

Horizontal Units



- Finger grooves on the tray sides for easy handling
- Wide range of comb configurations
- Selected units available with buffer recirculation capabilities
- Combs specifications clearly marked on each comb
- Advanced casting systems
- UV transmissible gel trays with
 - Built-in fluorescent rulers
 - Multiple comb slots
- High quality 9mm thick rugged acrylic construction
- Interlocking lid
- Protected sockets with permanently attached power cords
- Epoxy sealed electrode connections, resist corrosion and leaks
- Gold plated banana plugs
- Meets or exceeds IEC1010-1 standards



With the EHS3000 series Consort is introducing a new high quality standard for electrophoresis tanks. Every tank is designed and produced with much care for the customer. The tanks are made completely from cast acrylic ensuring a high material quality.

Various features, innovations and details make this tank easy to use, elegant and very durable.



Automatic buffer recirculation (available on selected units)

Reduces detrimental ion and pH gradients in your buffer, providing even migration for long running gels. Hydrogen bubbles created at the cathode carry buffer along a canted recirculation tube, providing a gentle, reliable and self-contained recirculation system that is self-regulating and requires no additional tubing or equipment.



RapidCast™ gel casting technology

Ideal for most small gel units with trays that are approximately equal in width and length. The dimensions of all cast-in-place gel trays are adjusted so that when the tray is placed cross-ways in the gel tank, the gasketed ends of the gel tray fit precisely against the walls of the buffer chamber. This forms a leak-proof seal for quick gel pouring.

Turn tray crossways in the gel base to seal and pour.
Align with the platform to run. No tape! No Leaks! Fast & Efficient.



ExpressCast™ gel casting technology

High throughput / high resolution systems require gel trays too long to fit crossways in the gel tank. For easy tapeless casting with these units, the ExpressCast™ system has been developed. ExpressCast trays incorporate removable gasketed end gates. These end gates fit into slots at both ends of the tray, to form a quick leak-proof seal for gel casting. Because the length of ExpressCast trays is not constrained by the width of the gel unit, these trays can accommodate longer run lengths or more sample capacity.

ExpressCast trays are also compatible with gel units from many other manufacturers.

ExpressCast™ trays include end slots into which fit gasketed end gates, for easy in-tray gel casting. Fit end gates into trays for a quick and leak-proof seal. No tape! No Leaks! Fast & Efficient.

Code	Description
EHS3100-SYS	Mini horizontal unit, gasketed UVT gel tray 7x8 cm + 2 combs (6, 10), RapidCast technology.
EHS3200-SYS	Mini horizontal unit, gasketed UVT gel tray 9x11 cm + 2 combs (10, 14), RapidCast technology.
EHS3300-SYS	Mini horizontal unit, gasketed UVT gel tray 12x14 cm + 2 combs (12, 20), RapidCast technology.
EHS3350-SYS	Mini horizontal unit, gasketed UVT gel tray 12x14 cm + 2 combs (12, 20), RapidCast technology. Buffer Recirculation.
EHS3400-SYS	Wide horizontal unit, UVT gel tray 15x15 cm + end gates + 4 combs (2x 17, 2x34). ExpressCast technology.
EHS3410-SYS	Long horizontal unit, UVT gel tray 15x25 cm + end gates + 4 combs (2x 17, 2x34) + leveling screws + bubble level. ExpressCast technology.
EHS3500-SYS	Wide horizontal unit, UVT gel tray 20x25 cm + end gates + 3 combs (16, 24, 36) + leveling screws + bubble level. ExpressCast technology.
EHS3600-SYS	Wide horizontal unit, UVT gel tray 23x14 cm + end gates + 4 combs (4x 50) + leveling screws + bubble level. ExpressCast technology.
EHS3610-SYS	Maxi horizontal unit, UVT gel tray 23x25 cm + end gates + 4 combs (2x 25, 2x50) + leveling screws + bubble level. ExpressCast technology.
EHS3660-SYS	Maxi horizontal unit, UVT gel tray 23x25 cm + end gates + 4 combs (2x 25, 2x50) + leveling screws + bubble level. ExpressCast technology. Buffer Recirculation.
EHS3620-SYS	Ultra horizontal unit, UVT gel tray 23x40 cm + end gates + 4 combs (2x 25, 2x50) + leveling screws + bubble level. ExpressCast technology.



With the EHS3xxx series Consort is introducing a new high quality standard for electrophoresis tanks. Every tank is designed and produced with much care for the customer. The tanks are made completely from cast acrylic ensuring a high material quality.

Various features, innovations and details make this tank easy to use, elegant and very durable.

Convenient & Versatile

- UV transmissible gel trays with built-in fluorescent rulers.
- Machined finger grooves on the tray sides for easy and sure handling.
- Wide range of comb configurations, including multi-channel capability.
- Selected units available with buffer recirculation capabilities.
- Combs specifications clearly marked on each comb.
- Advanced casting systems for flexibility, convenience and speed.
- All EHS3xxx-series trays feature multiple comb slots, built-in fluorescent rulers and ultra-strong assembly methods for long, reliable service.

Safe & Reliable

- High quality 9mm thick rugged acrylic construction, resists cracking and warping.
- Your safety ensured with interlocking lid, protected sockets and permanently attached power cords.
- Epoxy sealed electrode connections, resist corrosion and leaks.
- Gold plated banana plugs.
- Meets or exceeds IEC1010-1 standards.

RapidCast™ gel casting technology

The RapidCast™ system is ideal for most small gel units with trays that are approximately equal in width and length. The dimensions of all cast-in-place gel trays are adjusted so that when the tray is placed crossways in the gel tank, the gasketed ends of the gel tray fit precisely against the walls of the buffer chamber. This forms a leak-proof seal for quick gel pouring. This system can also be used with RapidCast casters, for casting outside the buffer tank. A long-lived silicone rubber gasket ensures a reliable seal thru many gel castings and side grooves on all RapidCast trays provide for easy handling.

RapidCast™ Technology uses trays with incorporated end gaskets, to easily cast gels in the gel unit base. Turn tray crossways in the gel base to seal and pour. Align with the platform to run. No tape! No Leaks! Fast & Efficient.

