



Elektro-Automatik



## PS 2000 B

### Advanced Laboratory Power Supplies for Precision Applications | 100 W - 320 W

**Wide Range of Output Voltages and Currents:** Accommodates diverse application needs with models offering various voltage and current specifications.

**Intuitive User Interface:** Features clear displays and control knobs for easy and precise adjustment of parameters.

**Remote Control Capability:** Supports integration into automated systems through remote operation features.

**Comprehensive Protection Mechanisms:** Includes overvoltage and overcurrent protection to ensure safety and reliability.

**Compact and Robust Design:** Built with high-quality materials to withstand rigorous use in various environments.

# EA-PS 2000 B 160 W - 320 W

Programmable desktop DC Power  
Supply



## General

The PS 2000 B series laboratory power supplies are available in three power ratings: 100 W, 160 W, and 320 W. These units feature a compact design with closed top and bottom surfaces and lack external heatsinks, making them particularly suitable for educational settings. Equipped with safety output sockets on the front panel, they allow for precise voltage and current adjustments from zero to the desired value. The units support both parallel and series connections, and their flexible power management ensures reliable operation under full load.

## Protective Features

In addition to standard overvoltage protection (OVP) designed to shield sensitive applications from unwanted voltage spikes, the PS 2000 B series includes an overcurrent protection feature. This protection has an adjustable threshold ranging from 0% to 110% of the nominal current, ensuring that in the event of a malfunction, the device will immediately shut down the output to prevent overcurrent and potential damage to connected equipment.

## PC Interface

Each unit in the PS 2000 B series comes standard with a USB interface, enabling users to monitor and control the device remotely. This functionality supports integration with custom applications, and LabView Virtual Instruments (VIs) are available to facilitate this process. Additionally, optional Windows-based software is available for purchase, offering enhanced control capabilities.

