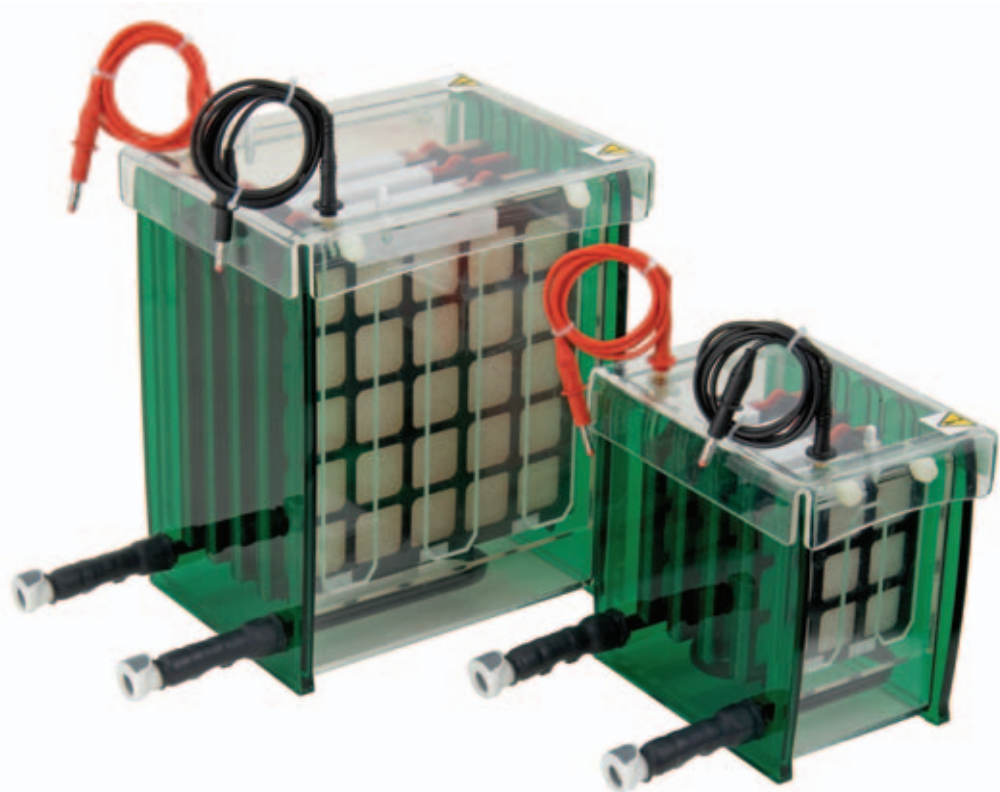


Blotting Units

Blotting Units

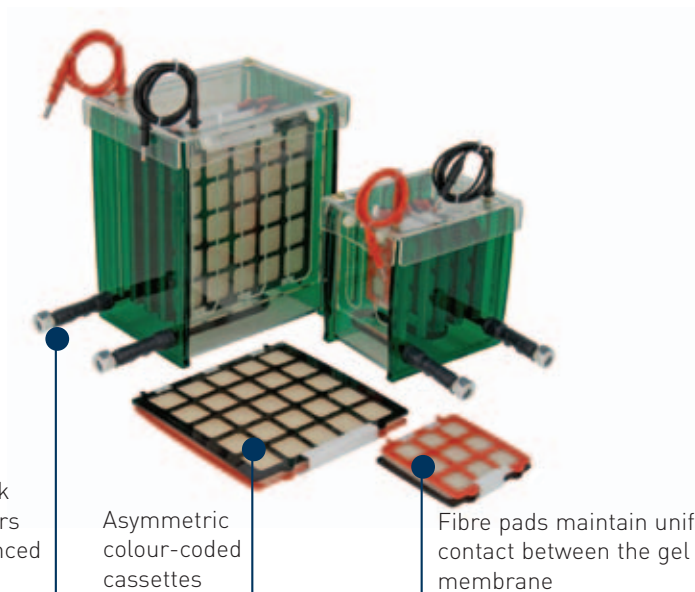
BENEFITS INCLUDE

- **Available in 2 different formats:** -
 - **TV100-EBK** - accommodates a maximum of four 10 x 10cm electroblotting cassettes
 - **TV400-EBK** - accommodates a maximum of four 20.5 x 20cm electroblotting cassettes
- **Asymmetric, colour-coded cassettes** - hinged, with red and black covers corresponding to the anode and the cathode, to ensure correct transfer
- **Fibre pads** - compress the gel against the nitrocellulose membrane for uniform transfer
- **Plate-electrodes** - 12.8cm apart - maximise the intensity of the electric field, allowing rapid transfer within 4 to 6 hours
- **Enhanced cooling** - included as standard - snap-lock connectors allow the cooling coil within each unit to be connected to an external chiller units for faster, high-intensity transfers, or extended overnight runs without buffer depletion
- **Flat bottom** - allows each electroblotter to be placed directly onto a magnetic stirring plate
- **Blotting paper, membranes and chemicals also available see pages 117-124**



The TV100-EBK Mini and TV400-EBK Maxi Electroblotters

Recently redesigned to accommodate up to 4 electroblotting cassettes, the Scie-Plas TV100-EBK and TV400-EBK electroblotters provide a cost-effective and safe and easy to use system for the transfer of proteins and nucleic acids from 10 x 10cm