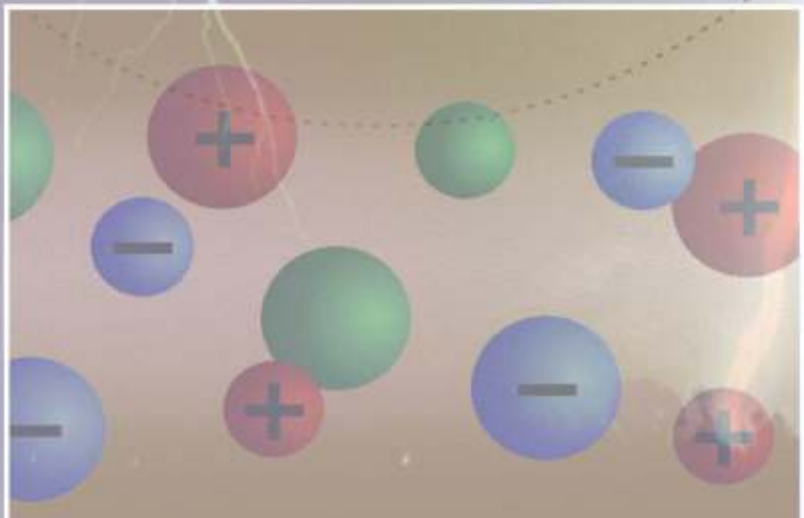
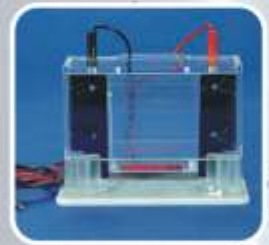


# ELECTROPHORESIS



## Protein Electrophoresis - Vertical type: LGV Series

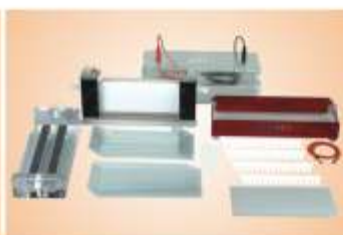
Vertical Protein Electrophoresis Unit is preferred for routine protein electrophoresis. It is a high quality and low cost product with supreme finish, durability and strength. Efficient cooling and the special arrangement of the three corrosion protected electrodes made of platinum ensure excellent separation results and very short running time. Four different sizes and an extensive range of accessories provide the best conditions for versatile use. The unit is completely equipped for casting and running two gels simultaneously.

### Features:

- ▶ Gel casting base.
- ▶ Running module.
- ▶ Safety lid.
- ▶ Power cords.



LGV-100



LGV-200



LGV-300



LGV-400

### Technical Specifications and Ordering Information:

Model No.	LGV-100	LGV-200	LGV-300	LGV-400
Glass Plate Size (W x L) cm	10 x 10	20 x 10	16 x 14	20 x 20
Active Gel Size (W x L) cm	9 x 8.5	19 x 8.5	15 x 12.5	19 x 18
Buffer Volume (ml)	300	600	850	1150
No. of Samples	48	72	48	50
Notched Glass Plates	2		4	
Ceramic Plates	2		-	
Plain Glass Plates	4		4	
Blind Plate	1		1	
*No. of Combs	2 with 10 wells, 0.8mm each	2 with 15 wells / 20 wells, 0.8mm each	2 with 15 wells / 20 wells, 1.5mm each	2 with 15 wells / 20 wells, 1.5mm each
Side Spacers	4, each 0.8mm	8, each 0.8mm	8, each 1.5mm	
No. of Replaceable Gaskets	2			
No. of Replaceable Seals	-		2	
Suggested Power Supplies	LPS-34, LPS-35, LPS-53	LPS-35, LPS-53, LPS-68	LPS-53 LPS-68	LPS-68, LPS-106P
Catalog No.	12220101	12220102	12220103	12220104

\*Both the combs is specific for only one type of no. of wells.

