

PAGE Electrophoresis and Blotting Eco-Line



Eco-Line

The Eco-Line offers tank-style systems for vertical gel electrophoresis with polyacrylamide gels.

Two sizes are available:

Eco-Mini for mini gels and **Eco-Maxi** for large sized gels.

The line is modular composed and allows an individual set-up. A specially designed casting stand provides for convenient gel casting. Glass plates with fixed glass spacers ensure perfect alignment and easy-to use, leak-free casting.

Features

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



The robust design provides for ease of use and longtime reliability for precise separation of nucleic acids and proteins. The chambers and lids are constructed of 8 mm thick high-quality acrylic glass.



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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.

In standard delivery 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 polymerization 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 at the tank side walls allow an 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 the system can be individually configured with different components (i.e. analytical, preparative or microtiter plate compatible combs).

System 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 (4 with divider plates)	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	

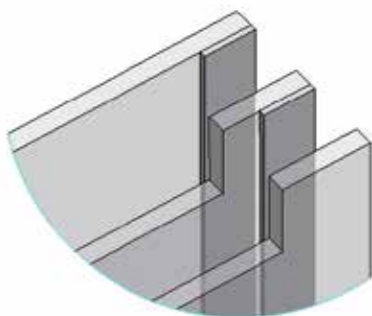
* = microtiter plate compatible / multichannel pipette compatible



Eco-Mini PAGE Electrophoresis System

Eco-Mini is compatible with hand-cast (self-poured) gels as well as with a choice of 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.

The standard delivery for running two gels can be easily upgraded with divider plates to double-gel sandwiches. This allows runs with up to 4 gels.



Two-gel sandwich with divider plate.

Eco-Maxi PAGE Electrophoresis System

Eco-Maxi comes with glass plates of 21 cm width and 20 cm length.

The electrophoresis module runs one or two gels at the same time.

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 is inserted into the specially designed Casting Stand.



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 and the special anti-slip mounting of the side clips leakage proof is guaranteed.



Buffer Chamber

After polymerisation of the gels, the complete assembly of Electrophoresis Module with glass plate sandwiches is taken 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.



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.

The Tankblot Eco-Line is available as stand-alone apparatus or as a module compatible with the Eco-Line buffer chamber EBC (with integrated cooling base) or EB (without integrated cooling option).



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.

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

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

Order Information

Tankblot Eco-Mini

Order number	Description
846-018-100	Tankblot Eco-Mini C, complete instrument with buffer chamber EBC (integrated cooling base), Bigfoot safety lid, Blot Module, 4 Blotting Cassettes and 8 foam pads
846-018-101	Tankblot Eco-Mini, see above, but with buffer chamber EB (without cooling base)

Replacement parts for Tankblot Eco-Mini

Order number	Description
846-018-111	Blotting Cassette, colour coded (black/red) 1/pkg
846-018-113	Foam pads, 4/pkg

Tankblot Eco-Maxi

Order number	Description
846-018-400	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
846-018-401	Tankblot Eco-Maxi, see above, but with buffer chamber EB (without cooling option)

Replacement parts for Tankblot Eco-Maxi

Order number	Description
846-018-411	Blotting Cassette, colour coded (black/red) 1/pkg
846-018-413	Foam pads, 4/pkg

Eco-Mini

Order number	Description
846-017-100	Eco-Mini System E, complete system for 2 gels with buffer chamber E (without cooling base), Bigfoot Safety Lid, Gel Module, 2 glass plates with fixed 1.0 mm spacers, 2 notched glass plates, 1 dummy plate, 2 combs (1.0 mm, 10 well) and Casting Stand. Note: Buffer chamber E is not compatible with Eco-Mini Blot Module!
846-017-101	Eco-Mini E, dto., but without Casting Stand
846-017-102	Eco-Mini System EB, similar to 846-017-100, but with buffer chamber EB (without cooling base), Note: Buffer chamber EB is compatible with Eco-Mini Blot Module!
846-017-103	Eco-Mini EB, dto., but without Casting Stand
846-017-104	Eco-Mini System EBC, similar to 846-017-100, but with buffer chamber EBC (with integrated cooling base), Note: Buffer chamber EBC is compatible with Eco-Mini Blot Module!
846-017-105	Eco-Mini EBC, dto., but without Casting Stand

