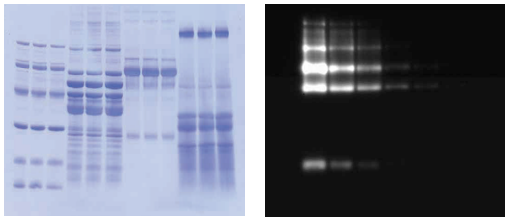
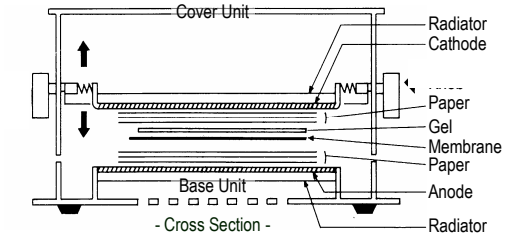
High Efficiency Semi-Dry Blotters
HorizBLOT AE-6687(S) & AE-6688(S)

- **High efficiency blotting of protein or nucleic acid from polyacrylamide or agarose gel**
- **AE-6687 : 9.5 × 19.5 cm gel accommodation**
  AE-6688 : 20 × 19.5 cm gel accommodation
- **Reliable blotting with a uniform electrical field provided by contamination-free platinum and stainless steel plate electrodes**
- **Simple operation to layer gel, blot membrane and blot paper, ensured by unique mechanism of moving and locking upper cathode**
- **Rapid transfer with relatively low voltage, with no requirement of cooling**
- **Affording simultaneous blotting of multiple gels, with the use of dialysis membrane put between gel-membrane-blot paper sandwiches in a stack**

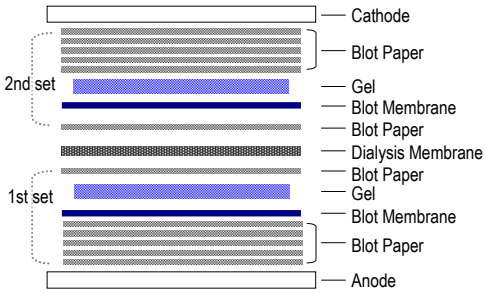

AE-6688(S)


AE-6687(S)


Protein separated by SDS-PAGE, transferred to PVDF membrane by Western-blotting, and detected respectively by CBB-stain (left) and by chemiluminecence-imaging following hybridization (right)



- Cross Section -



- Example of method to blot 2 gels simultaneously -

HorizBlot:
Unit consists of a base unit and a cover unit having respective plate electrodes. They are hinged, and the cover unit is opened and closed in operation, while they can be readily disassembled for ease of cleaning. The base unit has an anode made of high conductively platinum-plated titanium. The cover unit has a cathode made of stainless steel. The plate electrodes, to fully and directly cover an entire transfer site, generate a uniform electrical field that is essential for efficient, even transfer. The materials, free from deterioration or change in conductivity, ensure contamination-free and consistent, reliable transfer with repeated use. The electrodes also are backed by aluminum heat sinks for effective heat radiation.

HorizBlot:
Features a height-adjustable cathode. After a gel and a blotting membrane sandwiched by blot paper, saturated with buffer, is layered on the anode in the base unit, the cover unit incorporating the cathode is lowered. The cover unit has 2 handles in its sides. With the handles being kept pushed inwards, the height of the cathode can be adjusted by moving the handles horizontally. Then, releasing the metal fittings of back lock the cathode. The simple operation provides complete cathode-gel sandwich-anode contact, and uniform contact across the entire transfer site with even pressure during transfer is ensured. With the adjustable cathode, multiple gel sandwiches in a stack can be set while a dialysis membrane or cellophane is put between gel sandwiches to prevent cross contamination. Up to 6 gels of 1 mm thickness may be

HorizBlot:
Requires a small amount of buffer, enough to saturate membranes and blot paper ant to keep gels wet, and so relatively low current is required for transfer. It reduces the cost of reagents and eliminates the need for cooling. The unit also incorporates a diode to prevent reverse polarity caused by incorrect electrical connection. Its power input lead assembly cannot be connected unless the cover unit has been closed to protect operators from possible hazard to touch electrically charged materials.

