



Elektro-Automatik



PSI 9000 T

Advanced Programmable DC Power Supplies | 320 W - 1500 W

High Efficiency: Achieves up to 92% efficiency for energy-saving operation.

Flexible Auto-Ranging Output: Adapts to a wide range of voltage and current requirements, providing versatility across applications.

Comprehensive Protection Mechanisms: Includes OVP, OCP, OPP, and OT to safeguard both the power supply and connected devices.

Intuitive Touch Panel Interface: Features a color TFT display for easy configuration and monitoring.

Wide AC Input Range with Active PFC: Supports global use with input voltages from 90 to 264 V, ensuring compatibility with various power standards.

EA-PSI 9000 T

320 W - 1500 W

Programmable DC Power Supply

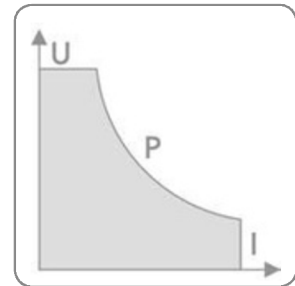


General

The EA-PSI 9000 T Series combines advanced microprocessor-controlled technology with a user-friendly and interactive design, ideal for laboratory and industrial applications. This series offers an extensive set of standard features, streamlining operation and reducing the need for external supervision hardware. The intuitive touch panel, ergonomic controls, and real-time monitoring capabilities empower users to manage power supply settings with ease, enhancing productivity and precision.

Autoranging Power Stage

Equipped with a flexible autoranging output stage, the EA-PSI 9000 T Series provides optimal versatility. This feature enables higher output voltages at lower currents and higher output currents at lower voltages, always within the device's adjustable power set value. This eliminates the need for multiple devices, making it an economical and efficient solution for a wide range of applications.



AC Supply

Designed for global use, the EA-PSI 9000 T Series integrates Active Power Factor Correction (PFC) for seamless operation across a wide input voltage range of 90 to 264 VAC. Models with 1500 W output power automatically adjust to maintain consistent performance, even under reduced input voltages, ensuring reliable operation worldwide.

DC Output

The EA-PSI 9000 T Series supports output voltages ranging from 0–40 V to 0–500 V and currents from 0–4 A to 0–60 A, with power ratings up to 1500 W. Featuring continuous adjustment and exceptional accuracy, these devices can be manually or remotely controlled via analog or digital interfaces. The inclusion of a resistance simulation mode further extends their versatility.

Protective Features

Safety is paramount in the EA-PSI 9000 T Series. Integrated protections include overvoltage protection (OVP), overcurrent protection (OCP), overpower protection (OPP), and overtemperature protection (OTP). These safeguards automatically shut down the device and generate status alerts, ensuring the safety of both the power supply and connected equipment.

Remote Sensing

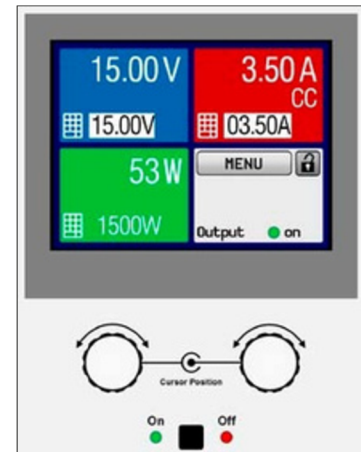
The built-in remote sensing feature compensates for voltage drops across cables, ensuring precise voltage delivery at the load. The system automatically detects the sensing input and adjusts the output voltage accordingly, maintaining accuracy even in complex configurations.

Optional Analog Interface

An optional galvanically isolated analog interface enhances the device's adaptability. Supporting input ranges of 0–10 V or 0–5 V, it allows precise control of voltage, current, and resistance. Output monitoring options provide comprehensive oversight, making it easy to tailor the device to diverse operational requirements.

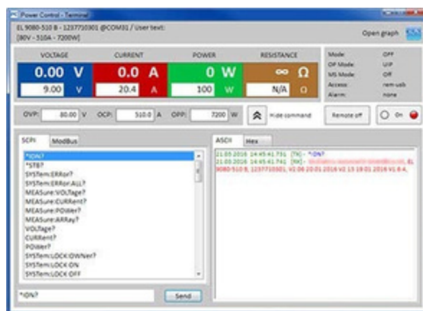
Display and Control Panel

The vibrant TFT touch display provides real-time visualization of critical parameters, including voltage, current, and power. Its intuitive interface allows users to adjust settings with precision while locking features prevent unauthorized changes. Multilingual support makes the system accessible to a global audience.