ExpressCast™ gel casting technology

High throughput / high resolution systems require gel trays too long to fit crossways in the gel tank. For easy tapeless casting with these units, the ExpressCast™ system has been developed. ExpressCast trays incorporate removable gasketed end gates. These end gates fit into slots at both ends of the tray, to form a quick leak-proof seal for gel casting. Because the length of ExpressCast trays is not constrained by the width of the gel unit, these trays can accommodate longer run lengths or more sample capacity.

ExpressCast trays are also compatible with gel units from many other manufacturers.

ExpressCast™ trays include end slots into which fit gasketed end gates, for easy in-tray gel casting. Fit end gates into trays for a quick and leak-proof seal. No tape! No Leaks! Fast & Efficient.

Integrated buffer recirculation (available on selected units)

Automatic buffer recirculation reduces detrimental ion and pH gradients in your buffer, providing even migration for long running gels. Hydrogen bubbles created at the cathode carry buffer along a canted recirculation tube, providing a gentle, reliable and self-contained recirculation system that is self-regulating and requires no additional tubing or equipment.



Gel dimensions	7x8 cm
Buffer volume	400ml
Gel volume (at 0.5cm)	28ml
Sample Capacity	24
Comb Slots	2
Sample runs	1 or 2
Unit Dimensions	12x17.6x9.5 cm
Running condition	60V at 5V/cm
UV transmissible gel tray	
RapidCast	
Warranty	36 months
Recommended power supply	
EV2650	



● Description

The EHS3100 mini gel systems are ideal for quick resolution of analytes from PCR, RE digestion, ligation and other common laboratory reactions.

Features

RapidCast™ gel casting technology.

Heavy duty lower buffer chamber and Interlock safety lid with attached leads.

Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.

UV transmissible gel tray with long-life silicone gaskets, built-in fluorescent ruler and 2 comb slots.

Safety cover with attached retractable-sheathed power cords.

Wide range of combs and accessories available.

● Ordering codes

Code	Description
EHS3100-SYS	Mini horizontal unit gasketed UVT gel tray 7x8 cm 1 comb: 6 sample, 1.5mm 1 comb: 10 sample, 1.5mm

Combs

Code	Description	Sample volume
EHS3100-C5-1.0	1 mm thick, 5 sample	25 µl
EHS3100-C6-1.0	1 mm thick, 6 sample	20 µl
EHS3100-C8-1.0	1 mm thick, 8 sample	14 µl
EHS3100-C10-1.0	1 mm thick, 10 sample	11 µl
EHS3100-C12-1.0	1 mm thick, 12 sample	8 µl
EHS3100-C5-1.5	1.5 mm thick, 5 sample	38 µl
EHS3100-C6-1.5	1.5 mm thick, 6 sample	31 µl
EHS3100-C8-1.5	1.5 mm thick, 8 sample	22 µl
EHS3100-C10-1.5	1.5 mm thick, 10 sample	16 µl
EHS3100-C12-1.5	1.5 mm thick, 12 sample	12 µl

Preparative Combs

Code	Description	Sample volume
EHS1100-PREP	1.5mm, preparative	193 µl

Replacement parts & Accessories

Code	Description
EHS3100-TRAY	Gasketed UVT gel tray 7x8 cm
EHS3100-GASKET	Replacement gasket (set of 2)
EHS3100-CAST	Multiple Casting Chamber (holds 3 UVT trays)
EHS3100-CAST3T	Multiple Casting Chamber including 3 UVT trays 7x8 cm

Gel dimensions	9x11 cm
Buffer volume	600ml
Gel volume (at 0.5cm)	50ml
Sample Capacity	36
Comb Slots	2
Equidistant sample runs	1 or 2
Unit Dimensions	15x22x9.5 cm
Running condition	90V at 5V/cm
UV transmissible gel tray	
RapidCast	
Warranty	36 months

Recommended power supply
EV2650
EV2310



● Description

The EHS3200 is a versatile mini-gel unit that offers a little more run length and capacity for restriction fragment and PCR amplicon analysis.

Features

RapidCast™ gel casting technology.

Heavy duty lower buffer chamber and Interlock safety lid with attached leads.

Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.

UV transmissible gel tray with long-life silicone gaskets, built-in fluorescent ruler and 2 comb slots.

Safety cover with attached retractable-sheathed power cords.

Wide range of combs and accessories available.

● Ordering codes

Complete System

Code	Description
EHS3200-SYS	Mini horizontal unit gasketed UVT gel tray 9x11 cm 1 comb: 10 sample, 1.5mm 1 comb: 14 sample, 1.5mm

Combs

Code	Description	Sample volume
EHS3200-C5-1.0	1 mm thick, 5 sample	25 µl
EHS3200-C8-1.0	1 mm thick, 8 sample	20 µl
EHS3200-C10-1.0	1 mm thick, 10 sample	14 µl
EHS3200-C12-1.0	1 mm thick, 12 sample	11 µl
EHS3200-C14-1.0	1 mm thick, 14 sample	8 µl
EHS3200-C5-1.5	1.5 mm thick, 5 sample	38 µl
EHS3200-C8-1.5	1.5 mm thick, 8 sample	31 µl
EHS3200-C10-1.5	1.5 mm thick, 10 sample	22 µl
EHS3200-C12-1.5	1.5 mm thick, 12 sample	16 µl
EHS3200-C14-1.5	1.5 mm thick, 14 sample	12 µl

Replacement parts & Accessories

Code	Description
EHS3200-TRAY	Gasketed UVT gel tray 9x11 cm
EHS3200-GASKET	Replacement gasket (set of 2)
EHS3200-CAST	Multiple Casting Chamber (holds 3 UVT trays)
EHS3200-CAST3T	Multiple Casting Chamber including 3 UVT trays 7x8 cm

Gel dimensions	12x14cm
Buffer volume	800ml
Gel volume (at 0.5cm)	84ml
Sample Capacity	100
Comb Slots	4
Equidistant sample runs	1 or 2
Unit Dimensions	18x24.5x9.5 cm
Running condition	115V at 5V/cm
RapidCast	
UV transmissible gel tray	
Automatic Buffer Recirculation (EHS3350 only)	
Warranty	36 months

Recommended power supply
EV2650
EV2310



EHS3350-SYS

● Description

The EHS3300 is our most popular mini-gel unit. A combination of outstanding versatility and value make it an ideal personal gel device. Two unit configurations are available including the new EHS3350 which includes integrated automatic buffer recirculation for improved performance. All systems feature RapidCast™ casting system for tapeless casting in the buffer chamber base or in optional casting frame.

