

Eco-Line

PAGE Electrophoresis
and Blotting



Eco-Line

The new Eco-Line models are available as **Eco-Mini** and **Eco-Maxi**. A special designed casting stand for 1 or 2 gels provides for convenient gel casting. Glass plates with fixed glass spacers ensure perfect alignment and easy-to use, leak-free casting. Eco-Mini is compatible with a variety of gel sizes from different suppliers.

PAGE Electrophoresis and Blotting

Both sizes of the tank-style Eco-line are compatible with a variety of separation techniques, including SDS-PAGE, native, preparative and gradient gel electrophoresis, as well as blotting applications. Eco-Mini and Eco-Maxi have the capacity to run 1 or 2 gels simultaneously.

The Electrophoresis Module (Gel Module) is due to integrated, special side clips easy to handle. Together with the Casting Stand a leak-proof system for gel pouring is guaranteed.

After polymerisation of the gels the Electrophoresis Module together with the two glass plate sandwiches is inserted into the buffer tank, forming now the upper buffer chamber. Interchangeable modules allow to switch from electrophoresis to tank blotting applications.

Locator slots are built into the tank side walls for easy and quick sliding of the Electrophoresis or Blotting Module into locked position.

For all systems optional buffer tanks with an integrated water circulation system are available. For electrophoretic separation under controlled temperature conditions the use of the EBC buffer tank with cooling option is recommended.

The Buffer Chambers EB (without cooling option) and EBC (with cooling option) are compatible with the Electrophoresis Module as well as the Blot Module.

The Bigfoot Safety Lid with its specially designed foot allows a space saving and safe storing of the lid when not placed on the buffer tank.

According to customer requirements a lot of special configurations by a large number of additional component parts are possible (i.e. analytical, preparative or microtiter plate compatible combs).

Features

- ❖ Tank-style model for electrophoresis and blotting
- ❖ Glass plates with permanently fixed glass spacers
- ❖ Double-gel system
- ❖ Casting Stand for 1 or 2 gels
- ❖ Cooling option (integrated water circulation system)



Instrument Name	Gel Size W x L (cm)	Glass Plate Size W x L (cm)	Number of Gels	Gel Thickness (mm)	Number of Wells	Volume per Well (µl)	Buffer Volume Upper / Lower Chamber (ml)
Eco-Mini	9.4 x 8.0	11.0 x 10.0	2	0.75	1 prep. 9 MTP* 10 12 15	2 x 25 and 385 30 33 25 18	1,580 resp. 2,180 (Blotting 2,100)
				1.0	1 prep. 9 MTP* 10 12 15	2 x 35 and 515 43 45 35 25	
				1.5	1 prep. 9 MTP* 10 12 15	2 x 55 and 780 65 70 55 37	
Eco-Maxi	19.4 x 18.5	21.0 x 20.0	2	0.75	1 prep. 12 19 MTP* 25 30	2 x 30 and 970 70 32 30 20	5,400 (Blotting 6,100)
				1.0	1 prep. 12 19 MTP* 25 30	2 x 45 and 1,310 95 45 40 29	
				1.5	1 prep. 12 19 MTP* 25 30	2 x 75 and 2,340 165 75 70 52	

* = microtiter plate compatible / multichannel pipet compatible



Eco-Mini PAGE Electrophoresis System

- Gel dimensions: 9.4 cm x 8.0 cm (W x L)
- Applicable for hand-cast gels and the most common pre-cast gels