## Optional Accessories:

### LGV-100

Thickness (mm)	Teeth	Sample Volume ( $\mu$ l)	Well width (mm)	Catalog No.
Comb 1.5	6	266	11	12220111
Comb 1.5	8	42	7.7	12220112
Comb 1.5 (multi-pipette channel)	9	160	6.6	12220113
Comb 1.5	10	134	5.7	12220114
Comb 1.5	12	103	4.3	12220115
Comb 0.8	6	142	11	12220116
Comb 0.8	8	99	7.7	12220117
Comb 0.8 (multi-pipette channel)	9	78	6.6	12220118
Comb 0.8	10	73	5.7	12220119
Comb 0.8	12	55	4.3	12220121
<b>Others</b>				<b>Catalog No.</b>
Set of 2 x 1.5mm spacers (Comb 1.5)				12220122
Set of 2 x 0.8mm spacers (Comb 0.8)				12220123
Plain glass plate 10 x 10cm (x 2)				12220124
Notched glass plate 10 x 10cm (x 2)				12220125
Notched alumina plate 10 x 10cm (x 2)				12220126
Blocking plate for running one gel				12220127
Water cooled removable running module (already included in the package)				12220128
Replacement clamps for running module #12220128 (x 2)				12220129
Replacement gasket for running module #12220128 (x2)				12220131
Gel casting base (already included in the package)				12220132
Replacement gasket for casting base (x2)				12220133
Gel casting base + acrylic block with gasket and clamps for casting 2 gels independently				12220134
Pack 1 including LGV 100 + Gel trans blotter 10 x 10 + LPS-34				12220135
Pack 2 including LGV 100 + Gel trans blotter 10 x 10				12220136
Pack 3 including LGV 100 + Semi dry blotter 10 x 10 + LPS-35				12220137
Pack 4 including LGV 100 + Semi dry blotter 10 x 10				12220138
Pack 5 including LGV 100 + Slim blotter + LPS-34				12220139

### LGV-200

Thickness (mm)	Teeth	Sample Volume ( $\mu$ l)	Well width (mm)	Catalog No.
Comb 1.5	10	449	13	12220141
Comb 1.5	15	271	8	12220142
Comb 1.5	20	182	5.5	12220143
Comb 1.5	25	129	4	12220144
Comb 1.5	18	156	6.5	12220145
Comb 1.5	36	64	2.7	12220146
Comb 0.8	10	239	13	12220147
Comb 0.8	15	144	8	12220148
Comb 0.8	20	97	5.5	12220149
Comb 0.8	25	69	4	12220151
Comb 0.8	18	78	6.5	12220152
Comb 0.8	36	34	2.7	12220153
<b>Others</b>				<b>Catalog No.</b>
Set of 2 x 1.5mm spacers (Comb 1.5)				12220154
Set of 2 x 0.8mm spacers (Comb 0.8)				12220155
Plain glass plate 20 x 10cm (W x H) x 2				12220156
Notched glass plate 20 x 10cm (W x H) x 2				12220157
Blocking plate for running one gel				12220158
Water cooled removable running module (already included in the package)				12220159
Replacement clamps for running module #12220159 (x2)				12220161
Replacement gasket for running module #12220159 (x2)				12220162
Gel casting base (already included in the package)				12220163
Replacement gasket for casting base #12220163 (x2)				12220164

## LGV-300

Thickness (mm)	Teeth	Sample Volume (µl)	Well width (mm)	Catalog No.
Comb 1.5	10	346	10.4	12220165
Comb 1.5	15	201	6.1	12220166
Comb 1.5	20	129	3.9	12220167
Comb 1.5	24	96	2.9	12220168
Comb 0.8	10	183	10.4	12220169
Comb 0.8	15	107	6.1	12220171
Comb 0.8	20	69	3.9	12220172
Comb 0.8	24	51	2.9	12220173
Prep Comb 1.5	2	3400 / 152	120 / 4.7	12220174

Others	Catalog No.
Set of 2 x 1.5mm spacers (Comb 1.5)	12220175
Set of 2 x 0.8mm spacers (Comb 0.8)	12220176
Plain glass plate 16 x 14cm (W x H) x 2	12220177
Notched glass plate 16 x 14cm (W x H) x 2	12220178
Blocking plate for running one gel	12220179
Water cooled removable Running module (already included in the package)	12220181
Replacement clamps for running module #12220181 (x2)	12220182
Replacement gasket for running module #12220181 (x2)	12220183
Gel casting base (already included in the package)	12220184
Replacement gasket for casting base #12220184 (x2)	12220185
Gel casting base + acrylic block with gasket and clamps for casting 2 gels independently	12220186

## LGV-400

Thickness (mm)	Teeth	Sample Volume (µl)	Well width (mm)	Catalog No.
Comb 1.5	10	449	13	12220187
Comb 1.5	15	271	8	12220188
Comb 1.5	20	182	5.5	12220189
Comb 1.5	25	129	4	12220191
Comb 0.8	10	239	13	12220192
Comb 0.8	15	144	8	12220193
Comb 0.8	20	97	5.5	12220194
Prep Comb 1.5	2	4230 / 135	151 / 5	12220195

Others	Catalog No.
Set of 2 x 1.5mm spacers (Comb 1.5)	12220196
Plain glass plate 20 x 20cm (x2)	12220197
Notched glass plate 20 x 20cm (x2)	12220198
Water cooled removable running module (already included in the package)	12220199
Replacement clamps for running module #12220199 (x2)	122201111
Replacement gasket for running module #12220199 (x2)	122201112
Gel casting base (already included in the package)	122201113
Replacement gasket for casting base #122201113 (x2)	122201114

## Nucleic Acid Electrophoresis - Horizontal Type

### LGH-100

LGH-100 is designed for very fast separations and small scale procedures of nucleic acids, restriction fragments in agarose gel.

