AIPUPOWER®

SMF750 series

750W Single Output With PFC Function





Features:

- Universal AC input 90~264VAC
- Built-in active PFC function, high efficiency
- Protections: Short circuit / Overload / Over voltage /
- Over temperature
- Built-in cooling Fan ON-OFF control
- 1U low profile 40.5mm
- Forced air cooling by built-in DC fan
- Remote control/power good(fail)
- Redundant (for LP-750R)
- 100% full load burn-in test
- LED indicator for power on
- High efficiency/High reliability
- 3 years warranty
- Compliance to IEC/EN/UL 62368–1

Specification	n									
MODEL		SMF750-5	SMF750-7.5	SMF750-12	SMF750-15	SMF750-24	SMF750-36	SMF750-48		
INPUT	VOLTAGE RANGE	90~264VAC 127~370VDC(refer to 'static characteristic')								
	FREQUENCY RANGE	47~63Hz								
	POWER FACTOR(Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load								
	EFFICIENCY(Typ.)	89%	90%	92%	92%	93%	94%	94%		
	AC CURRENT(Typ.)	9A/115VAC 4A/230VAC								
	INRUSH CURRENT(Typ.)	20A/115VAC 40A/230VAC (cold start)								
	LEAKAGE CURRENT	<2mA/240VAC								
OUTPUT	DC VOLTAGE	5V	7.5V	12V	15V	24V	36V	48V		
	RATED CURRENT	80A	66A	50A	43.3A	31.3A	20.9A	15.7A		
	CURRENT RANGE	0~80A	0~66A	0~50A	0~43.3A	0~31.3A	0~20.9A	0~15.7A		
	RATED POWER	400W	495W	600W	649.5W	751.2W	752.4W	753.6W		
	RIPPLE&NOISE (max.)	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	250mVp-p		
	VOLTAGE ADJ.RANGE	4.5~5.5V	6.75~8.25V	11.4~13.2V	14.3~15.8V	22.8~26.4V	34.2~37.8V	45.6~52.8V		
	VOLTAGE TOLERANCE	±2%	±2%	±1%	±1%	±1%	±1%	±1%		
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	LOAD REGULATION	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	SETUP, RISE TIME	1500ms,50ms/230VAC 3000ms,50ms/115VAC								
	HOLD UP TIME(Typ.)	8ms/230VAC 8ms/115VAC								
PROTECTION	OVER LOAD	110%~140% rated output power								
		Protection type: >0.2s, Shutdown, recovers automatically after repower on								
	OVER VOLTAGE	5.75~6.75V	8.6~10.4V	13.8~16.8V	16.5~19.5V	27.6~32.4V	39.6~46.8V	56.6~66.2V		
		Protection type: Shutdown, recovers automatically after repower on								
	OVER TEMPERATURE	Protection type: Shutdown, recovers automatically after temperature goes down								
FUNCTION	FAN ON/OFF CONTROL(Typ.)	RTH2≥50°C FAN ON, ≤40°C FAN OFF								
	REMOTE CONTROL(CN1)	Power on: voltage between RC+ and RC- is 0~0.8V; Power off: voltage between RC+ and RC- is 4~10V								
	POWER GOOD/FAIL(CN2)	Voltage between PG+ and PG- goes high after power set up; The voltage goes low when Vo below 90% of adj. voltage value. Internal pull-up voltage is 3.6V, internal pull-up resistor is 1KΩ								
	REDUNDANT(LP-750R)	For parallel connection protection: For parallel applications, when one PSU cannot work, the another one will be automatically enabled. This can prevent the system crash, and provide the reliability of system								
ENVIRONIMENT	WORKING TEMP., HUMIDITY	-30~+70°C (Refer to "Derating curve"), 20~90%RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40~+85℃, 10~95%RH								
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)								
	VIBRATION	10~500Hz, 2G 10min./1 cycle, each along X, Y, Z axes								



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	Safety 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							
	ISOlation resistance	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						
Safety and	Electromagnetic compatibility immunity	BS EN/EN55035							
electromagnetic		Parameter	Standard	Test Level /Note					
compatibility		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 3, 1KV/L-N, 2KV/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	≥200Khrs MIL-HDBK-217F(25°C)							
OTHERS	DIMENSION	230*127*40.5mm(L*W*H)							
	PACKING	1.3Kg; 9pcs/12.7Kg/ 0.66CUFT							
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 union a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. 								

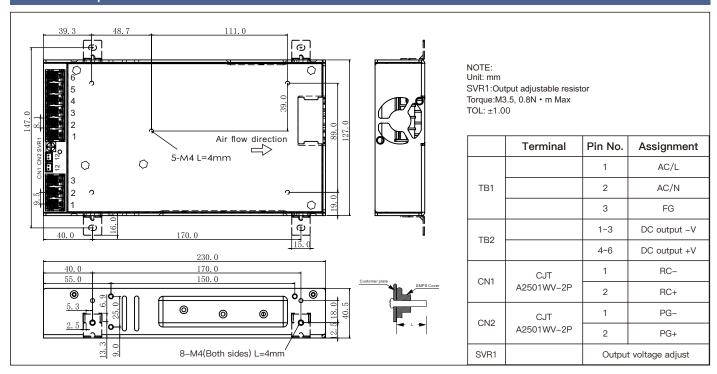




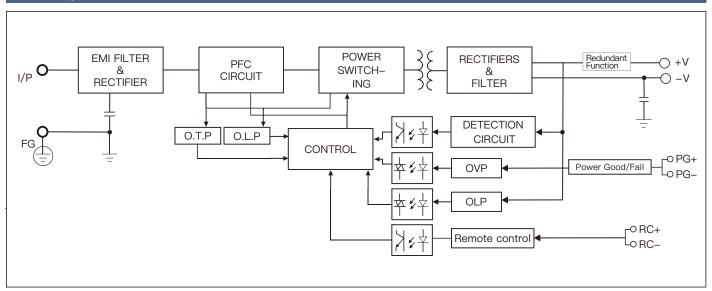
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Mechanical specification



Block diagram

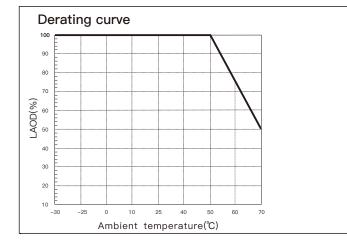


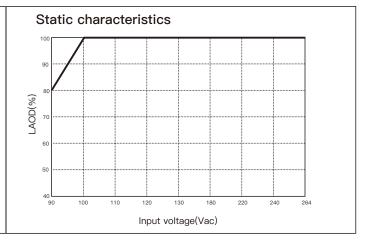
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Redundant function

- 1, SMF750 is built-in redundant function and can be connected 2 units in parallel
- 2, When in parallel operation the maximum load should not be greater than the rated power of any PSU

