新星 POWERLD

100Watts Single Output PD-100 Series

Features:

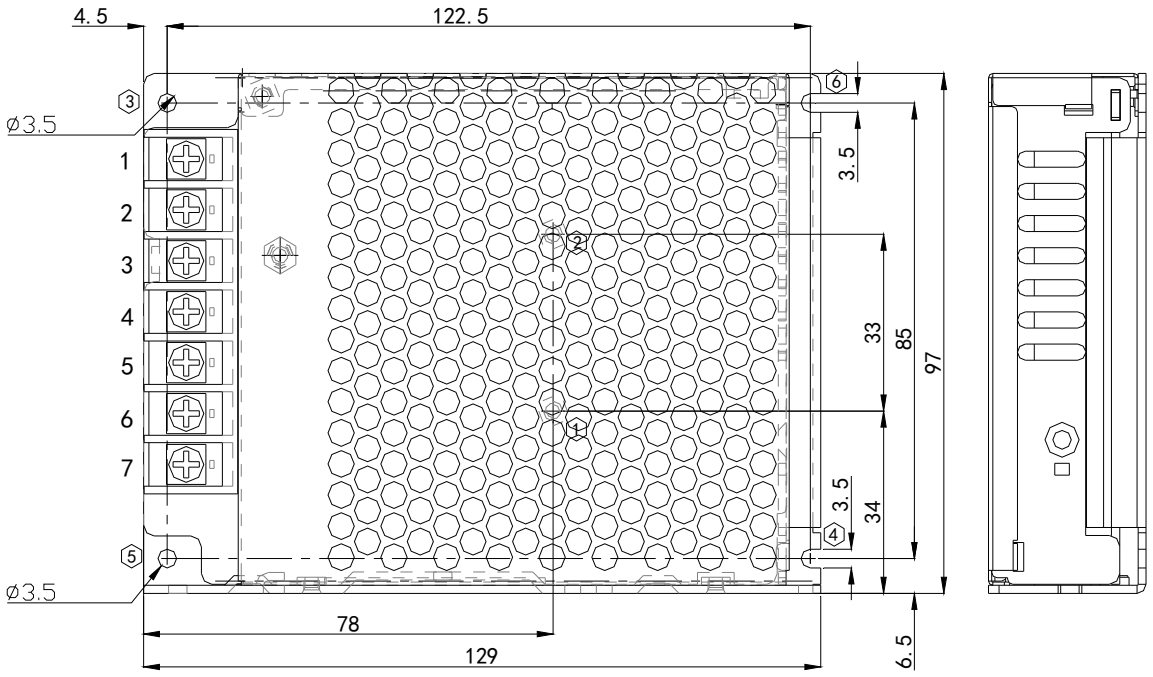
- Universal AC input: 90~ 264Vac
- Can bear 300Vac for 5s
- No load power consumption<0.5W
- High efficiency, long life and high reliability
- High efficiency up to 91%
- Output protections: OCP/OVP/SCP
- Wide operating ambient temperature (-30℃~70℃)
- Altitude up to 5000m
- All using 105℃ long life electrolytic capacitors.
- 100% full load burn-in test
- 1 U low profile
- 3 years warranty