#### Features:

- ▶ Compact size.
- ▶ Whole unit can be placed on U.V. table.



LGH-100

#### Technical Specifications and Ordering Information:

Model No.	LGH-100
Standard Components	Removable U.V. transmitted gel tray 5 x 8cm (W x L), 2 removable casting gates, 1mm thickness, 10 teeth comb. Sample volume 10 $\mu$ l, when gel thickness is 5mm, safety lid, set of power leads, casting tape, user's manual
Buffer volume (ml)	150
Maximum number of samples	20
Unit dimension (W x L x H) cm	19 x 11 x 6
Suggested power supply with	LPS-34 - 300volt - 400mA - 120watt
Timer and gel saver	LPS-35 - 300volt - 500mA - 150watt
Catalog No.	12220201

#### Optional Accessories:

Thickness (mm)	Teeth	Sample volume ( $\mu$ l)	Well width (mm)	Catalog No.
Comb 1.0	5	24	6.0	12220221
Comb 1.0	10	10	2.5	12220222
Comb 2.0	5	48	6.0	12220223
Comb 2.0	10	20	2.5	12220224
Prep Comb 1.0 with 1 sample / 1 marker	-	160 / 10	40.0 / 2.5	12220225
Prep Comb 1.5 with 1 sample / 1 marker	-	240 / 15	40.0 / 2.5	12220226

Others	Catalog No.
U.V. Transmitted gel tray 5 x 8cm (W x L)	12220227
Set of power leads	12220228
Casting gel system	12220229

## Nucleic Acid Electrophoresis - Horizontal Type

### LGH-200

LGH-200 is designed for very fast separations and small scale procedures of nucleic acids, restriction fragments in agarose gel.

#### Features:

- ▶ Compact size.
- ▶ Whole unit can be placed on U.V. table.



LGH-200

#### Technical Specifications and Ordering Information:

Model No.	LGH-200
Standard Components	Removable U.V. transmitted gel tray 10 x 8cm (W x L), 2 removable casting gates, 1mm thickness, 16 teeth comb. Sample volume 12 $\mu$ l, when gel thickness is 5mm, safety lid, set of power leads, casting tape, user's manual
Buffer volume (ml)	250
Maximum number of samples	36
Unit dimension (W x L x H) cm	19 x 16 x 6
Suggested power supply with	LPS-34 - 300volt - 400mA - 120watt
Timer and gel saver	LPS-35 - 300volt - 500mA - 150watt
Catalog No.	12220202

#### Optional Accessories:

Thickness (mm)	Teeth	Sample volume ( $\mu$ l)	Well width (mm)	Catalog No.
Comb 1.0	10	24	6.0	12220231
Comb 2.0	10	48	6.0	12220232
Comb 3.0	10	72	6.0	12220233
Comb 1.0	16	12	3.0	12220234
Comb 2.0	16	24	3.0	12220235
Comb 3.0	16	36	3.0	12220236
Comb 1.0	18	14	3.5	12220237
Prep Comb 1.0 with 1 sample / 2 marker	-	360 / 2 x 12	90/3	12220238
Prep Comb 2.0 with 1 sample / 2 marker	-	720 / 2 x 24	90/3	12220239

Others	Catalog No.
U.V. Transmitted gel tray 10 x 8cm (W x L)	12220241
Set of power leads	12220242
Casting gel system	12220243

## I Nucleic Acid Electrophoresis - Horizontal Type

### LGH-300

LGH-300 can analyze 32 samples with the choice of 4 gel bed.

#### Features:

- ▶ The choice of four gel beds.
- ▶ Upto 32 samples by comb.



