



Elektro-Automatik



PSI 5000 A

Programmable Desktop DC Power Supplies | 160 W - 640 W

Wide Power Range: Delivers power outputs from 160 W to 640 W, accommodating diverse applications.

High Efficiency: Achieves up to 92% efficiency, reducing energy consumption and heat output.

Advanced Protections: Integrated OVP, OCP, and OTP safeguard connected devices and enhance reliability.

Flexible Connectivity: Built-in USB and Ethernet interfaces support remote control and automation.

User-Friendly Design: Features a blue LCD display and rotary knobs for intuitive operation and real-time monitoring.

EA-PSI 5000 A 160 W - 640 W

Programmable desktop DC Power Supply



Features

- Wide input voltage range: 90...264 V with active PFC
- High efficiency: Up to 92%
- Output power ratings: 0...160 W up to 0...640 W
- Output voltages: 0...40 V up to 0...200 V
- Output currents: 0...2 A up to 0...40 A
- Flexible, power-regulated output stage
- Supervision: OVP, OCP, OPP
- Blue LCD display: For all values and status
- Memory: Stores 9 different presets
- Galvanically isolated analog interface
- Temperature-controlled fans for cooling
- Chassis: Top and bottom closed
- 40 V models: Compliant with SELV (EN 60950)
- Integrated ports: USB and Ethernet
- EMC compliance: EN 55022 Class B
- Supported protocols: SCPI command language, LabView VIs
- Control software: For Windows

Built-in interfaces

- USB
- Analog
- Ethernet

Software

- EA - Power Control



General

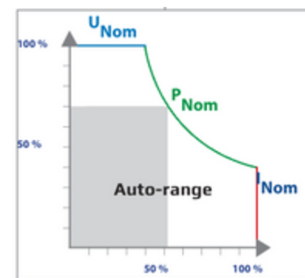
The PSI 5000 A Series delivers reliable and efficient performance in a compact, user-friendly design. Engineered for laboratory and industrial applications, this series offers 160 W to 640 W of output power with advanced features like auto-ranging power stages, precise control systems, and integrated safety protections. Its wide range of output voltages and currents makes it versatile for applications such as testing, prototyping, and production environments.

AC Input

With a wide AC input voltage range of 90...264 V, the PSI 5000 A Series is compatible with global power standards. Featuring active power factor correction (PFC), it ensures optimal energy usage and stable performance even in fluctuating supply conditions.

Auto-Ranging Power Stage

The auto-ranging power stage provides maximum flexibility by adapting to different voltage and current combinations within its power rating. This feature allows the PSI 5000 A to handle a wider range of applications compared to traditional power supplies, making it ideal for tasks requiring both high voltage and high current capabilities.



DC Output

The PSI 5000 A Series offers output voltages from 0...40 V to 0...200 V and currents up to 40 A, providing precise and stable performance across its range. Designed for efficiency, its regulated output stage ensures consistent results, meeting the needs of both low-power and high-energy testing environments.

Protective Features

Safety is a priority in the PSI 5000 A Series, which includes comprehensive protection mechanisms such as overvoltage protection (OVP), overcurrent protection (OCP), and overpower protection (OPP). These features safeguard both the power supply and the connected devices, ensuring reliable operation in critical testing scenarios.

Display and Controls

The intuitive blue LCD display provides clear, real-time visualization of all key parameters, including voltage, current, and power. Coupled with rotary knobs and buttons, the PSI 5000 A ensures quick adjustments and easy navigation, allowing users to maintain full control over their testing setups.

Presetting of Output Values

The PSI 5000 A simplifies repetitive tasks with its preset feature, allowing users to define and save output values in advance. This functionality minimizes setup time, ensuring quick and consistent operation for frequently used configurations.

