



# SP46P Series

Desk-Top, Switchmode Power Supply  
RoHS Compliant, CEC Efficiency Level V

Date: 1/10/11

Rev: 121510

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### Features:

- Universal Input 100 – 240 VAC
- IEC320-C14 Input Socket
- 5V – 50V Output
- Short Circuit Protection
- Over-Current Protection
- Over-Voltage Protection
- 100% Burn-In
- LED Indication
- RoHS, CEC Level V Compliant



### Input

Input Voltage	90 to 264 VAC
Input Frequency	47 to 63Hz
Input Current	1.1A Max at 115VAC 0.55A Max at 230VAC
Safety Ground Leakage Current	0.75mA Max. @ 240VAC, Full Load

### Output

Output Voltage & Current	<b>See Chart</b>
Ripple & Noise (P-P)	1% Max, Full Load @ 90VAC Input
Over-Voltage Protection	Set at 112 - 132% of Nominal Output Voltage
Over-Current Protection	Set at 110 - 150% of Nominal Output Current
Temperature Coefficient	± 0.04% / °C Max.
Transient Response	Full Load to Half Load @ 100VAC Input: 4mS Max.

### Environmental

Operating Temperature	0°C to 70°C
Derating	Derated from 100% at +40°C to 50% at +70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5% to 95% Non-Condensing

### Electrical

Efficiency	Meets CEC Level V Criteria
Hold-Up Time	16mS Max.
Line Regulation	±1% Max. at Full Load
Load Regulation	±3% Typ. at 230VAC
Inrush Current	23A @ 115VAC Max. 45A @ 230VAC Max. at 25°C Cold Start
Withstanding Voltage	4242 VDC from Input to Output, 2121 VDC from Input to Ground
Insulation Resistance	50 MΩ Min. from Output to Ground
Mean Time Between Failure (MTBF)	100,000 Hours Min., Full Load at 25°C Ambient

### Safety

EMI Requirements	Meets Conduction Limits of: (A) FCC Part-15 Class B (B) CISPR-22 Class B
Safety Standards	Meets or Exceeds: (A) UL/C-UL (UL 60950-1) (B) TUV/GS (EN 60950-1) (C) CB (D) CE (E) PSE (6V - 50V Output) (F) CEC Efficiency Level: V



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## Output Voltage and Current Chart

Model Number**	Output Voltage	Output Current	Total Regulation	Maximum Output Power
SP46P9XXR	5 - 6 VDC	6.66 - 8.00 A	5%	40W
SP46P9XXR	7 - 8 VDC	6.43 - 5.62 A	5%	45W
SP46P9XXR	9 - 11 VDC	5.00 - 4.09 A	4%	45W
SP46P9XXR	12 - 13 VDC	3.75 - 3.46 A	3%	45W
SP46P9XXR	14 - 16 VDC	3.21 - 2.81 A	3%	45W
SP46P9XXR	17 - 21 VDC	2.94 - 2.38 A	3%	50W
SP46P9XXR	22 - 27 VDC	2.27 - 1.85 A	2%	50W
SP46P9XXR	28 - 33 VDC	1.78 - 1.51 A	2%	50W
SP46P9XXR	34 - 40 VDC	1.47 - 1.25 A	2%	50W
SP46P9XXR	41 - 50 VDC	1.22 - 1.00A	2%	50W

\*\* To Determine Part Number:

- Replace "XX" with Required Output Voltage (5VDC = "05", 12VDC = "12", 50VDC = "50", etc.)

Example: SP46P924R indicates a Unit with 24VDC Output.

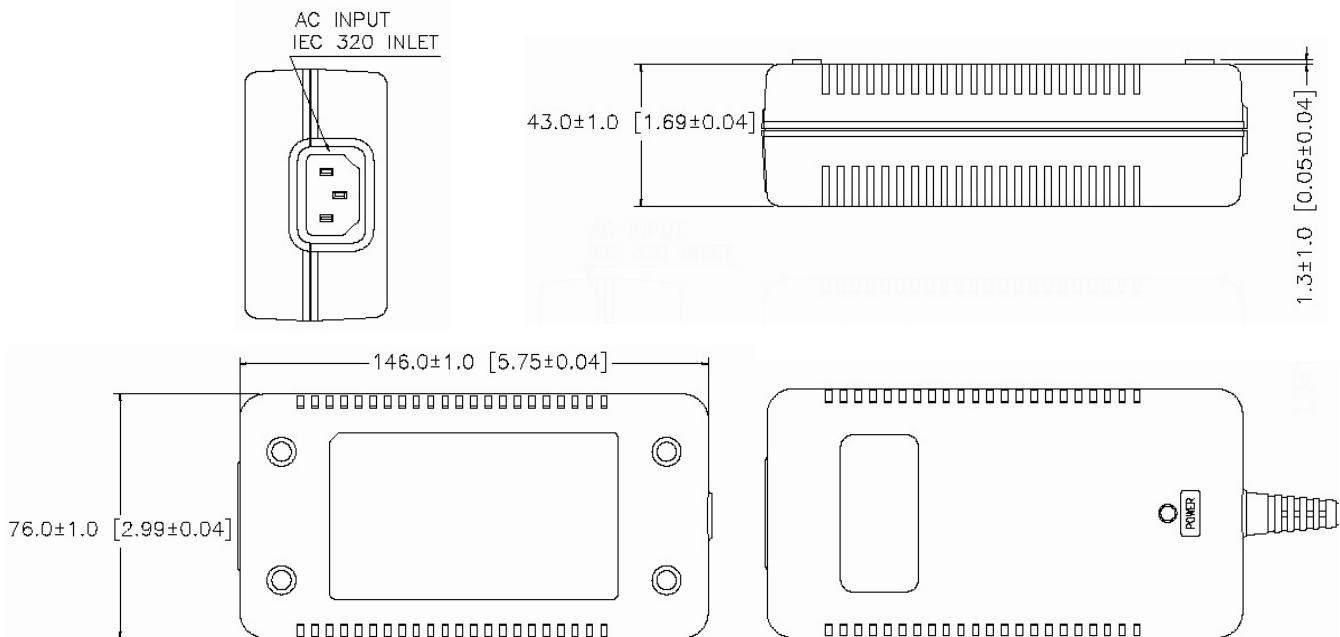
Note: Output Connector to be specified.

Standard Connector: 4 ft. (AWG#18) cable w/ 5-Pin Power Din Cable.

For 5 – 6V Output: 4 ft. (AWG#18x5C) cable w/ 5-Pin Power Din Cable.

For 12 – 13V Output: 4 ft. (AWG#18x3C or AWG#20x2C) cable w/ 5-Pin Power Din Cable.

For 41 – 50V Output: 4 ft. (AWG#18x2C) cable w/ 5-Pin Power Din Cable.



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