LGH-300

#### Technical Specifications and Ordering Information:

Model No.	LGH-300
Standard Components	U.V. transparent gel tray 15 x 17cm (W x L), 2 removable casting gates, 1 x 27 teeth comb, 2mm thickness. Sample volume 32 $\mu$ l, when gel thickness is 5mm, safety lid, set of power leads, casting tape, user's manual
Buffer volume (ml)	1200
Maximum number of samples	192
Unit dimension (W x L x H) cm	30 x 20 x 8
Suggested power supply with	LPS-34 - 300volt - 400mA - 120watt
Timer and gel saver	LPS-35 - 300volt - 500mA - 150watt
Catalog No.	12220203

#### Optional Accessories:

Thickness (mm)	Teeth	Sample volume ( $\mu$ l)	Well width (mm)	Catalog No.
Comb 1.0	16	24	6.0	12220244
Comb 2.0	16	48	6.0	12220245
Comb 3.0	16	72	6.0	12220246
Comb 1.0	27	16	4.0	12220247
Comb 2.0	27	32	4.0	12220248
Comb 3.0	27	48	4.0	12220249
Comb 1.0	32	14	3.5	12220251
Comb 2.0	36	24	3.0	12220252
Comb 3.0	36	36	3.0	12220253
Prep Comb 1.0 with 1 sample / 1 marker		140 / 24	138/5	12220254
Prep Comb 1.0 with 1 sample / 1 marker		280 / 48	138/5	12220255
Prep Comb 1.0 with 1 sample / 1 marker		420 / 72	138/5	12220256

Other	Catalog No.
U.V. transparent gel tray 15 x 20cm (W x L) for up to 6 combs	12220257
U.V. transparent gel tray 15 x 17cm (W x L) for up to 6 combs	12220258
U.V. transparent gel tray 15 x 12cm (W x L) for up to 4 combs	12220259
U.V. transparent gel tray 15 x 7cm (W x L) for up to 2 combs	12220261
Set of power leads	12220262
Casting gel system	12220263

## Nucleic Acid Electrophoresis - Horizontal Type

### LGH-400

LGH-400 are specially designed for DNA/RNA analysis and quick screening of all samples from a 96 position PCR thermal cycler on one gel. It is also facilitated with restriction fragments screening and separation of long length DNA.

#### Features:

- ▶ Maximum number of samples 176 using 4 combs compatible with multichannels pipette.
- ▶ Gel tray 20 x 24cm, has 4 spaces for comb insertion.
- ▶ Gel tray 20 x 12cm, has 2 spaces for combs insertion.
- ▶ Combs 10, 20, 30 teeth and preparative models.
- ▶ Comb 44 teeth, compatible with multichannel pipettes.
- ▶ 4 adjustable feet and bubble level.
- ▶ Red strips for wells visualisation.



LGH-400

#### Technical Specifications and Ordering Information:

Model No.	LGH-400
Standard Components	Removable U.V. transparent gel tray 20 x 24cm (W x L) , 2 removable casting gates, 2mm thickness, 20 teeth comb, sample volume 52µl, safety lid, set of power leads, buffer circulation accessories, user's manual
Buffer volume (ml)	1800
Maximum number of samples	352
Unit dimensions (cm)	37 x 28 x 9
Suggested power supply	LPS-35 - 300volt - 500mA - 150watt with Timer and Gel Saver LPS-53 - 500volt - 300mA - 150watt with Timer and Gel Saver LPS-68 - 600volt - 800mA - 300watt with Timer
Catalog No.	12220204

#### Optional Accessories:

Thickness (mm)	Teeth	Sample volume (µl)	Well width (mm)	Catalog No
Comb 1.0	10	64	16.0	12220264
Comb 2.0	10	128	16.0	12220265
Comb 3.0	10	192	16.0	12220266
Comb 1.0	20	26	6.5	12220267
Comb 2.0	20	52	6.5	12220268
Comb 3.0	20	78	6.5	12220269
Comb 1.0	30	16	4.0	12220271
Comb 2.0	30	32	4.0	12220272
Comb 3.0	30	48	4.0	12220273
Prep Comb 1.0 with 1 sample / 2 marker	-	360 / 2 x 12	90 / 3	12220274
Prep Comb 1.0 with 2 sample / 2 marker	-	360 / 2 x 12	90 / 3	12220275
<b>Compatible with multi-channel pipettes :</b>				
Double Comb, 1.0mm	44 / 21	14 / 24	3.5 / 6	12220276
Double Comb, 2.0mm	44 / 21	28 / 48	3.5 / 6	12220277

Other	Catalog No.
U.V. Transparent gel tray 20 x 24cm (W x L) supplied with 2 removable casting gel	12220278
U.V. Transparent gel tray 20 x 12cm (W x L) supplied with 2 removable casting gel	12220279
Set of 2 power leads	12220281
Separate gel casting system with bubble and adjustable feet	12220282

## I Nucleic Acid Electrophoresis - Horizontal Type

### LGH-500

LGH-500 are designed for high resolution electrophoresis including DNA analysis, PCR screening and long length separation of DNA. They also provide facility for pulsed fields electrophoresis and restriction fragments analysis.