mini and 20.5 x 20cm maxi gels. Both units are supplied with asymmetric colour-coded cassettes as a unique design feature to prevent them from being inserted into the tank in the wrong orientation, against the direction of transfer.

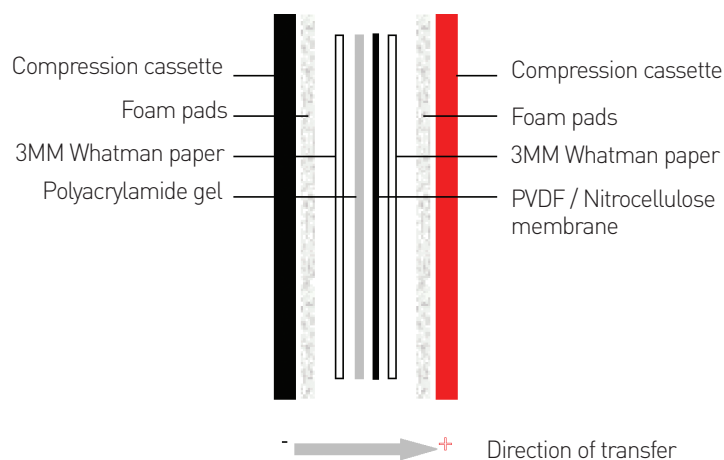


Snap-lock connectors for enhanced cooling

Asymmetric colour-coded cassettes

Fibre pads maintain uniform contact between the gel and the membrane

ELECTROBLOTTING CASSETTE ASSEMBLY



TECHNICAL SPECIFICATION

	TV100-EBK	TV400-EBK
Unit Dimensions (W x D x H)	20 x 22.5 x 18.5cm	19.5 x 32.5 x 28.5cm
Inner Tank Dimensions (W x D x H)	12.8 x 11 x 17cm	12.8 x 21 x 26cm
Maximum Sample Capacity	4 cassettes	4 cassettes
Recommended Buffer Volume	2000ml	6300ml
Recommended Running Conditions for Electroblotting	Voltage	50 - 100V
	Current	75mA [0.6-0.8mA/cm ²]
	Time	2-4h
Distance Between Plate Electrodes in EBGRM		12.8cm
		12.8cm
Electroblotting Cassette Dimensions (W x L)		11.5 x 10.5cm
		20.5 x 20cm
Active Transfer Area		71cm ²
		289cm ²
Snap-lock Connectors for Cooling Coil	Inner Diameter	10mm
	Outer Diameter	12mm
Quick-fit Tubing	Inner Diameter	10mm
	Outer Diameter	12mm
Power Output Connectors (diameter)	Shrouded, 4mm	
Recommended Power Supply	Consort EV243	

ORDERING INFORMATION

Complete System

Complete electroblotting system for four 10 x 10cm mini-gels, including 4 x electroblotting cassettes, 4 x fibre pads, cooled tank, lid and quick-fit tubing

Part No.

