


OMNIPAC POWER SUPPLY SPECIFICATIONS

POWER SUPPLIES

	MINI		MIDI	MAXI	MAXI
	nanoPAC-300	nanoPAC-500	CS-300V	CS-500V	CS-3AMP
					
Output range	10-300V	10-500V	2-300V	5-500V	5-300V
Volts	10-400mA	10-400mA	1-700mA	1-800mA	10-3000mA
Current	60W max.	120W max.	150W	300W	300W
Power	1V / 1mA	1V / 1mA	1V / 1mA	1V / 1mA / 1W	1V / 1mA / 1W
Resolution	Constant voltage or constant current		Constant voltage or constant current	Constant voltage, constant current or constant power	
Type of output	–		✓	✓	✓
Automatic crossover	1-999 min. with alarm; Continuous		1-999 min. with alarm; Continuous	Constant mode: 1-9999 min. with alarm; continuous. Programmable mode: 1-999 min. with alarm; continuous.	
Timer	–		✓	✓	✓
Pause/resume function	3-digit LED		3-digit LED	2.6" LCD, 2-line	2.6" LCD, 2-line
Display	–		Up to 30 programmable files, each with 6 steps		
Programmable Methods	–	✓	✓	✓	✓
Automatic recovery after power failure	No-load detection; over-voltage, current & temperature protection; maximum power output detection; shrouded plugs and sockets		No-load detection; sudden load change detection; overload detection; ground-leak detection; over-voltage, current & temperature protection; maximum power output detection; shrouded plugs and sockets		
Safety features	Ambient-40°C; ≤95% humidity		Ambient-40°C; ≤95% humidity	Ambient-40°C; ≤95% humidity	Ambient-40°C; ≤95% humidity
Operating conditions	–		✓	✓	✓
Stackable	2 sets in parallel		4 sets in parallel	4 sets in parallel	4 sets in parallel
Number of output jacks	EN-61010-1; CE		EN-61010-1; CE	EN-61010-1; CE	EN-61010-1; CE
Regulatory conformity	✓	✓	✓	✓	✓
Dual voltage	Polycarbonate housing with aluminium base		Flame retardant ABS-plate design with aluminium base		
Construction	140x191x84mm		190x305x95mm	190x305x95mm	190x305x95mm
Dimensions (WxDxH)	1Kg	1Kg	2.5Kg	2.5Kg	2.5Kg
Weight					

Whether you require a power supply for routine horizontal DNA agarose gel electrophoresis or techniques as technically demanding as SSCP analysis within a large format vertical, or first dimension IEF using IPG strips, Cleaver Scientific can meet your requirements with its comprehensive range of power supplies. Each power supply benefits from a small footprint area and compact design, while explanatory self-prompting menus facilitate easy set-up. Furthermore, these power supplies adhere to IEC 61010 – one of the world's most stringent electrical safety standards.

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Power Supply Selection Guide

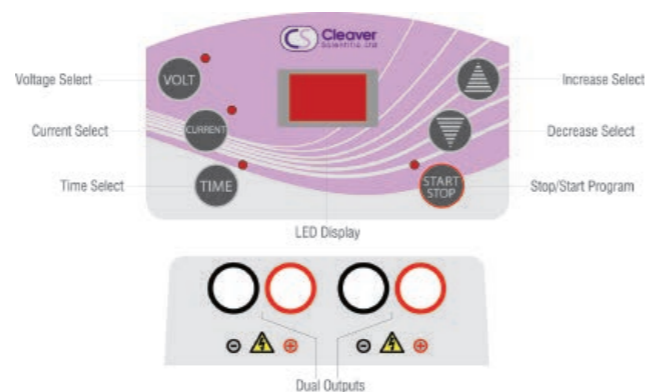
ELECTROPHORESIS POWER SUPPLIES

Please use the selection menu below to choose the power supply most suitable for your electrophoresis application. The typical running conditions shown serve as guidelines only.