#### Features:

- ▶ DNA/RNA analysis and quick screening of all samples from a 96 position PCR thermal cycler on one gel.
- ▶ Maximum number of samples 176, using 4 combs compatible with multichannels pipette.
- ▶ 4 adjustable feet and bubble level.



LGH-500

#### Technical specifications and Ordering information:

Model No.	LGH-500
Standard Components	In-built cooling plate, removable U.V. transparent gel tray 20 x 24cm (W x L), 2 removable casting gates, 2mm thickness, 20 teeth comb, sample volume 52µl, when gel thickness is 5mm, safety lid, set of power leads, casting tape, buffer circulation accessories, user's manual
Buffer volume (ml)	1800
Maximum number of samples	352
Unit dimensions (W x L x H) cm	37x 28 x 9
Suggested power supply	LPS-35 - 300volt - 500mA - 150watt with Timer and Gel Saver LPS-53 - 500volt - 300mA - 150watt with Timer and Gel Saver LPS-68 - 600volt - 800mA - 300watt with Timer
Catalog No.	12220205

#### Optional Accessories:

Thickness (mm)	Teeth	Sample volume (µl)	Well width (mm)	Catalog No.
Comb 1.0	10	64	16.0	12220283
Comb 2.0	10	128	16.0	12220284
Comb 3.0	10	192	16.0	12220285
Comb 1.0	20	26	6.5	12220286
Comb 2.0	20	52	6.5	12220287
Comb 3.0	20	78	6.5	12220288
Comb 1.0	30	16	4.0	12220289
Comb 2.0	30	32	4.0	12220291
Comb 3.0	30	48	4.0	12220292
Prep Comb 1.0 with 1 sample / 2 marker		360/2 x 12	90/3	12220293
Prep Comb 1.0 with 2 sample / 2 marker		360/2 x 12	90/3	12220294
<b>Compatible with multi-channel pipettes:</b>				
Double Comb, 1.0mm	44/21	14/24	3.5/6	12220295
Double Comb, 2.0mm	44/21	28/48	3.5/6	12220296

Other	Catalog No.
U.V. transparent gel tray 20 x 24cm (W x L), supplied with 2 removable casting gel	12220297
U.V. transparent gel tray 20 x 12cm (W x L), supplied with 2 removable casting gel	12220298
Set of 2 power leads	12220299
Separate gel casting system with bubble and adjustable feet	122202221
Cooler F 12-ED. Working temp range -20°C to 100°C. Digital and tactile switches. Pump low rate 15L/min, 0.35 bar, Dimension 20 x 36 x 56cm, weight 22kg	122202222

## ■ Nucleic Acid Electrophoresis - Horizontal Type LGH-600

These are designed for high resolution electrophoresis including DNA analysis. Screening of PCR products and long length separation of DNA can also be done using LGH-600. It is a suitable unit for pulsed field electrophoresis and restriction fragments analysis. DNA/RNA analysis and quick screening of all samples upto 96 wells PCR thermal cycler on one gel 24.5 x 36cm can be done.

### Features:

- ▶ All Combs compatible with multi-channels pipettes.
- ▶ Cooling at the base for water circulation.
- ▶ 4 adjustable feet to level.
- ▶ Ports for buffer circulation and cooling.



LGH-600

### Technical Specifications and Ordering Information:

Model No.	LGH-600
Standard Components	Removable U.V. transparent gel tray 24.5 x 26cm (W x L) 4 combs 52 teeth, thickness 1mm, compatible with multi-channel pipettes, Four comb holder with nylon screws, safety lid, set of connecting leads, gel casting base equipped with adjustable feet and level bubble designed to hold the gel trays
Buffer volume (ml)	2000
Unit dimension (W x L x H) cm	48 x 29 x 9
Suggested power supply	LPS-68 - 600volt - 800mA - 300watt
Catalog No.	12220206

### Optional Accessories:

Thickness (mm)	Teeth	Sample volume (µl)	Well width (mm)	Catalog No.
Comb 1.0	52	13	3.0	122202223
Comb 2.0	52	26	3.0	122202224
Comb 1.0	26	30	7.0	122202225
Comb 2.0	26	60	7.0	122202226

All combs are compatible with multichannel pipettes :

