



# SP120D – SP150D Series

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

Date: 5/7/10

Rev: 030110

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### Features:

- Active PFC
- IEC320-C14 Input
- Over-Voltage Protection
- Short Circuit Protection
- Over-Current Protection
- 100% Burn-In
- 100% Hi-Pot Tested
- RoHS Compliant
- CEC Efficiency Level: IV



### Input

Input Voltage	90 to 264 VAC
Input Frequency	47 to 63Hz
Input Current	2.5A Max
No Load Power Consumption	≤0.5 Watts
Safety Ground Leakage Current	0.75mA Max.

### Output

Output Voltage & Current	<i>See Chart</i>
Ripple & Noise (P-P)	<i>See Chart</i>
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 70°C
Derating	Derated from 100% at +40°C to 50% at +70°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	8.3mS Min.
Line Regulation	±1% Max. at Full Load
Load Regulation	±5% Max. at Full Load
Inrush Current	120A Max.
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 (B) TUV/GS (C) CE (D) CB (E) FCC (F) Doir+C-Tick (G) EK (H) BSMI



# SP120D – SP130D Series

Desk-Top, Switch Mode Power Supply  
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## Output Voltage and Current Chart

Model Number**	Output Voltage	Maximum Output Current	Maximum Output Power	Ripple & Noise
SP120D <u>Y</u> XXR	12 - 17 VDC	10.0 A	120W	240 mV
SP130D <u>Y</u> XXR	18 - 24 VDC	7.22 A	130W	480 mV
SP150D <u>Y</u> XXR	15 - 24 VDC	8.33 A	150W	480 mV

\*\* To Determine Part Number:

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

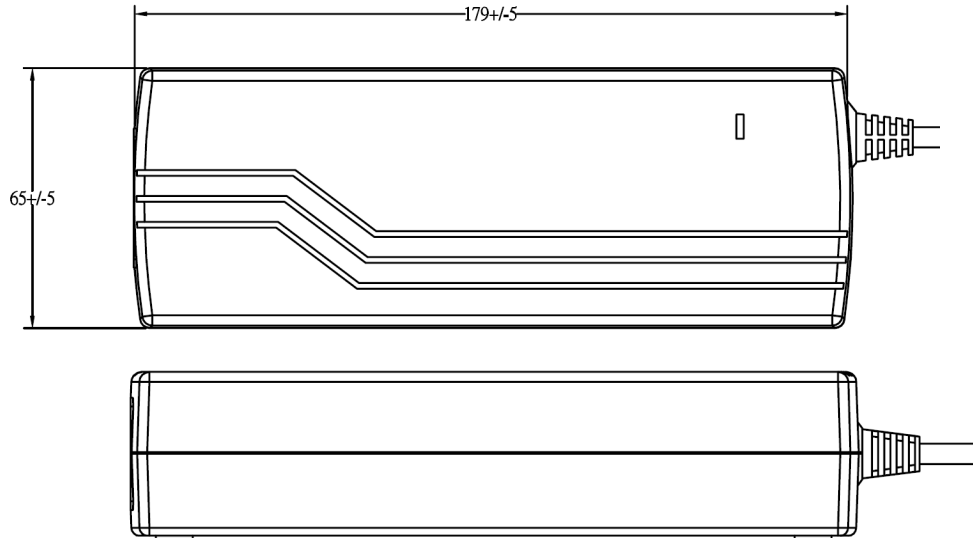
Example: SP130D924R indicates a 24VDC Unit with a C-14 Input Socket

**Note:**

Output connector to be specified

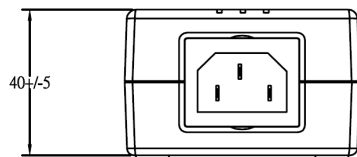
Standard Connector is a 2.5 x 5.5 x 11mm Female Barrel Plug, Center Positive (+)

The cable length and wire gauge will be dependent on CEC requirements for each current level

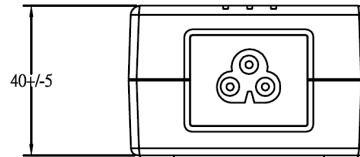


**Note:**

Determine part number by selecting Input Socket Style Designation (below) in place of "Y"



C14 = "9"



C6 = "6"



TECHNOLOGIES INC.  
HICKSVILLE, NEW YORK

• 264 Duffy Avenue  
• Hicksville, NY 11801

• Tel: (516) 433-1313  
• Fax: (516) 433-1457

• Web: [www.apxonline.com](http://www.apxonline.com)  
• Email: [sales@apxonline.com](mailto:sales@apxonline.com)

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