



High Current Adjustable DC SMPS

750W Adjustable Voltage DC Power Supply

Models:

S-750-12 / S-750-24 / S-750-36 / S-750-48 / S-750-60 / S-750-110



Features and Specifications

- Compact DC SMPS
- Adjustable Output Voltage
- Multi Turn Control for Voltage
- 750W output power
- Overvoltage, overcurrent, short circuit protection

This range of DC power PSUs offer a compact and low cost solution for a high current adjustable voltage source powered from the mains. They are a great alternative to SLA batteries for projects which require large DC currents. The SMPS units have built in protection from overload and short circuit and can be powered from 200V 240V AC European mains voltages.

Connections

Warning: this device requires a mains connection which should only be carried out by suitably qualified persons.

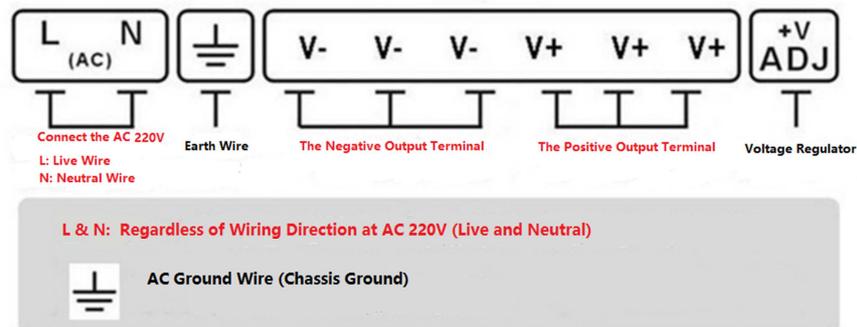


Figure 1: Connection Terminal Diagram

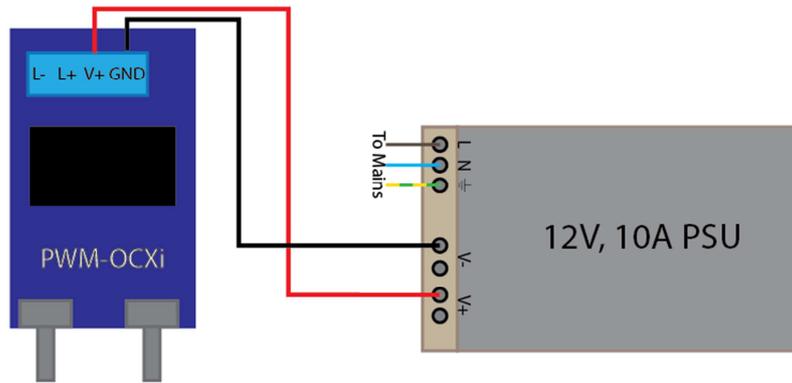


Figure 2: Example connections to our Power Pulse Modulators

	Model Number					
	S-750-12	S-750-24	S-750-36	S-750-48	S-750-60	S-750-110
Output Voltage (adjustable)	0-12V	0-24V	0-36V	0-48V	0-60V	0-110V
Maximum output current	62A	31A	21A	16A	12.6A	7A
Maximum output power	750W	750W	750W	750W	750W	750W
Power conversion efficiency	82%					
Output voltage accuracy	±1%					
Output ripples	≤100mv					
Input Voltage range	AC 185V-250V					
Frequency Range	50/60Hz					
Efficiency	> 82% / 220VAC					
Power surge current	8-10A/AC220V					
Power Factor	>0.93					
Leakage current	≤3.5MA/AC220V					
Overvoltage protection	Cuts off voltage output at 115% -135% of maximum output voltage. Output recovers once in the normal output range.					
Overload protection	The output power will be cut off at the 105% to 150% of maximum output power. Output recovers once in the normal output range.					
Short circuit protection	The output power will be cut off if the output is short circuited. Output recovers once in the normal range. (not re-energized after power failure)					
Shock resistance	10 ~ 500Hz, 2G 10min / 1 cycle, duration 60 minutes each axis					
Operating temperature	-20-50 °C, 10-90% RH (non-condensing)					
EMC standards	MEET EN55022 CLASS B,EN61000-3-2					
Insulation resistance	I/P-O/P,I/P-FG,0/P-FG:500VDC/100M Ohms					
Withstanding voltage	I/P-O/P:3kVAC,I/P-FG:1.5kVAC,0/P-FG:0.5kVAC					
Cooling	High speed dual ball bearing cooling fan					
Wight	1.5kg					
Size	260mm(L) x 105mm(W) x 65mm(H)					

