



**300W LED Driver power supply < HSP-300**



■ Features :

- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- Low leakage current < 1mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Low profile: 31mm
- Conformal coated
- LED indicator for power on
- 3 years warranty



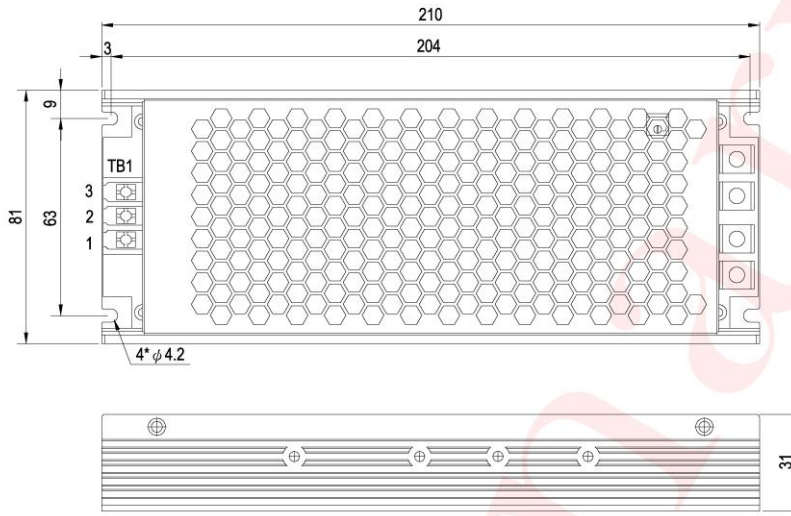
**SPECIFICATION**

MODEL		HSP-300-2.8	HSP-300-4.2	HSP-300-5
OUTPUT	DC VOLTAGE	2.8V	4.2V	5V
	RATED CURRENT	60A	60A	60A
	CURRENT RANGE Note.5	0 ~ 60A	0 ~ 60A	0 ~ 60A
	RATED POWER(convection)	168W	252W	300W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	2.5~3V	3.6~4.4V	4.5~5.5V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	2000ms, 100ms/230VAC      3000ms, 100ms/115VAC at full load		
HOLD UP TIME (Typ.)	8ms/230VAC      8ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.4	180 ~ 264VAC      254 ~ 370VDC or 90~135VAC      127~190VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF ≥ 0.93/230VAC      PF ≥ 0.98/115VAC at full load		
	EFFICIENCY (Typ.)	81%		87%
	AC CURRENT (Typ.)	2.1A/115VAC      1.1A/230VAC	2.7A/115VAC      1.5A/230VAC	4.0A/115VAC      2.0A/230VAC
	INRUSH CURRENT (Typ.)	Cold start 20A/115VAC      40A/230VAC		
LEAKAGE CURRENT	<1mA / 240VAC			
PROTECTION	OVERLOAD	105~135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	SHORT CIRCUIT	Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	3.22 ~ 3.78V	4.6 ~ 5.4V	5.7 ~ 7.0V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after fault condition is removed		
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes		
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, EN60950-1, CCC GB4943.1-2011 approved		
	WITHSTAND VOLTAGE	I/P-O/P: 3.0KVAC      I/P-FG: 2.0KVAC      O/P-FG: 0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC/25°C / 70%RH		
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2, EN61000-3-3, GB9254-2008		
EMC IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN55024, light industry level (surge 4KV), criteria A, GB17625.1-2003			
OTHERS	MTBF	263.2K hrs min.      MIL-HDBK-217F (25°C)		
	DIMENSION	210*81*31mm (L*W*H)		
	PACKING	0.8kg; pcs/ kg/ CUFT		
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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 : line regulation and load regulation. 4. Derating may be needed under low input voltages. Please check the static characteristics for more details. 5. Please refer to "Static Characteristics". 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.			

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**Mechanical Specification**

CASE NO.: 233B Unit:mm



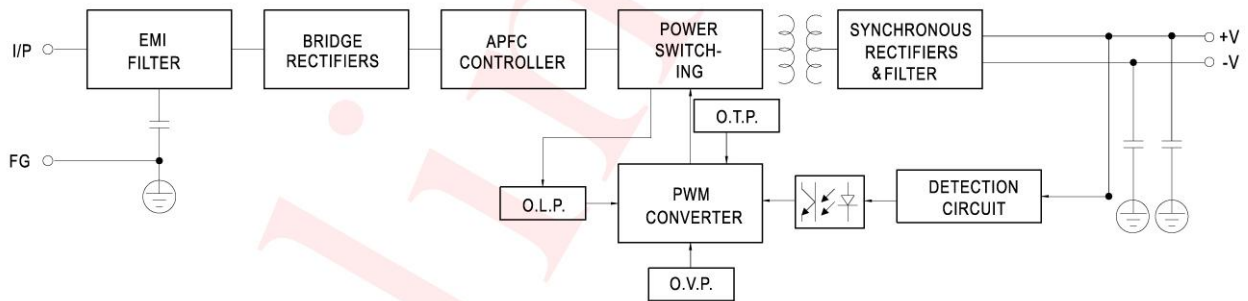
AC Input Terminal(TB1) pin NO. Assignment

Pin No.	Assignment	Terminal
1	AC/L	
2	AC/N	
3	FG $\perp$	

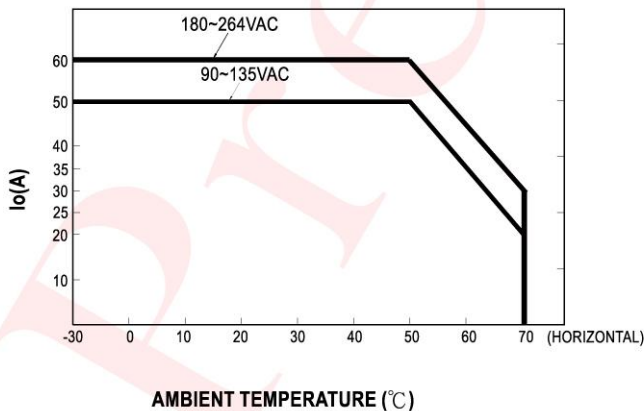
DC Output Terminal pin NO. Assignment

Pin No.	Assignment	Terminal
1	+V	CPB-7 M5
2	+V	
3	-V	
4	-V	

**Block Diagram**



**Derating Curve**



**Static Characteristics**