HorizBLOT AE-6687(S) & AE-6688(S)

Specifications:

	AE-6687(S) HorizBLOT 2M	AE-6688(S) HorizBLOT 4M
Size of electrodes	9.5 × 19.5 cm	20 × 19.5 cm
Distance of electrodes	Up to 22 mm	
Material	Acrylic plastic, except stainless steel for cathode and platinum-plated titanium for anode	
Dimensions (W × D × H)	27 × 13.8 × 12.3 cm, approx.	27 × 23.6 × 12.3 cm, approx.
Net weight	1.67 kg, approx.	2.54 kg, approx.

HorizBlot:
Is offered with high performance blot membrane and quality blot paper. They are precut to the gel sizes of the Atto mini-PAGE or PAGE systems, eliminating the requirement to cut and adjust their dimensions.

8.5 × 9 cm membrane and blot paper:
Fit gels of Atto AE-6400 (discontinued), AE-6450, AE-6510, AE-6530 and AE-6531 mini-PAGE systems.

13 × 14 cm membrane and blot paper:
Fit gels of Atto AE-6210 + AE-6200 or AE-6220 PAGE system, and AE-6290 PAGE system

P-Membrane for protein blotting:
Is 0.2 µm PVDF (polyvinylidene difluoride) membrane having superior protein binding and retention capacity and suits a variety of stains. It also is suitable for immunoblotting and amino acid sequencing, due to its high mechanical strength and chemical resistance.

N-Membrane for nucleic acid blotting:
Is 0.45 µm positively-charged Nylon 66 membrane and suits Southern and Northern blotting. It provides high resistance for repeated hybridization or reprobing and low background for chemiluminescent detection. The hydrophilic membrane does not require pretreatment

Blot Paper:
Is specialty, thick and fine absorbent paper, being clean and contamination-free, and features superior buffer retention capacity that is essential for efficient blotting. When procuring equivalent blot paper, 0.8 mm or thicker paper with efficient buffer retention capacity is desirable.

Power Supply:



In usual applications, 2 mA/cm² current is applied for blotting protein from polyacrylamide gel, and 3 mA/cm² current is applied for blotting nucleic acid from agarose gel, both with the requirement of about 150 V capacity. AE-8135 myPower Ⅱ 300, AE-8450 powerStation 1000VC and AE-8300 crossPower 150 (shown left to right in the above figure) are available from Atto.

Ordering Information	
Code	Description
2322381	**AE-6687 HorizBLOT 2M** Blotting unit incl. power leads
2322380	**AE-6687S HorizBLOT 2M** Blotting unit incl. power leads + 8.5 x 9cm membrane,20pcs & filter paper 400pcs
2322391	**AE-6688 HorizBLOT 4M** Blotting unit incl. power leads
2322390	**AE-6688S HorizBLOT 4M** Blotting unit incl. power leads + 8.5 x 9cm membrane,20pcs & filter paper 400pcs
Blot absorbent paper:	
2392393	8.5 × 9 cm Blot Paper 400/pk
2322435	13 × 14 cm Blot Paper 100/pk
2392493	20 × 20 cm Blot Paper 100/pk
PVDF membrane for protein blotting:	
2392390	8.5 × 9 cm P-Membranes 20/pk
2322430	13 × 14 cm P-Membranes 10/pk
2392440	26 × 300 cm P-Membrane, 1 roll
Nylon 66^{+} membrane for nucleic acid blotting:	
2392394	20 × 20 cm N-Membranes 10/pk
Suggested power supplies:	
2311175	AE-8135 myPower Ⅱ 300, 110V
2311177	AE-8135 myPower Ⅱ 300, 230V 300 V, 400 mA, 999 min.
2311151	AE-8450 powerStation 1000VC, 110V
2311152	AE-8450 powerStation 1000VC, 230V 1000 V, 500 mA, 1000 min., programmable
2311122	AE-8300 crossPower 150, 110V
231123	AE-8300 crossPower 150, 230V 150 V, 4 A

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