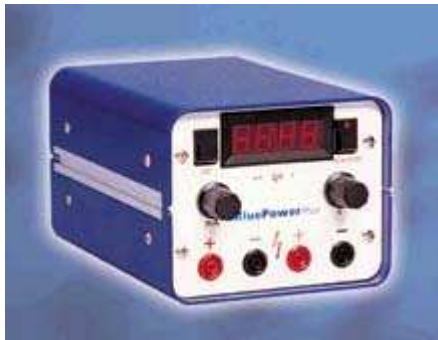


BluePower Power Supplies

Different power supplies are needed to cover the large variety of separations such as SDS and native PAGE electrophoresis of proteins, DNA electrophoresis in agarose and PAGE gels, Isoelectric Focusing, 2D electrophoresis and electrotransfer of biomolecules e.g. Southern-, Northern- and Western-Blotting. But today's power supply should not only apply the electrical field to a gel – a power supply must also be easy to use, safe and reliable. All SERVA BluePower power supplies are fully overload-protected including short-circuit of outputs. An automatic power-off function stops the voltage, when ground leaked is detected.



BP-PLUS



BP-200, BP-500 Plus, BP-3000

Which power supply for which purpose?

BluePower Plus (BP-PLUS)

The BluePower Plus is the work horse for many applications featuring 200 V and 300 mA. It requires a minimum of bench space (13 x 11 x 18 cm). It comes with 2 x 2 parallel outlets, LCD display and cross-over mode. Settings are controlled via a set mode switch. It has a robust design (aluminum housing) and is compatible with all „small" units of the BlueLine Series.

BluePower 200 (BP-200)

The BluePower 200 (200 V, 2000 mA, 250 W) is suited for applications requiring high current (e.g., tank blotting of proteins). It is also compatible with separation of nucleic acids. 2 x 2 outlets, programmable.

BluePower 500 Plus (BP-500 PLUS)

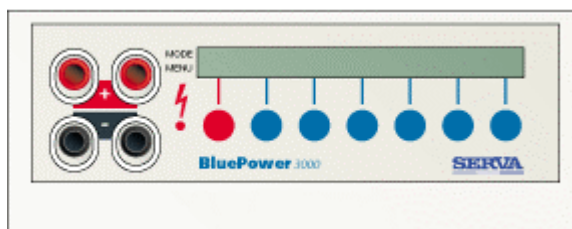
The allround instrument serving many applications, e.g., SDS PAGE, submarine electrophoresis and blotting. BluePower 500 Plus features 500 V, 1000 mA, 200 W and 2 x 2 outlets, programmable.

BluePower 3000 (BP-3000)

BluePower 3000 is designed for high voltage applications (Isoelectric Focusing, DNA sequencing) delivering 3000 V, 200 mA and 300 W. Other applications (SDS PAGE, submarine electrophoresis) can be performed as well. 2 x 2 outlets, programmable.

Programmable power supplies (BP-200, BP-500 Plus, BP-3000)

Operation of the programmable BluePower power supplies (BP-200, BP-500 Plus and BP-3000) is very simple and user-friendly. The unit comes with a large LCD display which makes starting the instrument easy. User-defined editing of programs is done within minutes. 9 programs with each up to 9 steps can be stored. Alternatively, the unit can be controlled via manual mode. Two electrophoresis units can be operated in parallel



Front BluePower 3000

Entering a program via the front panel

Arranged at front: alpha-numerical display, keyboard, LCD monitor and four sockets. Each step to be programmed individually according to the customer's needs is highlighted in the LCD monitor dialogue system. Voltage, current and power can be programmed separately. Maximum settings are controlled by a cross-over mode. Actual values can be monitored during the run as well as the maximum settings of voltage, amperes and wattage. Once a set has been made, the parameters can be changed during the run, without interrupting it.

A "wait" function is useful when you want to interrupt your run without changing the actual settings. The timer function enables you to run your gels at a constant time, while the volt-hour integrator gives you maximum reproducibility of your runs. The SAP (step after program) function eliminates unwanted diffusion of the bands after a run has been performed. The instrument will switch to a "stand-by" mode supplying low electrical field (100 V, 5 mA, 5 W). This function will be particularly useful, if a run is controlled by the timer function and the gel is not further processed immediately after the run.

