



## Features:

- Universal AC input / Full range
- Low leakage current  $\leq$  0.3mA
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- 3 years warranty





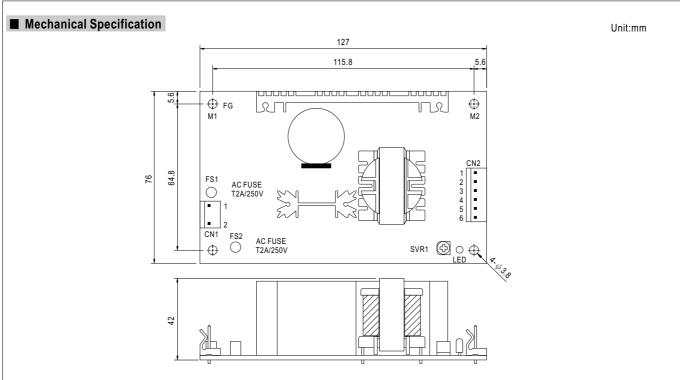




### **SPECIFICATION**

MODEL		MPS-65-3.3	MPS-65-5	MPS-65-7.5	MPS-65-12	MPS-65-13.5	MPS-65-15	MPS-65-24	MPS-65-27	MPS-65-48
	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	12A	12A	8A	5.2A	4.7A	4.2A	2.7A	2.4A	1.35A
	CURRENT RANGE	0 ~ 15.2A	0 ~ 13.8A	0~9.6A	0~6A	0 ~ 5.4A	0 ~ 4.8A	0 ~ 3A	0 ~ 2.7A	0 ~ 1.5A
	RATED POWER	39.6W	60W	60W	62.4W	63.5W	63W	64.8W	64.8W	64.8W
	OUTPUT POWER (max.)	72W(+3.3V:50W;+5V:69W)with 18CFM min. Forced air convection								
OUTPUT	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	2.97 ~ 3.63V	4.5 ~ 5.5V	6.75 ~ 8.25V	10.8 ~ 13.2V	12.2 ~ 14.85V	13.5 ~ 16.5V	21.6 ~ 26.4V	24.3 ~ 29.7V	43.2 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	SETUP, RISE TIME	800ms, 30ms/230VAC 800ms, 30ms/115VAC at full load								
	HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load								
	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 440Hz								
INPUT	EFFICIENCY(Typ.)	66%	74%	76%	77%	78%	79%	80%	80%	80%
INFUI	AC CURRENT (Typ.)	1.6A/115VAC 0.9A/230VAC								
	INRUSH CURRENT (Typ.)	COLD START 15A/115VAC 30A/230VAC								
	LEAKAGE CURRENT	<0.3mA / 264VAC								
		73 ~ 105W (3.3V:51 ~ 75W)(5V:70 ~ 105W) rated output power								
PROTECTION	OVERLOAD	Protection type : Hiccup mode, recovers automatically after fault condition is removed								
PROTECTION	0VED VOLTA 0E	3.8 ~ 4.46V   5.75 ~ 6.75V   8.63 ~ 10.1V   13.8 ~ 16.2V   15.5 ~ 18.2V   17.25 ~ 20.25V   27.6 ~ 32.4V   31 ~ 36.45V   55.2 ~ 64.8V								
	OVER VOLTAGE	Protection type: Hiccup mode, recovers automatically after fault condition is removed								
	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.04%/°C (0 ~ 50°C )								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
	SAFETY STANDARDS	UL2601-1, TUV EN60601-1, IEC60601-1 approved								
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms/500VDC								
EMC (Note 4)	EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11) Class B								
(11010 4)	HARMONIC CURRENT	Compliance t	o EN61000-3-2	2,-3						
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN60601-1-2, medical level, criteria A								
	MTBF	359.7Khrs min. MIL-HDBK-217F (25°C)								
OTHERS	DIMENSION	127*76*42mm (L*W*H)								
	PACKING	0.23Kg; 54pcs/14.6Kg/1.35CUFT								
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>Mounting holes M1 and M2 should be grounded for EMI purposes.</li> </ol>									





AC Input Connector (CN1): Molex 5277-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	Molex 5195	Molex 5194
2	AC/N	or equivalent	or equivalent

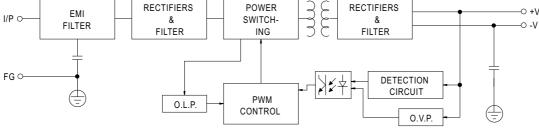
DC Output Connector (CN2): Molex 5273-06 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2,3	+V	Molex 5195	Molex 5194
4,5,6	-V	or equivalent	or equivalent

# **■** Block Diagram



fosc: 45KHz



### ■ Derating Curve

#### **■** Static Characteristics