TV100-EBK

Complete electroblotting system for four 20.5 x 20cm maxi-gels, including 4 x electroblotting cassettes, 4 x fibre pads, cooled tank, lid and quick-fit tubing

TV400-EBK

Replacement Parts & Accessories

1 x (10 x 10cm) hinged, colour-coded cassette with fibre pads	TV100-EBC
4 x (10 x 10cm) fibre pads	EB-FPS
1 x (20.5 x 20cm) hinged, colour-coded cassette with fibre pads	TV400-EBC
4 x (20.5 x 20cm) fibre pads	EB-FPL
2 x quick-fit tubes for cooling coil	TCS-CC
2 x 0.2mm thick, platinum electrode wire	PT-0.2100CM
2 x 1 metre power leads with shrouded 4mm power output connectors	CABLE-4



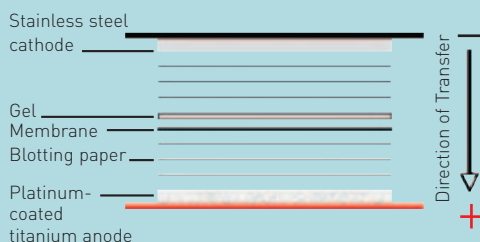
ELECTROPHORESIS CHEMICALS
SEE PAGES 117-123

DO YOU NEED...?

BLOTTING PAPER & MEMBRANES	SEE PAGE 124
TRANSFER BUFFER	SEE PAGE 124
A RECIRCULATING CHILLER	SEE PAGE 82
A POWER SUPPLY	SEE PAGES 91-92

BENEFITS INCLUDE

- **2 sizes available:** -
 - **V10-SDB** – 10 x 10cm format - accommodates one 10 x 10cm mini-gel
 - **V20-SDB** – 20 x 20cm format - accommodates up to four 10 x 10cm mini-gels or one 20 x 20cm maxi-gel
- **Gels can be stacked** – for higher throughput blotting
- **Rapid transfer assured within 1 hour** – for lower molecular weight proteins and nucleic acids; larger molecules transferred in 2 hours
- **Semi-dry format** – minimises buffer consumption, with no need for mess and additional accessories
- **Colour-coded, corrosion-free plate electrodes** – platinum-coated titanium anode and stainless steel cathode maximise the transfer area, so that full electrical contact is made between the gel and the membrane, while corrosion-resistant metal prolongs lifespan and durability
- **Blotting paper, membranes and chemicals also available** – see page 124



Semi-dry blotting with Scie-Plas V10-SDB and V20-SDB units

Three sheets of blotting paper, saturated with transfer buffer, are first superimposed over the anode plate, followed by the membrane, the gel and a further 3 sheets of blotting paper. The cathode plate is then placed over the blotting sandwich and the current applied at 0.8mAcm^{-2} for 1 to 2 hours.



The V10-SDB and V20-SDB Semi-Dry Blotters

The V10-SDB 10 x 10cm and V20-SDB 20 x 20cm semi-dry blotters are ideal for fast transfer of proteins and nucleic acids without the need for costly accessories such as gel cassettes and tanks. Corrosion-free platinum-coated titanium and stainless steel plate electrodes, corresponding to the anode and cathode, maximise the active area of transfer so that full electrical contact is made between the gel and the membrane, allowing transfer to be completed within an hour with the minimum of heat dissipation, buffer consumption and mess in the laboratory, normally associated with wet blotting techniques.

TECHNICAL SPECIFICATION

	V10-SDB	V20-SDB
Unit Dimensions (W x D x H)	17 x 7.5 x 17cm	27 x 7.5 x 27cm
Active Transfer Area (W x L)	10 x 10cm	20 x 20cm
Sample Throughput	One 10 x 10cm mini-gel	Four 10 x 10cm mini-gels; One 20 x 20cm maxi-gel
Recommended Current Setting	80mA / 0.8mAcm^{-2}	320mA / 0.8mAcm^{-2}
Power Output Connectors (diameter)	4mm	4mm
Recommended Power Supplies	EV243	EV265, 261 & 215

ORDERING INFORMATION

Complete System

10 x 10cm semi-dry blotter
20 x 20cm semi-dry blotter

Part No.

