



#### Features:

- > Universal AC input/ Full range
- Built-in active PFC function, PF>0.95
- Withstand 300VA surge input for 3 secs.
- Built-in cooling Fan ON-OFF control
- Output protections: OLP/OVP/OTP/SCP
- All using  $105\,^{\circ}$ C long life electrolytic capacitors.
- Build-in remote sense function
- Build-in remote ON-OFF control
- 3 years warranty

### **SPECIFICATION**

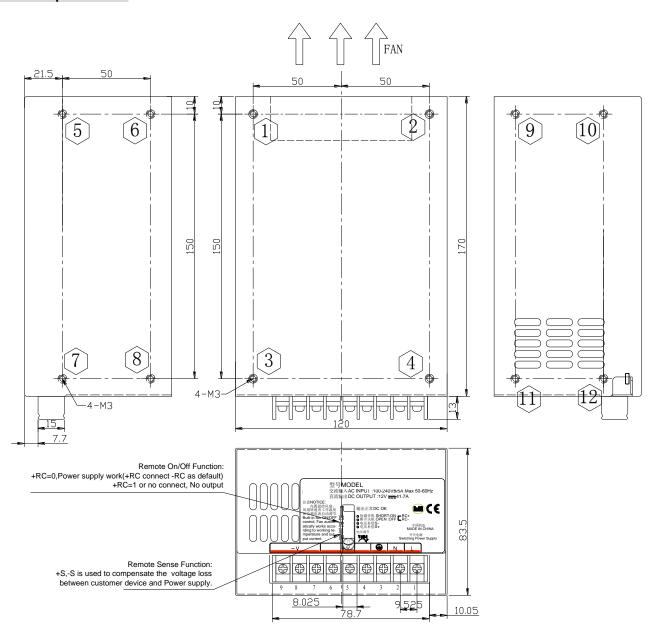
MODEL		MFPDF-500-12	MFPDF-500-24	MFPDF-500-27.5	MFPDF-500-48	
	DC Output		12V	24V	27.5V	48V
OUTPUT	Rated Current		41.7A	21A	18.2A	10.5A
	Current Range Note 1		0~41.7A	0~21A	0~18.2A	0~10.5A
	Ripple and Noise	0~70℃	<150mV	<200mV	<200mV	<240mV
	Note 2	-20~0℃	<240mV	<400mV	<400mV	<480mV
	Voltage ADJ. Range		11.6V-13.2V	23.5V-27.2V	26.0V-30.0V	46V-54V
	Voltage Accuracy		±2.0%	±2.0%	±2.0%	±2.0%
	Line Regulation		±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation		±1.0%	±1.0%	±1.0%	±1.0%
	Set-up Time		<2.0S (115Vac input, Full load); <2.0S (230Vac input, Full load)			
	Hold up Time		>10mS(230Vac input, Full load)			
	Temperature Coefficient		±0.03%/°C			
	Overshoot and Undershoot		<5.0%			
INPUT	Voltage Range		88Vac~264Vac			
	Frequency Range		47Hz~63Hz			
	Power Factor(Typical)		PF>0.98/115VAC PF>0.95/230VAC			
	Efficiency ( Typical)	115Vacin	85%	87%	88%	89%
		230Vacin	88%	90%	91%	92%
	AC Current (max.)		5.5A			
	Inrush Current (Typical)		<20A@115Vac <40A@230Vac Cold start			
	Leakage Current		Input—output:<0.25mA Input—PG:<3.5mA			
PROTECTION	Over Load		110%~150% of rated output current, constant current limiting for 3S,then hiccup mode, auto recovery			
	Over Voltage		115%~150% of rated output voltage, constant voltage			
	Over Temperature		95°C+10°C (detect on heatsink of power transistor); shut down, auto recover after the temperature goes dow			
	Fan ON/OFF Control		Output load>65% rating or inside temperature >55°C, FAN ON			
ENVIRONMENT	Operating amb. Temp. & Hum.		-20°C~70°C; 20%~90%RH No condensing(refer to the derating curve)			
	Storage Temp. & Hum.		-25°C~85°C; 10%~95%RH No condensing			
SAFETY&EMC Note 3	Safety Standards		UL60950-1; EN60950-1: 2006			
	Withstand Voltage		Primary-Secondary:3.0KVac; ≤10mA .Primary-PG:1.5KVac; ≤10mA .Secondary-PG:0.5KVDC;≤10mA			
	Isolation Resistance		≥100M ohms			
	EMI Conduction& Radiation		Compliance to EN55022, EN55024, FCC PART 15 CLASS B			
	Harmonic Current		Compliance to EN61000-3-2, CLASS D			
	EMS Immunity		Compliance to EN61000-4-2,3,4,5,6,8,11;heavy industry level			
OTHERS	MTBF (MIL-HDBK-217F)		More than 200,000Hrs (25°C, Full load)			
	Dimension (L*W*H)		170×120×83.5mm			
	Packing		6PCS/CTN, 12KGS, 0.04CBM			
	Cooling method		Cooling by forced air (built-in temperature controlled fan)			
	All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature.					
NOTE						
	2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 47uF parallel capacitor.					
	3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives.					

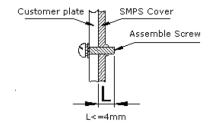
Tel: 732-249-2656

Date: 10/8/2014

# **Mechanical Specification**

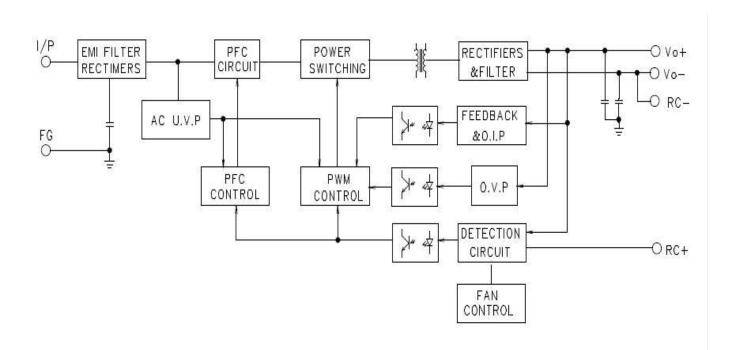
Unit: mm



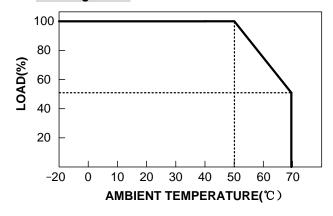


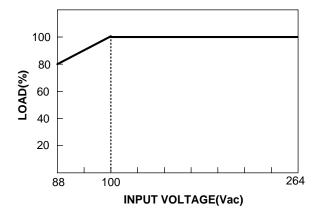


## **Block Diagram**



## **Derating Curve**





3