







■ Features

- · 3"×2" miniature size
- · Universal AC input / Full range
- Class II (without FG) installations
- No load power consumption<0.1W
- · High efficiency up to 91%
- For 1U applications
- · Protections: Short circuit / Overload / Over voltage
- · Cooling by free air convection
- -30~70°C wide range of operating temperature
- Operating altitude up to 5000 meters(Note 7.)
- · LED indicator for power on
- · 3 years warranty

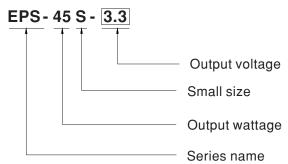
Applications

- · Industrial electrical equipment
- · Mechanical equipment
- Factory automation equipment
- · Handheld electronic device

Description

EPS-45S is a 45W highly reliable green PCB type industrial power supply with a high power density on the 3" by 2" footprint. It accepts 80~264VAC input and offers various output voltages between 3.3V and 48V. The working efficiency is up to 91% and the extremely low no load power consumption is down below 0.1W. EPS-45S is able to be used for Class II (no FG) system design.

■ Model Encoding



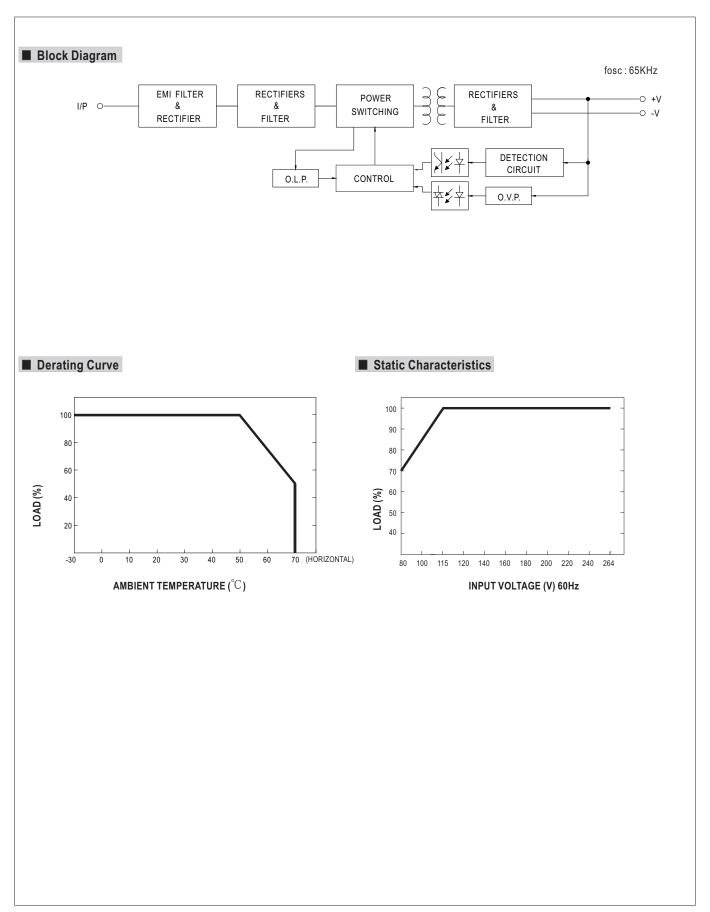
SPECIFICATION

ORDER NO.		EPS-45S-3.3	EPS-45S-5	EPS-45S-7.5	EPS-45S-12	EPS-45S-15	EPS-45S-24	EPS-45S-48	
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	48V	
	RATED CURRENT	8A	8A	5.4A	3.8A	3A	1.9A	0.94A	
	CURRENT RANGE	0 ~ 8.8A	0 ~ 8.8A	0 ~ 5.95A	0 ~ 4.18A	0 ~ 3.3A	0 ~ 2.1A	0 ~ 1.03A	
	RATED POWER	26.4W	40W	40.5W	45.6W	45W	45.6W	45.1W	
OUTPUT	PEAK LOAD(10sec.) Note.2	29W	44W	44.6W	50.2W	49.5W	50.2W	49.4W	
	RIPPLE & NOISE (max.) Note.3		80mVp-p	80mVp-p	120mVp-p	150mVp-p	240mVp-p	300mVp-p	
	VOLTAGE ADJ.RANGE	3.1~3.6V	4.7~5.5V	7.12~8.3V	11.4~13.2V	13.5~16.5V	22.8~27.6V	45.6~52.8V	
	VOLTAGE TOLERANCE Note.4		±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	土0.5%	±0.5%	土0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	SETUP, RISE TIME	500ms, 30ms / 23		s, 30ms / 115VAC at			• //		
	HOLD UP TIME (Typ.)	30ms / 230VAC 12ms / 115VAC at full load							
	, , ,	80 ~ 264VAC							
	FREQUENCY RANGE	47 ~ 63Hz							
INPUT	EFFICIENCY (Typ.)	80%	83%	85%	88%	89%	90%	91%	
IIII O I	AC CURRENT (Typ.)	1.2A / 115VAC	1A / 230VAC	03 /0	00 /0	03 /0	90 /6	9170	
	INRUSH CURRENT (Typ.)			101/40					
	LEAKAGE CURRENT(max.)	0.25mA/264VAC	/115VAC 60A/23	BUVAC					
	LEARAGE CORRENT (IIIax.)		d						
	OVERLOAD	115 ~ 150% rate				:			
PROTECTION			1	overs automatically			00.4.00.414	55.0.04.01/	
PROTECTION	OVER VOLTAGE	3.8~5V	5.7~6.8V	8.62~11.3V	13.8~16.2V	17.25~20.3V	28.4~32.4V	55.2~64.8V	
		Protection type: Shut down o/p voltage, re-power on to recover							
	WORKING TEMP.	-30 ~ +70 °C (Refer to "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 &	ISOLATION LEVEL	Primary-Secondary: 2xMOPP							
EMC (Note. 7)	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55022(CISPR22) 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	726.2Khrs min. MIL-HDBK-217(25° C)							
OTHERS	DIMENSION	76.2*50.8*24mm or 3" * 2" *0.945" inch (L*W*H)							
	PACKING	0.11Kg; 120pcs/1	4.2Kg/0.97CUFT						
NOTE	 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltages. Please check the derating curve for more details. Touch current was measured from primary input to DC output. The ambient temperature derating of 5℃/1000m is needed for operating altitude greater than 2000m (6500ft). 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) 								



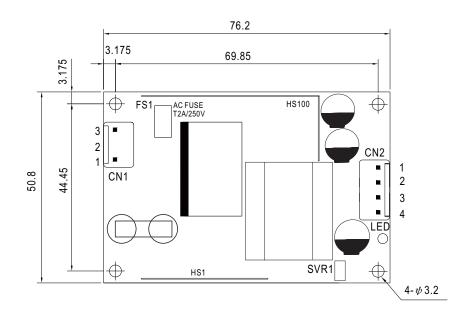
45W Single Output Switching Power Supply

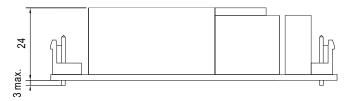
EPS-45S series



■ Mechanical Specification

Case No. Unit:mm





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

Pin No.	Assignment	Mating Housing	Terminal	
1	AC/N	ICTVIID	IOT OVILLOAT DA A	
2	No Pin	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent	
3	AC/L	or oquiraioni		

${\tt DC\ Output\ Connector\ (CN2): JST\ B2P-VH\ or\ equivalent}$

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

■ Installation Manual

Please refer to: http://www.meanwell.com/webnet/search/InstallationSearch.html