V10-SDB
V20-SDB



The CP-2826 Maxi Capillary Blotter

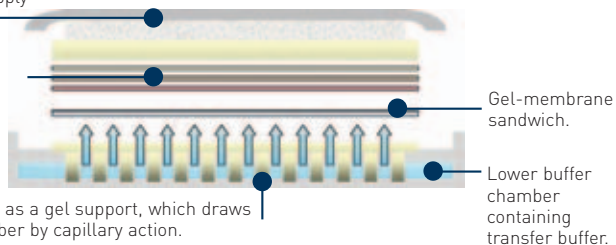
The CP-2826 maxi capillary blotter is ideal for the simultaneous Northern and Southern transfer of multiple gels. A novel design feature of a permanent wick set within the lower tank is optimised to draw up more buffer than traditional systems, eliminating the need for messy overhanging paper wicks and maximising transfer efficiency to less than 3 hours for nucleic acids

Floating lid maintains even pressure across the gel without the need to apply extra weight.

The gel-membrane sandwich is overlaid with additional materials in the following order:

1. blotting paper,
2. absorbent towel
- and 3. cardboard.

The porous polyethylene wick serves as a gel support, which draws transfer buffer from the lower chamber by capillary action.



Gel-membrane sandwich.

Lower buffer chamber containing transfer buffer.

Schematic Diagram of the Maxi Capillary Blotter

Once impregnated with buffer the porous polyethylene wick draws buffer through the gel by capillary action, evenly transferring nucleic acids onto the membrane regardless of their molecular weight. Any surrounding area of the wick not involved in transfer is masked with cellophane wrapping to prevent uneven transfer.

TECHNICAL SPECIFICATION

	CP-2826
Unit Dimensions (W x D x H)	41.5 x 29 x 10.5cm
Inner Tank Dimensions (W x D x H)	38.5 x 27 x 5cm
Active Transfer Area	728cm ²
Recommended Buffer Volume	500ml
Transfer Time for DNA/RNA from a 6mm, 0.8 to 1.2% Agarose Gel	2h

ORDERING INFORMATION

Complete System

Capillary blotting unit (28 x 26cm; W x L)

Part No.

CP-2826

BENEFITS INCLUDE

- **CP-2826** – 28 x 26cm wick - for simultaneous transfer of seven 10 x 10cm gels
- **Permanent wick** – serves as porous support for the gel, eliminating the problems associated with uneven transfer by allowing buffer to be drawn more efficiently from the lower tank, thus effecting nucleic acid transfer in <3 hours
- **Simple design** – guarantees fast and easy set up
- **Floating lid** – compresses the gel against the membrane for uniform transfer without the need to apply a weight, causing mechanical damage to the gel
- **Blotting paper, membranes and chemicals also available see pages 117-124**

Blotting Units

BENEFITS INCLUDE

- **Rapid transfer assured within minutes**
 - dot/slot microfiltration manifold allows unfractionated samples to be immobilised onto a membrane for immediate screening with nucleic acid probes or antibodies
- **Available in 3 different formats:**
 - **DHM-48** - for 5 x 12.8cm membranes - 48-sample throughput
 - **DHM-96** - for 7.5 x 11.3cm membranes - 96-sample throughput
 - **SHM-48** - for 5 x 12.8cm membranes - 48-sample throughput
- **Compatibility (DHM Only)** - with multi-channel pipettes and standard 96-well microtitre plates ensures fast loading of the manifold
- **Simple design** - based on the alignment of stainless steel thumbscrews and mating screws - guarantees fast and easy set up without the need for gaskets and 'O' rings
- **Dot/slot blot imaging and quantitation** - available on the Vision gel documentation system
- **Blotting paper, membranes and chemicals also available see pages 117-124**

DO YOU NEED...?

