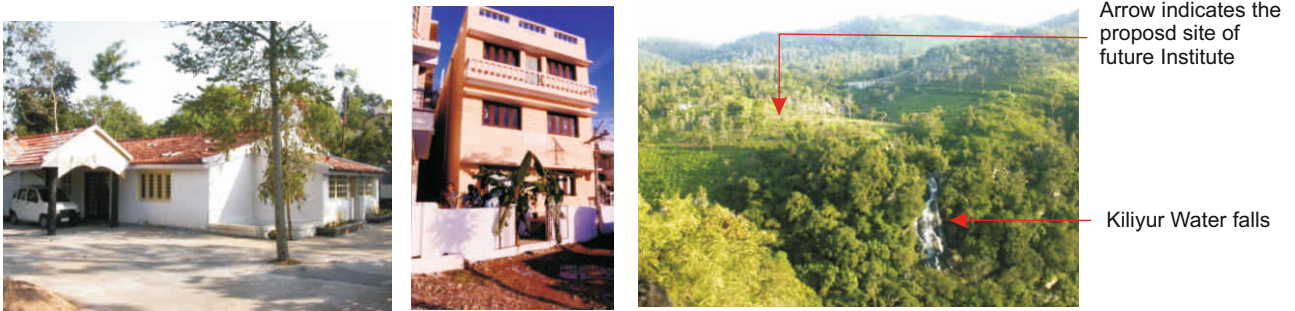
(Biotech - Yercaud)



The Electrophoresis Institute – and the 1st summer program - Inauguration,



The Electrophoresis Institute – Yesterday, today and tomorrow ...



Milestones in the Institute activities - summer, short-term training programs ...



1st Batch, 1999



25th Batch, 2003



50th Batch, 2005



75th Batch, 2008



77th Batch - March, 2008



85th Batch - 2011

- Devoted to Electrophoresis Techniques since, 1998
- Short-term Training program
- Summer / winter courses
- Research & Developmental facilities
- Projects & consultations on Electrophoresis techniques

LABORATORY WITH ADEQUATE FACILITIES



LECTURE HALL WITH MODERN TEACHING AIDS



GUEST LECTURES BY EMINENT SCIENTISTS



VISITORS GALLERY

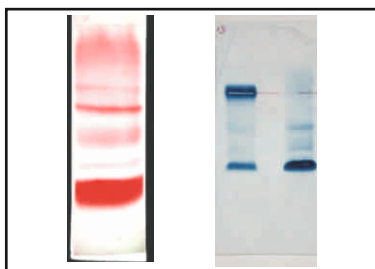


TRAINEES' HOUSE

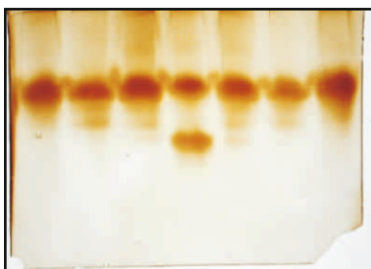


RESULTS AT A GLANCE...

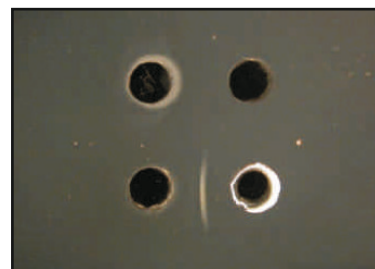
Serum Protein Electrophoresis in Cellulose acetate / Agarose gels



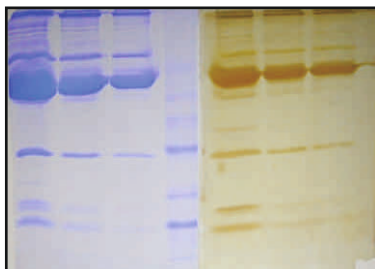
Peroxidase assay in PAGE



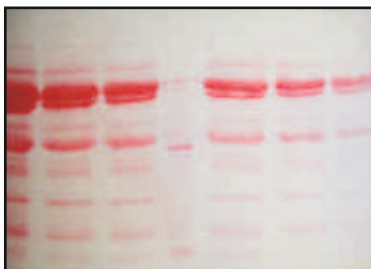
Counter Immuno Electrophoresis



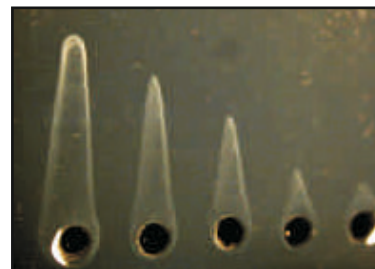
PAGE



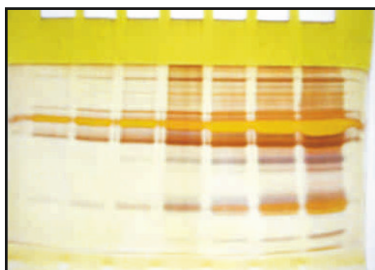
Blotting on NCP



Rocket Electrophoresis



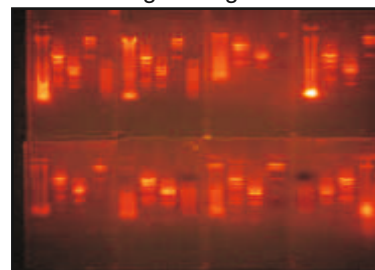
Silver Staining



2D PAGE - a Model



DNA Fragment separation in Agarose gels



William Graber's Technique



Program assesments & Certificate presentation