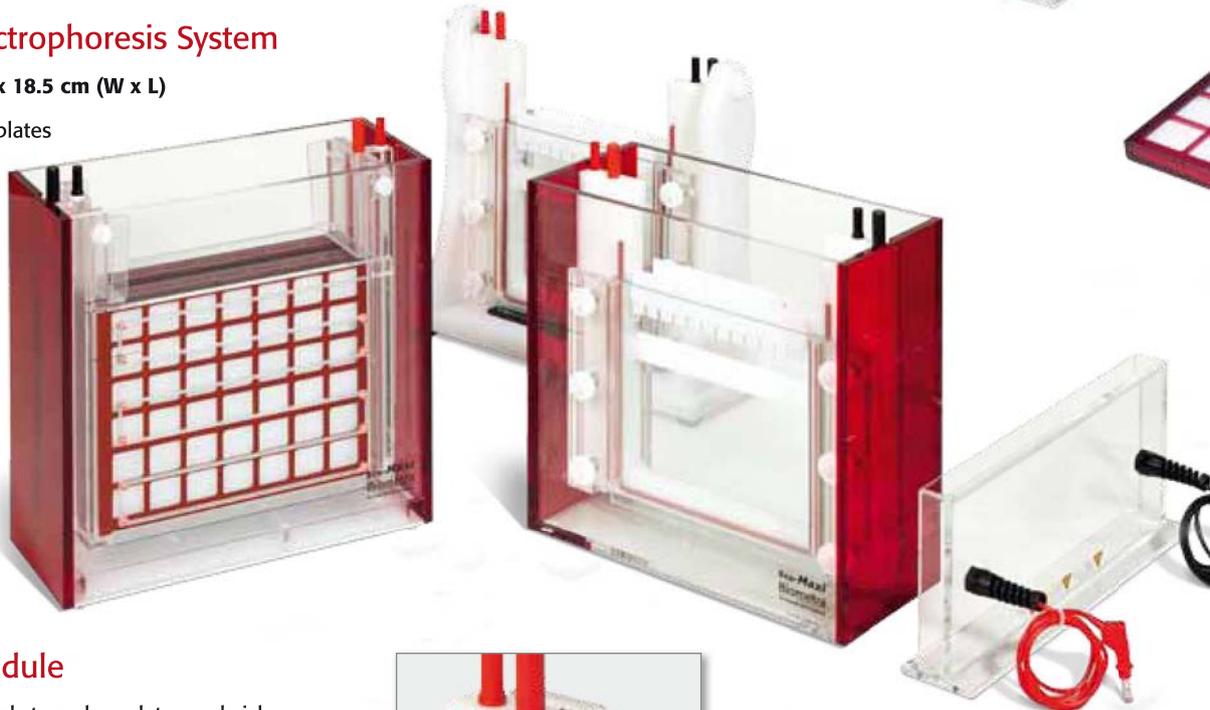
Eco-Mini is compatible with hand-cast (self-poured) gels as well as with the most common pre-cast gels. With the Electrophoresis Module, glass plates from 10.5 cm to 11.0 cm width and a length up to 11.0 cm may be used.



Eco-Maxi PAGE Electrophoresis System

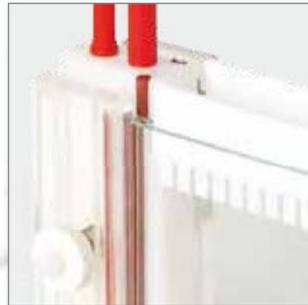
- Gel dimensions: 19.4 cm x 18.5 cm (W x L)

Eco-Maxi comes with glass plates of 21 cm width and 20 cm length for the Electrophoresis Module.



Electrophoresis Module

Preliminary, for casting the gels two glass plate sandwiches or one glass plate sandwich and one Dummy Plate are set into the Electrophoresis Module and fixed with the side clips. Because the spacers are permanently fixed to one glass plate, the often difficult adjustment of large spacers and glass plate is no longer necessary. In a second step the Electrophoresis Module with the two glass plate sandwiches or one glass plate sandwich and one Dummy Plate is inserted into the specially designed gel Casting Stand.



Buffer Chamber

After polymerisation of the gels the complete assembly of Electrophoresis Module and glass plate sandwiches is taken in a third step from the Casting Stand into the buffer tank for electrophoretic separation. Specially formed slots in the side walls of the buffer tank allow a rapid and safe positioning of the module. Finally the electrophoresis buffer is filled into the buffer tank and samples are loaded before the electrophoretic separation can be started.



Casting Stand

The Casting Stand allows an easy, fast and leak-proof assembly for 1 or 2 glass plate sandwiches. For gel casting the Electrophoresis Module with the glass plate sandwiches is inserted into the specially designed gel Casting Stand and is fixed easily and reliably by two eccentric vices. By the use of a unique high-tech material for the gaskets in the casting stand and the special anti-slip device of the side clips leakage proof is guaranteed.



Tankblot Eco-Line

Platinum wire electrodes are placed on the side walls to provide uniform, reproducible protein transfer over a wide molecular weight range. The lower buffer chamber EBC with built-in cooling base absorbs heat generated during rapid transfers and allows temperature controlled runs. A stir bar may be added to the buffer chamber to further improve buffer circulation and heat exchange.