Technique & Apparatus Format	Gel or Tube Size*, Quantity (Width x Length x Thickness)	Typical Running Condition†						Run Time	omniPAC (Consort) Power Supply
		At start			End				
		Power (W)	Voltage (V)	Current (mA)	Power (W)	Voltage (V)	Current (mA)		
SDS-PAGE, second-dimension 2-D									
VS30DSYS	280 x 200 x 1mm, 2 gels	-	100	35 (Constant)	-	350	35 (Constant)	5½-6h Max	CS-500V
VS20WAVE	160 x 175 x 1mm, 2-4 gels	-	100	35 (Constant)	-	350	35 (Constant)	5h Max	CS-500V or nanoPAC-500
VS10WDSYS	160 x 85 x 1mm, 2 gels	-	200 (Constant)	200	-	200 (Constant)	80	60-80 min	CS-300V, nanoPAC-300 or -500
CVS10DSYS, CVS10TETRAD, CVS10TETPRO	80 x 85 x 1mm, 2-4 gels	-	200 (Constant)	120-240	-	200 (Constant)	120	40-60 min	CS-300V, nanoPAC-300 or -500
IEF, first-dimension 2-D									
Flat-bed e.g. CSL-IEF	3 x 240 x 1mm, max. 12 strips	-	300 (Constant)	3	-	300 (Constant)	<1	16h Max	EV233
Maxi Tube Gel - e.g. VS20DC, WAVEC2DS	180 x 1/1.5mm tubes, 10 max.	-	800 (Constant)	4	-	800 (Constant)	<1	8h Max	EV215
Mini-Wide TubeGel - e.g. VS10WDC, VS10WC2DS	80 x 1/1.5mm tubes	-	700-800 (Constant)	1	-	700-800 (Constant)	<1	4h Max	EV215
Mini Tube Gel - e.g. VS10DC, CVS10C2DS	80 x 1/1.5mm tubes	-	700-800 (Constant)	1	-	700-800 (Constant)	<1	4h Max	EV215
DNA Restriction Analysis (Horizontal)									
MSMINIDUO	70 x 100 x 5mm, max.	-	80 (Constant)	40	-	80 (Constant)	45	45-60 min	nanoPAC-300, -500 or CS-300V
MSMIDIDUO	100 x 100 x 5mm, max.	-	90 (Constant)	50	-	95 (Constant)	55	45-60 min	nanoPAC-300, -500 or CS-300V
FMMS10	100 x 80 x 5mm	-	50 (Constant)	25	-	50 (Constant)	35	30-60 min	nanoPAC-300, -500 or CS-300V
MSCHOICE-TRIO	150 x 150 x 5mm, max.	-	90-150 (Constant)	50-80	-	90-150 (Constant)	55-90	60-90 min	nanoPAC-300, -500 or CS-300V
MSMAXIDUO	200 x 200 x 5mm, max.	-	100-150 (Constant)	50-80	-	100-150 (Constant)	55-90	60-90 min	nanoPAC-300, -500 or CS-300V

*Sizes shown are those most commonly used in the corresponding apparatus. See product manuals for running conditions for additional sizes.
 †(Constant) the parameter set as a constant value on the power supply. Typical conditions are to serve as guidelines only, and will vary according to the buffer and overall quality of the sample and reagents. a Uses 2xTAE.

