

320 Watt Embedded Power Supply

Features

- Universal AC input / Full range
- Built-in active PFC function, PF > 0.95
- High efficiency and high reliability
- Output protections: OLP/OTP/OVP/SCP
- Wide operating ambient temperature (-20°C~65°C)
- All using 105°C long life electrolytic capacitors
- 100% full load burn-in test
- 3 year warranty



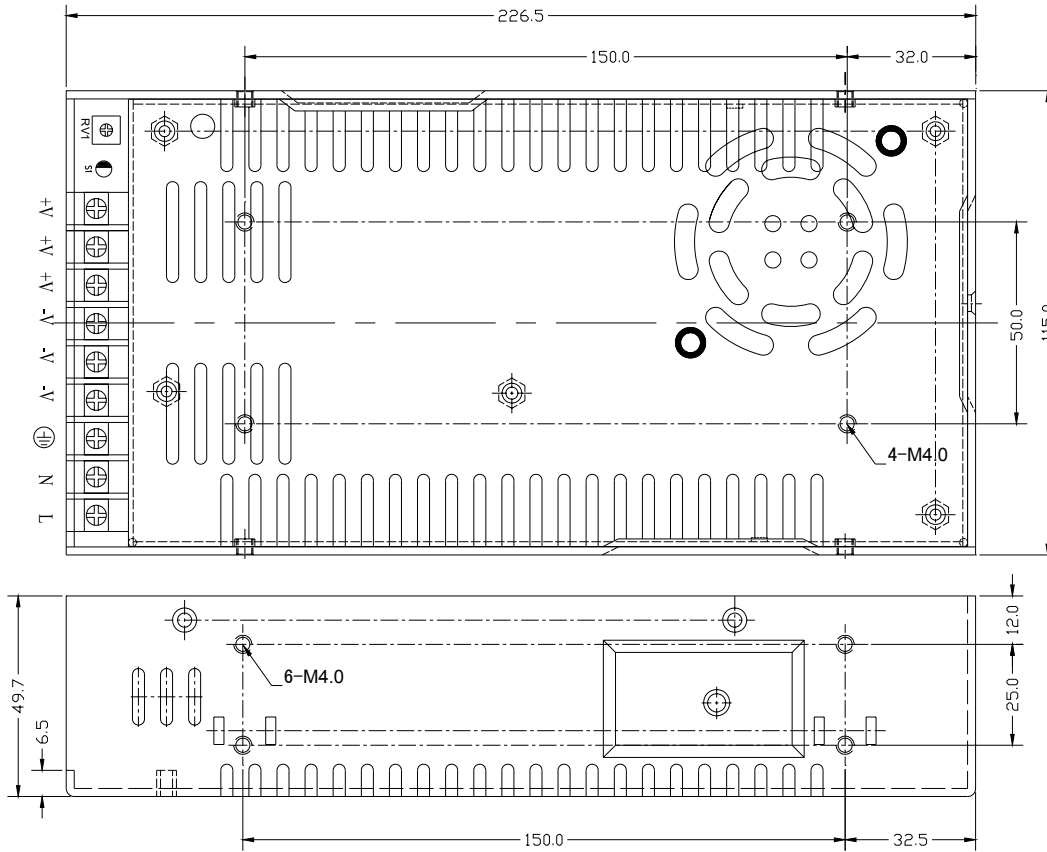
Specifications

PDF-320-3.3 PDF-320-5 PDF-320-7.5 PDF-320-12 PDF-320-24 PDF-320-36 PDF-320-48

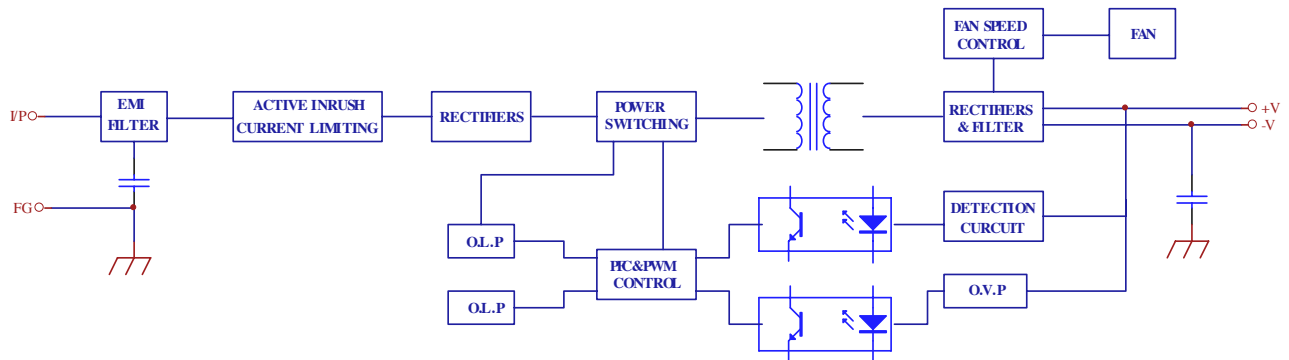
		PDF-320-3.3	PDF-320-5	PDF-320-7.5	PDF-320-12	PDF-320-24	PDF-320-36	PDF-320-48	
OUTPUT	DC Output	3.3V	5.0V	7.5V	12V	24V	36V	48V	
	Rated Current	60A	60A	40A	25A	13A	8.8A	6.7A	
	Current Range (NOTE)	0 ~ 60A	0 ~ 60A	0 ~ 40A	0 ~ 25A	0 ~ 13A	0 ~ 8.8A	0 ~ 6.7A	
	Ripple and Noise	0 ~ 65°C	< 150mV	< 150mV	< 150mV	< 150mV	< 150mV	< 200mV	< 240mV
		-20 ~ 0°C	< 180mV	< 180mV	< 180mV	< 180mV	< 180mV	< 200mV	< 240mV
	Voltage ADJ. Range	3.1 ~ 3.6V	4.4 ~ 5.3V	6.6 ~ 8.4V	10.5 ~ 13.3V	19.7 ~ 26.4V	33.2 ~ 38.4V	41.5 ~ 53.1V	
	Voltage Accuracy	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.3%	±0.2%	±0.2%	±0.2%	
	Load Regulation	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	
	Set-up Time	≤ 1.2S (230Vac input, Full load)		< 2.5S (115Vac input, Full load)					
Hold up Time	3.3V/4V/5V > 14mS		7.5V/12V/24V/28V/36V/48V > 16mS (230Vac input, Full load)						
Temperature Coefficient	±0.03%/°C								
Overshoot & Undershoot	< 5.0%								
INPUT	Voltage Range	88Vac ~ 264Vac, 124Vdc~370Vdc							
