120W AC-DC Single Output Desktop AS-120P series



Features :

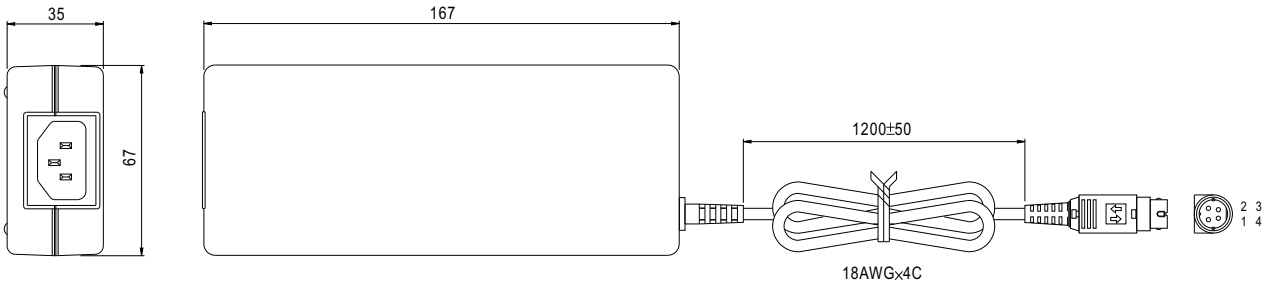
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- High power density 5w/in^3
- Fully enclosed plastic case
- Approvals: UL / CUL / TUV / CCC / CB/ CE
- No load power consumption<0.5W
- Meet EISA 2007(Energy Independence and Security Act)
- ZCS/ZVS technology to reduce power dissipation
- 2 years warranty

