TECHNICAL NOTES

BluePower™ Power Supplies

SERVA serving scientists

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 gel 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.



Automatic cross-over function

Each model has constant voltage, constant current and constant power capabilities with automatic cross-over and shows which parameter is kept constant.

Programmable power supplies

User-defined editing of programs is done quickly. 9 programs with each up to 9 steps can be stored. Once a set has been made, the parameters can be changed during the run, without interrupting it.

Data logging, data transfer and remote control*

All BluePower™ power supplies have a continuous logging combined with a real time clock. Data can be transfered via USB interface to visualize and examine the stored run details. Moreover the power supply could be controlled by your computer via remote control function.

Timer Function

The timer function enables you to run your gels at a constant time, while the Vh integrator gives you maximum reproducibility of difficult runs.

Voltage Ramp Mode

A linear voltage gradient for any step provided the limiting current current or power is not attained.

Selection Guide

Model	BluePower™ 400 Marine	BluePower™ 600 PRiME™	BluePower™ 300 BLOT	BluePower™ 3000 HPE™	BluePower™ 6000 IPG
Voltage $_{max.}$	400 V	600 V	300 V	3000 V	6000 V
Current $_{max.}$	500 mA	1000 mA	2000 mA	200 mA	100 mA
Power $_{max.}$	50 W	300 W	300 W	300 W	300 W
SDS PAGE	●	●	●	●	●
Native PAGE	●	●	●	●	●
Blotting (mini gel)	●	●	●	●	●
Blotting (large size)	●	●	●	●	●
Submarine	●	●	●	●	●
IEF (horizontal)	●	●	●	●	●
IEF (vertical)	●	●	●	●	●
2D (horizontal)	●	●	●	●	●
2D (vertical)	●	●	●	●	●
IPG Strip Focusing	●	●	●	●	●

● = best choice ● = suited ● = not suited/limited suited

* not valid for BluePower™ 400 Marine Power Supply

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BluePower™ 400 Marine Power Supply (BP-400-MAR)

The BluePower™ 400 Marine Power Supply (400 V, 500 mA, 50 W) serves many applications like submarine electrophoresis of nucleic acid agarose gels and SDS PAGE in mini gel format. 4 x 2 outlets, programmable.

BluePower™ 600 PRiME™ Power Supply (BP-600-PRI)

The allround instrument serving many applications, e.g., SDS PAGE, submarine electrophoresis and blotting. BluePower™ 600 PRiME™ Power Supply features 600 V, 1000 mA and 300 W. The BP-600-PRiME™ 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™ 300 Blot Power Supply (BP-300-BLO)

The BluePower™ 300 BLOT Power Supply (300 V, 2 A, 300 W) is suited for applications requiring high current like tank blotting or semi-dry blotting of larger protein gels. It is also compatible with separation of nucleic acids. 4 x 2 outlets, programmable.

BluePower™ 3000 HPE™ Power Supply (BP-3000-HPE)

The BluePower 3000 HPE™ Power Supply (3000 V, 200 mA and 300 W) is designed for high voltage applications like isoelectric focusing, horizontal 2D gel electrophoresis. It comes with a special mode for low current applications such as IEF: the power supply can meassure currents a slow as 10 microAmps and keep it's voltage constant at even 0 current. Other applications like SDS PAGE and submarine electrophoresis can be performed as well. 4 x 2 outlets, programmable.

BluePower™ 6000 IPG Power Supply (BP-6000-IPG)

The BluePower™ 6000 HPE™ Power Supply (6000 V, 100 mA and 300 W) is designed for high voltage applications like isoelectric focusing in IPG strips. It comes with a special mode for low current applications such as IEF: the power supply can meassure currents a slow as 10 microAmps and keep it's voltage constant at even 0 current. Other applications like SDS PAGE and submarine electrophoresis can be performed as well.
4 x 2 outlets, programmable

Specifications

		BluePower™ 400 Marine	BluePower™ 600 PRiME™	BluePower™ 300 BLOT	BluePower™ 3000 HPE™	BluePower™ 6000 IPG
	Product					
	Regulation	const. Voltage / const. current/ const. power / programming				
Load End	Voltage	0 V – 400 V	0 V – 600 V	0 V – 300 V	0 V – 3000 V	0 V – 6000 V
Load End	Current	0 mA – 500 mA	0 mA – 1000 mA	0 mA – 2000 mA	0 mA – 20 mA (LCu) 0 mA – 200 mA (HCu)	0 mA – 10 mA (LCu) 0 mA – 100 mA (HCu)
Load End	Power	0 W – 50 W	0 W – 300 W	0 W – 300 W	0 W – 300 W	0 W – 300 W
Resolution	Voltage	1 V	1 V	1 V	1 V	1 V
Resolution	Current	1 mA	1 mA	1 mA	0.1 mA (LCu) 1 mA (HCu)	0.1 mA (LCu) 1 mA (HCu)
Resolution	Power	1 W	1 W	1 W	0.1 W (LCu) 1 W (HCu)	0.1 W (LCu) 1 W (HCu)
Measurement Resolution	Voltage	1 V	1 V	1 V	1 V	1 V
Measurement Resolution	Current	1 mA	0.1 mA	1 mA	0.01 mA (LCu) 0.1 mA (HCu)	0.01 mA (LCu) 0.1 mA (HCu)
Measurement Resolution	Power	0.1 W	0.1 W	1 W	0.01 W (LCu) 0.1 W (HCu)	0.01 W (LCu) 0.1 W (HCu)
	Voltage	200 V – 260 V, 50/60 Hz , Optional: 90 V – 130 V, 50/60 Hz				
	Temperature	0 °C – 40 °C				
	Humidity	0 % – 95 %				
	Security Measures	Ground leakage detection / Overload detection / No load detection				
	Dimensions	163 mm x 300 mm x 307 mm				

Ordering Information

	Qty.	1 piece	1 piece	1 piece	1 piece	1 piece
	Cat. no.	BP-400-MAR	BP-600-PRI	BP-300-BLO	BP-3000-HPE	BP-6000-IPG

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