

## SP Series 60W~300W

### Introduction

The SP series switching mode DC power supply are made with 1 output channel, rated power from 15W to 300W, with 3 digits LED 1999 or 4 digits LED 19999 display. The SP series are meant for a low-cost DC power supply which can be widely used in education and electronic industry.

### Features

- ✓ Adopts PWM pre-regulation and linear adjustment
- ✓ Constant voltage and constant current operations
- ✓ Auto CV/CC switch
- ✓ Coarse and Fine control for voltage and current
- ✓ Over current protection, Over voltage protection and Over temperature protection
- ✓ Intelligent cooling fan

### Product photo



**SP-3010**



**SP-1503D**

# Switching DC Power Supply

## Specifications

Constant voltage operation	
Line regulation	$\leq 0.05\% + 1\text{mV}$
Load regulation	$\leq 0.1\% + 5\text{mV}$
Ripple & Noise	$\leq 10\text{mVrms}$
Constant current operation	
Line regulation	$\leq 0.05\% + 10\text{mA}$
Load regulation	$\leq 0.1\% + 10\text{mA}$
Ripple & Noise	$\leq 20\text{mArms}$
Display	
Voltmeter	3 digits LED display
Ammeter	3 digits LED display
Resolution	100mV/10mA
Accuracy	$\pm(1\% \text{ reading} + 1 \text{ digit})$
General	
Protection	Over current protection, fixed 105% of rated current. Over voltage protection, fixed 105% of rated voltage. Over temperature protection: when internal temperature reaches $65^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , OTP is activated and the output will be shut down.
Operating environment	$0^{\circ}\text{C} \sim 40^{\circ}\text{C}$ , $\leq 80\% \text{RH}$
Storage environment	$-10^{\circ}\text{C} \sim 70^{\circ}\text{C}$ , $\leq 70\% \text{RH}$
Power source	AC115V/230V $\pm 10\%$ selectable, 50/60Hz
Accessories	Power cord x1, Operation manual x1
Dimension	S2 chassis: 125Wx160Hx260D mm S3 chassis: 150Wx140Hx280D mm
Weight	Approx.2kg

## Selection guide

Model	Rated Output	Voltage Display	Current Display	Weight / kg
S2 Chassis: 125W*160H*260D				
SP-1505	0-15V 0-5A	0.00-9.99-10.0-16.0V	000.-999.mA 1.00-5.10A	2
SP-1510	0-15V 0-10A	0.00-9.99-10.0-16.0V	0.00-9.99-10.0-10.1A	2
SP-1515	0-15V 0-15A	0.00-9.99-10.0-16.0V	0.00-9.99-10.0-15.1A	2
SP-1520	0-15V 0-20A	0.00-9.99-10.0-16.0V	0.00-9.99-10.0-20.1A	2
SP-3003	0-30V 0-3A	0.00-9.99-10.0-32.0V	000.-999.mA 1.00-3.10A	2
SP-3005	0-30V 0-5A	0.00-9.99-10.0-32.0V	000.-999.mA 1.00-5.10A	2
SP-3010	0-30V 0-10A	0.00-9.99-10.0-32.0V	0.00-9.99-10.0-10.1A	2
SP-3610	0-36V 0-10A	0.00-9.99-10.0-36.0V	0.00-9.99-10.0-10.1A	2
SP-6002	0-60V 0-2A	00.0-62.0V	000.-999.mA 1.00-2.10A	2
SP-6003	0-60V 0-3A	00.0-62.0V	000.-999.mA 1.00-3.10A	2
SP-6005	0-60V 0-5A	00.0-62.0V	000.-999.mA 1.00-5.10A	2
SP-6006	0-60V 0-6A	00.0-62.0V	000.-999.mA 1.00-6.10A	2
SP-1001	0-100V 0-1A	00.0-99.9-100-102V	000.-999.mA 1.00-1.10A	2
SP-1002	0-100V 0-2A	00.0-99.9-100-102V	000.-999.mA 1.00-2.10A	2
SP-1003	0-100V 0-3A	00.0-99.9-100-102V	000.-999.mA 1.00-3.10A	2
SP-12001	0-120V 0-1A	00.0-99.9-100-122V	000.-999.mA 1.00-1.10A	2
SP-12002	0-120V 0-2A	00.0-99.9-100-122V	000.-999.mA 1.00-2.10A	2
SP-12003	0-120V 0-3A	00.0-99.9-100-122V	000.-999.mA 1.00-3.10A	2
SP-15001	0-150V 0-1A	00.0-99.9-100-152V	000.-999.mA 1.00-1.10A	2
SP-15002	0-150V 0-2A	00.0-99.9-100-152V	000.-999.mA 1.00-2.10A	2
S3 Chassis: 150W*140H*280D mm				
SP-1505D	0-15V 0-5A	00.00V-99.99V	0.000A-5.100A	2
SP-1510D	0-15V 0-10A	00.00V-99.99V	0.000A-10.10A	2
SP-1515D	0-15V 0-15A	00.00V-99.99V	0.000A-15.10A	2
SP-1520D	0-15V 0-20A	00.00V-99.99V	0.000A-20.10A	2
SP-3003D	0-30V 0-3A	00.00V-99.99V	0.000A-3.100A	2
SP-3005D	0-30V 0-5A	00.00V-99.99V	0.000A-5.100A	2
SP-3010D	0-30V 0-10A	00.00V-99.99V	0.000A-10.10A	2
SP-6002D	0-60V 0-2A	00.00V-99.99V	0.000A-2.100A	2
SP-6003D	0-60V 0-3A	00.00V-99.99V	0.000A-3.100A	2
SP-6005D	0-60V 0-5A	00.00V-99.99V	0.000A-5.100A	2
SP-1001D	0-100V 0-1A	00.00-99.99-100.00V	0.000A-1.100A	2
SP-1002D	0-100V 0-2A	00.00-99.99-100.00V	0.000A-2.100A	2
SP-1003D	0-100V 0-3A	00.00-99.99-100.00V	0.000A-3.100A	2
SP-12001D	0-120V 0-1A	00.00-99.99-120.00V	0.000A-1.100A	2
SP-12002D	0-120V 0-2A	00.00-99.99-120.00V	0.000A-2.100A	2
SP-12003D	0-120V 0-3A	00.00-99.99-120.00V	0.000A-3.100A	2
SP-15001D	0-150V 0-1A	00.00-99.99-150.00V	0.000A-1.100A	2
SP-15002D	0-150V 0-2A	00.00-99.99-150.00V	0.000A-2.100A	2

Specifications are subject to change without prior notice.