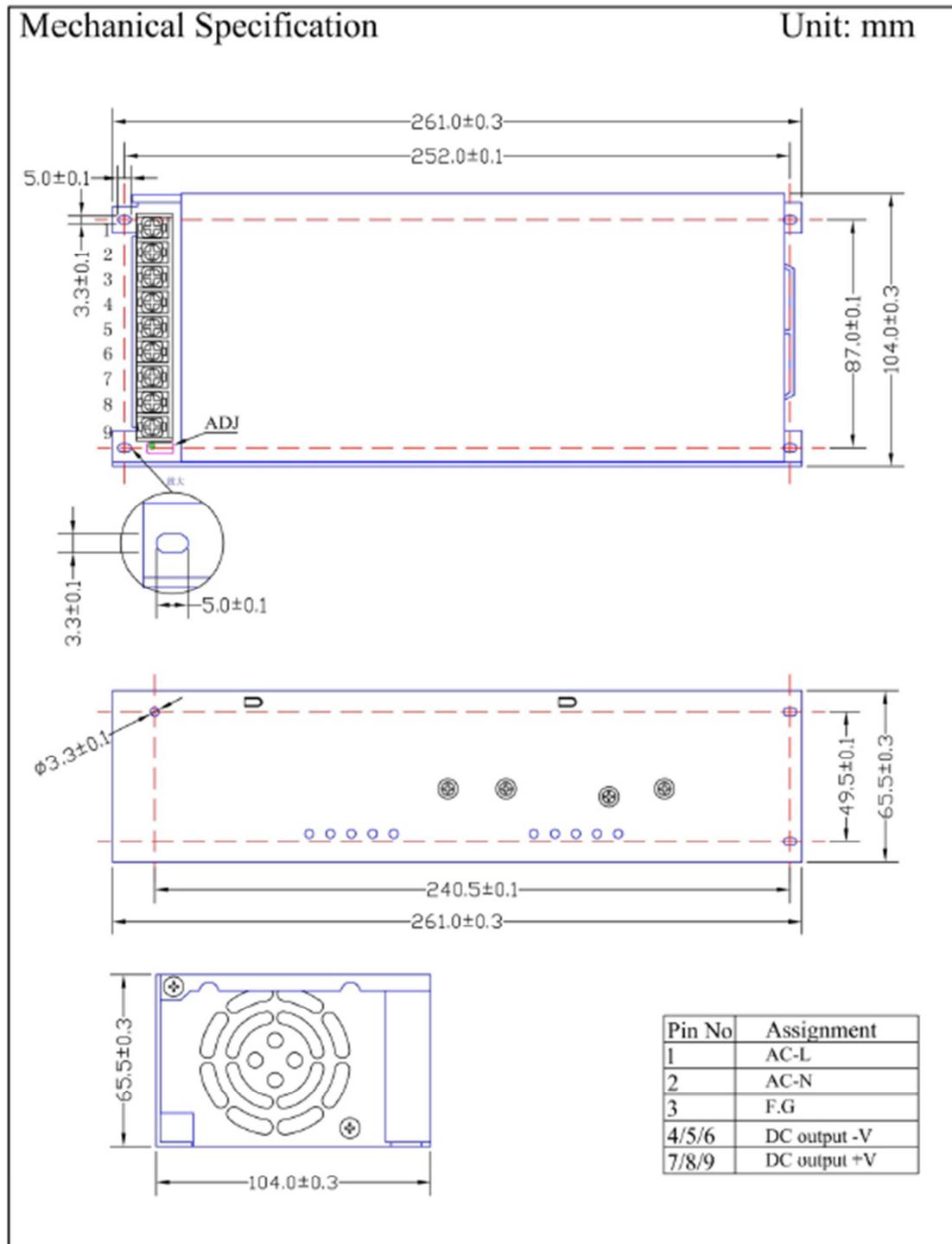


Figure 3: Mechanical Drawing

■ Block Diagram

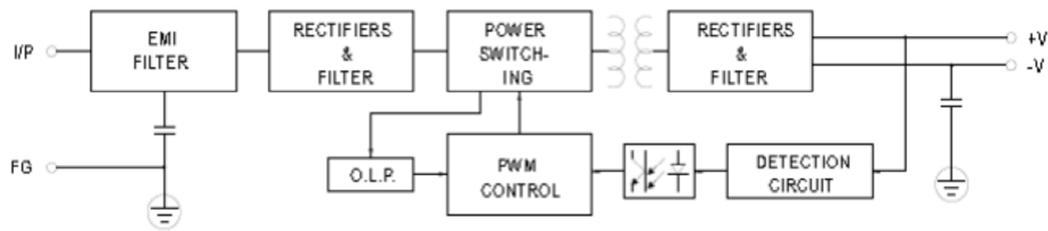


Figure 4: Functional Diagram

■ Derating Curve

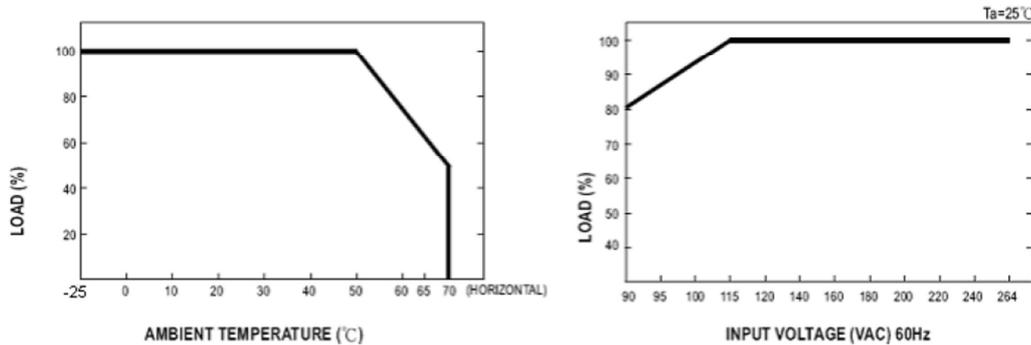


Figure 5: Derating Information

Installation Warnings:

1. This product is only for indoor use, it cannot be installed in any places easily accessed by rainwater.
2. Do not remove the power supply chassis!
3. Do not parallel two or more power supplies with same voltage, they cannot work simultaneously.
4. The wire length at the output of the switching power supply should be less than 20 meters, it will drop the voltage efficiency if it is too long, input and output wire have to be 1.5 square mm or above.
5. The switching power supply cannot be installed in dusty or smoky environments, nor surrounded by metal debris, water vapour, combustible volatile gases such as gasoline, alcohol.
6. The metal chassis is connected to the mains earth connection. Do not connect DC output "GND" or "Negative" line to the metal chassis, or it will damage the power supply.
7. Do not place any inflammable and explosive materials within 50 cm area of the power external circular mesh heat vent hole, do not place anything within 5cm of the power supply to ensure it has a good thermal environment, and runs safely.
8. Please accurately calculate the load power, do not operate it at full load or over load for long time. Continuous load should be less than 80% of specified power.

9. If the case of the power supply is not grounded, when it runs, do not touch it for your own safety.
10. Do not short circuit output, if there is no output, power off for one minute then power on and try again.
11. Before connecting wires and using it, please make sure you have connected the power properly, never connect the power lines in reverse.