



# ENCLOSED SWITCHING POWER SUPPLY-QUAD OUTPUT

## 120W Quad Output Switching Power Supply

**PICTURE** Case:D 199x110x50mm



### FEATURES

- High efficiency, high reliability
- Built in EMI filter, low ripple noise
- Compact size, light weight
- 100% full load burn-in test
- Short circuit/ over load/ over voltage protected
- International AC input selected
- Approvals: CE/ CSA:219967-1426940
- 2 years warranty

### TECHNICAL DATA

Input voltage. . . . . 88 ~ 132VAC/176 ~ 264VAC selected by sw.  
 Input frequency. . . . . 47-63Hz  
 Inrush current. . . . . cold start, 30A  
 Output voltage. . . . . refer to below table (CH1:+10,-5% ADJ.)  
 Ripple. . . . . <2%(p-p)  
 Overload protection. . . . . 105% ~ 135% output shutdown  
 Over voltage protection. . . . . CH1:115% ~ 135% of output voltage  
 Setup, rise, hold up time. . . . . 200ms, 50ms, 20ms  
 Withstand voltage. . . . . I/P-O/P:3KV, I/P-FG:1.5KV, 1min  
 Insulation resistance. . . . . >100MΩ (output) and (input,FG)  
 Working temperature. . . . . 0-50°C@100%, -10°C@80%, 60°C@60%  
 Storage temperature. . . . . -25~65°C  
 Operation humidity. . . . . 25~85%RH  
 EMI Standards. . . . . IEC-1000-3-2,3, FCC class B  
 EMC Standards. . . . . EN61000-4-2,3,4,5,  
 Vibration. . . . . 10~55HZ, 0.375mm amplitude at X,Y,Z axial for about 2H  
 Shock. . . . . 294m/s<sup>2</sup>{30G} at 6 surfaces for three times  
 Weight. . . . . 0.88kgs

### ※Type

Type No .	Output	Tol.	R & N	Effi .
SP-E120Q005N-SC	5V : 2-11A	±2%	80mV	77%
	12V : 0.5-4A	±6%	120mV	
	-5V : 0.2-1A	±6%	80mV	
	-12V : 0.2-1A	±6%	120mV	
SP-E120Q015N-SC	5V : 2-10A	±2%	80mV	76%
	15V : 0.5-3.5A	+10,-5%	150mV	
	-5V : 0.2-1A	±6%	80mV	
	-15V : 0.2-1A	+10,-5%	150mV	
SP-E120Q012N-SC	5V : 2-8A	±2%	80mV	80%
	12V : 0.2-2A	±6%	120mV	
	24V : 0.2-2A	±6%	180mV	
	-12V : 0.2-1A	±6%	120mV	

## 180W Quad Output Switching Power Supply

**PICTURE** Case:G 155x150x86mm



### FEATURES

- Low cost, high reliability
- High efficiency, low working temp.
- Built in EMI filter, low ripple noise
- Compact size, light weight
- 100% full load burn-in test
- Approvals: CE/ CSA:219967-1426940
- Short circuit/ over load protected
- International AC input selected
- 1 year warranty

### TECHNICAL DATA

Input voltage. . . . . 88 ~ 132VAC/176 ~ 264VAC selected by sw.  
 Input frequency. . . . . 47-63Hz  
 Inrush current. . . . . cold start, 20A/115V, 40A/230V  
 Output voltage. . . . . refer to below table (CH1:+10 ADJ.)  
 Ripple. . . . . <2%(p-p)  
 Overload protection. . . . . 105% ~ 135% output shutdown  
 Setup, rise, hold up time. . . . . 200ms, 50ms, 16ms  
 Withstand voltage. . . . . I/P-O/P:1.5KV, I/P-FG:1.5KV, 1min  
 Insulation resistance. . . . . >100MΩ (output) and (input,FG)  
 Working temperature. . . . . 0-50°C@100%, -10°C@80%, 60°C@60%  
 Storage temperature. . . . . -25~65°C  
 Operation humidity. . . . . 25~85%RH  
 EMI Standards. . . . . IEC-1000-3-2,3, FCC class B  
 EMC Standards. . . . . EN61000-4-2,3,4,5  
 Vibration. . . . . 10~55HZ, 0.375mm amplitude at X,Y,Z axial for about 2H  
 Shock. . . . . 294m/s<sup>2</sup>{30G} at 6 surfaces for three times  
 Desire life. . . . . >8years (load 50% at +40°C)  
 Weight. . . . . 1.28kgs

### ※Type

Type No .	Output	Tol.	R & N	Effi .
SP-E180Q012N-SC	5V : 1-8A	±2%	80mV	80%
	12V : 0.2-2A	±6%	120mV	
	24V : 0.5-4A	±5%	200mV	
	-12V : 0.1-1A	±8%	120mV	