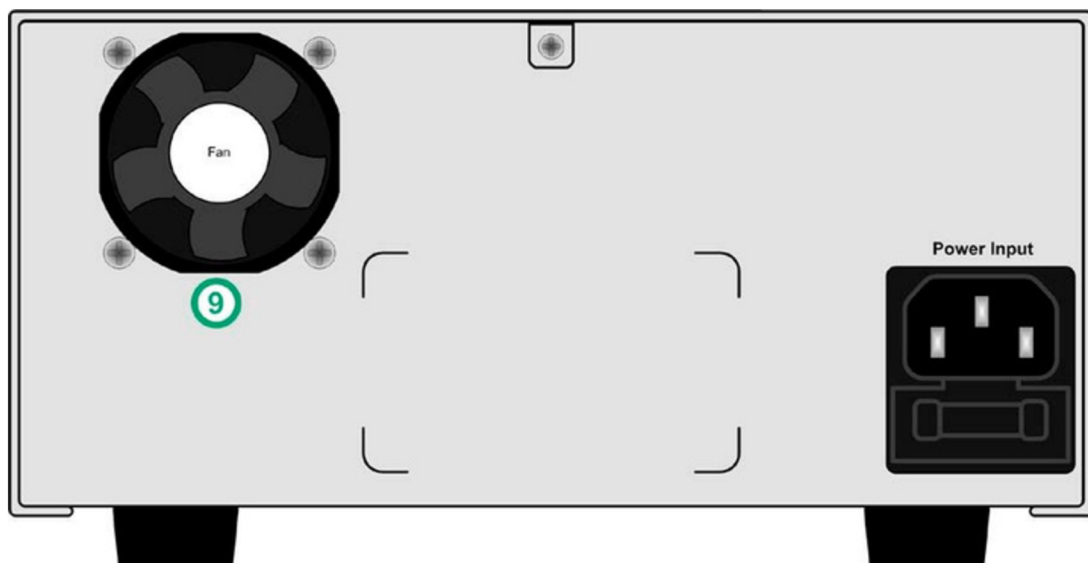
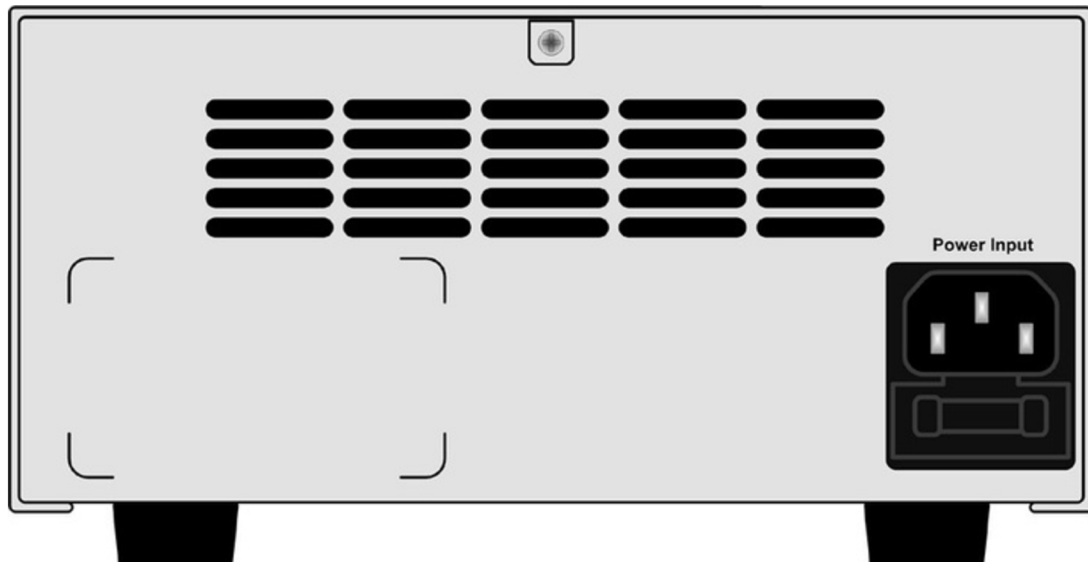
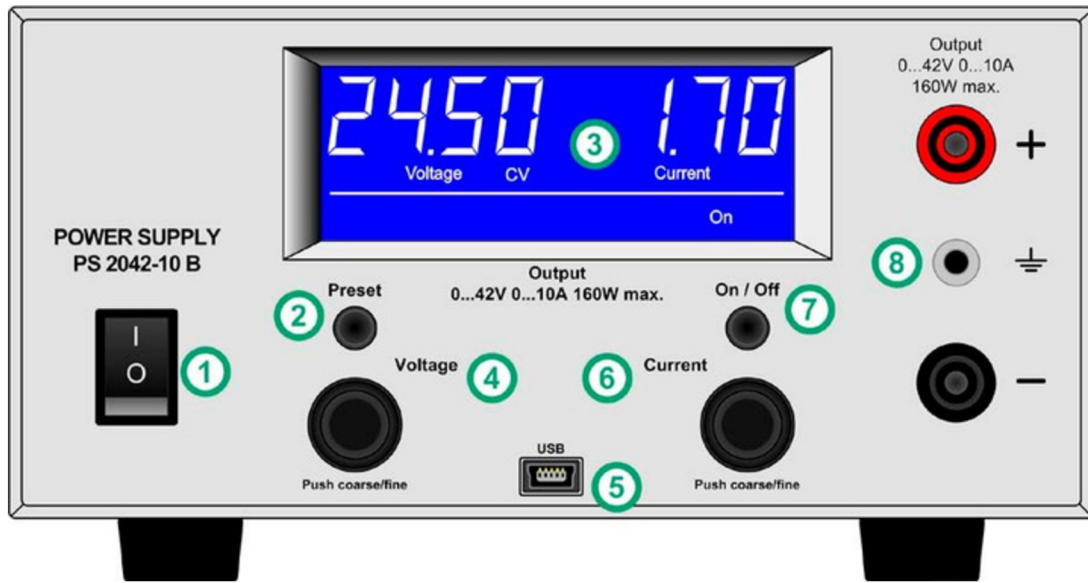
## Flexible Power Ranging

The PS 2000 B series features flexible power management, allowing for reliable operation at full load. This flexibility ensures that the power supplies can adapt to varying load conditions, maintaining consistent performance across a wide range of applications.