Features

- RapidCast™ gel casting technology.
- Heavy duty lower buffer chamber and Interlock safety lid with attached leads.
- Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.
- UV transmissible gel tray with long-life silicone gaskets, built-in fluorescent ruler and 2 comb slots.
- Safety cover with attached retractable-sheathed power cords.
- Wide range of combs and accessories available.



EHS3350-SYS

● Ordering codes

Complete System

Code	Description
EHS3300-SYS	Mini horizontal unit gasketed UVT gel tray 12x14 cm 1 comb: 12 sample, 1.5mm 1 comb: 20 sample, 1.5mm
EHS3350-SYS	Mini horizontal unit with automatic buffer recirculation gasketed UVT gel tray 12x14 cm 1 comb: 12 sample, 1.5mm 1 comb: 20 sample, 1.5mm



EHS3300-SYS

Combs

Code	Description	Sample volume
EHS3300-C8-1.0	1 mm thick, 8 sample	25 µl
EHS3300-C16-1.0	1 mm thick, 16 sample	20 µl
EHS3300-C20-1.0	1 mm thick, 20 sample	14 µl
EHS3300-C24-1.0	1 mm thick, 24 sample	11 µl
EHS3300-C8-1.5	1.5 mm thick, 8 sample	38 µl
EHS3300-C16-1.5	1.5 mm thick, 16 sample	31 µl
EHS3300-C20-1.5	1.5 mm thick, 20 sample	22 µl
EHS3300-C24-1.5	1.5 mm thick, 24 sample	16 µl

Microtiter Combs

Code	Description	Sample volume
EHS3300-CMT9-1.0	1 mm thick, 9 sample MC	16 µl
EHS3300-CMT12-1.0	1 mm thick, 12 sample MC	6 µl
EHS3300-CMT25-1.0	1 mm thick, 25 sample MC	6 µl
EHS3300-CMT9-1.5	1.5 mm thick, 9 sample MC	24 µl
EHS3300-CMT12-1.5	1.5 mm thick, 12 sample MC	9 µl
EHS3300-CMT25-1.5	1.5 mm thick, 25 sample MC	6 µl

Replacement parts & Accessories

Code	Description
EHS3300-TRAY	Gasketed UVT gel tray 12x14 cm
EHS3300-GASKET	Replacement gasket (set of 2)
EHS3300-CAST	Multiple Casting Chamber (holds 3 UVT trays)
EHS3300-CAST3T	Multiple Casting Chamber including 3 UVT trays 7x8 cm

Gel dimensions	15x15cm
Buffer volume	1020ml
Gel volume (at 0.5cm)	112ml
Sample Capacity	160
Comb Slots	6
Equidistant sample runs	1, 2, 3 or 4
Unit Dimensions	21x26x9.5 cm
Running condition	120V at 5V/cm
UV transmissible gel tray	
ExpressCast	
Warranty	36 months

Recommended power supply
EV2650
EV2310



● Description

The EHS3400 ExpressCast™ system is an ideal midi-gel unit for moderate thru-put sample analysis. This system features the ExpressCast gel casting system for quick, tape-free gel casting.

Features

ExpressCast™ gel casting technology.

Heavy duty lower buffer chamber and Interlock safety lid with attached leads.

Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.

UV transmissible gel tray built-in fluorescent ruler and 6 comb slots.

Safety cover with attached retractable-sheathed power cords.

Wide range of combs and accessories available.

● Ordering codes

Complete System

Code	Description
EHS3400-SYS	Wide horizontal unit UVT gel tray 15x15 cm , end gates 2 combs: 17 sample, 1.5mm 2 combs: 34 sample, 1.5mm

Combs

Code	Description	Sample volume
EHS3400-C10-1.0	1 mm thick, 10 sample	25 µl
EHS3400-C20-1.0	1 mm thick, 20 sample	20 µl
EHS3400-C40-1.0	1 mm thick, 40 sample	14 µl
EHS3400-C10-1.5	1.5 mm thick, 10 sample	38 µl
EHS3400-C20-1.5	1.5 mm thick, 20 sample	31 µl
EHS3400-C40-1.5	1.5 mm thick, 40 sample	22 µl

Microtiter Combs

Code	Description	Sample volume
EHS3400-CMT17-1.0	1 mm thick, 17 sample MC	16 µl
EHS3400-CMT34-1.0	1 mm thick, 34 sample MC	6 µl
EHS3400-CMT17-1.5	1.5 mm thick, 17 sample MC	24 µl
EHS3400-CMT34-1.5	1.5 mm thick, 34 sample MC	9 µl

Replacement parts & Accessories

Code	Description
EHS3400-TRAY	UVT gel tray, 15x15 cm, with gasketed end gates
EHS3400-DAM	Casting Dam for 15cm Wide Gel Trays
EHS3400-GATE	End Gates, includes gasket (set of 2)
EHS3400-GASKET	Replacement Gasket (set of 2)

Gel dimensions	15x25cm
Buffer volume	1850ml
Gel volume (at 0.5cm)	188ml
Sample Capacity	112
Comb Slots	6
Equidistant sample runs	1, 2, 3 or 4
Run lengths	5.5, 7.5, 11.4 and 23,2 cm
Unit Dimensions	23.5x37.5x10.5 cm
Running condition	170V at 5V/cm
UV transmissible gel tray	
ExpressCast	
Warranty	36 months

Recommended power supply
EV2650
EV2310



● Description

The EHS3410 is a long run length mini-gel system. With a maximum run length of 25cm, the unit can provide high resolution of complex analytes. The EHS3410 features the ExpressCast gel casting system for quick, tape-free gel casting. The unit is manufactured with a levelling base that includes a built-in level and 3-point levelling using nylon screws for convenient level adjustment.

Features:

ExpressCast™ gel casting technology.

Heavy duty lower buffer chamber and Interlock safety lid with attached leads.

Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.

UV transmissible gel tray with 6 comb slots.

Safety cover with attached retractable-sheathed power cords.

Wide range of combs and accessories available.

