

### Features:

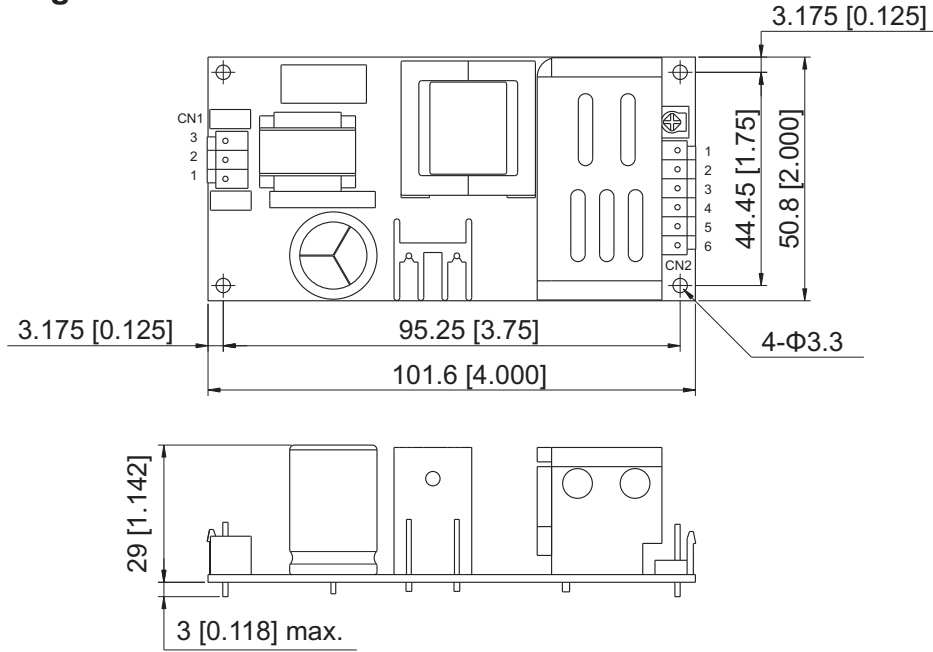
- Universal AC input / Full range
- Medical safety approval: ANSI / AAMI ES 60601-1 / TUV EN 60601-1: 2006; IEC 60601-1 / 2xMOPP
- Green design, No-load power consumption < 0.5W
- Protection: Short circuit, Over load, Over voltage  
Brown-out (Low AC Input Voltage)
- High operation temperature up to 70°C
- Withstand 2G vibration test
- 3 years warranty



MODEL		MP45-12	MP45-15	MP45-24	MP45-48
Output	DC Voltage Range	12V	15V	24V	48V
	Rated Current	3.75A	3A	1.875A	0.94A
	Current Range	0 ~ 4.125A	0 ~ 3.3A	0 ~ 2.06A	0 ~ 1.032A
	Rated Power	45W	45W	45W	45W
	Peak Load (10sec.) <small>Note.8</small>	49.5W	49.5W	49.4W	49.53W
	Ripple & Noise (Max.)	120mVp-p	150mVp-p	240mVp-p	300mVp-p
	Voltage Adj. Range	±10%			
	Voltage Tolerance	±2.0%	±2.0%	±1.0%	±1.0%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%
	Setup, Rise Time	500ms, 30ms / 230VAC, 500ms, 30ms / 115VAC at full load			
Hold Up Time	50ms / 230VAC, 13ms / 115VAC at full load				
Input	Voltage Range	90 ~ 264VAC, 127 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)			
	Frequency Range	47 ~ 63Hz			
	Efficiency (Typ.) at 230VAC	85%	85%	86%	87%
	AC Current (Typ.)	0.9A / 115VAC, 0.5A / 230VAC			
	Inrush Current (Typ.)	Cold Start 30A / 115VAC, 60A / 230VAC			
	Leakage Current	For earth < 200uA / 264VAC, For patient < 100uA / 264VAC			
Protection	Over Load	Above 110% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed			
	Over Voltage	115 ~ 140% rated output voltage Protection type: latch-off mode			
Environment	Working Temp.	-20 ~ 70°C (Refer to de-rating curve)			
	Working Humidity	20 ~ 90% RH non-condensing			
	Storage Temp. & Humidity	-40 ~ +85°C, 10 ~ 95% RH			
	Temp. Coefficient	±0.03% / °C (0 ~ 50°C)			
Safety & EMC	Vibration	10 ~ 500Hz, 2G 10min. / 1cycle, period for 60min. each along X, Y, Z axes			
	Safety Standards	Certified UL / cUL (ANSI / AAMI ES 60601-1; CAN / CSA-C22.2 No.60601-1); NFPA 99 Certified TUV (EN 60601-1; IEC 60601-1); MOPP approval			
	Withstand Voltage	I/P-O/P: 4KVAC, I/P-FG: 1.8KVAC, O/P-FG: 1.5KVAC			
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC			
	EMI Conduction & Radiation	Certified EN 55011			
	Harmonic Current	Certified EN 61000-3-2; EN 61000-3-3			
Others	EMS Immunity	Certified EN 60601-1-2; IEC 61000-4-2, 3, 4, 5, 6, 8, 11			
	MTBF	215.48K HRS Certified MIL-HDBK-217F			
	Dimension (WxHxD)	50.8x29.0x101.6 mm / 2.000x1.142x4.000 inch			
	Packing	0.151kg; 80pcs / 13.08kg / 1.43CUFT			
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 setup time 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. 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.</p> <p>7. Length of setup time is measured at first cold start. Turning ON/OFF the power supply continuously may increase the setup time.</p> <p>8. Max. 33% duty cycle within every 30 sec. Average output power should not exceed the rated power.</p>				

### Mechanical Drawings:

Unit : mm[inch]



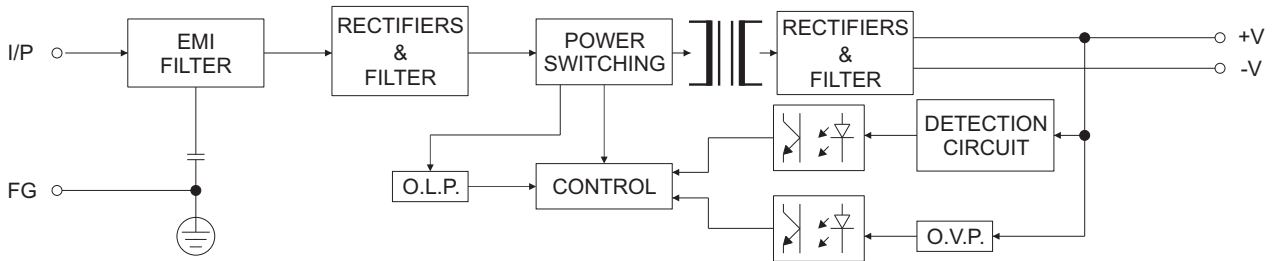
AC Input Connector (CN1): JST B3P-VH or equivalent

DC Output Connector (CN2) : JST B4P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC / N	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC / L		

Pin No.	Assignment	Mating Housing	Terminal
1,2	+V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3,4	-V		

### Block Diagram:



### De-rating Curve:

