# PD-150 Series 150 Watt Embedded **Power Supply**



### **Features**

- AC input selectable by switch (115Vac/230Vac)
- · High efficiency and high reliability
- Output protections: OLP/OVP/SCP
- Wide operating ambient temperature (-25°C ~ 70°C)
- All using 105°C long life electrolytic capacitors
- 100% full load burn-in test
- 3 year warranty



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## Specifications

Specifications		PD-150-5	PD-150-12	PD-150-15	PD-150-24	PD-150-48	
Ουτρυτ	DC Output		5.0V	12.0V	15.0V	24.0V	48.0V
	Rated Current		26A	12.5A	10A	6.5A	3.3A
	Current Range (NOTE 1)		0~26A	0~12.5A	0 ~ 10A	0~6.5A	0 ~ 3.3A
	Ripple and Noise (NOTE 2)	0~70°C	< 60mV	< 120mV	< 120mV	< 120mV	< 200mV
		-25°C	< 100mV	< 150mV	< 150mV	< 150mV	< 200mV
	Voltage ADJ. Range		4.6V - 5.5V	11.0V - 13.0V	13.7V - 16.2V	22.4V - 27.3V	44.7V - 51.7V
	Voltage Accuracy		±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	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); < 1.0S (230Vac input, Full load)				
	Hold up Time		> 10mS (115Vac input, Full load); > 20mS (230Vac input, Full load);				
	Temperature Coefficient		±0.03%/°C				
	Overshoot and Undershoot		< 5.0%				
INPUT	Voltage Range (NOTE 3)		88Vac ~ 132Vac / 176 ~ 264Vac				
	Frequency Range		47Hz - 63Hz				
	Efficiency (Typical)	115Vac input	78%	83%	83%	85%	85%
		230Vac input	79%	84%	84%	86%	86%
	AC Current (Max.)		< 3.5A				
	Inrush Current (Typical)		< 20A@115Vac < 40A@230Vac Cold Start				
	Leakage Current		Input – output: < 0.25mA Input – PG: < 3.5mA				
PROTECTION	Over Load		105% ~ 150% of rated output current, hiccup mode, auto recovery				
	Over Voltage		120% ~ 150% of rated output voltage, shut down				
	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 4)	Safety Standards		UL60950-1; EN60950-1: 2006				
	Withstand Voltage		Primary – Secondary: 3.0KVac; ≤10mA Primary – PG: 1.5KVac; ≤10mA Secondary – PG: 0.5KVDC; ≤10m/				
	Isolation Resistance		≥100M ohms				
	EMI Conduction & Radiation		Compliance to EN55022 (CISPR22) Class B				
	Harmonic Current		Compliance to EN61000-3-2, -3				
	EMS Immunity		Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, light industry level, criteria A				
OTHERS	MTBF (MIL-HDBK-217F)		301,649Hrs (25°C, Full load)				
	Dimension (L*W*H)		199 x 98 x 38 mm				
	Packing		20PCS/CTN, 15KGS, 0.04CBM				
	Cooling Method		Cooling by free air convection				
IOTE	<ol> <li>All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature</li> <li>Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF &amp; 47uF parallel capacitor</li> <li>AC input range selected by switch</li> <li>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</li> <li>HDP Power offers accessories for Din-35 rail bar. Please contact sales for details.</li> </ol>						
			rail bar. Please contac	t sales for details.			

### PD-150 Series | 150 Watt Embedded Power Supply

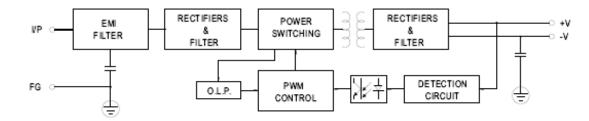


unit: mm

#### **Mechanical Specification**

120 62 17.8 ņ 4.5 ē. 10.8 σ 9.525  $\oplus$ L Ν ÷ -88 68.18 -V Ð 98 80 -V Ð 8.025  $\oplus$ +V  $\oplus$ +V4-M3 V ADJ ¢ to ⊕ 2-ø3.5 199 22 157 5.5 **-**٣ 6 18  $\oplus$ <u>∞</u> 38 3-МЗ 191

### **Block Diagram**



### **Derating Curve**

