



Yangzhou IdealTek Electronics Co., Ltd.

Address: #343, No. 8 Wenchang Middle Road, Guangling District, Yangzhou, Jiangsu, China.

Tel: +86 – 514 – 87922965 Fax: +86 – 514 – 87922965

Website: www.idealtek.cn Email: sales@idealtek.cn

Ideal Power Solution

SMP5000 Series Rack DC Power Supply

- Power range: 900 ~ 6KW
- Voltage range: 6 ~ 800V
- Current range: 4 ~ 300A
- 434*180*500 benchtop chassis
- Precise voltage and current setting and measurement capabilities
- OVP, OCP, OTP protections etc.
- CE certified



Overview

The SMP5000 series of DC power supplies are designed with the highest power among high-frequency DC switching power supplies based on MOSFETs. Under a single-phase 220Vac input, the designed output power reaches 6KW, and the output voltage ranges from 10Vdc to 800Vdc with low ripple, high precision and high efficiency and high-power density electronic characteristics.

The SMP5000 series DC power supplies are a constant voltage and constant current adjustable DC power

supply. The output voltage and output current of the power supplies can be adjusted separately through the knobs on the front panel. the independent LED voltage and current meters can display the output voltage and current value separately, and RS485, 0-10V analog quantity or 24V interlock loop can be added to realize system integration control and monitoring.

Thanks to the higher switching frequency MOSFET-based switching power supplies, the SMP5000 series of rack-mounted DC power supplies can be built in the smaller 9-inch standard rack-mounted chassis at the same power by using a smaller semiconductor devices and LC filter units, which make the power supplies suitable for rack-mounted DC test systems, new material heating aging system matching, fuse test system, etc.

Features

- Max. Output power reaches 6000W.
- CV / CC working modes, automatic switchable between two modes.
- Voltage & Current continuously adjustable, 10-turn potentiometer setting.
- Output voltage & current LED display.
- Intelligent fan cooling, withstand continuous working.
- Adaptability to continuous or dynamic loads.
- Over heat & Over current protection.
- 434*185*500 benchtop housing.

- Low ripple and noise.