## Control and Monitoring Software

For enhanced control and monitoring, the PS 2000 B series is compatible with optional Windows-based software. This software provides an intuitive interface for remote operation, real-time monitoring, and data logging, streamlining workflows and improving efficiency in laboratory settings.

# Product Views



# Technical Specification by Model

Technical Specifications	PS2042-06B	PS2084-03B	PS2042-10B	PS2084-05B	PS2042-20B	PS2084-10B
Input	90...264 V AC, 45...65 Hz, PF = 0.99	90...264 V AC, 45...65 Hz, PF = 0.99	90...264 V AC, 45...65 Hz, PF = 0.99	90...264 V AC, 45...65 Hz, PF = 0.99	90...264 V AC, 45...65 Hz, PF = 0.99	90...264 V AC, 45...65 Hz, PF = 0.99
Output voltage	0...42 V	0...84 V	0...42 V	0...84 V	0...42 V	0...84 V
- Load regulation 0-100%	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%
- Line regulation $\pm 10\% \Delta U_{AC}$	<0.02%	<0.02%	<0.02%	<0.02%	<0.02%	<0.02%
- Ripple (1)	<100 mV_PP, <4 mV_RMS	<63 mV_PP, <5 mV_RMS	<96 mV_PP, <24 mV_RMS	<96 mV_PP, <24 mV_RMS	<150 mV_PP, <2 mV_RMS	<150 mV_PP, <2 mV_RMS
- Regulation 10-100% load	<1 ms	<2 ms	<1 ms	<1 ms	<2 ms	<1 ms
- OVP adjustment	0...46.2 V	0...92.4 V	0...46.2 V	0...92.4 V	0...46.2 V	0...92.4 V
- Accuracy	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$
Output current	0...0.6 A	0...0.3 A	0...10 A	0...0.5 A	0...20 A	0...10 A
- Load regulation 0-100% $\Delta U_{DC}$	<0.05%	<0.05%	<0.05%	<0.05%	<0.05%	<0.05%
- Line regulation $\pm 10\% \Delta U_{AC}$	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%
- Ripple (1)	<10 mA_PP, <4 mA_RMS	<13 mA_PP, <5 mA_RMS	<13 mA_PP, <9 mA_RMS	<9 mA_PP, <3 mA_RMS	<15 mA_PP, <6 mA_RMS	<3.8 mA_PP, <1.4 mA_RMS
- Accuracy	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$	$\leq 0.2\%$

# Technical Specification by Model

Technical Specifications	PS2042-06B	PS2084-03B	PS2042-10B	PS2084-05B	PS2042-20B	PS2084-10B
Efficiency	85%	85%	85%	85%	85%	85%
Output power	100 W	100 W	160 W	160 W	320 W	320 W
Cooling	Natural convection	Natural convection	Natural convection	Natural convection	Fan	Fan
Operation temperature	0...50 °C	0...50 °C	0...50 °C	0...50 °C	0...50 °C	0...50 °C
Storage temperature	-20...70 °C	-20...70 °C	-20...70 °C	-20...70 °C	-20...70 °C	-20...70 °C
Dimensions (WxHxD)	174x82x240 mm	174x82x240 mm	174x82x240 mm	174x82x240 mm	174x82x320 mm	174x82x320 mm
Weight	1.9 kg	1.9 kg	2.0 kg	2.0 kg	2.3 kg	2.3 kg

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