# SP80D – SP120D Series

## Desk-Top, Switch Mode Power Supply
## RoHS Compliant, CEC Efficiency Level IV

### Features:

- Active PFC
- Available with C6, C8, and C14 Input Socket
- Over-Voltage Protection
- Short Circuit Protection
- Over-Current Protection
- 100% Burn-In & Hi-Pot Tested
- LED Indication
- RoHS Compliant
- CEC Efficiency Level: IV

### Input

| | |
|---|---|
| Input Voltage | 90 to 264 VAC |
| Input Frequency | 47 to 63Hz |
| Input Current | 2.50A Max @ 115VAC, 1.25A Max @ 230VAC, Full Load |
| Safety Ground Leakage Current | 0.5mA Max. |
| No Load Power Consumption | ≤0.5 Watts |

### Output

| | |
|---|---|
| Output Voltage & Current | ***See Chart*** |
| Ripple & Noise (P-P) | ***See Chart*** |
| Over-Voltage Protection | Auto Recovery |
| Over-Current Protection | Protected to Short Circuit Conditions, Auto Start |
| Temperature Coefficient | ± 0.05% / °C Max. |

### Environmental

| | |
|---|---|
| Operating Temperature | 0°C to 40°C |
| Storage Temperature | -20°C to 85°C |
| Relative Humidity | 5% to 95% Non-Condensing |

### Electrical

| | |
|---|---|
| Efficiency | Meets CEC Level IV Criteria |
| Hold-Up Time | 16mS Min. |
| Line Regulation | ±1% Max. at Full Load |
| Load Regulation | ±5% Max. at Full Load |
| Inrush Current | 45A Max. @ 110VAC, 90A Max. @ 220VAC, 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) | 30,000 Hours Min., Full Load at 25°C Ambient |

### Safety

| | |
|---|---|
| EMI Requirements | Meets Conduction Limits of:<br>(A) FCC Part-15 Class B<br>(B) CISPR-22 Class B |
| Safety Standards | Meets or Exceeds:<br>(A) UL<br>(B) C-UL<br>(C) TUV<br>(D) CE<br>(E) CB<br>(F) FCC<br>(G) CEC Level IV |

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## Output Voltage and Current Chart

| Model Number** | Output Voltage | Maximum Output Current | Ripple & Noise | Maximum Output Power |
|---|---|---|---|---|
| SP80D9XXR† | 12 - 16 VDC | 6.60 A | 2.0% Max. | 80W |
| SP90DYXXR | 12 - 16 VDC | 7.50 A | 2.0% Max. | 90W |
| SP90D9XXR† | 19 - 24 VDC | 4.73 A | 1.5% Max. | 90W |
| SP100DYXXR‡ | 12 - 17 VDC | 8.33 A | 2.0% Max. | 100W |
| SP100DYXXR | 19 - 24 VDC | 5.20 A | 1.5% Max. | 100W |
| SP120D1RYXXR‡ | 18 - 24 VDC | 6.67 A | 1.5% Max. | 120W |

** To Determine Part Number:

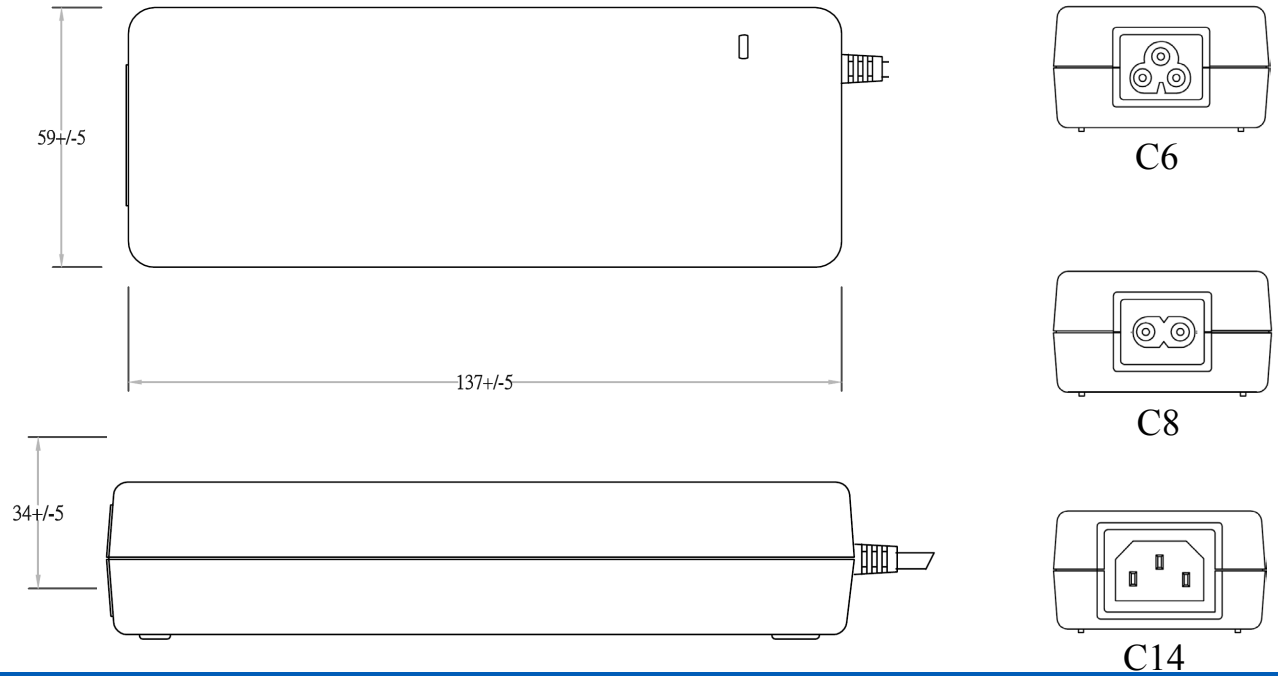
- Replace "Y" with Required Input Socket Style Designation (C6 = "6", C8 = "8", C14 = "9")
- Repace "XX" with Required Output Voltage (15VDC = "15", 24VDC = "24", etc.)

  Example: SP100D**8**24R indicates a 24VDC Unit with a C8 Input Socket.

† The 80W (12 - 16 VDC) and 90W (19 - 24 VDC) are only available with C14 Input Socket.
For models in these ranges with C6 & C8 input sockets, See SP80D - SP90D Series Spec Sheet

‡ The 100W (12 - 17 VDC) and 120W (18 - 24 VDC) are only available with C14 & C6 Input Socket.

Note:
Output connector to be specified. Standard Termination is a 4 ft. cable with a 2.5x5.5x11mm Female Barrel Plug.



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