● Ordering codes

Complete System

Code	Description
EHS3410-SYS	Long horizontal unit UVT gel tray 15x25 cm , end gates 2 combs: 17 sample, 1.5mm 2 combs: 34 sample, 1.5mm

Combs

Code	Description	Sample volume
EHS3400-C10-1.0	1 mm thick, 10 sample	25 µl
EHS3400-C20-1.0	1 mm thick, 20 sample	20 µl
EHS3400-C40-1.0	1 mm thick, 40 sample	14 µl
EHS3400-C10-1.5	1.5 mm thick, 10 sample	38 µl
EHS3400-C20-1.5	1.5 mm thick, 20 sample	31 µl
EHS3400-C40-1.5	1.5 mm thick, 40 sample	22 µl

Microtiter Combs

Code	Description	Sample volume
EHS3400-CMT17-1.0	1 mm thick, 17 sample MC	16 µl
EHS3400-CMT34-1.0	1 mm thick, 34 sample MC	6 µl
EHS3400-CMT17-1.5	1.5 mm thick, 17 sample MC	24 µl
EHS3400-CMT34-1.5	1.5 mm thick, 34 sample MC	9 µl

Replacement parts & Accessories

Code	Description
EHS3400-TRAY	UVT gel tray, 15x15 cm, with gasketed end gates
EHS3410-TRAY20	UVT gel tray, 15x20 cm, with gasketed end gates
EHS3410-TRAY25	UVT gel tray, 15x25 cm , with gasketed end gates
EHS3400-DAM	Casting Dam for 15cm Wide Gel Trays
EHS3400-GATE	End Gates, includes gasket (set of 2)
EHS3400-GASKET	Replacement Gasket (set of 2)

Gel dimensions	20x25cm
Buffer volume	1850ml
Gel volume (at 0.5cm)	250ml
Sample Capacity	168
Comb Slots	6
Equidistant sample runs	1, 2, 3 or 4
Run lengths	5.5, 7.5, 11.4 and 23,2 cm
Unit Dimensions	29x37.5x10.5 cm
Running condition	170V at 5V/cm
UV transmissible gel tray	
ExpressCast	
Warranty	36 months
Recommended power supply	
EV2650	
EV3150	



● Description

The EHS3500 can accommodate a large range of sample and run length combinations for the ultimate in versatility. The unit is manufactured with a levelling base that includes a built-in level and 3-point levelling using nylon screws for convenient level adjustment.

Features

- ExpressCast™ gel casting technology.
- Heavy duty lower buffer chamber and Interlock safety lid with attached leads.
- Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.
- UV transmissible gel tray with 6 comb slots.
- Safety cover with attached retractable-sheathed power cords.

● Ordering codes

Complete System

Code	Description
EHS3500-SYS	Wide long horizontal unit UVT gel tray 20x25 cm, end gates levelling screws, bubble level 1 comb: 16 sample, 1.5mm 1 comb: 24 sample, 1.5mm 1 comb: 36 sample, 1.5mm

Combs

Code	Description	Sample volume
EHS3500-C8-1.0	1 mm thick, 8 sample	25 µl
EHS3500-C12-1.0	1 mm thick, 12 sample	20 µl
EHS3500-C16-1.0	1 mm thick, 16 sample	14 µl
EHS3500-C20-1.0	1 mm thick, 20 sample	38 µl
EHS3500-C24-1.0	1 mm thick, 24 sample	31 µl
EHS3500-C28-1.0	1 mm thick, 28 sample	22 µl
EHS3500-C32-1.0	1 mm thick, 32 sample	22 µl
EHS3500-C36-1.0	1 mm thick, 36 sample	22 µl
EHS3500-C8-1.5	1.5 mm thick, 8 sample	25 µl
EHS3500-C12-1.5	1.5 mm thick, 12 sample	20 µl
EHS3500-C16-1.5	1.5 mm thick, 16 sample	14 µl
EHS3500-C20-1.5	1.5 mm thick, 20 sample	38 µl
EHS3500-C24-1.5	1.5 mm thick, 24 sample	31 µl
EHS3500-C28-1.5	1.5 mm thick, 28 sample	22 µl
EHS3500-C32-1.5	1.5 mm thick, 32 sample	22 µl
EHS3500-C36-1.5	1.5 mm thick, 36 sample	22 µl

Microtiter Combs

Code	Description	Sample volume
EHS3500-CMT18-1.0	1 mm thick, 18 sample MC	16 µl
EHS3500-CMT21-1.0	1 mm thick, 21 sample MC	6 µl
EHS3500-CMT42-1.0	1 mm thick, 42 sample MC	6 µl
EHS3500-CMT18-1.5	1.5 mm thick, 18 sample MC	24 µl
EHS3500-CMT21-1.5	1.5 mm thick, 21 sample MC	9 µl
EHS3500-CMT42-1.5	1.5 mm thick, 42 sample MC	9 µl

Replacement parts & Accessories

Code	Description
EHS3500-TRAY	UVT gel tray, 20x25 cm, with gasketed end gates
EHS3500-DAM	Casting Dam for 20cm Wide Gel Trays
EHS3500-GATE	End Gates, includes gasket (set of 2)
EHS3500-GASKET	Replacement Gasket (set of 2)

Gel dimensions	23.5x14cm
Buffer volume	1700
Gel volume (at 0.5cm)	161ml
Sample Capacity	200
Comb Slots	4
Unit Dimensions	32x26x10.5 cm
Running condition	120V at 5V/cm
UV transmissible gel tray	
ExpressCast	
Warranty	36 months

Recommended power supply
EV2650
EV3150



● Description

The EHS3500 is our “double-wide” midi gel unit. Ideal for quick analysis of larger quantities of samples. The unit is manufactured with a levelling base that includes a built-in level and 3-point levelling using nylon screws for convenient level adjustment.

Features

ExpressCast™ gel casting technology.

Heavy duty lower buffer chamber and Interlock safety lid with attached leads.

Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.

UV transmissible gel tray and 4 comb slots.

Safety cover with attached retractable-sheathed power cords.