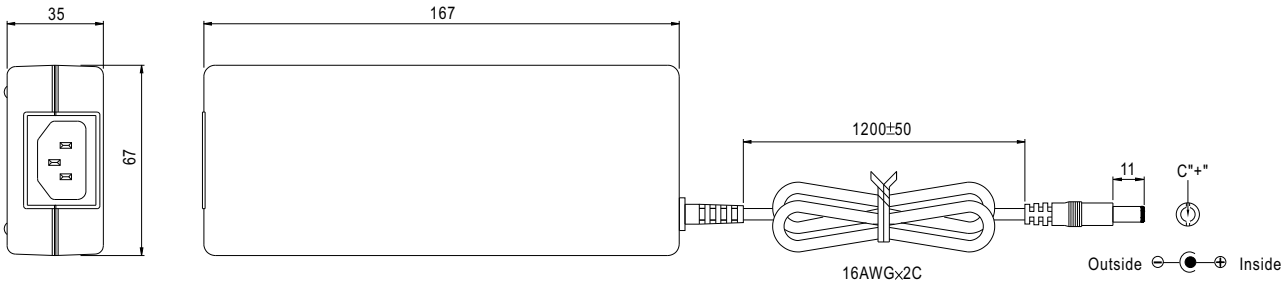
SPECIFICATION

MODEL		AS-120P-12	AS-120P-15	AS-120P-20	AS-120P-24	AS-120P-48
OUTPUT	ORDER NO.	AS120P12R7B	AS120P15R7B	AS120P20P1M	AS120P24P1M	AS120P48P1M
	DC VOLTAGE Note.2	12V	15V	20V	24V	48V
	RATED CURRENT	8.4A	6.7A	6A	5A	2.5A
	CURRENT RANGE	0~ 8.4A	0 ~ 6.7A	0 ~ 6A	0 ~ 5A	0 ~ 2.5A
	RATED POWER	100W	100W	120W	120W	120W
	RIPPLE & NOISE (max.) Note.3	100mVp-p	100mVp-p	200mVp-p	200mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.4	±4.0%	±4.0%	±3.0%	±2.0%	±2.0%
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6	±3.5%	±3.0%	±2.5%	±2.0%	±2.0%
	SETUP, RISE TIME	4500ms, 80ms at full load				
	HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load				
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	PF≧0.95/230VAC PF≧0.98/115VAC at full load				
	EFFICIENCY (Typ.)	86%	87.5%	89%	89%	89%
	AC CURRENT (Typ.)	1.4A/115VAC 0.7A/230VAC				
	INRUSH CURRENT (Typ.)	120A/230VAC				
	LEAKAGE CURRENT (max.)	<1mA / 240VAC				
PROTECTION	OVERLOAD	105 ~ 135% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	14 ~ 16.8V	17 ~ 21V	22.5 ~ 28V	27 ~ 33.6V	53.3 ~ 67.2V
		Protection type : Shut down o/p voltage, re-power on to recover				
	OVER TEMPERATURE	90℃ ±10℃(RTH2) detect on heatsink of power transistor				
		Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.	0 ~ + 50℃ (Refer to "Derating Curve")				
	WORKING HUMIDITY	20% ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 50℃)				
	VIBRATION	10 ~ 500Hz, 2G 3AXES 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, CCC GB4943 approved				
	WITHSTAND VOLTAGE	I/P-O/P:4.25KVDC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 25℃/ 70% RH				
	EMC EMISSION	Compliance to EN55022(CISPR22) Class B, EN61000-3-2,3, FCC part 15J class B				
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A				
OTHERS	LIFE	Average life expectancy of 6 years (12 hours / day, 70% load, 115VAC)				
	MTBF	308.9K hrs min. MIL-HDBK-217F (25℃)				
	DIMENSION	167*67*35mm (L*W*H)				
	PACKING	0.52Kg; 30pcs/16.6Kg/1.1CUFT				
CONNECTOR	PLUG	Standard type R7B,P1M: 2.5ϕ * 5.5ϕ * 11mm, center positive for stock ; Other type available by customer requested				
	CABLE	Standard type 120cm of SPT-1, 18Awg*4c for stock ; Other type available by customer requested				
NOTE	1. All parameters are specified at 230VAC input, rated load, 25℃ 70% RH. Ambient. 2. DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4. Tolerence: includes set up tolerance, line regulation, load regulation. 5. Line regulation is measured from low line to high line at rated load. 6. Load regulation is measured from 0% to 100% rated load. 7. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.					

■ Mechanical Specification

Case No.947A Unit:mm





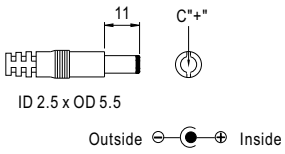
■ Plug Assignment

Standard plug(For 12V,15V only)

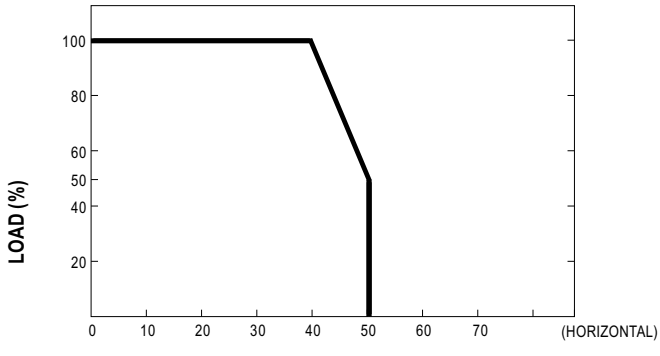
R7B		
2 1 3 4	PIN NO	OUTPUT
	1,4	+V
	2,3	-V

Standard plug(For 20V,24V,48V only)

P1M	
P/N	OUTPUT
CENTER	+

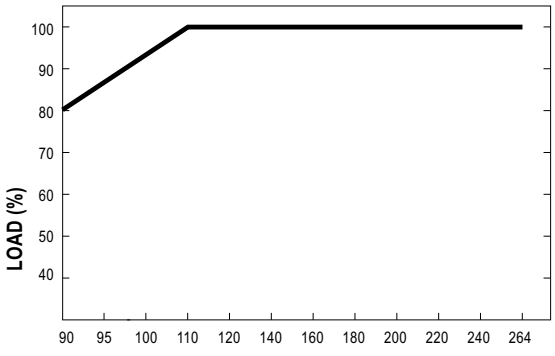


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Static Characteristics



INPUT VOLTAGE (VAC) 60Hz