	Frequency Range	47Hz – 63Hz							
	Efficiency (Typical)	115Vac	72%	73%	77%	78%	79%	80%	81%
		230Vac	77%	79%	83%	86%	87%	87%	88%
	AC Current (Max.)	4.0A							
	Inrush Current (Typical)	< 50A@230Vac		< 30A@115Vac		Cold Start			
Leakage Current	Input – output: ≤ 0.1mA Input – PG: ≤ 0.75mA								
PROTECTION	Over Load	105% ~ 135% of rated output current, hiccup mode, auto recovery							
	Over Voltage	110% ~ 150% of rated voltage; Shut down							
	Short Circuit	Long-term mode, auto recovery							
ENVIRONMENT	Operating amb. Temp. & Hum.	-20°C ~ 65°C; 20% ~ 90%RH		No Condensing (refer to the derating curve)					
	Storage Temp. & Hum.	-40°C ~ 85°C; 10% ~ 95%RH		No Condensing					
SAFETY & EMC (NOTE 3)	Safety Standards	UL60950-1; EN60950-1: 2006							
	Withstand Voltage	Primary – Secondary: 3.0KVac; ≤10mA Primary – PG: 1.5KVac; ≤10mA Secondary – PG: 0.5KVac; ≤10mA							
	Isolation Resistance	≥100M ohms							
	EMI	Compliance to EN55022, Class B							
	Harmonic Current	Compliance to EN61000-3-2, Class D							
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level							
OTHERS	MTBF (MIL-HDBK-217F)	More than 300,000Hrs (25°C, Full load)							
	Dimension (L*W*H)	226.5 x 115 x 50 mm							
	Packing	10PCS/CTN, 11.6KGS, 0.04CBM							
	Cooling Method	Forced air cooling (Built-in fan)							
NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives 4. HDP Power offers accessories for Din-35 rail bar. Please contact sales for details. 								

Mechanical Specification

unit: mm



Block Diagram



Derating Curve