Others	Catalog No.
Comb holder with 4 nylon screws	122202227
U.V. transparent Gel Tray 24.5 x 26cm (W x L), designed for 8 combs	122202228
U.V. transparent Gel Tray 24.5 x 36cm (W x L), designed for 12 combs	122202229
Gel casting base with adjustable feet and level bubble	122202231
Set of power leads	122202232
Set of 4 nylon screws	122202233
Safety lid	122202234
Set of accessories for buffer circulation	122202235

## I LDS Series

LDS Units for DNA sequencing are designed with cabinet style doors and a safety lid to provide easy access for sample loading without compromising safety. All components are shielded and the unit cannot operate until the doors are closed and the safety lid is in place. A combination of rubber mounted, precision machined aluminium heat transfer plates, float glass plates and clamps, ensure excellent heat distribution and straight sample migration through the gel. A drainage port in the upper buffer tank facilitates removal of the running buffer.



LDS-96 & 48

### Features:

- ▶ **Electrodes:** Pure platinum, the electrodes are both protected and user-replaceable.
- ▶ **Power leads:** All leads are double insulated and connectors have CE standard 2mm fixed shrouds to prevent finger contact.
- ▶ **Buffer Seals:** Easily replaced double format in silicon join together for leak-free sealing and easy cleaning.
- ▶ **Power Connection:** Gold plated terminals resist corrosion.
- ▶ **Heat Sink Plate:** A heavy duty aluminium back plate helps disperse heat evenly.

### Technical Specifications and Ordering Information:

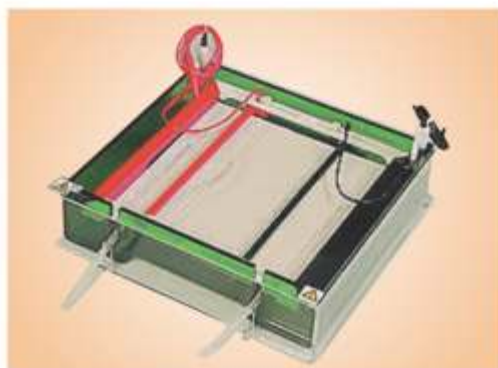
Model No.	LDS-96	LDS-48
Standard Components	2 x Notched Glass Plate, 2 x Plain Glass Plate, 1x set of 0.35mm Melinex Spacers, 1 of 0.35mm Melinex 48 Sample Shark's Tooth Comb	
Gel Dimension (cm)	20 x 50	33 x 41
Overall Dimension (W x L x H) cm	17.5 x 39 x 56	17.5 x 51.5 x 48
Max Sample Capacity	96	48
Maximum Buffer Volume (ml)	Upper: 800 Lower: 800	700
No. of Samples	1, 10, 18, 24, 36, 48	40, 48, 60, 80, 96
Thickness (mm)	0.25, 0.35, 0.75, 1, 1.5, 2	0.25, 0.35
Catalog No.	12220301	12220302

### Optional Accessories:

Items		Catalog No.
Spacer for Model No. LDS-96	0.25mm Spacer set, 2 x 50cm (W x L)	12220331
	0.35mm Spacer set, 2 x 50cm (W x L)	12220332
	1.0mm Spacer set, 2 x 50cm (W x L)	12220333
	Notched Glass Plate, pk/2	12220334
	Plain Glass Plate, pk/2	12220335
	Spacer for Model No. LDS-48	0.25mm Spacer set, 2 x 41cm (W x L)
0.35mm Spacer set, 2 x 41cm (W x L)		12220337
Notched Glass Plate, pk/2		12220338
Plain Glass Plate, pk/2		12220339
Thermostatic fan for sequencing unit		12220341
Temperature probe (suitable power supply LPS-303)		12220342
45 x 34cm Complete Slab Gel Dryer		12220343
50 x 40cm complete Slab Gel Dryer System		12220344
Vacuum Pump		12220345

## LIF-100

The modular design of this LIF-100 unit, enables the user to carry out almost all of the flatbed electrophoresis techniques. The large 270 x 270mm cooling plate allows for the running of virtually all of the available pre-cast gels and self-cast gels. The removable cooling plate has a specially designed ceramic surface, which provides homogeneous thermostating over its entire surface. This provides even heat dissipation, particularly important when using ultra-thin gels at high voltages. Gels can be electrophoresed at temperatures as low as 4°C. The coded grid allows for the accurate measurement of sample migration. The positions of the electrodes are adjusted by moving them in an electrode frame. The electrode frame is also designed for easy electrode tensioning and replacement. Buffer chambers, in the running tank, provide large volumes of running buffer for electrophoresis using wicks.



