



Features :

- . Universal AC input range / full range
- . Medical safety approved
- . Fix switching frequency at 45 KHz
- . Short circuit, over-load, over-voltage protected
- . Approvals : UL / CUL / TUV / CB / CE
- . Free air cooling convection
- . 100% full load burn-in test
- . Built-in EMI filter, low ripple noise
- . Low leakage current $\leq 0.3A$

. 3 years warranty



Specifications	Model									
	MPS45 3.3	MPS45 5	MPS45 7.5	MPS45 12	MPS45 13.5	MPS45 15	MPS45 24	MPS45 27	MPS45 48	
DC output voltage	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V	
Output voltage tolerance	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	
Output rated current	8A	8A	5.4A	3.7A	3.3A	3A	1.9A	1.7A	1A	
Output min. current	0A	0A	0A	0A	0A	0A	0A	0A	0A	
Output max. current	10.7A	10.5A	7A	4.4A	3.9A	3.5A	2.2A	1.95A	1.1A	
Ripple & noise	80mV	100mV	100mV	100mV	100mV	100mV	100mV	100mV	100mV	
Line regulation	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	
Load regulation	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	
Rated output power	26.4W	40W	40.5W	44.4W	44.6W	45W	45.6W	45.9W	48W	
Maximum output power	52W (+3.3V: 35W) with 18 CFM min. forced air convection									
Efficiency	65%	72%	75%	76%	76%	77%	78%	78%	78%	
DC voltage adj.	$\pm 10\%$									
Input voltage range	90~264VAC auto switch 47~440Hz ; 120~370VDC									
AC current	1.2A/115V ; 0.7A/230V									
Inrush current	Cold start 20A/115VAC 40A/230V									
Leakage current	$< 0.3mA/264VAC$									
Over-load protection	53~75V (3.3V : 36~55W) Type : pulsing hiccup shutdown Reset : auto-recovery									
Over-voltage protection	110%~135%									
Temperature coefficient	$\pm 0.04\% / ^\circ C$ (0°~50°C)									
Set-up, Rise, Hold-up time	1.2s, 30ms, 12ms,/115VAC 800ms, 30ms, 20ms/230VAC									
Vibration	10~500Hz, 2G 10min./1cycle, period for 60min. Each axes									
Withstand voltage	I/P-O/P: 4KVAC I/P-FG: 1.5KVAC O/P-FG: short									
Isolation resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC / 100M Ω									
Working temp. & humidity	-10°C~+60°C (refer to output derating curve), 20%~90% R.H.									
Storage temp. & humidity	-20°C~+85°C, 10%~95% R.H. (non-condensing)									
Dimensions	127 x 76.2 x 30 mm (Length x Width x Height) PCB only									
Weight	230 gr									
Safety standards	UL2601-1, EN6060-1 approved									
EMC standards	CISPR11 (EN55011); IEC61000-4-2,3,4,5,6,8,11; IEC61000-3-2,3 EN60601-1-2 verification									

Notes:

- All parameters are specified at 230VAC input, rated load, 25°C & 70% R.H. ambient.
- Tolerance include set-up tolerance, line regulation, load regulation.
- Ripple & Noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1yF & 47uF capacitor.
- Line regulation is measured from low line to high line at rated load.
- Mounting holes M1 & M2 should be grounded for EMI purposes

**Models available :****◆ Single output**

Stock n°	Type	Output	Tolerance	Ripple~Noise	Efficiency	P.P.
12381	MPS45-3.3	3.3V/8A	+3%	80mV	65%	42
12382	MPS45-5	5V/8A	+3%	100mV	72%	42
12383	MPS45-7.5	7.5V/5.4A	+3%	100mV	75%	42
12384	MPS45-12	12V/3.7A	+2%	100mV	76%	42
12385	MPS45-13.5	13.5V/3.3A	+2%	100mV	76%	42
12386	MPS45-15	15V/3A	+2%	100mV	77%	42
12387	MPS45-24	24V/1.9A	+2%	100mV	78%	42
12388	MPS45-27	27V/1.7A	+2%	100mV	78%	42
12389	MPS45-48	48V/1A	+2%	100mV	78%	42

◆ Dual output

Stock n°	Type	Output	Tolerance	Ripple~Noise	Efficiency	P.P.
12401	MPD45-A	+5V/0.4~5A +12V/0.2~2.5A	+4% +7%	60mV 120mV	76%	46
12402	MPD45-B	+5V/0.4~5A +24V/0.2~1.8A	+4% +7%	60mV 150mV	78%	46

◆ Triple output

Stock n°	Type	Output	Tolerance	Ripple~Noise	Efficiency	P.P.
12411	MPT45-A	+5V/0.4~5A +12V/0.2~2.5A -5V/0.0~0.5A	+4% +7% +5%	60mV 120mV 60mV	73%	49
12411	MPT45-B	+5V/0.4~5A +12V/0.2~2.5A -12V/0.0~0.5A	+4% +7% +5%	60mV 120mV 100mV	75%	49
12413	MPT45-C	+5V/0.4~5 +15V/0.2~2.3 -15V/0.0~0.5	+4% +7% +5%	60mV 120mV 100mV	75%	49

