



45W Single Output Switching Power Supply

EPS-45 series



■ Features :

- Universal AC input / Full range
- Optional L-Bracket and cover
- * High efficiency up to 90%
- * Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 4"×2" compact size
- LED indicator for power on
- * No load power consumption<0.3W
- 3 years warranty



EPS-45-3.3 -C =Blank,-C; Blank=PCB only, -C=Enclosed type

SPECIFICATION

MODEL		EPS-45-3.3	EPS-45-5	EPS-45-7.5	EPS-45-12	EPS-45-15	EPS-45-24	EPS-45-36	EPS-45-48
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	36V	48V
OUTPUT	RATED CURRENT	8A	8A	5.4A	3.75A	3A	1.9A	1.25A	1A
	CURRENT RANGE	0 ~ 9A	0 ~ 9A	0 ~ 6A	0 ~ 4.2A	0 ~ 3.3A	0 ~ 2.1A	0 ~ 1.4A	0 ~ 1.1A
	RATED POWER	26.4W	40W	40.5W	45W	45W	45.6W	45W	48W
	PEAK LOAD(10sec.) Note.6	29.7W	45W	42W	50.4W	49.5W	50.4W	50.4W	52.8W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	100mVp-p	120mVp-p	150mVp-p	240mVp-p	280mVp-p	300mVp-p
	VOLTAGE ADJ. RANGE	3.1 ~ 3.6V	4.75 ~ 5.5V	7.13 ~ 8.25V	10.8 ~ 13.5V	13.5 ~ 16.5V	21.6 ~ 27V	32.4 ~ 39.6V	43.2 ~ 52.8\
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	1000ms, 50ms/230VAC 2000ms, 50ms/115VAC at full load							
	HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load							
	VOLTAGE RANGE Note.5	90 ~ 264VAC 127 ~ 370VDC [DC input operation possible by connecting AC/N(+), AC/L(-)]							
	FREQUENCY RANGE	47 ~ 63Hz							
NPUT	EFFICIENCY (Typ.)	80%	82%	84%	87%	88%	89%	89%	90%
NFUI	AC CURRENT (Typ.)	1.8A/115VAC 1A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 60A/230VAC							
	LEAKAGE CURRENT	<2mA/240VAC							
		115 ~ 160% rated output power							
	OVER LOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed							
PROTECTION	OVER VOLTAGE	3.7 ~ 4.45V	5.6 ~ 6.75V	8.63 ~ 10.1V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	39.7 ~ 46.8V	53.3 ~ 64.8
		Protection type: Shut down o/p voltage, re-power on to recover							
	WORKING TEMP.	-30 ~ +70°C (Refer to output load derating curve)							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved							
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC							
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH							
(Note 4)	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A							
	MTBF	652.3Khrs min. MIL-HDBK-217F (25°C)							
OTHERS	DIMENSION	PCB:101.6*50.8*29mm (L*W*H); with optional CASE:103.4*62*37mm (L*W*H)							
OTHERS	PACKING	PCB: 0.14Kg; 96pcs/ 14.5Kg/0.89CUFT; with optional CASE: 0.3Kg; 45pcs/ 14.5Kg/0.67CUFT							

2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47 uf parallel capacitor.

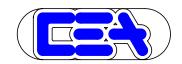
3. Tolerance : includes set up tolerance, line regulation and load regulation.

- 4. Derating may be needed under low input voltage. Please check the static characteristics for more details.
- 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.
 The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)



NOTE

File Name:EPS-45-SPEC 2017-07-07

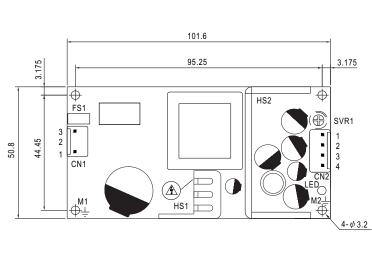


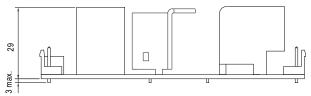


Unit:mm



■ Mechanical Specification







- 1.HS1,HS2 cannot be shorted.
- 2.HS1 must have safety isolation distance with system case.

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

Pin No.	Assignment	Mating Housing	Terminal	
1	AC/N	ICTVIID	10T 0\/11 04T D4 4	
2	No Pin	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent	
3	AC/L	5. 5qa.vaiont	or oquivalent	

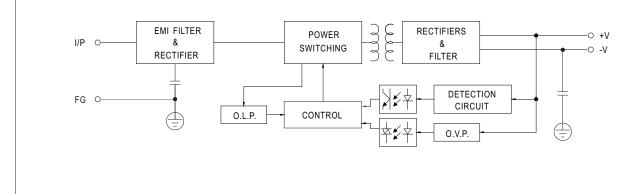
DC Output Connector (CN2): JST B4P-VH or equivalent

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

^{± :} Grounding Required; M1 and M2 are Safety ground and should all be grounded.

Optional cover: No.998A -T Mylar film Optional L-Bracket: No.998A -D 2-M3 L=4 27 2-M3L=3 78

■ Block Diagram



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