Tankblot Eco-Mini is designed to transfer up to four PAGE mini-gels (up to 9.4 cm x 8.0 cm) in separate colour coded Blotting Cassettes simultaneously.



Tankblot Eco-Maxi is designed for up to 2 gels with a size of up to 22 cm x 19 cm gels. This system additionally offers the capacity of multiple transfers: several small gels or 1 large gel per colour coded Blotting Cassette.

Tankblot Eco-Mini and **Tankblot Eco-Maxi** both are available as stand-alone apparatus or as a module compatible with the respective Eco-Line buffer chamber EBC (with integrated cooling base) or EB (without integrated cooling option).



Tankblot Eco-Mini – Order Information

Item	Order No.
Tankblot Eco-Mini C , complete instrument with buffer chamber EBC (with integrated cooling base), Bigfoot Safety Lid, Blot Module, 4 Blotting Cassettes and 8 foam pads	018-100
Tankblot Eco-Mini , complete instrument with buffer chamber EB (<u>without</u> cooling base), Bigfoot Safety Lid, Blot Module, 4 Blotting Cassettes and 8 foam pads	018-101
Accessories for Tankblot Eco-Mini	
Blot Module Eco-Mini for up to 4 Blotting Cassettes	018-105
Blotting Cassette, colour coded (black/red) 1/pkg	018-111
Foam pads, 4/pkg	018-113
Accessories for Eco-Mini and Tankblot Eco-Mini	
Buffer chamber E (without cooling base) for Eco-Mini, without Bigfoot Safety Lid	017-169
Buffer chamber EB (without cooling base) for Eco-Mini, without Bigfoot Safety Lid	017-170
Buffer chamber EBC (with integrated cooling base) for Eco-Mini, without Bigfoot Safety Lid	017-171
Bigfoot Safety Lid, with cables and safety plugs for Eco-Mini and Tankblot Eco-Mini	017-172

Tankblot Eco-Maxi – Order Information

Item	Order No.
Tankblot Eco-Maxi C , complete instrument with buffer chamber EBC (with integrated cooling base), Bigfoot Safety Lid, Blot Module, 2 Blotting Cassettes and 4 foam pads	018-400
Tankblot Eco-Maxi , complete instrument with buffer chamber EB (<u>without</u> cooling option), Bigfoot Safety Lid, Blot Module, 2 Blotting Cassettes and 4 foam pads	018-401
Accessories for Tankblot Eco-Maxi	
Blot Module Eco-Maxi for up to 2 Blotting Cassettes	018-405
Blotting Cassette, colour coded (black/red) 1/pkg	018-411
Foam pads, 4/pkg	018-413
Accessories for Eco-Maxi and Tankblot Eco-Maxi	
Buffer chamber EB (without cooling base) for Eco-Maxi and Tankblot Eco-Maxi, without Bigfoot Safety Lid	017-471
Buffer chamber EBC (with integrated cooling base) for Eco-Maxi and Tankblot Eco-Maxi, without Bigfoot Safety Lid	017-472
Bigfoot Safety Lid, with cables and safety plugs for Eco-Maxi and Tankblot Eco-Maxi	017-474



Item	Order No.
Eco-Mini System E , complete system with buffer chamber E (without cooling base), Bigfoot Safety Lid, Electrophoresis Module, 2 glass plates with fixed 1.0 mm spacers, 2 notched glass plates, 1 Dummy Plate, 2 combs (1.0 mm, 10 wells) and Casting Stand. Note: Buffer chamber E is not compatible with Eco-Mini Blot Module!	017-100
Eco-Mini E , dto., but without Casting Stand	017-101
Eco-Mini System EB , complete system with buffer chamber EB (without cooling base), Bigfoot Safety Lid, Electrophoresis Module, 2 glass plates with fixed 1.0 mm spacers, 2 notched glass plates, 1 Dummy Plate, 2 combs (1.0 mm, 10 wells) and Casting Stand.	017-102
Eco-Mini EB , dto., but without Casting Stand	017-103
Eco-Mini System EBC , complete system with buffer chamber EBC (with integrated cooling base), Bigfoot Safety Lid, Electrophoresis Module, 2 glass plates with fixed 1.0 mm spacers, 2 notched glass plates, 1 Dummy Plate, 2 combs (1.0 mm, 10 wells) and Casting Stand.	017-104
Eco-Mini EBC , dto., but without Casting Stand	017-105