Technique & Apparatus Format	Gel or Tube Size*, Quantity (Width x Length x Thickness)	Typical Running Condition†						Run Time	omniPAC (Consort) Power Supply
		At start			End				
		Power (W)	Voltage (V)	Current (mA)	Power (W)	Voltage (V)	Current (mA)		
High Throughput DNA Electrophoresis (Horizontal)									
MSMIDI96	100 x 120 x 5mm	-	70 (Constant)	40	-	80 (Constant)	45	30-45 min	nanoPAC-300, -500 or CS-300V
MSMIDI96ST	100 x 240 x 5mm	-	90 (Constant)	50	-	95 (Constant)	55	60-90 min	nanoPAC-300, -500 or CS-300V
MULTISUB4	80 x 240 x 5mm, max.	-	90 (Constant)	50	-	95 (Constant)	55	60-90 min	nanoPAC-300, -500 or CS-300V
MSCHOICE-TRIO	150 x 250 x 5mm, max.	-	90-150 (Constant)	50-80	-	90-150 (Constant)	55-90	60-90 min	nanoPAC-300, -500 or CS-300V
MSSCREEN-TRIO	260 x 320 x 5mm, max.	-	100-150 (Constant)	50-80	-	100-150 (Constant)	55-90	90-120 min	nanoPAC-300, -500 or CS-300V
Comet Assay, SCGE (Horizontal)									
CSL-COM10 CSL-COM20 CSL-COM40 COMPAC-50™	25 x 75mm, 10, 20, 40 & 50 slides respectively	-	25V (Constant)	300 max.	-	25V (Constant)	300 max.	1 h	nanoPAC-300, -500 or CS-300V
			21V (Constant)	450 max.		21V (Constant)		20 mins	CS-300
Clinical Electrophoresis (Horizontal)									
CSL-CELLAS	25 x 140mm-170 x 170mm, Cellasgel strips max. 250µm thickness; or CellasMEM membranes (all types)	-	200V (Constant)	7.5	-	200V (Constant)	7.5 max.	30-90 min	nanoPAC-300, -500 or CS-300V
DNA Sequencing, SSCP Analysis & Microsatellite Mapping (Large Format Vertical)									
CSQ20	160 x 500 x 0.35mm	45-55 (Constant)	1500 max.	20-30	45-55 (Constant)	1500	20-30	4-5h	EV233
CSQ33	290 x 410 x 0.35mm	45-55 (Constant)	1500 max.	20-30	45-55 (Constant)	1500	20-30	4-5h	EV233
Mutation Detection									
VS20-DGGE	160 x 175 x 1mm, 2 gels	-	120-150 (Constant)	-	-	120-150 (Constant)	-	2-2.5h	CS-500V
Western Blotting									
omniBLOT Mini - e.g. SB10	80 x 85 x 1mm, 4 gels	-	100 (Constant)	250	-	100 (Constant)	400	1-2h	CS-300V or CS-3AMP
Modular System - e.g. CVS10CBS	80 x 85 x 1mm, 4 gels	-	100 (Constant)	250/550 Wire/Plate Electrodes	-	100 (Constant)	400/1500 Wire/Plate Electrodes	2h / ½-1h Wire/Plate Electrodes	CS-300V/CS-3AMP Wire/Plate Electrode
Standalone - e.g. EBM10	80 x 85 x 1mm, 4 gels	-	100 (Constant)	250	-	100 (Constant)	400	1-2h	CS-300V or CS-3AMP
omniBLOT Mini Wide - e.g. SB10W	160 x 85 x 1mm, 3 gels	-	100 (Constant)	250	-	100 (Constant)	250	1-2h	CS-300V, CS-500V or CS-3AMP
Modular System - e.g. VS10WCBS	160 x 85 x 1mm, 3 gels	-	100 (Constant)	250	-	100 (Constant)	250	1-2h	CS-300V, CS-500V or CS-3AMP
WAVE Maxi - e.g. VS20CBS	160 x 175 x 1mm, 4 gels	-	50/100 Wire/Plate Electrodes (Constant)	150-250/1000-1600	-	50/100 Wire/Plate Electrodes (Constant)	150-250/1000-1600	5-20h/1-5h	CS-3AMP
omniBLOTMaxi - e.g. SB20	160 x 175 x 1mm, 3 gels	-	50 (Constant)	250	-	50 (Constant)	250	5-20h max.	CS-3AMP
Semi-Dry Blotting (Protein / Nucleic Acids)									
SD10 Mini	100 x 100 x 2/5mm, 1 gel	-	75 (Constant)	550	-	75 (Constant)	550	15-30 min	CS-3AMP
SD20 Maxi	200 x 200 x 2/5mm, 1gel; 4x Mini Gels	-	75 (Constant)	1200	-	75 (Constant)	1200	15-30 min	CS-3AMP
SD33 Maxi-Plus	330 x 450 x 2/5mm, 1gel; 14x Mini Gels; 3x Maxi Gels	-	75 (Constant)	2000	-	75 (Constant)	2000	15-30 min	CS-3AMP
SD50 Maxi-Long	200 x 500 x 2/5mm, 1 gel; 10x Mini Gels; 2x Maxi Gels	-	75 (Constant)	2000	-	75 (Constant)	2000	15-30 min	CS-3AMP



nanoPAC-300 & 500 Power Supplies

The nanoPAC Mini Power supplies are an ultra compact and economic unit ideal for use with DNA (Horizontal) and Protein (Vertical) electrophoresis systems.