LIF-100

### Features:

- ▶ Large ceramic cooling plate – 270 x 270mm.
- ▶ Printed grid to measure migration rates.
- ▶ Electrode frame with easy to position electrodes.
- ▶ Electrodes easy to tension and replace.

### Technical Specifications and Ordering Information:

Model No.	LIF-100
Standard Components	Running Tank, Cooling plate, Glass Electrode Frame and Electrodes
Unit Dimension (W x L x H) cm	37.5 x 40.5 x 10
Cooling Plate Size (mm)	270 x 270
Running Buffer Volume	600ml per chamber
Suggested power supply	LPS-303 - 3000volt - 300mA - 300watt, Timer and Integrator
Catalog No.	12220401

### Optional Accessories:

Item	Catalog No.
Cooling plate	12220441
Glass electrode furnace	12220442
Cathode electrode	12220443
Anode electrode	12220444

## I LTB Series

LTB Series combines proven quality features with constructive improvements and a very high quality design. Efficient cooling and special arrangement of the corrosion-protected electrodes made of platinum ensure excellent separation results.



LTB-100

LTB-200

### Features:

- ▶ Integrated cooling base for temperature control.
- ▶ Stable chamber cover for safe working with no risk of electrical shock.
- ▶ Attached power lead with safety contacts and a length of 1m for maximum working safety and flexibility.
- ▶ Side handle for easy removal of cover.
- ▶ Water cooled base which cools the gels with the help of flow-through water of a cooling circulator.
- ▶ An open square grid design for the cassettes provides a maximum area for the transfer and is strong enough to maintain a firm contact between the gel and the transfer membrane.

### Technical Specifications and Ordering Information:

Model No.	LTB-100	LTB-200
Standard Components	Tank with cooling system lid with attached power chords 4 Cassettes (10 x 10) cm 4 Sets of 2 Fiber pads	Tank with cooling system lid with attached power chords 2 Cassettes (20 x 20) cm 2 Sets of 2 Fiber pads
Gel Size (cm)	10 x 10	20 x 20
Buffer Volume (ml)	1300	3000
Number of Provided Cassettes	4	2
Maximum Gel Capacity	4 Gels (10 x 10) cm	2 Gels (20 x 20) cm
Maximum Operating Current	2A (With cooling circulator)	
Suggested Power Supplies	LPS-35, LPS-22	LPS-22
Catalog No.	12220501	12220502

### Optional Accessories:

Item		Catalog No.
LTB-100	Cassette with 2 blocking pads	12220551
	Fiber Pads (x4)	12220552
LTB-200	Cassette with 2 blocking pads	12220553
	Fiber Pads (x4)	12220554

## LSL Series

LSL models have been designed for rapid Western type blotting. Platinized titanium anode is provided for prolonged usage of conductive buffers while performing western blotting of a thick nucleic acid.

### Features:

- ▶ Uniform electric field.
- ▶ High surface area which ensures a high field in the gel.
- ▶ No bubbles surrounding the electrodes.
- ▶ Western Blots of 0.75 or 0.8mm thick gels are cleared of proteins up to 170kD in 40 minutes at 24volt.
- ▶ Western Blots of 1mm thick gels are cleared of protein in 30 minutes at 24volt.



LSL 10, 20, 30, 40,  
50, 60, 70 & 80

### Technical Specifications and Ordering Information:

Model No.	LSL-10	LSL-20	LSL-30	LSL-40
Standard Components	2 electrodes, 4 grids, 6 support pads			
Specifications	10 x 15cm with alloy anode for Western Blots	10 x 15cm with Platinized Titanium anode for Southern and Western blots	15 x 20cm with alloy anode for Western Blots	15 x 20cm with Platinized Titanium anode for Southern and Western blots
Buffer Volume (ml)	350		800	
Catalog No.	12220601	12220602	12220603	12220604

Model No.	LSL-50	LSL-60	LSL-70	LSL-80
Standard Components	2 electrodes, 4 grids, 6 support pads			
Specifications	20 x 24cm with alloy anode for Western Blots	20 x 24cm with Platinized Titanium anode for Southern and Western blots	25 x 34cm with alloy anode for Western Blots	25 x 34cm with Platinized Titanium anode for Southern and Western blots
Buffer Volume (ml)	1400		2500	
Catalog No.	12220605	12220606	12220607	12220608

### Optional Accessories:

Items	Catalog No.
10 x 15cm Platinized Titanium anode for nucleic acid blots	12220661
15 x 20cm Platinized Titanium anode for nucleic acid blots	12220662
20 x 24cm Platinized Titanium anode for nucleic acid blots	12220663
25 x 34cm Platinized Titanium anode for nucleic acid blots	12220664

## I LSB Series

LSB models enables rapid and extremely efficient transfer of proteins and nucleic acids from Polyacrylamide or agarose gels to nitrocellulose, nylon and other membrane filters instead of standard procedures for Western, Southern and Northern blotting, which take several hours or even overnight runs. LSB models are ideal for proteins less than 150 kd.