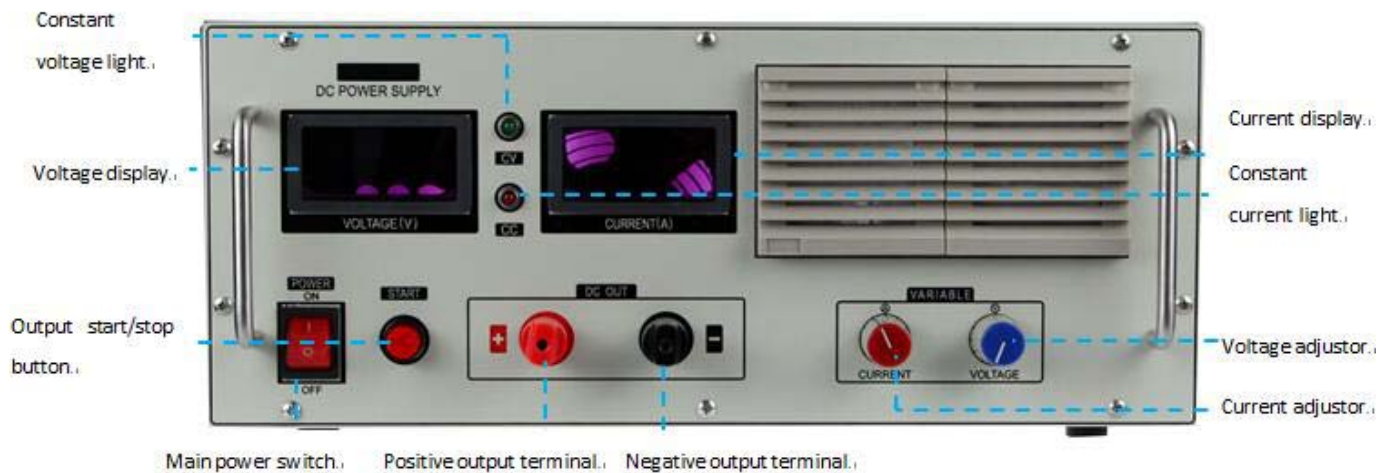
Applications

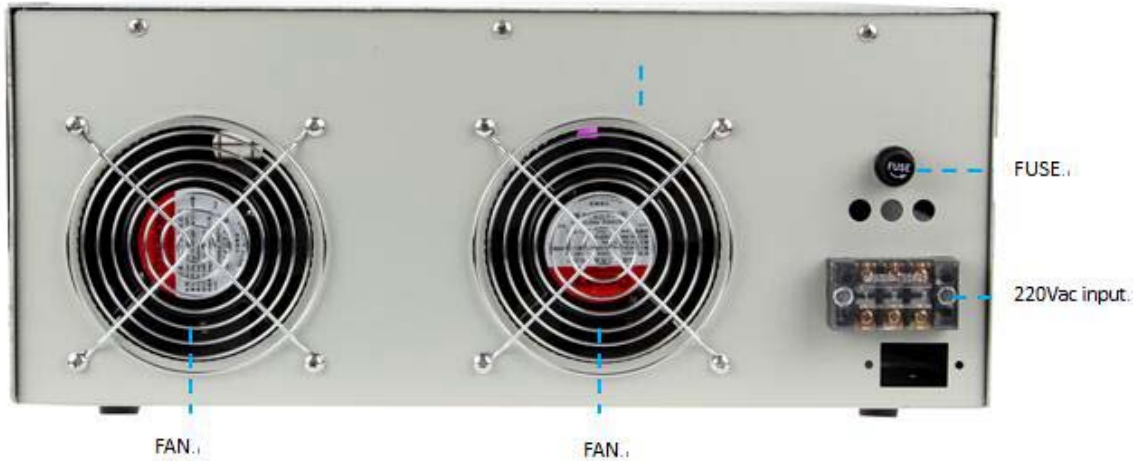
- Products burn-in test, such as DC motors, DC fans, vehicle DVD, vehicle AUDIO, resistors and capacitors etc.
- LED, motors and DC fans test.
- Accumulator charging.
- Labs and universities.
- Small electrolysis or electroplating system.
- Other conditions need stable DC output

Optional functions

- Analog control port via external 0 ~ 5V / 0 ~ 10V or 4mA ~ 20mA signal.
- RS485 communication port

Front & Back Panel instruction





Specifications

Input	Voltage	Single - phase 220V±10%	
	Frequency	50Hz/60Hz	
Output	Rated power	* kW	
	Output voltage	Adjusting range	0V ~ ***V
		Line regulation	< 0.05%±20mV (Stability @ ±10% Δ UIN)
		Load regulation	< 0.08%±20mV (Stability @ 10% ~ 90% load variance)
		Ripple	500mV (RMS)
		Response time	< 5mS (Regulation rate @ 10% ~ 100% load variance)
	Output current	Adjusting range	0A ~ ***A
		Line regulation	< 0.2% (Stability @ ±10% Δ UIN)
		Load regulation	< 0.08% (Stability @ 0 ~ 100% Δ UOUT)
		Ripple	500mA (RMS)
Setting & Display	Control mode	Front panel button control	
	Display mode	LED digital display	
Protection & Monitoring functions	Output over current protection (OCP)	Power supply automatically CC working and alarms when the output has over current.	
	Over temperature protection (OTP)	Power supply automatically cuts off output and alarms when the internal temperature of the power supply exceeds 85 °C.	
Noise		≤55dB	
Protection degree		IP20	
Cooling method		Forced air cooling	
Working	Ambient temperature	0°C ~ 45°C	

conditions	Humidity	10% ~ 90%(non-condensing)
	Height	≤2000m
Size (W*H*D) (mm)		434*180*500 (handle excluded)
Weight		Approx. 20 ~ 25Kg

Model list

Model	Output		Dimension (W*H*D) (mm)	Packing
SMP506A	6.0V	150.0A	434*180*500	Plywood case
SMP506B		200.0A	434*180*500	Plywood case
SMP506C		300.0A	434*180*500	Plywood case
SMP518A	18.0V	150.0A	434*180*500	Plywood case
SMP518B		200.0A	434*180*500	Plywood case
SMP518C		300.0A	434*180*500	Plywood case
SMP530A	30.0V	150.0A	434*180*500	Plywood case
SMP530B		200.0A	434*180*500	Plywood case
SMP536A	36.0V	100.0A	434*180*500	Plywood case
SMP536B		150.0A	434*180*500	Plywood case
SMP550A	50.0V	80.0A	434*180*500	Plywood case
SMP550B		100.0A	434*180*500	Plywood case
SMP560A	60.0V	80.0A	434*180*500	Plywood case
SMP560B		100.0A	434*180*500	Plywood case
SMP580A	80.0V	50.0A	434*180*500	Plywood case
SMP580B		80.0A	434*180*500	Plywood case
SMP5100A	100.0V	30.0A	434*180*500	Plywood case
SMP5100B		40.0A	434*180*500	Plywood case
SMP5100C		25.0A	434*180*500	Plywood case
SMP5120A	120.0V	50.0A	434*180*500	Plywood case
SMP5200A	200.0V	20.0A	434*180*500	Plywood case
SMP5200B		25.0A	434*180*500	Plywood case
SMP5250A	250.0V	10.0A	434*180*500	Plywood case
SMP5250B		15.0A	434*180*500	Plywood case

SMP5250C		20.0A	434*180*500	Plywood case
SMP5300A	300.0V	10.0A	434*180*500	Plywood case
SMP5300B		15.0A	434*180*500	Plywood case
SMP5400A	400.0V	10.0A	434*180*500	Plywood case
SMP5400B		15.0A	434*180*500	Plywood case
SMP5500A	500.0V	8.0A	434*180*500	Plywood case
SMP5500B		10.0A	434*180*500	Plywood case
SMP5600A	600.0V	5.0A	434*180*500	Plywood case
SMP5600B		8.0A	434*180*500	Plywood case
SMP5700A	700.0V	5.0A	434*180*500	Plywood case
SMP5700B		7.0A	434*180*500	Plywood case
SMP5800A	800.0V	4.0A	434*180*500	Plywood case
SMP5800B		6.0A	434*180*500	Plywood case

More models are coming soon. 😊