● Ordering codes

Complete System

Code	Description
EHS3600-SYS	Wide horizontal unit UVT gel tray 23.5x14 cm, end gates levelling screws, bubble level 4 combs: 50 sample, 1.5mm

Microtiter Combs

Code	Description	Sample volume
EHS3600-CMT25-1.0	1 mm thick, 25 sample MC	16 µl
EHS3600-CMT26-1.0	1 mm thick, 26 sample MC	6 µl
EHS3600-CMT40-1.0	1 mm thick, 50 sample MC	6 µl
EHS3600-CMT25-1.5	1.5 mm thick, 25 sample MC	24 µl
EHS3600-CMT26-1.5	1.5 mm thick, 26 sample MC	9 µl
EHS3600-CMT50-1.5	1.5 mm thick, 50 sample MC	9 µl

Replacement parts & Accessories

Code	Description
EHS3600-TRAY	UVT gel tray, 23.5x14 cm, with gasketed end gates
EHS3600-DAM	Casting Dam for 20cm Wide Gel Trays
EHS3600-GATE	End Gates, includes gasket (set of 2)
EHS3600-GASKET	Replacement Gasket (set of 2)

Gel dimensions	23.5x25cm 23.5x14cm
Buffer volume	1700
Gel volume (at 0.5cm)	161ml
Sample Capacity	500
Comb Slots	14
Equidistant sample runs	1, 2, 3, 4, 5 or 10
Run lengths	2, 4.4, 5.5, 7.5, 11.4 & 23,2 cm
Unit Dimensions	32x26x10.5 cm
Running condition	170V at 5V/cm
UV transmissible gel tray	
ExpressCast	
Automatic Buffer Recirculation (EHS3660 only)	
Warranty	36 months

Recommended power supply
EV2650
EV3150



EHS3660-SYS

● Description

The EHS3610 and EHS3660 system is capable of processing large numbers of samples quickly and efficiently. Two unit configurations are available including the new EHS3660 which includes integrated automatic buffer recirculation for improved performance. The unit is manufactured with a levelling base that includes a built-in level and 3-point levelling using nylon screws for convenient level adjustment.

Features

ExpressCast™ gel casting technology.
Heavy duty lower buffer chamber and Interlock safety lid with attached leads.
Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.
UV transmissible gel tray with 14 comb slots.
Safety cover with attached retractable-sheathed power cords.

● Ordering codes

Complete System

Code	Description
EHS3610-SYS	Maxi horizontal unit UVT gel tray 23x25 cm, end gates levelling screws, bubble level 2 combs: 25 sample, 1.5mm 2 combs: 50 sample. 1.5mm
EHS3660-SYS	Maxi horizontal unit UVT gel tray 23x25 cm, end gates levelling screws, bubble level 2 combs: 25 sample, 1.5mm 2 combs: 50 sample. 1.5mm

Microtiter Combs

Code	Description	Sample volume
EHS3600-CMT25-1.0	1 mm thick, 25 sample MC	16 µl
EHS3600-CMT26-1.0	1 mm thick, 26 sample MC	6 µl
EHS3600-CMT40-1.0	1 mm thick, 50 sample MC	6 µl
EHS3600-CMT25-1.5	1.5 mm thick, 25 sample MC	24 µl
EHS3600-CMT26-1.5	1.5 mm thick, 26 sample MC	9 µl
EHS3600-CMT50-1.5	1.5 mm thick, 50 sample MC	9 µl

Replacement parts & Accessories

Code	Description
EHS3600-TRAY	UVT gel tray, 23.5x14 cm, with gasketed end gates
EHS3610-TRAY	UVT gel tray, 23.5x25 cm, with gasketed end gates
EHS3600-DAM	Casting Dam for 20cm Wide Gel Trays
EHS3600-GATE	End Gates, includes gasket (set of 2)
EHS3600-GASKET	Replacement Gasket (set of 2)



EHS3610-SYS

Gel dimensions	23.5x40cm 23.5x25cm 23.5x14cm
Buffer volume	1700
Gel volume (at 0.5cm)	161ml
Sample Capacity	600
Comb Slots	12
Equidistant sample runs	1, 2, 3, 4, 6 or 12
Run lengths	3, 6.3, 8.9, 12.9, 19.5 & 35 cm
Unit Dimensions	32x26x10.5 cm
Running condition	120V at 5V/cm
UV transmissible gel tray	
ExpressCast	
Buffer recirculation ports	
Warranty	36 months

Recommended power supply
EV2650, EV3150



● Description

The EHS3620 can handle both very large numbers of samples, and long runs as well, providing both high resolution and high through-put. The EHS3620 device includes buffer recirculation ports for connection to external buffer recirculation devices, and features Galileo's ExpressCast™ casting system for in-tray tapeless casting. The unit is manufactured with a levelling base that includes a built-in level and 3-point levelling using nylon screws for convenient level adjustment.

Features

ExpressCast™ gel casting technology.

Heavy duty lower buffer chamber and Interlock safety lid with attached leads.

Buffer chamber with color coded, sealed platinum electrodes and non-slip rubber feet.

UV transmissible gel tray with 12 comb slots.

Safety cover with attached retractable-sheathed power cords.

Wide range of combs and accessories available.

● Ordering codes

Complete System

Code	Description
EHS3620-SYS	Wide horizontal unit UVT gel tray 23x40 cm, end gates levelling screws, bubble level 2 combs: 25 sample, 1.5mm 2 combs: 50 sample, 1.5mm

Microtiter Combs

Code	Description	Sample volume
EHS3600-CMT25-1.0	1 mm thick, 25 sample MC	16 µl
EHS3600-CMT26-1.0	1 mm thick, 26 sample MC	6 µl
EHS3600-CMT40-1.0	1 mm thick, 50 sample MC	6 µl
EHS3600-CMT25-1.5	1.5 mm thick, 25 sample MC	24 µl
EHS3600-CMT26-1.5	1.5 mm thick, 26 sample MC	9 µl
EHS3600-CMT50-1.5	1.5 mm thick, 50 sample MC	9 µl

Replacement parts & Accessories

Code	Description
EHS3600-TRAY	UVT gel tray, 23.5x14 cm, with gasketed end gates
EHS3610-TRAY	UVT gel tray, 23.5x25 cm, with gasketed end gates
EHS3620-TRAY	UVT gel tray, 23.5x40 cm, with gasketed end gates
EHS3600-DAM	Casting Dam for 20cm Wide Gel Trays
EHS3600-GATE	End Gates, includes gasket (set of 2)
EHS3600-GASKET	Replacement Gasket (set of 2)

About Horizontal Electrophoresis

Gel concentration

The range of fragment sizes to be separated will determine the choice of agarose concentration for a gel. Typical agarose concentration is 0.5% to 3.0%. For large DNA fragments low-percentage gels are required, while for small DNA fragments, high-percentage gels are recommended. Weak gels (0.5% agarose) should be electrophoresed at low temperatures (e.g. -4°C). Agarose gels of 0.75% to 1.0%, for routine electrophoresis, are recommended for a wide range of separations (0.15 to 15 kb). 2...4% agarose gels are usually selected for PCR fragment resolution. If the gel has to be subsequently photographed, thin gels (2 to 3 mm) with low-percentage agarose are better than thick or high-percentage gels. The latter produce increased opacity and autofluorescence.

