

Biochemicals

Electrophoresis

Bioseparation

Life Sciences

Specials

BluePower Power Supplies

The force that drives your gel

SERVA 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. All SERVA BluePower power supplies are easy-to-use, safe and reliable. They are fully overload-protected including short-circuit of outputs: an automatic power-off function stops the voltage when ground leakage is detected.

Which power supply for which purpose?

BluePower 200 (BP-200x4)

The BluePower 200x4 (200 V, 2 A, 200 W) is suited for applications requiring high current (e. g. tank blotting of proteins). It is also compatible with separation of nucleic acids. 4 x 2 outlets, programmable.

BluePower 500 (BP-500x4)

The allround instrument serving many applications, e.g., SDS PAGE, submarine electrophoresis and blotting. BluePower 500x4 features 500 V, 1000 mA and 200 W. The BP-500x4 power supply is particularly advised for operation of up to four vertical slab gel units run at higher voltage, also resulting in shorter running times and for blotting applications (tank blot, semi-dry blot). 4 x 2 outlets, programmable.

BluePower 1500 (BP-1500x4)

BluePower 1500x4 is designed for high voltage applications delivering 1500 V, 400 mA and 600 W. Applications like SDS PAGE, submarine electrophoresis can be performed as well. 4 x 2 outlets, programmable.

BluePower 3000 (BP-3000x4)

BluePower 3000x4 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. 4 x 2 outlets, programmable.



BluePower 200x4 / 500x4 / 1500x4 / 3000x4

These programmable power supplies are useful in many separation techniques.

Programmable power supplies

Operation of the programmable BluePower power supplies 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.

TECHNICAL NOTES

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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.

The 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 Vh integrator gives you maximum reproducibility of difficult 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 processed immediately after the run.

SERVA BluePower Supplies: Technical data

Product	BluePower 200x4	BluePower 500x4	BluePower 1500x4	BluePower 3000x4
Regulation	const. voltage / const. current / const. output / programming			
Load End				
voltage	5 V - 200 V	10 V - 500 V	30 V - 1500 V	30 V - 3000 V
current	10 mA - 2000 mA	10 mA - 1000 mA	3 mA - 400 mA	0.3 mA - 200 mA
output	1 W - 200 W	1 W - 200 W	1 W - 300 W	1 W - 300 W
Resolution				
voltage	1 V	1 V	1 V	1 V
current	1 mA	1 mA	1 mA	0.1 / 1 mA
output	1 W	1 W	1 W	1 W
time	1 min / 1Vh	1 min / 1Vh	1 min / 1Vh	1 min / 1Vh
Accuracy				
voltage	+/- 1 %	+/- 1 %	+/- 1 %	+/- 1 %
current	+/- 1 % of final limit	+/- 1 % of final limit	+/- 1 %	+/- 1 % of final limit
output	+/- 1 %	+/- 1 %	+/- 1 %	+/- 1 %
Net Voltage				
	200 V - 260 V	200 V - 260 V	200 V - 260 V	200 V - 260 V
	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
	90 V - 130 V	90 V - 130 V	90 V - 130 V	90 V - 130 V
	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Operating conditions				
Temperature	5 °C - 35 °C	5 °C - 35 °C	5 °C - 35 °C	5 °C - 35 °C
Humidity	0 % - 95 %	0 % - 95 %	0 % - 95 %	0 % - 95 %
Security Measures	recognition of load / earthing output jackets / power error test			

SERVA BluePower Supplies: Applications

Casting of Gels	BluePower 200x4	BluePower 500x4	BluePower 1500x4	BluePower 3000x4
SDS PAGE (vertical)	+	+	+	o
SDS PAGE (horizontal)	-	+	+	o
native PAGE (vertical)	+	+	+	o
native PAGE (horizontal)	-	+	+	o
UREA PAGE (DNA/RNA)	-	-	-	+
Submarine (DNA/RNA)	+	+	+	-
Isoelectric Focusing (vertical)	-	+	+	o
Isoelectric Focusing (horizontal)	-	-	-	+
Tank Blotting	+	+	o	-
Semi-Dry Blotting	+	+	o	o

Ordering Information

Product	Cat. No.
BluePower 200x4	BP-200x4
BluePower 500x4	BP-500x4
BluePower 1500x4	BP-1500x4
BluePower 3000x4	BP-3000x4

+ = recommended
o = applicable
- = not recommended



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