Accessories

Casting Stand (two-place) for Eco-Mini		017-180
Glass plate with fixed spacers, 1.0 mm		017-120
Glass plate with fixed spacers, 0.75 mm		017-121
Glass plate with fixed spacers, 1.5 mm		017-122
Notched glass plate		017-125
Dummy Plate for running single gels		017-127
Electrophoresis Module for Eco-Mini (2 gels)		017-175
Combs, 0.75 mm thick	(max. volume in µl/well)	
9 wells, multichannel pipet compatible	30	017-130
10 wells	33	017-131
12 wells	25	017-132
15 wells	18	017-133
1 well (preparative), with 2 marker lanes	385 and 2 x 25	017-134
Combs, 1.0 mm thick	(max. volume in µl/well)	
9 wells, multichannel pipet compatible	43	017-140
10 wells	45	017-141
12 wells	35	017-142
15 wells	25	017-143
1 well (preparative), with 2 marker lanes	515 and 2 x 35	017-144
Combs, 1.5 mm thick	(max. volume in µl/well)	
9 wells, multichannel pipet compatible	65	017-150
10 wells	70	017-151
12 wells	55	017-152
15 wells	37	017-153
1 well (preparative), with 2 marker lanes	780 and 2 x 55	017-154

Compatibility of Eco-Line Modules

The Eco-Line electrophoresis and blotting apparatus are available as stand-alone systems or as modules compatible with the different types of buffer chambers.

* Indication of buffer chamber: **E = Electrophoresis** **B = Blotting** **C = Cooling option**

System *	Blotting Module	Cooling Option
Eco-Mini E	-	-
Eco-Mini EB	+	-
Eco-Mini EBC	+	+
Eco-Maxi EB	+	-
Eco-Maxi EBC	+	+

System *	Electrophoresis Module	Cooling Option
Tankblot Eco-Mini C	+	+
Tankblot Eco-Mini	+	-
Tankblot Eco-Maxi C	+	+
Tankblot Eco-Maxi	+	-



Item	Order No.
Eco-Maxi System EB , complete system with buffer chamber (without cooling base), Bigfoot Safety Lid, Electrophoresis Module, 2 glass plates with fixed 1.0 mm spacers, 2 notched glass plates, 2 combs (1 mm, 12 wells) and Casting Stand.	017-400
Eco-Maxi EB , dto., but without Casting Stand	017-401
Eco-Maxi System EBC , complete system with buffer chamber (with integrated cooling base), Bigfoot Safety Lid, Electrophoresis Module, 2 glass plates with fixed 1.0 mm spacers, 2 notched glass plates, 2 combs (1.0 mm, 12 wells) and Casting Stand.	017-402
Eco-Maxi EBC , dto., but without Casting Stand	017-403

Accessories

Casting Stand (two place) for Eco-Maxi	017-480
Glass plate with fixed spacers, 1.0 mm	017-420
Glass plate with fixed spacers, 0.75 mm	017-421
Glass plate with fixed spacers, 1.5 mm	017-423
Notched glass plate	017-425
Dummy Plate for running single gels	017-426
Electrophoresis Module for Eco-Maxi (2 gels)	017-475

Combs, 0.75 mm thick	(max. volume in µl/well)	
12 wells	70	017-430
19 wells, multichannel pipet compatible	32	017-431
25 wells	30	017-432
30 wells	20	017-433
1 well (preparative), with 2 marker lanes	970 and 2 x 30	017-434

Combs, 1.0 mm thick	(max. volume in µl/well)	
12 wells	95	017-440
19 wells, multichannel pipet compatible	45	017-441
25 wells	40	017-442
30 wells	29	017-443
1 well (preparative), with 2 marker lanes	1,310 and 2 x 45	017-444

Combs, 1.5 mm thick	(max. volume in µl/well)	
12 wells	165	017-450
19 wells, multichannel pipet compatible	75	017-451
25 wells	70	017-452
30 wells	52	017-453
1 well (preparative), with 2 marker lanes	2,340 and 2 x 75	017-454

Biometra

An Analytik Jena Company

Biometra GmbH

Rudolf-Wissell-Str. 30
D-37079 Göttingen
Germany

Tel. +49 551-50686-0

Fax +49 551-50686-66

info@biometra.com

www.biometra.com



Innovation · Advancement · Development