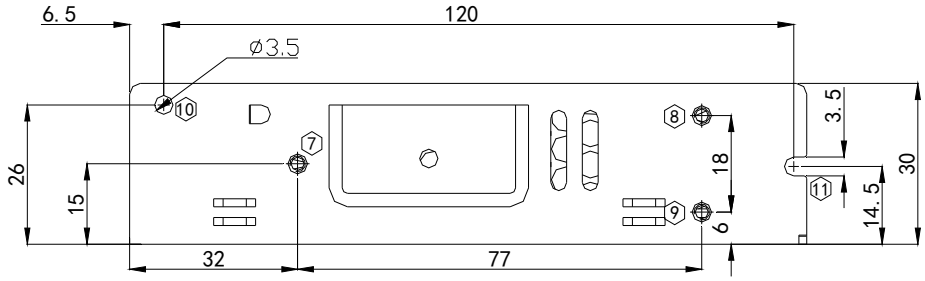
SPECIFICATION

MODEL			LPD-100-5	LPD-100-12	LPD-100-15	LPD-100-24	LPD-100-36	LPD-100-48
OUTPUT	DC Output		5V	12V	15V	24V	36V	48V
	Rated Current		18A	8.5A	7A	4.5A	3A	2.3A
	Current Range		0~18A	0~8.5A	0~7A	0~4.5A	0~3A	0~2.3A
	Rated Power		90W	102W	105W	108W	108W	110.4W
	Ripple and Noise (note1)		120 mV	150mV	150mV	200mV	200mV	200mV
	Voltage ADJ. Range		4.5~5.5V	10.8~13.2V	13.5~16.5V	21.6~26.4V	32.4~39.6V	43.2~52.8V
	Voltage Accuracy		±30%	±1.0%				
	Line Regulation		±0.5%					
	Load Regulation		±1.0%					
	Set-up Time		≤500mS (230Vac/115Vac, Full load)					
	Hold up Time		≥20mS(230Vac, Full load) ≥10mS(115Vac, Full load)					
	Temperature Coefficient		±0.03%/℃					
	Overshoot		<5.0%					
INPUT	Voltage Range Note 3		90Vac~264Vac					
	Frequency Range		47Hz-63Hz					
	Efficiency (Typical)	230Vac input	86%	87%	88 %	90%	90.5%	91%
	AC Current (max.)		<1.9A@115Vac <1.2A@230Vac					
	Inrush Current (Typical)		<65A@230Vac Cold start					
PROTECTION	Over Power		110%~180% rated power, hiccup mode, auto recovery					
	Over Current		110%~160% of rated current, hiccup mode, auto recovery					
	Over Voltage		5.75~6.9V	13.8~16.2V	18.75~21.75	28.8~33.6V	41.4~48.6V	55.2~64.8V
			Protection type: Constant voltage, auto recovery					
	Shorted Circuit		Long-term mode, auto recovery					
ENVIRONMENT	Operating amb. Temp. & Hum.		-30℃~70℃; 20%~90%RH No condensing (refer to the derating curve)					
	Storage Temp. & Hum.		-40℃~85℃; 10%~95%RH No condensing					
SAFETY &EMC (Note 4)	Safety Standards		UL62368-1, IEC/EN62368-1					
	Withstand Voltage		Primary-Secondary:3..0KVac/10mA.; Primary-PE:1.5KVac/10mA; Secondary-PE:0.5KVdc/10mA .					
	Leakage Current		Input—output:<0.25mA Input—PE:<0.75mA (@240Vac/63Hz)					
	Isolation Resistance		100M ohms					
	EMI Conduction&Radiation		Compliance to EN55032 Class B					
	Harmonic Current		Compliance to EN61000-3-2，CLASS A					
	EMS Immunity		Compliance to EN61000-4-2,3,4,6,8,11					
OTHERS	MTBF (MIL-HDBK-217F)		More than 200,000Hrs (25℃, Full load)					
	Dimension (L*W*H)		129*97*30mm					
	Packing		30pcs/CTN					
	Cooling method		Cooling by free air flow					
NOTE	1. All parameters NOT specially mentioned are measured at rated input, rated load and 25℃ of ambient temperature. 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 47uF parallel capacitor. 3. The power supply is considered as a component which will be installed into a final equipment. 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" on http://www.powerld.com.cn.							

■ Mechanical Specification

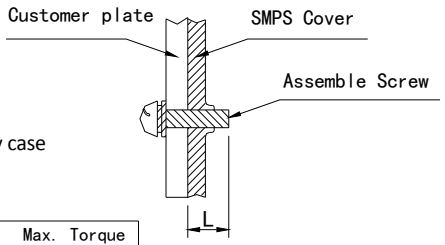
Unit: mm





Mounting Position	Mounting Type	Mounting Position No.	Screw Type	Lmax	Mounting Torque(max)
Bottom Mounting	Fixing by screws	1 — 2	M3	4.0mm	6.5Kgf.cm (max)
		3 — 4	M3	4.0mm	
		5 — 6	M3	4.0mm	
Side Mounting	Fixing by screws	7 — 8	M3	4.0mm	6.5Kgf.cm (max)
		9 — 10	M3	4.0mm	

1, Dimensional Unit: mm
2, Unmarked Tolerance is GB/T 1804-m
3, Choose the best installation method.



Remarks: 1. For safety purpose, the length of screw inside the power supply case shall comply with the above table (refer the right drawing)

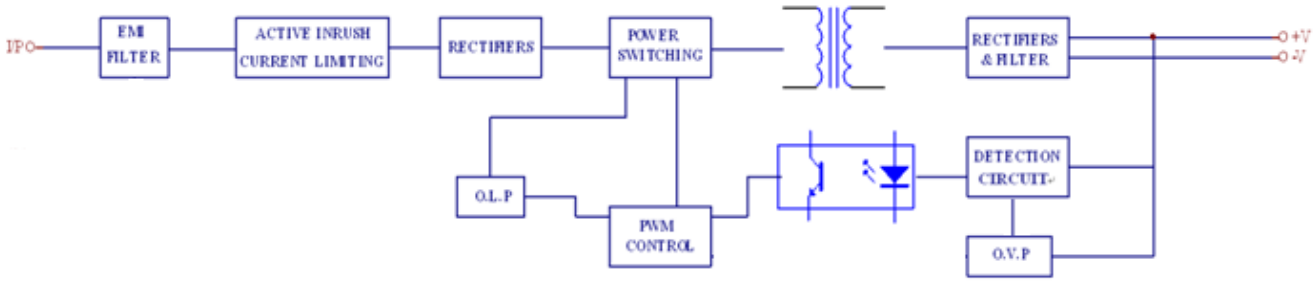
1, Instruction of the AC Input Connectors

Part number	Function	Connector	Requirement for Cables	Max. Torque
1	AC(L)	95 Terminal Block	22-12AWG	12Kgf.cm (max)
2	AC(N)			
3	⏚			

2, Instruction of the DC Output Connectors

Part number	Function	Connector	Requirement for Cables	Max. Torque
4/5	V-	95 Terminal Block	22-12AWG	12Kgf.cm (max)
6/7	V+			

■ Block Diagram



■ Derating Curve