Accessories

Order number	Description
846-017-180	Casting Stand for Eco-Mini
846-017-120	Glass plate with fixed spacers, 1.0 mm
846-017-121	Glass plate with fixed spacers, 0.75 mm
846-017-122	Glass plate with fixed spacers, 1.5 mm
846-017-125	Notched glass plate
846-018-105	Blot Module Eco-Mini, for up to 4 Blotting Cassettes
846-017-175	Electrophoresis Module for Eco-Mini
846-017-187	Divider-Plate Set (2 Divider-Plates and 2 combs, 10 wells), 1.0 mm
846-017-188	Divider-Plate Set (2 Divider-Plates and 2 combs, 10 wells), 0.75 mm
846-017-189	Divider-Plate Set (2 Divider-Plates and 2 combs, 10 wells), 1.5 mm

	Combs, 0.75 mm thick	(max. volume/well)
846-017-130	9 wells, multichannel pipet compatible	30
846-017-131	10 wells	33
846-017-132	12 wells	25
846-017-133	15 wells	18
846-017-134	1 preparative well, with 2 marker lanes	2 x 25 and 385
	Combs, 1.0 mm thick	(max. volume/well)
846-017-140	9 wells, multichannel pipet compatible	43
846-017-141	10 wells	45
846-017-142	12 wells	35
846-017-143	15 wells	25
846-017-144	1 preparative well, with 2 marker lanes	2 x 35 and 515
	Combs, 1.5 mm thick	(max. volume/well)
846-017-150	9 wells, multichannel pipet compatible	65
846-017-151	10 wells	70
846-017-152	12 wells	55
846-017-153	15 wells	37
846-017-154	1 preparative well, with 2 marker lanes	2 x 55 and 780

Eco-Maxi

Order number	Description
846-017-400	Eco-Maxi 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, 2 combs (1 mm, 12 well) and Casting Stand. Note: Buffer chamber EB is compatible with Eco-Maxi Blot Module!
846-017-401	Eco-Maxi EB, dto., but without Casting Stand
846-017-402	Eco-Maxi System EBC, similar to 846-017-400, but with buffer chamber EBC (with integrated cooling base. Note: Buffer chamber EBC is compatible with Eco-Maxi Blot Module!
846-017-403	Eco-Maxi EBC, dto., but without Casting Stand

Accessories

Order number	Description
846-017-480	Casting Stand for Eco-Maxi
846-017-420	Glass plate with fixed spacers, 1.0 mm
846-017-421	Glass plate with fixed spacers, 0.75 mm
846-017-423	Glass plate with fixed spacers, 1.5 mm
846-017-425	Notched glass plate
846-018-405	Blot Module for Eco-Maxi for up to 2 Blotting Cassettes
846-017-426	Dummy Plate for running single gels
846-017-475	Electrophoresis Module for Eco-Maxi

	Combs, 0.75 mm thick	(max. volume/well)
846-017-430	12 wells	70
846-017-431	19 wells, multichannel pipet compatible	32
846-017-432	25 wells	30
846-017-433	30 wells	20
846-017-434	1 preparative well, with 2 marker lanes	2 x 30 and 970
	Combs, 1.0 mm thick	(max. volume/well)
846-017-440	12 wells	95
846-017-441	19 wells, multichannel pipet compatible	45
846-017-442	25 wells	40
846-017-443	30 wells	29
846-017-444	1 preparative well, with 2 marker lanes	2 x 45 and 1,310
	Combs, 1.5 mm thick	(max. volume/well)
846-017-450	12 wells	165
846-017-451	19 wells, multichannel pipet compatible	75
846-017-452	25 wells	70
846-017-453	30 wells	52
846-017-454	1 preparative well, with 2 marker lanes	2 x 75 and 2,340

Please check our homepage for the complete list of accessories.

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Pictures: Analytik Jena AG
Subjects to changes in design and scope of delivery as well as further technical development!