Electrophoresis buffer

TAE buffer provides optimal resolution of fragments >4 kb in length, while for 0.1 to 3 kb fragments, TBE buffer should be selected. TBE has both a higher buffering capacity and lower conductivity than TAE and therefore should be used for high-voltage electrophoresis. Additionally, TBE buffer generates less heat than TAE at an equivalent voltage and does not allow a significant pH drift. Note: because of its lower buffering capacity, TAE should be circulated or mixed from time to time for full-length electrophoresis, especially at higher voltages.

Temperature influence

Electrophoresis at high voltages produces heat. Additionally, high-conductivity buffers such as TAE generate more heat than low-conductivity buffers. Care should be taken in agarose gel electrophoresis with voltages greater than 175 V, as heat build up can generate gel artifacts such as S-shaped migration fronts, and in extended electrophoresis runs, can even melt the agarose gel. With high voltage electrophoresis, the use of low-melting-point agarose gels should be avoided.

RNA mobility

Either before or during electrophoresis, RNA should be denatured. For example, RNA fragments which have denatured with glyoxal and dimethyl sulphoxide can be separated on neutral agarose gels, or RNA can be fractionated on agarose gels containing methylmercuric hydroxide or formaldehyde. RNA samples usually require longer runs or buffers that are easily depleted, so it is necessary to circulate the buffer. Northern analyses should not normally be run on a mini gel tank.

Separation performance

Gel concentration, running buffer, voltage, temperature, conformation, and the presence of ethidium bromide all affect separation results. To establish progress of double-stranded DNA, ethidium bromide (0.5 $\mu\text{g}/\text{ml}$) is often added to running buffer. The dye's fluorescence properties allows the band to be visualised under a UV lamp. However, ethidium bromide may slow the DNA migration rate by approx. 15%. As an alternative, after electrophoresis, the gel may be stained in an ethidium bromide solution (0.5 $\mu\text{g}/\text{ml}$ H₂O) for 15 to 60 minutes and then viewed or photographed on a UV trans-illuminator.

Enhancing resolution

2 x TAE buffer can be used in units with low buffer volume to enhance resolution during extended runs.

EHS1000 series



Horizontal units



● Overview

Low cost

Injection moulded construction

Durable, leak-proof environment for complete safety and long life

Cassette type electrodes

Inexpensive, easy to replace. Made of 99.99% corrosion resistant, pure platinum.

Multiple gel trays

Gel size and sample number requirements can be exactly matched in each unit, with the option of additional gel tray sizes.

This eliminates the need for multiple gel tanks for changes in gel size or application. With no indentations or casting gate grooves in the tray to interfere with sample progression, traditional tape casting can be used, should this be preferred.

Easy to use

Leak proof "Plug and Go" casting dams allow gels to be rapidly cast externally while the tank remains in use for electrophoresis.

Gel dimensions	10x 8 cm
Buffer volume	50ml
Sample Capacity	40
Unit Dimensions	15x15x4 cm

Recommended power supply
EV2650



● Description

The mini rapid horizontal unit is a completely self contained system designed for quick checks of samples. Gel casting, running and analysis are all performed in the same ultra compact unit.

Buffer and gel volumes have been kept to a minimum and the parallel electrode arrangement allows ultra efficient current transfer, enabling resolution to be completed within 30 minutes.

The UV transparent base allows direct viewing on a UV Transilluminator with no need for time consuming transfer and potential gel damage.

Dual comb slots allow the loading of up to 40 samples per gel while multichannel pipette compatible combs further enhance the speed and convenience.

Complete System

Code	Description
EHS1050-SYS	Mini rapid unit dams 2 combs: 8 sample, 1.5mm

Combs

Code	Description	Sample volume
EHS1050-C16-1.0	1 mm thick, 16 sample	15 µl

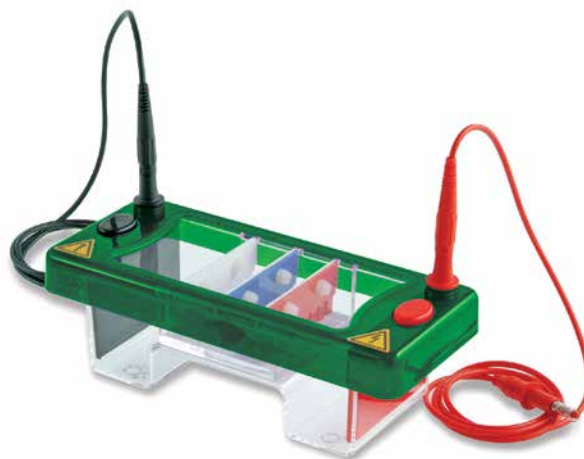
Replacement parts & Accessories

Code	Description
EHS1050-GATE	Casting dams (pk/2)

Gel dimensions	7x7cm 7x10 cm
Buffer volume	225ml
Sample Capacity	64
Unit Dimensions	21x9x9 cm
Warranty	12 months

Recommended power supply
EV2650
EV2310

EHS1100 is the smallest unit in the range, designed for low to medium numbers of samples. The small gel size maximises run economy but does not compromise versatility. This compact unit is capable of resolving up to 64 different samples.



