

SPP-8250/SPP-8251 SWITCH MODE POWER SUPPLY

USER'S MANUAL

INTRODUCTION

The SPP-8250/SPP-8251 Switching Mode DC Power Supply provides high power output with its small size and lightweight. They are suitable for applications that require clean and stable DC power source such as telecommunications, audio and digital systems, transceivers and amateur radios.

The SPP-8250 provides a variable voltage from 3V to 15V under 25A continuous operation.

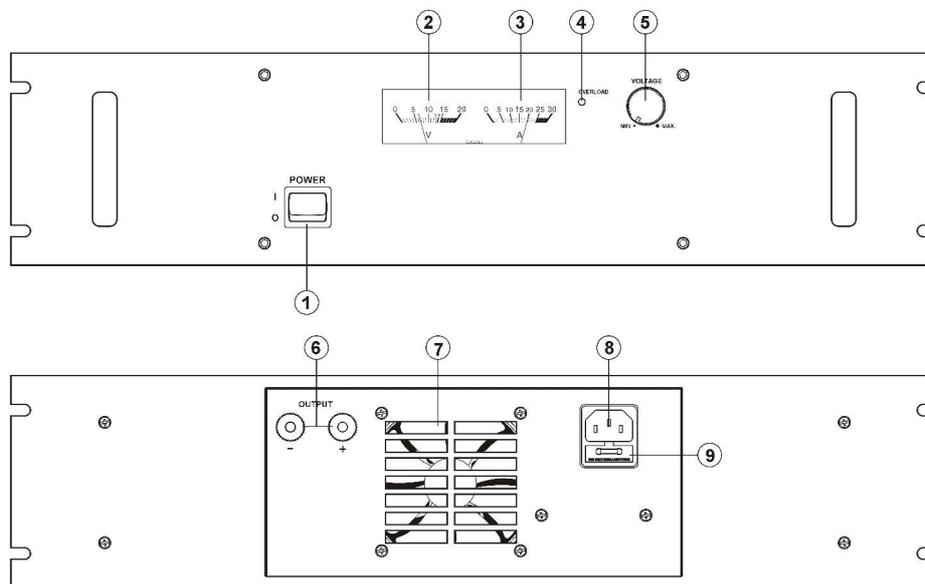
The SPP-8251 provides a fixed output of 13.8V under 28A continuous operation.

Please read through this operation instruction carefully and follow the instructions to prevent from abuse or misuse.

PRECAUTIONS

- This power supply is intended for Indoor Use Only.
- **Never** remove the metal cover of the power supply while AC power is connected.
- **Never** touch the power supply when your hands are wet.
- **Never** block the ventilation slots and cooling fan air intake window
- **Never** attempt to repair the power supply. Incorrect re-assembly may result in a risk of electric shock or fire.
- **DO NOT** use the power supply for the lamps or motorized equipment, which require high current input at starting and it may damage the power supply.
- **Never** use the power supply for the load requiring higher current than the designed value otherwise it may damage the power supply.
- Place the power supply on a flat surface with sufficient clearance, dry, dust free surroundings for ventilation.
- **Do not** expose the power supply to sun, high humid and dusty environment.
- **DO NOT** place the power supply close to the TV sets or CRT monitor.

PANEL DESCRIPTION



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|--|-----------------------|
| 1. On/Off Switch | 2. Voltmeter |
| 3. Ammeter | 4. Overload Indicator |
| 5. Output Voltage control knob (for SPP-8250 only) | 6. Output Terminal |
| 7. Cooling Fan and Air Intake Window | 8. AC Input Connector |
| 9. Fuse Holder | |

Note: At the bottom of SPP-8250, there is a fixed 13.8Vdc output selection switch. It is used to select the output voltage to fixed 13.8V or adjustable output 3-15V.

CONNECTION AND OPERATION

1. Check the rating label of the power supply and make sure it accepts the AC mains voltage. Connect the power supply to the AC Mains using the power cord provided.
2. Turn on the power supply and adjust the output voltage to match with the input voltage of the equipment. Then turn off the power supply.
3. Connect the equipment to the power supply. Red (+) is connected to the positive polarity input of the equipment and Black (-) is connected to the negative polarity input of the equipment.
4. Turn on the power supply again and then turn on the equipment.
5. When an operation is finished, turn off the equipment first and then turn off power supply.

FEATURES

1. Lightweight and Small Size: Switching mode power supply has the advantages of lightweight and small size. Comparing with linear mode power with the same power output, it is much lighter and smaller.
2. High Efficiency: The power supply is operated with efficiency over 78%.
3. Overload Protection: The current foldback circuitry is adopted to prevent from overload. The overload indicator will be lit up when the power supply is overload.
4. Over Temperature Protection: The over temperature circuitry is triggered when the power supply is over a certain high temperature to prevent the power supply from damage by the high temperature. When the protection is triggered, the output voltage and current will drop to a safety value and the overload indicator will be lit up.
5. Over Voltage Protection: The over voltage circuitry can protect the power supply and the loading equipment from damage by abnormal high output voltage.
6. High RFI Stability: The high protection circuitry against RFI (Radio Frequency Interference) provides a stable operation.
7. Variable Voltage Output: The variable range of output voltage from 3V to 15V enables good fit with various uses (for SPP-8250 only).

SPECIFICATIONS

	SPP-8250	SPP-8251
OUTPUT VOLTAGE:	3-15Vdc Adjustable or Fixed 13.8Vdc (Selectable)	Fixed 13.8Vdc
OUTPUT CURRENT:	25A	28A
RIPPLE AND NOISE:	50mVp-p or 5mV _{r.m.s}	
LINE REGULATION:	50mV (±10% Variation)	
LOAD REGULATION:	200mV (0~100% Load)	
POWER SOURCE:	230Vac/50Hz~ (or On Request)	
METER TYPE:	Analog	
DIMENSION (W×H×D):	Main Body 220 × 89 × 225 (mm) w / Standard 19" 2U Rack Mount Panel	
WEIGHT:	Approx. 3.5Kg	