

<b>PART NUMBER</b>	HDP-50 Series
<b>DESCRIPTION</b>	50 Watt Enclosed Power Supply

## HDP-50 Series 50 Watt Embedded Power Supply

### Features

- No load power consumption < 0.5W
- Universal AC input range
- Miniature size, high power density, high efficiency, long life and high reliability
- Withstand 300VA surge input for 5 sec.
- Output protections: OLP/OVP/SCP
- All using 105°C long life electrolytic capacitors
- Operating altitude up to 5000M
- Wide operating ambient temperature (-25°C~70°C) 100% @ 50°C, 70% @ 70°C
- 100% full load burn-in test
- Easy assembling from top side
- PCB soldering side with conformal coating
- Suitable for critical applications
- 3 year warranty



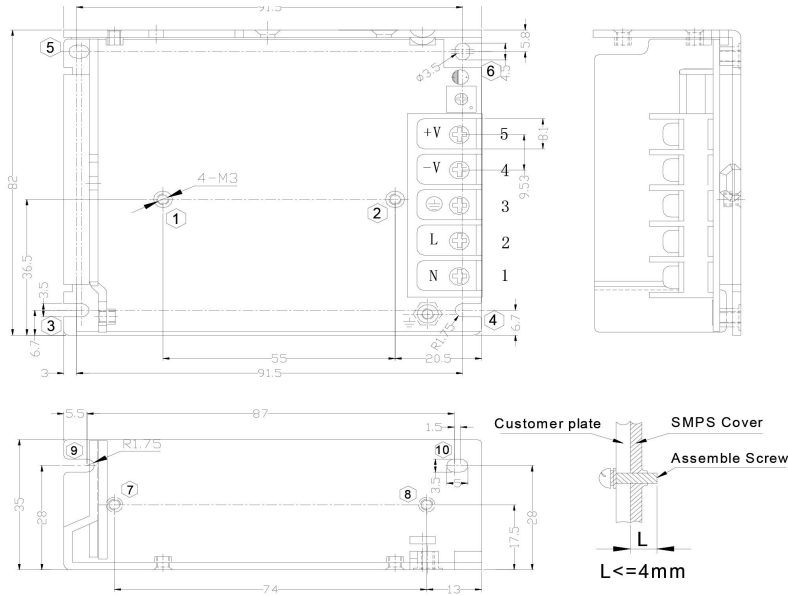
### Specifications

		HDP-50-5	HDP-50-12	HDP-50-15	HDP-50-24	HDP-50-48	
OUTPUT	DC Output	5V	12V	15V	24V	48V	
	Rated Current	8A	4.2A	3.4A	2.2A	1.12A	
	Current Range (NOTE 1)	0 ~ 8A	0 ~ 4.2A	0 ~ 3.4A	0 ~ 2.2A	0 ~ 1.12A	
	Ripple and Noise (NOTE 2)	-25°C ~ 70°C <80mV	<120mV	<120mV	<200mV	<200mV	
	Voltage ADJ. Range	-5% ~ +10% of rated output voltage					
	Voltage Accuracy	±3.0%	±3.0%	±3.0%	±3.0%	±3.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	Set-up Time	<2.0S (115Vac input, Full load); <1.5S (230Vac input, Full load)					
	Hold-up Time	>20mS (115vac input, Full load); >50mS (230Vac input, Full load)					
	Temperature Coefficient	±0.03%/°C					
Overshoot and Undershoot	< 5.0%						
INPUT	Voltage Range	90Vac~264Vac, 127~370Vdc					
	Frequency Range	47Hz – 63Hz					
	Efficiency (Typical)	115Vac input	79%	84%	85%	86%	88%
		230Vac input	80%	85%	86%	87%	89%
	AC Current (Max.)	< 1.5A					
	Inrush Current (Typical)	<20A@115Vac <40A@230Vac ColdStart					
PROTECTION	Over Load	105% ~ 150% of rated output current, constant power					
	Over Voltage	105% ~ 150% of rated output voltage, constant voltage					
	Short Circuit	Long-term mode, auto recovery					
ENVIRONMENT	Operating amb. Temp. & Hum.	-25°C ~ 70°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 2nd Ed; IEC 60950-1:2005 (2ndEd); EN60950-1:2006					
	Withstand Voltage	Primary – Secondary: 3.0KVdc; ≤10mA Primary – PG: 1.5KVdc; ≤10mA Secondary – PG: 0.5KVdc; ≤10mA					
	Isolation Resistance	≥100M ohms					
	EMC Emission	Compliance EN55022, EN55024 Class B					
	Harmonic Current	Compliance to EN61000-3-2, -3					
OTHERS	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN55024, EN61000-6-2 heavy industry level					
	MTBF (MIL-HDBK-217F)	More than 200,000Hrs (25°C, Full load)					
	Dimension (L*W*H)	99 x 82 x 35 mm					
	Packing	40PCS/CTN, 12.8KGS, 0.043CBM					
NOTE	Cooling Method	Cooling by free air convection					
NOTE	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.						

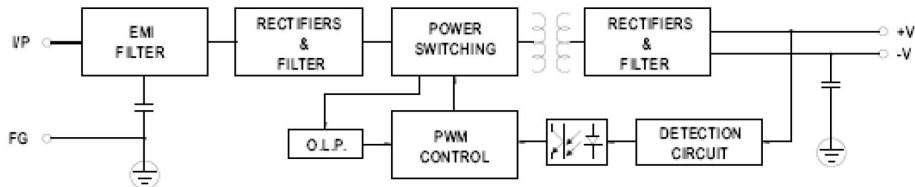
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### Mechanical Specification

Unit: mm (Tolerance is ±1mm)



### Block Diagram



### Derating Curve