Function Generator

Every model in the EA-PSI 9000 T Series includes a built-in function generator, capable of creating and applying standard or custom waveforms to output voltage or current. The generator supports up to 99 programmable sequences, enabling advanced testing and production workflows. Configurations can be saved via USB, ensuring seamless transitions between test environments.



Control Software

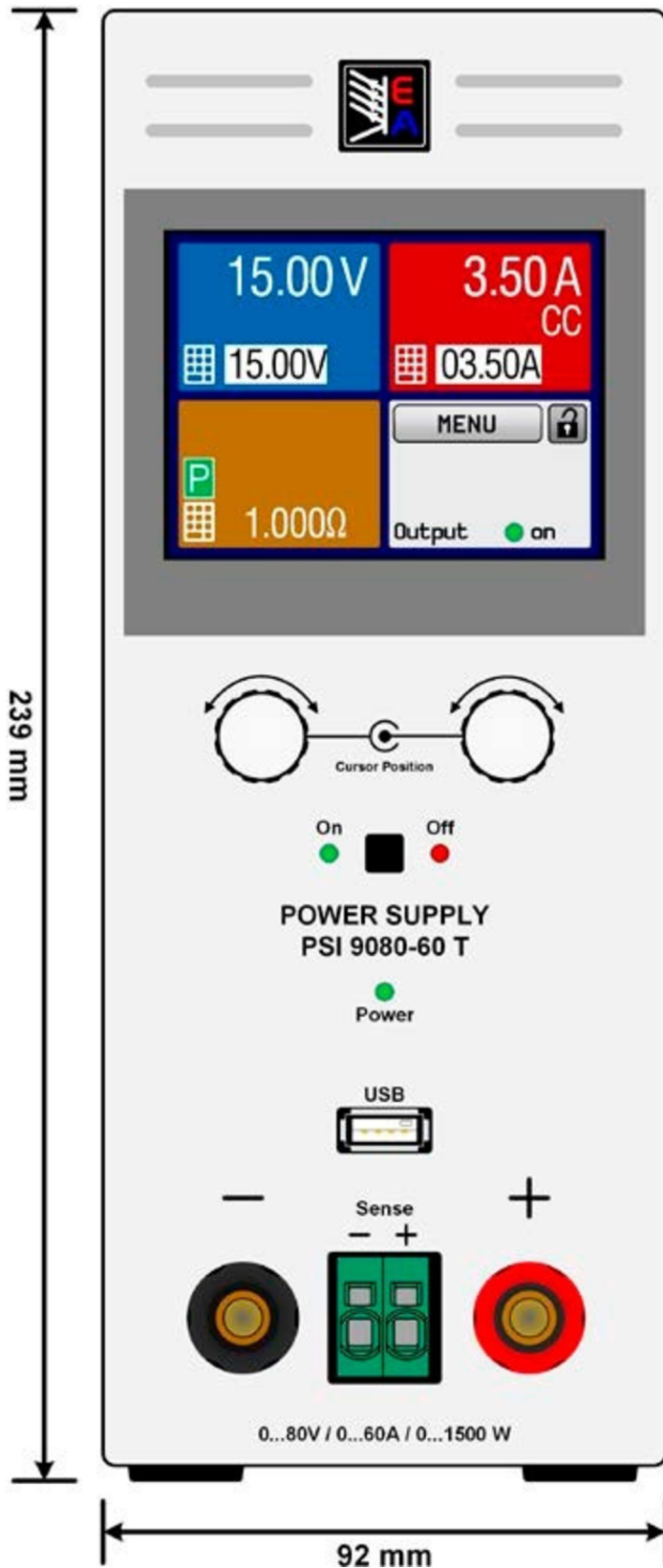
The included control software for Windows PCs offers extensive remote management capabilities. Supporting SCPI and ModBus RTU protocols, it enables direct command input, sequencing, and firmware updates. The optional Multi-Control app expands scalability, allowing the management of up to 20 units simultaneously with advanced logging and monitoring features.

Options

Expand the capabilities of the EA-PSI 9000 T Series with retrofittable interface modules, including USB, Ethernet, and analog options. These add-ons provide enhanced connectivity and flexibility, catering to a wide range of technical and operational needs.



