



300W Single Output with PFC Function

SPV-300 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC Fan
- Output voltage programmable from 20~110% by 1~5.5VDC external control signal
- Built-in remote ON-OFF control
- Built-in fan speed control
- Fixed switching frequency at 100KHz
- 3 years warranty

User's Manual



■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

SPECIFICATION

MODEL		SPV-300-12		SPV-300-24		SPV-300-48	
OUTPUT	DC VOLTAGE	12V		24V		48V	
	RATED CURRENT	25A		12.5A		6.25A	
	CURRENT RANGE	0 ~ 25A		0 ~ 12.5A		0 ~ 6.25A	
	RATED POWER	300W		300W		300W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p		150mVp-p		240mVp-p	
	VOLTAGE ADJ. RANGE	10.8 ~ 13.2V		20 ~ 26.4V		41 ~ 52.8V	
	VOLTAGE TOLERANCE <small>Note.3</small>	± 1.0%		± 1.0%		± 1.0%	
	LINE REGULATION	± 0.3%		± 0.2%		± 0.2%	
	LOAD REGULATION	± 0.5%		± 0.5%		± 0.5%	
SETUP, RISE TIME	800ms, 50ms/230VAC 2500ms, 50ms/115VAC at full load						
HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load						
INPUT	VOLTAGE RANGE <small>Note.5</small>	88 ~ 264VAC 124 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load					
	EFFICIENCY (Typ.)	83.5%				85%	86.5%
	AC CURRENT (Typ.)	3.6A/115VAC 1.8A/230VAC					
	INRUSH CURRENT (Typ.)	20A/115VAC 45A/230VAC					
	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed					
	OVER VOLTAGE	13.8 ~ 16.2V				27.6 ~ 32.4V	57.6 ~ 67.2V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down					
FUNCTION	REMOTE CONTROL	4 ~ 10VDC power off, <0 ~ 0.8VDC power on					
	OUTPUT VOLTAGE TRIM	2.4 ~ 13.2V				4.8 ~ 26.4V	9.6 ~ 52.8V
ENVIRONMENT	WORKING TEMP.	-20 ~ +65℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)					
SAFETY EMC (Note 4)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
	SAFETY STANDARDS	UL60950-1, TUV BS EN/EN60950-1, EAC TP TC 004 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH					
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020					
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024, light industry level, EAC TP TC 020					
	MTBF	2116.3K hrs min. Telcordia SR-332 (Bellcore) ; 210.6K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	215*115*50mm (L*W*H)					
	PACKING	1.1Kg; 12pcs/14Kg/0.92CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 5. Derating may be needed under low input voltages. Please check the derating curve for more details. 6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx						

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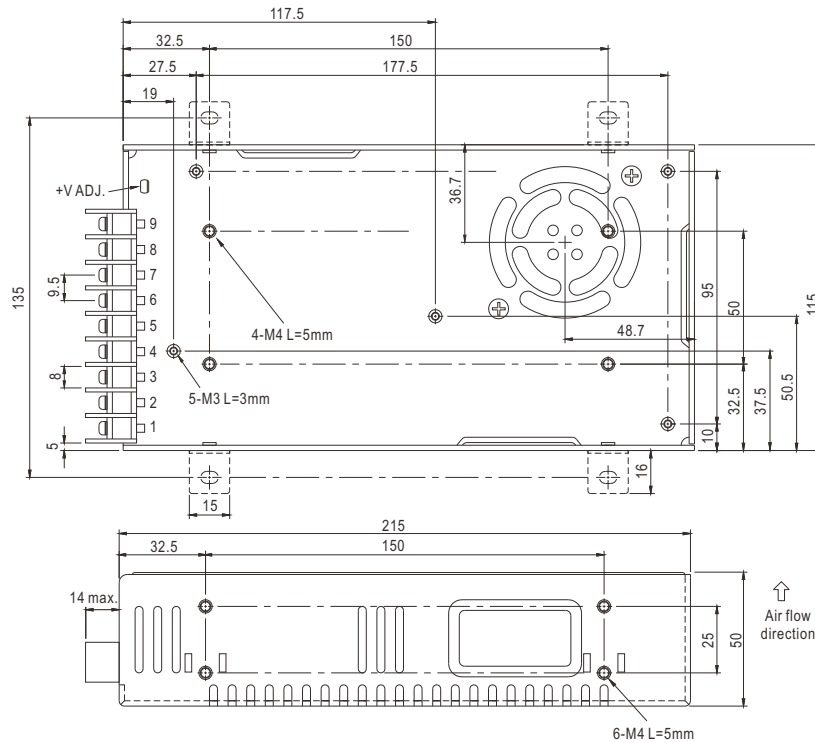


