



**Features:**

- Universal AC input 90~264VAC
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in cooling Fan ON-OFF control
- 1U low profile 30mm
- Forced air cooling by built-in DC fan
- 100% full load burn-in test
- LED indicator for power on
- High reliability
- 3 years warranty
- Compliance to IEC/EN/UL 62368-1

**Specification**

MODEL		SMF350-5	SMF350-7.5	SMF350-12	SMF350-15	SMF350-24	SMF350-27	SMF350-36	SMF350-48
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.)	84.5%	88%	88.5%	88.5%	90%	90%	90%	91%
	AC CURRENT(Typ.)	4A/115VAC 2A/230VAC							
	INRUSH CURRENT(Typ.)	20A/115VAC 40A/230VAC (cold start)							
	LEAKAGE CURRENT	<1mA/240VAC							
OUTPUT	DC VOLTAGE	5V	7.5V	12V	15V	24V	27V	36V	48V
	RATED CURRENT	60A	46A	29A	23.3A	14.6A	12.9A	9.7A	7.3A
	CURRENT RANGE	0~60A	0~46A	0~29A	0~23.3A	0~14.6A	0~12.9A	0~9.7A	0~7.3A
	RATED POWER	300W	345W	348W	349.5W	350.4W	348.3W	349.2W	350.4W
	RIPPLE&NOISE (max.)	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ.RANGE	4.5~5.5V	6~9V	10.2~13.8V	13.5~18V	21.6~28.8V	26~31.5V	32.4~39.6V	43.2~52.8V
	VOLTAGE TOLERANCE	±3%	±2%	±1.5%	±1%	±1%	±1%	±1%	±1%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2%	±1%	±1%	±1%	±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: Constant current limiting>3s, then hiccup, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.75~6.75V	9.4~10.9V	13.8~16.2V	18.8~21.8V	28.8~33.6V	33~38.5V	41.4~48.6V	55.2~64.8V
		Protection type: Hiccup mode, recovers automatically after fault condition is removed							
	OVER TEMPERATURE	Protection type: Hiccup mode, recovers automatically after fault condition is removed							
FUNCTION	FAN ON/OFF CONTROL(Typ.)	RTH2≥50°C FAN ON, ≤40°C FAN OFF							
ENVIRONMENT	WORKING TEMP., HUMIDITY	-30~+70°C (Refer to "Derating curve") , 20~90%RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40~+85°C, 10~95%RH							
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)							
	VIBRATION	10~500Hz, 2G 10min./1 cycle, each along X、Y、Z axes							

Safety and electromagnetic compatibility	Safety standards	Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1		
	Withstand voltage and isolation resistance	I/P-O/P: 3KVac; 100MΩ / 500Vdc / 25°C / 70%RH		
		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
		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	
OTHERS	MTBF	≥300Khrs MIL-HDBK-217F(25°C)		
	DIMENSION	215*115*30mm(L*W*H)		
	PACKING	0.8Kg; 15pcs/13Kg/0.77CUFT		
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. Line regulation is measured from low line to high line at rated load.</p> <p>5. Load regulation is measured from 0% to 100% rated load</p> <p>6. 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.</p> <p>7. The ambient temperature derating of 5°C/1000m is needed for operating altitude great than 2000m(6500ft).</p> <p>8. 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 unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives.</p>			

**Mechanical specification**

**Top View Dimensions:**  
 Total width: 215.0  
 Main body width: 150.0  
 Right side width: 32.5  
 Left side height: 86.9  
 Top left height: 9.5  
 Middle height: 8.1  
 Right side height: 50.0  
 Bottom right height: 115.0  
 Bottom left height: 32.5  
 Internal width: 36.5  
 Internal height: 47.0  
 Screws: 4-4M L=3mm

**Side View Dimensions:**  
 Total length: 150.0  
 Left side length: 32.5  
 Left side height: 12.8  
 Middle height: 6.9  
 Right side height: 12.5  
 Total height: 30.0  
 Middle width: 2.0  
 Bottom width: 6.5  
 Bottom height: 6.5  
 Screws: 4-4M L=5mm

**Air flow direction:** Indicated by a downward arrow.

**Customer plate / SMPS Cover:** Cross-section diagram showing the cover with length 'L'.

**NOTE:**  
 Unit: mm  
 ADJ: Output adjustable resistor  
 Torque: M3.5, 0.8N · m Max  
 TOL: ±1.00

Position No.	Screw Size	L max	Torque max
⑤ - ⑧	M4	3mm	0.9N · m
① - ④	M4	5mm	0.9N · m

Screw Terminal			
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5,6	DC OUTPUT -
2	AC/N	7,8,9	DC OUTPUT +
3	FG		

**Block diagram**