Recall Feature

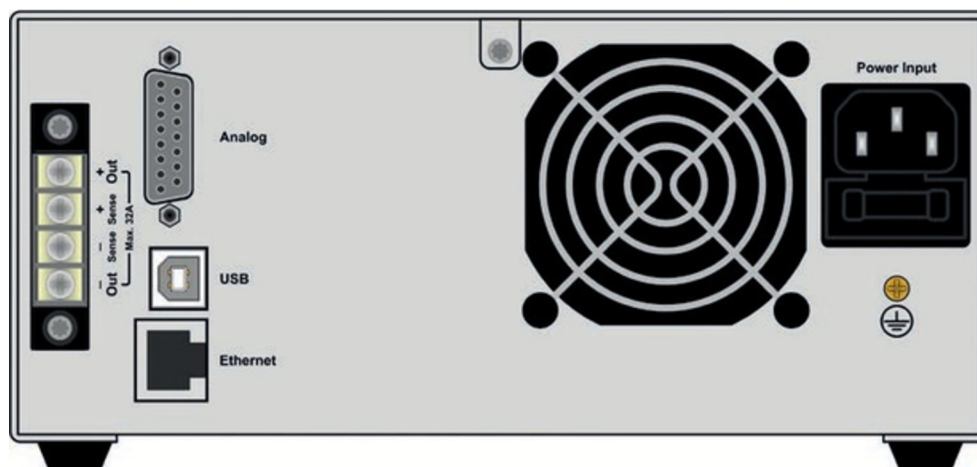
The recall feature enables users to access up to nine stored output configurations at the press of a button. This functionality streamlines workflows by eliminating the need for manual reconfiguration, making the PSI 5000 A Series an excellent choice for multi-step or repetitive testing.

Three-Way Interface

Connectivity is seamless with the PSI 5000 A Series, featuring built-in USB and Ethernet ports and a galvanically isolated analog interface. This three-way interface supports remote control, data acquisition, and integration into automated test systems, ensuring compatibility with modern laboratory and production setups.

Options

Expand the PSI 5000 A's capabilities with optional features like customized interface modules and extended memory. These enhancements allow the system to adapt to specialized applications, providing the flexibility engineers need to meet evolving requirements.



Available Models

Specifications	PSI 5040-10 A	PSI 5080-05 A	PSI 5200-02 A	PSI 5040-20 A	PSI 5080-10 A
Output Voltage (V)	0...40 V	0...80 V	0...200 V	0...40 V	0...80 V
Output Current (A)	0...10 A	0...5 A	0...2 A	0...20 A	0...10 A
Output Power (W)	0...160 W	0...160 W	0...160 W	0...320 W	0...320 W
Load Regulation (0-100%)	<0.08%	<0.08%	<0.08%	<0.08%	<0.08%
Line Regulation ($\pm 10\% \Delta UAC$)	<0.02%	<0.02%	<0.02%	<0.02%	<0.02%
Ripple (rms)	≤ 5 mV	≤ 8 mV	≤ 15 mV	≤ 5 mV	≤ 8 mV
Ripple (pp)	≤ 30 mV	≤ 50 mV	≤ 100 mV	≤ 30 mV	≤ 50 mV
Efficiency (%)	$\geq 85\%$	$\geq 85\%$	$\geq 85\%$	$\geq 85\%$	$\geq 85\%$
AC Input Voltage (V)	90...264 V	90...264 V	90...264 V	90...264 V	90...264 V
Frequency (Hz)	45...65 Hz	45...65 Hz	45...65 Hz	45...65 Hz	45...65 Hz
Dimensions (mm)	200 x 87 x 301	200 x 87 x 301	200 x 87 x 301	200 x 87 x 301	200 x 87 x 301
Weight (kg)	3 kg	3 kg	3 kg	3 kg	3 kg

Specifications	PSI 5200-04 A	PSI 5040-40 A	PSI 5080-20 A	PSI 5200-10 A
Output Voltage (V)	0...200 V	0...40 V	0...80 V	0...200 V
Output Current (A)	0...4 A	0...40 A	0...20 A	0...10 A
Output Power (W)	0...640 W	0...640 W	0...640 W	0...640 W
Load Regulation (0-100%)	<0.08%	<0.08%	<0.08%	<0.08%
Line Regulation ($\pm 10\% \Delta UAC$)	<0.02%	<0.02%	<0.02%	<0.02%
Ripple (rms)	≤ 30 mV	≤ 5 mV	≤ 8 mV	≤ 15 mV
Ripple (pp)	≤ 100 mV	≤ 30 mV	≤ 50 mV	≤ 100 mV
Efficiency (%)	$\geq 85\%$	$\geq 85\%$	$\geq 85\%$	$\geq 85\%$
AC Input Voltage (V)	90...264 V	90...264 V	90...264 V	90...264 V
Frequency (Hz)	45...65 Hz	45...65 Hz	45...65 Hz	45...65 Hz
Dimensions (mm)	200 x 87 x 301	200 x 87 x 301	200 x 87 x 301	200 x 87 x 301
Weight (kg)	3 kg	3 kg	3 kg	3 kg

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