BLOTTING PAPER & MEMBRANES	SEE PAGE 124
A VACUUM PUMP	SEE PAGE 75
A THERMAL CYCLER	SEE PAGE 99
A UV STERILISATION CABINET	SEE PAGE 98



Dot and Slot Blot Microfiltration Manifolds

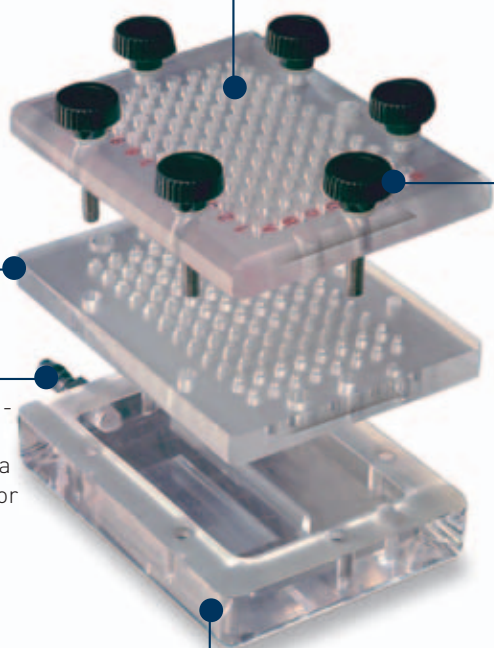
Available in alphanumeric 48 and 96 sample throughputs, Scie-Plas's dot and slot blot microfiltration manifolds provide an easy and reproducible means to hybridise proteins and nucleic acids in solution onto membranes. These manifolds, which are machined from high-density acrylic, have precision-lapped mating surfaces that ensure uniform filter/membrane contact without gaskets and 'O' rings. Manifold assembly is simple, being achieved by the alignment and tightening of stainless steel thumbscrews and mating screws, while filters can be cut down to the exact size of the template. Standard manifold configurations are available with the DHM-48 and -96 units providing 48 and 96 dots, 3mm in diameter, that are compatible with the configuration of 96-well microtitre plates. The SHM-48 units focus up to 48 samples into thin lines, less than 0.5 x 6mm in size, making densitometric quantitation more reproducible. Each hybridisation manifold requires a vacuum pump or water aspirator equivalent to 600mm Hg (0.8 Bar).

Upper manifold - allows sample to be loaded into each dot/slot

Template - allows membranes to be cut down to size

Vacuum Port - can be connected to a water aspirator or vacuum pump

Vacuum reservoir - serves as a collection chamber for filtrate



Stainless steel thumbscrews and precision-lapped mating surfaces - maintain vacuum transfer without sample smearing, cross contamination and leakage

TECHNICAL SPECIFICATION

	SHM-48	DHM-48	DHM-96
Unit Dimensions (W x D x H)	18.5 x 7.5 x 7cm	18.5 x 7.5 x 7cm	17 x 10.5 x 7cm
Maximum Sample Capacity	48	48	96
Dot Diameter	-	3mm	3mm
Slot Dimensions (W x L)	3 x 12mm	-	-
Sample Volume / Dot	-	100µl	100µl
Sample Volume / Slot	300µl	-	-
Minimum Membrane Size (W x L)	5 x 12.8cm	5 x 12.8cm	7.5 x 11.3cm
Vacuum Port External Diameter	7mm	7mm	7mm
Vacuum Port Internal Diameter	6mm	6mm	6mm
Maximum Operating Temperature	65°C	65°C	65°C
Working Pressure of Pump or Water Aspirator	600mm Hg (0.8 Bar)	600mm Hg (0.8 Bar)	600mm Hg (0.8 Bar)

ORDERING INFORMATION

Complete System

48-well Dot Blot Hybridisation Manifold in 3 x 16 array, comprising paired upper dot-forming modules for dots 3mm in diameter, and lower vacuum chamber module.

Part No.

DHM-48

96-well Dot Blot Hybridisation Manifold in 8 x 12 array, comprising paired upper dot-forming modules for dots 3mm in diameter, and lower vacuum chamber module.

DHM-96

48-well Slot Blot Hybridisation Manifold in 3 x 16 array, comprising paired upper slot-forming module for slots 0.5 x 6mm in size, and lower vacuum chamber module.

SHM-48