Compatibility Chart for BlueLine Power Supplies:

Separation Technique	Electrophoresis Tank	Cat.No.	BP-3000	BP-500 Plus	BP-200	BP-PLUS
PAGE, SDS PAGE	BlueVertical 102	(BV 102)	!	!!!	!!!	!!!
	BlueHorizon Super Cool	(BH-2C)	!	!!!	-	-
DNA/RNA submarine electrophoresis	BlueMarine 100	(BM 100)	!	!!!	!!!	!!!
	BlueMarine 200	(BM 200)	!	!!!	!!!	!!!
DNA Sequencing			!!!	-	-	-
Isoelectric Focusing	BlueHorizon Super Cool	(BH-2C)	!!!	-	-	-
Blotting	BlueBlot Wet 100	(BB 100)	-	!!!	!!!	!
	BlueBlot Wet 200	(BB 200)	-	!	!!!	-
	BlueFlash	(BF-S, BF-M, BF-L, BF-XL, BF-XL)	-	!!!	!!!	-

!!! = highly recommended BluePower Supply

! = suitable BluePower Supply

- = not recommended

BlueLine Power Supplies: Technical Data

Parameter		BluePower Plus	BluePower 200	BluePower 500 Plus	BluePower 3000
Regulation		constant voltage constant current	constant voltage constant current constant output automatic programming	constant voltage constant current constant output automatic programming	constant voltage constant current constant output automatic programming
Load End	voltage current output	1 V - 200 V 1 mA - 300 mA max. 60 W	10 V - 200 V 3 mA - 2000 mA 1 W - 250 W	10 V - 500 V 3 mA - 1000 mA 1 W - 200 W	30 V - 3000 V 0.5 mA - 200 mA 1 W - 300 W
Resolution	voltage current output time	1 V 1 mA	1 V 0.1 mA 1 W 1 min / 1 Vh	1 V 0.1 mA 1 W 1 min / 1 Vh	1 V 1 mA 1 W 1 min / 1 Vh
Load End Stability	wavyness	± 1 % at 200 V load stability ± 1 % at 50 % modified initial load short time stability ± 0.5 %/hr long time stability ± 1 %/year	± 1 % at 200 V or 2 A net stability ± 1 % at 200 V load stability ± 1 % at 50 % change of starting load short time stability ± 0.4 %/hr after burn-in long time stability ± 1 %/year	± 1 % at 500 V or 500 mA net stability ± 1 % at 500 V load stability ± 1 % at 50 % change of starting load short time stability ± 0.4 %/hr after burn-in long time stability ± 1 %/year	± 1 % at 3000 V or 200 mA net stability ± 1 at 3000 V load stability ± 1 % at 50 % change of starting load short time stability ± 0.5 %/hr after burn-in long time stability ± 1 %/year
Accuracy of Adjustment	voltage current output	± 1 % ± 1 %	± 1 % ± 1 % of final limit ± 1%	± 1 % ± 1 % of final limit ± 1%	± 1 % ± 1 % of final limit ± 1%
Net Voltage	voltage current output	200 V - 260 V AC 50/60 Hz	200 V - 260 V AC 50/60 Hz optional 90 V -130 V AC 50/60 Hz	200 V - 260 V AC 50/60 Hz optional 90 V -130 V AC 50/60 Hz	200 V - 260 V AC 50/60 Hz optional 90 V -130 V AC 50/60 Hz
Operating Conditions	surrounding temperature relative humidity	5 °C - 35 °C 0 % - 95 % (not condensing)	5 °C - 40 °C 0 % - 95 % (not condensing)	5 °C - 40 °C 0 % - 95 % (not condensing)	max. 5 °C - 40 C 0 % - 95 % (not condensing)
Footprint (dimension)		13 x 11 x 18 cm	26 x 33 x 10.8 cm	26 x 33 x 10.8 cm	26 x 33 x 10.8 cm
Weight		2.0 kg	3.1 kg	3.1 kg	3.4 kg
Security Measures		ungrounded outlet overload protection	recognition of load earthing output jackets power error test	recognition of load earthing output jackets power error test	recognition of load earthing output jacket power error test