With enhanced features, such as a maximum constant voltage up to 300 or 500V and maximum constant current output of 400mA the nanoPAC's are capable of running all Cleaver Scientific horizontal multiSUB™ systems and vertical omniPAGE™ mini. The nanoPAC-500 is also capable of running the VS10W & VS20WAVE vertical units, as well as horizontal and vertical gel tanks from other manufacturers. These can be set on a continuous run or timed setting up to 999 minutes. The nanoPAC's user-friendly interface is easily adjustable in 1V and 1mA increments, making it perfect for separations where precise settings are required. Its ultra compact size and two pairs of parallel power terminals, which can run two electrophoresis units simultaneously, save time and bench space.

ORDERING INFORMATION

nanoPAC-300	Mini Power supply, 300V, 400mA, 60W - 100-240VAC
nanoPAC-500	Mini Power supply, 500V, 400mA, 120W - 100-240VAC

FEATURES:

- Highly visible LED display
- 300Volts, 400mAmps, 60 Watts For DNA & Protein
- 500Volts, 400mAmps, 120 Watts For DNA & Protein
- Electrophoresis Enhanced in-built safety features Alarm function
- Easy maintenance and cleaning

OUTPUT SPECIFICATIONS

Order No.	nanoPAC-300	nanoPAC-500
Output Voltage / Inc.	0-300V /1V	10 - 500V / 1V
Output Current / Inc.	10 - 400mA / 1mA	
Output Power	60W	120W
Output Type	Constant voltage or constant current	
Control	Microprocessor controller	
Terminal Pairs	2 Pairs	
Timer	1-999 minutes with alarm or continuous	
Safety Device	No load detection; shrouded plugs and sockets	
Unit Dimension (W x L x H)	140 x 191 x 84mm	
Weight	Approx. 1 kg	
Rated Voltage	Universal, 100 - 240V	

TYPICAL APPLICATIONS

NanoPAC-300 - Suitable for running all Cleaver Horizontal Gel tanks and the CVS10 Mini Vertical. NanoPAC-500 - as above but also larger vertical systems such as VS20WAVE.

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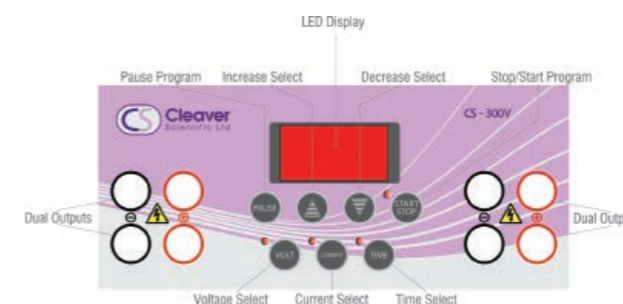
OR CALL +44 (0) 1788 565300
FOR MORE INFORMATION



omniPAC Midi CS-300V

With nearly twice the current and power of the market leader's equivalent unit, at 700mA and 150W, the CS-300V offers a specification comparable to any midi power supply presently available on the market. The CS-300V is perfectly suited to use with all Cleaver Scientific horizontal multiSUB™ systems and omniPAGE mini vertical gel units, and may also be adapted for specialist techniques including the Comet Assay, and clinical and high throughput horizontal electrophoresis. Microprocessor control with four sets of power terminals allow simultaneous operation of as many electrophoresis units either at a constant voltage or current setting, while the timer function may be set continuously or up to a maximum 999 minutes when an alarm sounds to signify termination of the run. A user-friendly interface houses a conspicuous 3-digit LED to aid set up, as well as a convenient 'pause/resume' key, a particularly useful feature during extended runs when it is necessary to access the gel tank to monitor buffer levels and sample migration. Given its high specification and remarkable versatility the CS-300V is relatively inexpensive, and benefits from additional features such as:

- a stackable design;
- rigorous in-built safety mechanisms;
- automatic crossover;
- dual voltage compatibility.



ORDERING INFORMATION

CS-300V	omniPAC MIDI Power Supply, 300V, 700mA, 150W – 100-240VAC
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OUTPUT SPECIFICATIONS

Voltage	2-300V
Current	1-700mA
Power	150W max.

TYPICAL APPLICATIONS

General Laboratory power supply ideal for DNA gels and mini protein electrophoresis and blotting.

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OR CALL +44 (0) 1788 565300
FOR MORE INFORMATION



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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

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