Product Views



Technical Data

AC Supply

- Voltage: 90...264 V, 1ph+N
- Frequency: 45...65 Hz
- Power factor: >0.99
- Derating: Only models with 1500 W: <150 V AC to P rated 1000 W

DC Voltage

- Accuracy: <0.1% of rated value
- Load regulation $\pm 100\%$ ΔI UC: <0.05% of rated value
- Line regulation $\pm 10\%$ ΔU AC: <0.02% of rated value
- Regulation 10–100% load: <2 ms
- Rise time 10–90%: Max. 30 ms
- Overvoltage: Adjustable, 0...110% U nom

DC Current

- Accuracy: <0.2% of rated value
- Load regulation $\pm 100\%$ ΔI UC: <0.15% of rated value
- Line regulation $\pm 10\%$ ΔU AC: <0.05% of rated value

DC Power

- Accuracy: <1% of rated value

Overvoltage category: 2

Protection: OT, OVP, OCP, OPP, PF

Insulation

- Input to enclosure: 2500 V DC
- Input to output: 2500 V DC
- Output to enclosure: Negative: max. 400 V DC, positive: max. 400 V DC + output voltage
- Degree of pollution: 2
- Protection class: 1

Analog interface (optional)

- 15 pole D-Sub, galvanically isolated
- Signal range: 0...5 V or 0...10 V (switchable)
- Inputs: U, I, P, remote control on-off, DC output on-off, resistance mode on-off
- Outputs: U, I, overvoltage, alarms, reference voltage
- Accuracy U / I / P: 0...10 V: <0.2%, 0...5 V: <0.4%

Parallel operation: Possible

Standards: EN 60950, EN 61326, EN 61010, EN 55022 Class B

Cooling: Temperature-controlled fan

Operation temperature: 0...50 °C

Storage temperature: -20...70 °C

Relative humidity: <80%, non-condensing

Altitude: <2000 m (1,242 mi)

Mechanics

- Weight:
 - 320 W–640 W: ≈ 7 kg (15.4 lb)
 - 1000 W–1500 W: ≈ 8 kg (17.6 lb)
- Dimensions (W x H x D):
 - 320 W–640 W: 92 x 239 x 352 mm (3.6" x 9.4" x 13.8")
 - 1000 W–1500 W: 92 x 239 x 412 mm (3.6" x 9.4" x 16.2")

Available Models

Model	Voltage	Current	Power	Efficiency	Ripple U α	Ripple I	Programming α (U (typ.))	Programming α (I (typ.))	Programming α (P (typ.))
PSI 9040-20T	0...40 V	0...20 A	320 W	$\leq 88\%$	20 mV / 2 mV rms	1 mA rms	1.5 mV	0.8 mA	0.012 W
PSI 9080-10T	0...80 V	0...10 A	320 W	$\leq 89\%$	20 mV / 2 mV rms	1 mA rms	3.1 mV	0.4 mA	0.012 W
PSI 9200-04T	0...200 V	0...4 A	320 W	$\leq 89\%$	20 mV / 2 mV rms	1 mA rms	3.1 mV	0.4 mA	0.012 W
PSI 9040-40T	0...40 V	0...40 A	640 W	$\leq 88\%$	20 mV / 2 mV rms	1 mA rms	1.5 mV	0.8 mA	0.012 W
PSI 9080-20T	0...80 V	0...20 A	640 W	$\leq 91\%$	50 mV / 6 mV rms	5 mA rms	3.1 mV	0.4 mA	0.038 W
PSI 9200-10T	0...200 V	0...10 A	640 W	$\leq 91\%$	50 mV / 6 mV rms	5 mA rms	3.1 mV	0.4 mA	0.038 W
PSI 9040-60T	0...40 V	0...60 A	1000 W	$\leq 92\%$	25 mV / 4 mV rms	7.5 mA rms	1.5 mV	1.0 mA	0.057 W
PSI 9080-40T	0...80 V	0...40 A	1000 W	$\leq 92\%$	25 mV / 4 mV rms	7.5 mA rms	1.5 mV	1.0 mA	0.057 W
PSI 9200-15T	0...200 V	0...15 A	1000 W	$\leq 93\%$	25 mV / 4 mV rms	1.8 mA rms	7.6 mV	1.5 mA	0.057 W
PSI 9500-03T	0...500 V	0...3 A	1500 W	$\leq 93\%$	62 mV / 13 mV rms	0.6 mA rms	19.1 mV	2.3 mA	0.057 W
PSI 9200-25T	0...200 V	0...25 A	1500 W	$\leq 93\%$	155 mV / 33 mV rms	1.8 mA rms	7.6 mV	1.5 mA	0.057 W
PSI 9500-10T	0...500 V	0...10 A	1500 W	$\leq 93\%$	155 mV / 33 mV rms	0.8 mA rms	19.1 mV	2.3 mA	0.057 W

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