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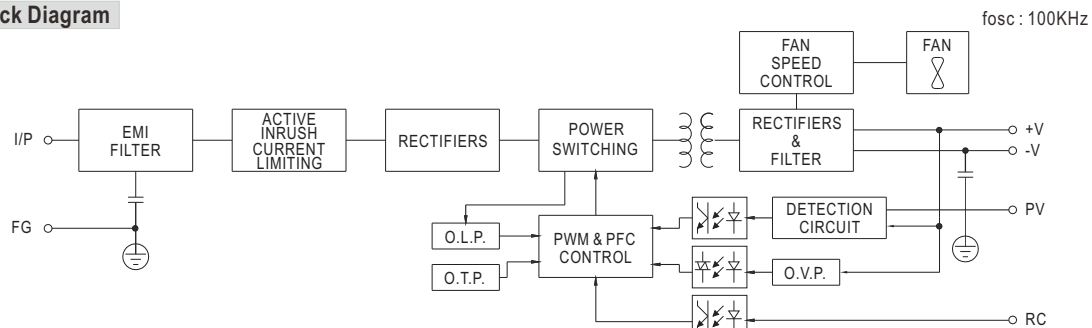
SPV-300 series

Mechanical Specification

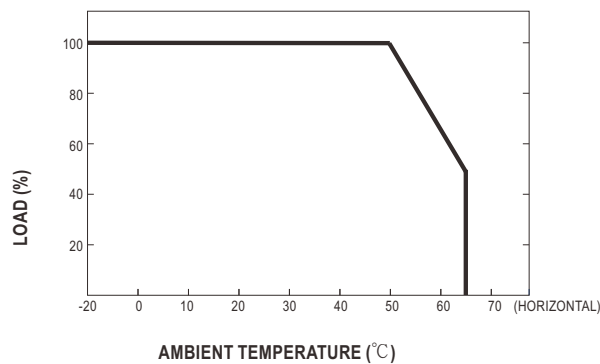
Case No. 912G Unit:mm



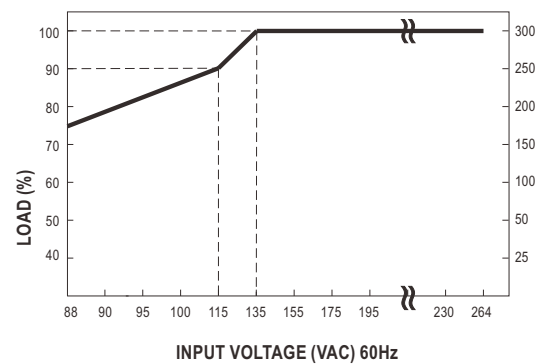
Block Diagram



Derating Curve



Static Characteristics



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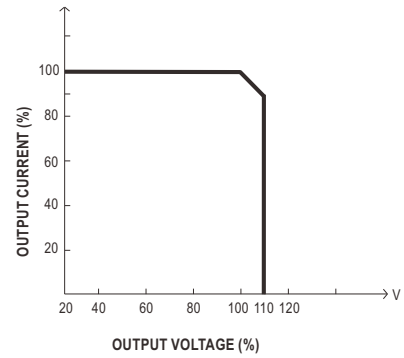
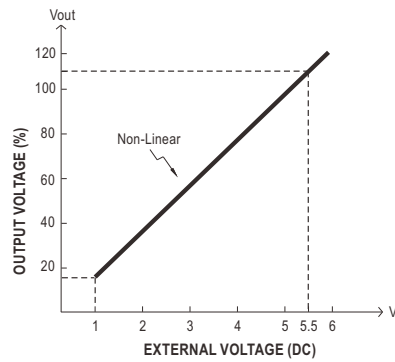
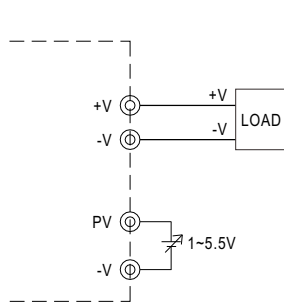


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Function Manual

1. External Voltage Control



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We are here for you. Addresses and Contacts.

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