AIPUPOWER®

SO-150 series

150W single Output Medical Power Supply





Features:

- 4"x2" miniature size
- Universal AC input / Full range
- No load power consumption<0.5W
- High efficiency up to 92%
- Protections: Short circuit / Overload / Over voltage/ Over temperature
- Cooling by free air convection for 80W and 150W with 10CFM forced air
- Built-in 12V/0.5A fan supply
- LED indicator for power on Operating altitude up to 5000 meters
- 3 years warranty

Specification									
MODEL			SO-150-12	SO-150-15	SO-150-24	SO-150-27	SO-150-36	SO-150-48	
INPUT	VOLTAGE RANGE		80 ~ 264VAC (Refer to "Static characteristics")						
	FREQUENCY RANGE		50/60Hz						
	EFFICIENCY(Typ.)		88%	88%	89%	90%	90%	91%	
	AC CURRENT(Typ.)		2.8A/115VAC 1.7A/230VAC						
	INRUSH CURRENT(Typ.)		COLD START 40A/115VAC 60A/230VAC						
	LEAKAGE CURRENT		<0.75mA / 240VAC						
OUTPUT	DC VOLTAGE		12V	15V	24V	27V	36V	48V	
	CURRENT	10CFM	11.67A	9.33A	6.25A	5.55A	4.16A	3.13A	
		Convection	6.67A	5.34A	3.34A	2.97A	2.23A	1.67A	
	RATED POWER	10CFM	140W	140W	150W	150W	150W	150W	
		Convection	80W	80W	80W	80W	80W	80W	
	RIPPLE&NOISE(max.)		120mVp-p	120mVp-p	150mVp–p	150mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ.RANGE		11.4~12.6V	14.3~15.8V	22.8~25.2V	25.6 ~ 28.4V	32.4 ~39.6V	45.6 ~50.4V	
	VOLTAGE TOLERANCE		±2%	±2%	±1%	±1%	±1%	±1%	
	LINE REGULATION		±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION		±1%	±1%	±1%	±1%	±1%	±1%	
	SETUP, RISE TIME		680ms, 30ms/230VAC 1600ms, 30ms/115VAC at full load						
	HOLD UP TIME(Typ.)		50ms/230VAC 10ms/115VAC at full load						
PROTECTION	OVER LOAD		110~150% rated output power						
			Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE		13.2 ~ 15.6V	16.5 ~ 19.5V	26.4 ~ 32.5V	30~36V	40~45V	52.8 ~ 62.4V	
			Protection type : Shut down o/p voltage, re-power on to recover						
	OVER TEMPERATURE		Protection type : Shut down o/p voltage, re-power on to recover						
FUNCTION	FAN SUPPLY		12V@0.5A for driving a fan ; tolerance $-15\% \sim +10\%$						
ENVIRONIMENT	WORKING TEMP.		-30 ~ +70°C (Refer to "Derating Curve")						
	WORKING HUMIDITY.		20 ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY		-40~+85°C,10~95% RH						
	TEMP. COEFFICIENT		±0.03%/°C (0~50°C)						
	OPERATING ALTITUDE		5000 meters						
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes						

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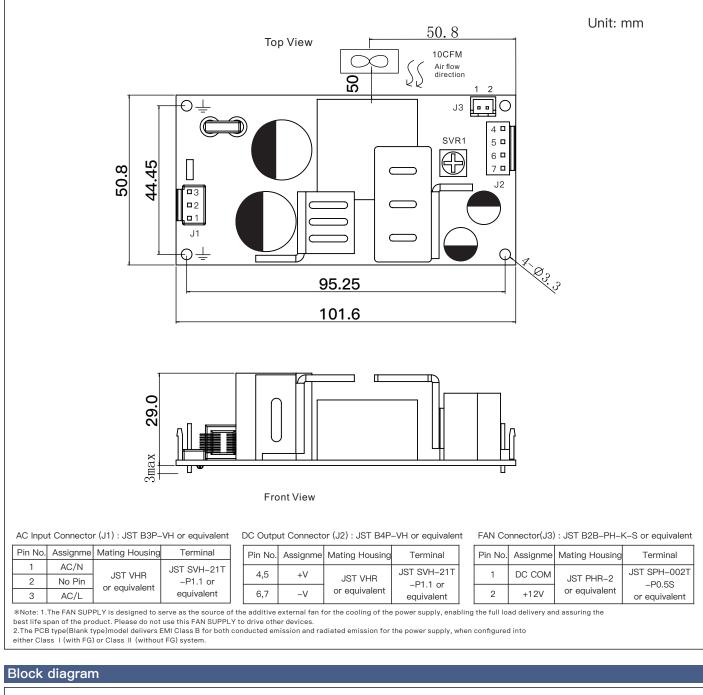
Safety and electromagnetic compatibility	Safety standards	standards Refer to UL62368–1,TUV EN62368–1,CCC GB4943.1							
		I/P–O/P: 3KVac; 100MΩ / 500Vdc / 25°C / 70%RH							
	Withstand voltage and isolation resistance	I/P-FG: 2KVac; 100MΩ / 500Vdc / 25°C / 70%RH							
		O/P-FG: 0.5KVac; 100MΩ / 500Vdc / 25°C / 70%RH							
	Electromagnetic	Parameter	Standard	Test Level / Note					
		Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1	Class B					
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1	Class B					
		Harmonic current	BS EN/EN61000-3-2,GB17625.1	Class A					
		Voltage flicker	BS EN/EN61000-3-3						
		BS EN/EN55035							
		Parameter	Standard	Test Level /Note					
	Electromagnetic compatibility immunity	ESD	BS EN/EN61000-4-2	Level 4, 8KV air, Level 2, 4KV contact, criteria A					
		RF field susceptibility	BS EN/EN61000-4-3	Level 3, criteria A					
		EFT bursts	BS EN/EN61000-4-4	Level 3, criteria A					
		Surge susceptibility	BS EN/EN61000-4-5	Level 4, 2KV/L-N, 4KV/L/N-FG criteria A					
		Conducted susceptibility	BS EN/EN61000-4-6	Level 3, criteria A					
		Magnetic field immunity	BS EN/EN61000-4-8	Level 4, criteria A					
		Voltage dips and interruptions	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods , >95% interruptions 250 periods					
	MTBF	≥585Khrs MIL-HDBK-217F(25°C)							
OTHERS	DIMENSION	PCB: 101.6*50.8*29mm(L*W*H)							
	PACKING	0.15Kg; 96pcs/15.4Kg/1.51CUFT							
NOTE	 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. Line regulation is measured from low line to high line at rated load. Load regulation is measured from 0% to 100% rated load Length of set up time is measured at cold first start, Turning ON/OFF the power supply very quickly may lead to increase of the set up time. The ambient temperature derating of 5°C/1000m is needed for operating altitude great than 2000m(6500ft). The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the u on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. 								

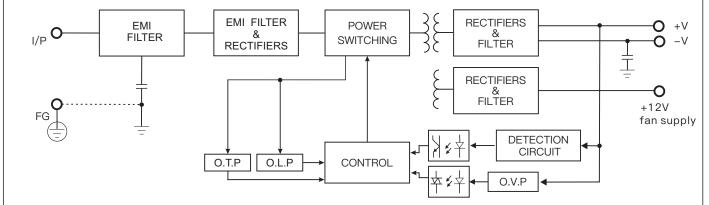
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Mechanical specification





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