## DC-DC Module Power Supply 300W SPA300 Series



## Key features

- Universal input:90-264 VAC, 50/60 Hz
- Low ripple and noise
- Over load and short circuit protection
- High efficiency, high density, the efficiency is up to 91%.
- Industrial design
- Active power factor, PF≥0.95@230Vac
- Lower power, ROHS
- Slim Design, only 30mm
- 3 Years product warranty

RoHS

SPM300 series --- a wiring module power supply offered by Zhongyiguang. The maximum output power is 300 w, high efficiency, low loss, and adopts the design of Europe and the United States first-line brand components. It has high reliability, high power density, good anti-interference characteristics, and widely used in military industry, communications, industrial automation, industrial control and so on related high-end industry.

Electrical specifications							
Model	Input voltage	Output Power(W)	Output voltage(V)	Output current(A)	Ripple(mv)	Efficiency (%)	
SPA200-S05	90 ~ 265Vac	200	5	40	150	85	
SPA200-S12	90 ~ 265Vac	200	12	16	150	88	
SPA200-S15	90 ~ 265Vac	200	15	13	150	89	
SPA300-S24	90 ~ 265Vac	300	24	12.5	150	89	
SPA300-S36	90 ~ 265Vac	300	36	8.3	150	90	
SPA300-S48	90 ~ 265Vac	300	48	6.25	150	91	

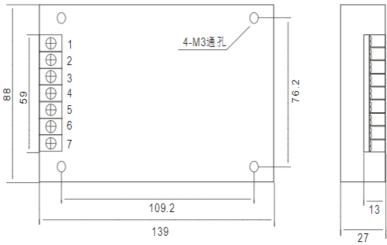
General leatures					
Output					
	Output voltage accuracy	±2.0%			
	Source effect	±1.0%			
	Load effect	±1.0%			
	Starting time (TYP)	100ms/230VAC 200ms/115VAC at full load			
	Output hold time (TYP)	40ms/230VAC 15ms/115VAC at full load			
	Input voltage range	90 ~ 265VAC			
	Input frequency range	47 ~ 63Hz			
Input	Input current (TYP)	3.5A /115VAC 1.5A / 230VAC			
	Inrush current (TYP)	Cold boot 50 A / 230 VAC			
	Recommended values for External Fuses	T10A/250Vac			
	Leakage current (TYP)	<1mA at 230VAC/50Hz			
	Power factor PF (TYP)	> 0.95 230VAC Full load			



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	Over current protection	130150% load, automatic recovery after troubleshooting			
Protection	Over temperature protection	automatic recovery after troubleshooting			
	Over pressure protection	Over voltage would be locked.			
Work environment	Operating Temperature	—40 ~ +80 °C (According to the output load derating) note:See cooling mode			
	Humidity	85% .RH max			
	Storage Temperature	-40 ~ +85, 10 ~ 95% RH			
	Temperature coefficient	0.03%/ (0~ 50℃ )			
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes			
	Safety Standard	UL60950,EN60950			
	I/O-Isolation voltage	I/P-O/P:3KVAC I/P-FG(CASE):1.5KVAC O/P-FG(CASE):0.5KVAC			
	Isolation resistance	I/P-O/P,I/P-FG,O/P-FG:>100M Ohms/500VDC 25°C 70% RH			
Safety and	EMI / RFI conducted	Conform to EN55011, EN55022 (CISPR22) class A			
EMC (Note:3)	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV			
	RF	IEC/EN 61000-4-3 level 4			
	EFT	IEC/EN 61000-4-4 level 4 4kV			
	SURGE	IEC/EN 61000-4-5 level 4 2kV			
Others	MTBF	≥130K hrs min. MIL-HDBK-217F(25)			
Officis	Dimension	139*88*27mm (L*W*H)			
Notes	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature. The				
	efficiency is measured after 0.5h of the engine				
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor				
	The power supply is considered a conre-confirmed that it still meets EMC of the confirmed that it still meets are supplyed to the confirmed that it still meets are supplyed to the confirmed that it still meets are supplyed to the confirmed that it is not supply in the confirmed	mponent which will be installed into a final equipment.The final equipment must be directives			

## **Dimension**



	↓ <sup>A</sup> ↓ <sup>B</sup>
13	

Pin	1	2	3	4	5	6	7
Function	AC	AC	FG	+V	'o	_'	Vo

Heat sink according to the installation:

- 1 , Figure A heat sink material: aluminum, 2.0mm, B is power module.
- $2,\geq 200W$ , the area of A  $\geq 3000$ cm2,
- 3, between A and B should be filled with thermal grease.