Complete System

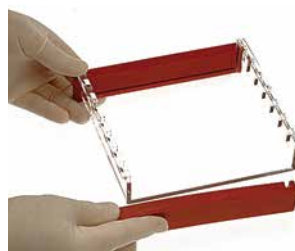
Code	Description
EHS1100-SYS	Mini horizontal unit, 7x7 cm casting tray, 7x10 cm casting tray loading guides, dams 2 combs: 8 sample, 1mm
EHS1101-SYS	Mini horizontal unit, 7x7 cm casting tray loading guides, dams 2 combs: 8 sample, 1 mm
EHS1102-SYS	Mini horizontal unit, 7x10 cm casting tray loading guides, dams 2 combs: 8 sample, 1 mm

Combs

Code	Description	Sample volume
EHS1100-C8-1.0	1 mm thick, 8 sample	25 µl
EHS1100-C10-1.0	1 mm thick, 10 sample	18 µl
EHS1100-C16-1.0	1 mm thick, 16 sample	10 µl
EHS1100-C8-1.5	1.5 mm thick, 8 sample	37 µl
EHS1100-C10-1.5	1.5 mm thick, 10 sample	27 µl
EHS1100-C16-1.5	1.5 mm thick, 16 sample	14 µl

Replacement parts & Accessories

Code	Description
EHS1100-TRAY7	Gel casting tray, 7x7 cm
EHS1100-TRAY10	Gel casting tray, 7x10 cm
EHS1100-GATE	Casting dams, pk/2
EHS1100-POS	Positive electrode cassette (red)
EHS1100-NEG	Negative electrode cassette (black)
EHS1100-LG	Adhesive loading guides
EHS1100-BUFSAVE	Buffer saving blocks, pk/2 (saves 100 ml of buffer)
EHS1100-COOL	Cool-pack and platform
EHS1100-SCOOP	Gel scoop, 7 cm



Casting dams allow gels to be rapidly cast externally while the unit is in use for gel running¹

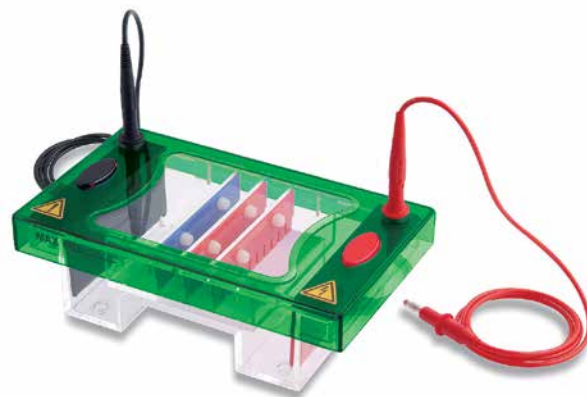
Gel dimensions	10x7cm 10x10 cm
Buffer volume	300ml
Sample Capacity	100
Unit Dimensions	22x12.5x9 cm
Warranty	12 months

Recommended power supply

EV2650

EV2310

EHS1200 allows more samples to be resolved per gel without a significant increase in buffer or gel volumes. 100 samples per gel can be resolved making this unit ideal for those routinely checking medium numbers of samples over short to medium gel run lengths.



● Ordering codes

Code	Description
EHS1200-SYS	Midi horizontal unit, 10x7 cm casting tray, 10x10 cm casting tray loading guides, dams 2 combs: 16 sample, 1 mm
EHS1201-SYS	Midi horizontal unit, 10x7 cm casting tray loading guides, dams 2 combs: 16 sample, 1 mm
EHS1202-SYS	Midi horizontal unit, 10x10 cm casting tray loading guides, dams 2 combs: 16 sample, 1 mm

Combs

Code	Description	Sample volume
EHS1200-C8-1.0	1 mm thick, 8 sample	41 µl
EHS1200-C12-1.0	1 mm thick, 12 sample	23 µl
EHS1200-C16-1.0	1 mm thick, 16 sample	16 µl
EHS1200-C25-1.0	1 mm thick, 25 sample	10 µl
EHS1200-C8-1.5	1.5 mm thick, 8 sample	61 µl
EHS1200-C12-1.5	1.5 mm thick, 12 sample	34 µl
EHS1200-C16-1.5	1.5 mm thick, 16 sample	24 µl
EHS1200-C25-1.5	1.5 mm thick, 25 sample	15 µl

Replacement parts & Accessories

Code	Description
EHS1200-TRAY7	Gel casting tray, 10x7 cm
EHS1200-TRAY10	Gel casting tray, 10x10 cm
EHS1200-GATE	Casting dams, pk/2
EHS1200-POS	Positive electrode cassette (red)
EHS1200-NEG	Negative electrode cassette (black)
EHS1200-LG	Adhesive loading guides
EHS1200-BUFSAVE	Buffer saving blocks, pk/2 (saves 100 ml of buffer)
EHS1200-COOL	Cool-pack and platform
EHS1200-SCOOP	Gel scoop, 10 cm



Loading guides allow easy well identification and sample loading

Gel dimensions	15x7cm 15x10 cm 15x15 cm
Buffer volume	500ml
Sample Capacity	210
Unit Dimensions	26.5x17.5x9 cm
Warranty	12 months

Recommended power supply

EV2650

EV2310

EHS1300 offers a wide degree of versatility with three tray options. Up to 210 samples to be resolved per gel. The 15 cm total run length allows restriction fragment or other close MW sample bands to be easily separated and identified.



● Ordering codes

Code	Description
EHS1300-SYS	Midi-plus horizontal unit, 15x7 casting trays, 15x10 casting trays, 15x15 cm gel casting trays loading guides, dams, 2 combs: 20 sample, 1 mm thick
EHS1301-SYS	Midi-plus horizontal unit, 15x7 cm casting tray loading guides, dams, 2 combs: 20 sample, 1 mm thick
EHS1302-SYS	Midi-plus horizontal unit, 15x10 cm casting tray loading guides, dams, 2 combs: 20 sample, 1 mm thick
EHS1303-SYS	Midi-plus horizontal unit, 15x15 cm casting tray loading guides, dams, 2 combs: 20 sample, 1 mm thick

Combs

Code	Description	Sample volume
EHS1300-C10-1.0	1 mm thick, 10 sample	45 µl
EHS1300-C12-1.0	1 mm thick, 12 sample	41 µl
EHS1300-C20-1.0	1 mm thick, 20 sample	21 µl
EHS1300-C35-1.0	1 mm thick, 35 sample	10 µl
EHS1300-C10-1.5	1.5 mm thick, 10 sample	68 µl
EHS1300-C12-1.5	1.5 mm thick, 12 sample	61 µl
EHS1300-C20-1.5	1.5 mm thick, 20 sample	32 µl
EHS1300-C35-1.5	1.5 mm thick, 35 sample	15 µl

