



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									
	MPS65 3.3	MPS65 5	MPS65 7.5	MPS65 12	MPS65 13.5	MPS65 15	MPS65 24	MPS65 27	MPS65 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	12A	12A	8A	5.2A	4.7A	4.2A	2.7A	2.4A	1.35A	
Output min. current	0A	0A	0A	0A	0A	0A	0A	0A	0A	
Output max. current	15.2A	13.8A	9.6A	6A	5.4A	4.8A	3A	2.7A	1.5A	
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	39.6W	60W	60W	62.4W	63.5W	63W	64.8W	64.8W	64.8W	
Maximum output power	72W (+3.3V: 50W; +5V: 69W) with 18 CFM min. forced air convection									
Efficiency	66%	74%	76%	77%	78%	79%	80%	80%	80%	
DC voltage adj.	$\pm 10\%$									
Input voltage range	90~264VAC auto switch 47~440Hz ; 120~370VDC									
AC current	1.6A/115V ; 0.9A/230V									
Inrush current	Cold start 20A/115VAC 40A/230V									
Leakage current	$< 0.3mA/264VAC$									
Over-load protection	73~105W (3.3V: 51W) Type : pulsing hiccup shutdown Reset : auto-recovery									
Over-voltage protection	115%~135%									
Temperature coefficient	$\pm 0.04\% / ^\circ C (0^\circ \sim 50^\circ C)$									
Set-up, Rise, Hold-up time	800ms, 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	$-10^\circ C \sim +60^\circ C$ (refer to output derating curve), 20%~90% R.H.									
Storage temp. & humidity	$-20^\circ C \sim +85^\circ C$, 10%~95% R.H. (non-condensing)									
Dimensions	127 x 76.2 x 42 mm (Length x Width x Height) PCB only									
Weight	280 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.
12421	MPS65-3.3	3.3V/12A	+3%	80mV	66%	44
12422	MPS65-5	5V/12A	+3%	100mV	74%	44
12423	MPS65-7.5	7.5V/8A	+3%	100mV	76%	44
12424	MPS65-12	12V/5.2A	+2%	100mV	77%	44
12425	MPS65-13.5	13.5V/4.7A	+2%	100mV	78%	44
12426	MPS65-15	15V/4.2A	+2%	100mV	79%	44
12427	MPS65-24	24V/2.7A	+2%	100mV	80%	44
12428	MPS65-27	27V/2.4A	+2%	100mV	80%	44
12429	MPS65-48	48V/1.35A	+2%	100mV	80%	44

◆ Dual output

Stock n°	Type	Output	Tolerance	Ripple~Noise	Efficiency	P.P.
12441	MPD65-A	+5V/0.4~7A +12V/0.2~3.2A	+4% +7%	60mV 150mV	75%	53
12442	MPD65-B	+5V/0.4~6A +24V/0.2~2.6A	+4% +7%	60mV 150mV	78%	53

◆ Triple output

Stock n°	Type	Output	Tolerance	Ripple~Noise	Efficiency	P.P.
12451	MPT65-A	+5V/0.4~7A +12V/0.2~3.2A -5V/0.0~0.7A	+4% -7%~+10% +5%	60mV 120mV 60mV	74%	56
12452	MPT65-B	+5V/0.4~7A +12V/0.2~3.2A -12V/0.0~0.7A	+4% -7%~+10% +5%	60mV 160mV 100mV	74%	56
12453	MPT65-C	+5V/0.4~7A +15V/0.2~2.6A -15V/0.0~0.7A	+4% -7%~+10% +5%	60mV 180mV 100mV	74%	56