LSB-100 & 200

### Features:

- ▶ Completely removable lid and flat base with small footprint.
- ▶ Very robust construction of base unit and lid for long life use.
- ▶ Stable knobs fitting on the screws mounted on the lower base unit.
- ▶ Very uniform pressure distribution and uniform transfer over the whole transfer area.
- ▶ Resistant stainless steel cathode and platinum plated titanium anode for maximum transfer efficiency.
- ▶ Special lid construction to prevent reverse orientation of electric field.
- ▶ Gold plated contact for increased durability.

### Technical Specifications and Ordering Information:

Model No.	LSB-100	LSB-200
Standard Components	Lid with stainless-steel cathode, Base with Platinum/Titanium anode, Separate and protected power chords 3 Easy to tight knobs	
Electrodes Surface (cm)	11 x 11	20 x 20
Buffer Volume (ml)	About 50	
Maximum Gel Size (cm)	10 x 10	20 x 20 or 4 gels 10 x 10
Maximum Operating Current	3mA/cm <sup>2</sup>	
Suggested Power Supplies	LPS-34, LPS-35	LPS-22
Catalog No.	12220701	12220702

## Power Supply

### Features:

#### LPS-34 / LPS-35 / LPS-53 / LPS-68 / LPS-22

- ▶ Two red LEDs indicate the constant parameter.
- ▶ Last setting is automatically restored at power up with audible alarm ringing for 10 seconds.

#### LPS-303 / LPS-106P

- ▶ Constant power or temperature limitation (for LPS-106P).
- ▶ Last settings are automatically restored at power up.



- ▶ It is possible to perform electrophoresis with constant current whilst limiting the voltage to a selected value and vice versa.

- ▶ 8 programs with up to 9 steps which automatically follow preset values for each step.
- ▶ LCD display with 2 lines of 20 characters.

### Technical Specifications and Ordering Information:

Model No.	LPS-34	LPS-35	LPS-53
Output Range	1-300V / 1V 15µA-400mA / 1mA	1-300V / 1V / 15µA- 500mA / 1mA- 0.999 min / 1min	1-500V / 1V / 15µA- 300mA / 1mA- 0.999 min / 1min
Minimum Regulated Value		1 volts-1mA	
Fault Detection	Stop		Stop and Audible alarm
Operating Temperature		0°C - 40°C	
Dimension (W x D x H) cm		17 x 24 x 7	
Weight		1.6kg	
Catalog No.	12220801	12220802	12220803

Model No.	LPS-68	LPS-22
Output Range	1-600volt / 1volt / 15µA-800mA / 1mA - 0-999 min	1-200volt 15µA - 1998mA / 1mA
Minimum Regulated Value	5volt - 1mA	1volt - 1mA
Fault Detection		Stop & Audible Alarm
Operating Temperature		0°C - 40°C
Dimension (W x D x H) cm		27 x 34 x 11
Weight		4kg
Resolution	—	1 V - 2mA 1minute
Power	0.3 - 300watt	300watt
Display		3
Minimum output		1V - 15µA, 0.3W - 1min
Catalog No.	12220804	12220805

Model No.	LPS-303	LPS-106P
Output Range	10-3000volt / 10volt 15µA - 300mA / 1mA 0.3-300watt / 1watt 0 - 99°C / 1°C 1- 99999volt-hour / 1V-hr, 1-9999minutes/ 1min	10-1000volt / 10volt 15µA - 600mA / 1mA 0.3-300watt / 1watt 0-99°C / 1°C 1-99999volt-hour / 1V-hr 1-9999minutes / 1min
Minimum Regulated Value		10volts - 1mA - 1watt
Fault Detection		Stop & displayed messages
Operating Temperature		0°C - 40°C
Dimension (W x D x H) cm		27 x 34 x 11
Weight		4kg
Value display range/resolution		0/3000volt / 10volt 0-300mA / 1mA 0-300watt / 1watt, 0-99°C / 1°C 1? 99999volt-hrs / 1V-hr 1-9999min / 1min
Current range with program	—	0-600mA
Catalog No.	12220806	12220807