Replacement parts & Accessories

Code	Description
EHS1300-TRAY7	Gel casting tray, 15x7 cm
EHS1300-TRAY10	Gel casting tray, 15x10 cm
EHS1300-TRAY15	Gel casting tray, 15x15 cm
EHS1300-GATE	Casting dams, pk/2
EHS1300-POS	Positive electrode cassette (red)
EHS1300-NEG	Negative electrode cassette (black)
EHS1300-LG	Adhesive loading guides
EHS1300-BUFSAVE	Buffer saving blocks, pk/2 (saves 190 ml of buffer)
EHS1300-COOL	Cool-pack and platform
EHS1300-SCOOP	Gel scoop, 15 cm

Gel dimensions	20x10cm 20x20 cm 20x25 cm
Buffer volume	1200ml
Sample Capacity	550
Unit Dimensions	39.5x23x9 cm
Warranty	12 months

Recommended power supply
EV2310
EV2650

EHS1400 is primarily designed for resolution of high numbers of samples such as from cloning or PCR. It allows ultra high-resolution separations over extended runs. Tray sizes correspond to standard blotter sizes. Multichannel pipette compatible combs facilitate speed loading of up to 550 samples per gel.



● Ordering codes

Code	Description
EHS1400-SYS	Maxi horizontal unit, 20x10 gel casting tray, 20x20 cm casting trays loading guides, dams, 2 combs: 20 sample, 1 mm thick
EHS1401-SYS	Maxi horizontal unit + 20x10 cm casting tray loading guides, dams, 2 combs: 20 sample, 1 mm thick
EHS1402-SYS	Maxi horizontal unit + 20x20 cm casting tray loading guides, dams, 2 combs: 20 sample, 1 mm thick
EHS1403-SYS	Maxi Horizontal unit + 20x25 cm casting tray loading guides, dams, 2 combs: 20 sample, 1 mm thick

Combs

Code	Description	Sample volume
EHS1400-C10-1.0	1 mm thick, 10 sample	72 µl
EHS1400-C16-1.0	1 mm thick, 16 sample	41 µl
EHS1400-C25-1.0	1 mm thick, 25 sample	21 µl
EHS1400-C30-1.0	1 mm thick, 30 sample	17 µl
EHS1400-C36-1.0	1 mm thick, 36 sample	14 µl
EHS1400-C50-1.0	1 mm thick, 50 sample	10 µl
EHS1400-C10-1.5	1.5 mm thick, 10 sample	108 µl
EHS1400-C16-1.5	1.5 mm thick, 16 sample	61 µl
EHS1400-C25-1.5	1.5 mm thick, 25 sample	32 µl
EHS1400-C30-1.5	1.5 mm thick, 30 sample	26 µl
EHS1400-C36-1.5	1.5 mm thick, 36 sample	22 µl
EHS1400-C50-1.5	1.5 mm thick, 50 sample	16 µl

Replacement parts & Accessories

Code	Description
EHS1400-TRAY10	Gel casting tray, 20x10 cm
EHS1400-TRAY20	Gel casting tray, 20x20 cm
EHS1400-TRAY25	Gel casting tray, 20x25 cm
EHS1400-GATE	Casting dams, pk/2
EHS1400-POS	Positive electrode cassette (red)
EHS1400-NEG	Negative electrode cassette (black)
EHS1400-LG	Adhesive loading guides
EHS1400-BUFSAVE	Buffer saving blocks, pk/2 (saves 450 ml of buffer)
EHS1400-COOL	Cool-pack and platform
EHS1400-SCOOP	Gel scoop, 20 cm

Gel dimensions	26x16 cm 26x24 cm 26x32 cm
Buffer volume	1400 ml
Sample Capacity	672
Unit Dimensions	50x28x9 cm
Warranty	12 months

Recommended power supply

EV2650

EV3150

Designed for rapid screening of very large numbers of clonal or PCR samples, EHS1500 has a 672 maximum sample capacity per gel. This allows loading and analysis of seven 96 well format micro titre plates.

The large gel run length allows resolution of samples over a long distance for separation of complex sample bands. Buffer recirculation ports are included as standard to allow enhanced resolution over extended runs.



● Ordering codes

Code	Description
EHS1500-SYS	Maxi-plus horizontal unit, 26x16 casting trays, 26x24 casting trays, 26x32 cm casting trays loading guides, dams, 6 combs: 28 sample, 1 mm thick
EHS1501-SYS	Maxi-plus horizontal unit, 26x16 cm gel casting tray loading guides, dams, 6 combs: 28 sample, 1 mm thick
EHS1502-SYS	Maxi-plus horizontal unit + 26x24 cm gel casting tray loading guides, dams, 6 combs: 28 sample, 1 mm thick
EHS1503-SYS	Maxi-plus horizontal unit + 26x32 cm gel casting tray loading guides, dams, 6 combs: 28 sample, 1 mm thick

Microtiter Combs

Code	Description	
EHS1500-CMT28-1.0	1 mm thick, 28 sample MC	34 µl
EHS1500-CMT56-1.0	1 mm thick, 56 sample MC	14 µl
EHS1500-CMT28-1.5	1.5 mm thick, 28 sample MC	51 µl
EHS1500-CMT56-1.5	1.5 mm thick, 56 sample MC	20 µl

Replacement parts & Accessories

Code	Description
EHS1500-TRAY16	Gel casting tray, 26x16 cm
EHS1500-TRAY24	Gel casting tray, 26x24 cm
EHS1500-TRAY32	Gel casting tray, 26x32 cm
EHS1500-TAPE	Gel tray sealing tape, 65 m x 25.4 mm
EHS1500-POS	Positive electrode cassette (red)
EHS1500-NEG	Negative electrode cassette (black)
EHS1500-LG	Adhesive loading guides
EHS1500-BUFSAVE	Buffer saving blocks, pk/2 (saves 625 ml of buffer)
EHS1500-COOL	Cool-pack and platform
EHS1500-SCOOP	Gel scoop, 26 cm