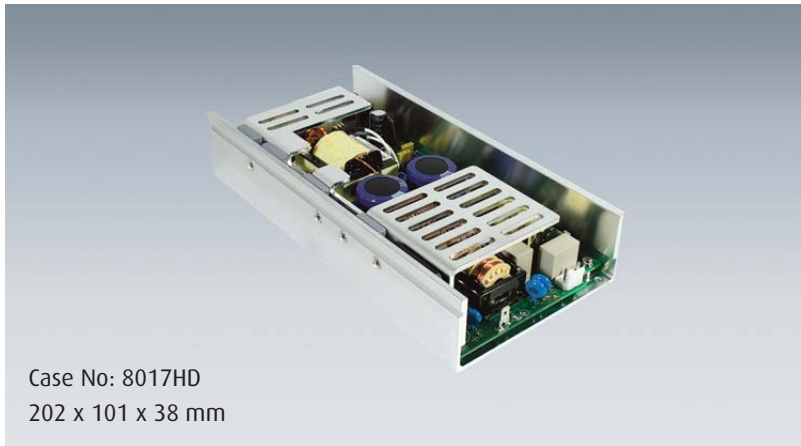


USP-225 Series

225W U-bracket Single Output Power Supply with PFC



Case No: 8017HD
202 x 101 x 38 mm

Features

- Universal AC input/ Full range
- Built-in active PFC circuit compliance to EN61000-3-2
- Protections: Short Circuit/Overload/ Over Voltage/ Over temperature
- Free air convection for 150W and forced air convection for 225W
- High power density 4.7w/in³
- Active AC surge current limiting
- U-bracket low profile:38mm

Please note that all values are for forced air convection



Specification

INPUT	Voltage	90V ~ 264VAC universal full range or 127V ~ 370VDC.					
	Frequency	47 ----- 63 Hz					
	Current	<2.2A (USP-225-3.3), 3.3A @ 115VAC; 1.1A(USP-225-3.3),1.6A@230VAC input, full load					
	Inrush Current	<15A@115VAC; 30A@230VAC, Cold start at 25°C ambient					
	Leakage Current	<3.5mA@240VAC input					
OUTPUT	MODEL No.	USP-225-3.3	USP-225-5	USP-225-12	USP-225-15	USP-225-24	USP-225-48
	Voltage	3.3V	5V	12V	15V	24V	48V
	Rated Current	40A	40A	18.7A	15A	9.4A	4.7A
	Current Range	0~40A	0~40A	0~18.7A	0~15A	0~9.4A	0~4.7A
	Voltage Adj. Range	2.97~3.6V	4.5~5.5V	10.8~13.2V	13.5~16.5V	21.6~26.4V	43.2~52.8V
	Output Tolerance	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%
	Line Regulation	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
	Load Regulation	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%
	Ripple Noise MAX.	100mV	100mV	100mV	100mV	150mV	250mV
	Efficiency (TYP.)	72%	77%	83%	84%	85%	86%
	Power	132W	200W	224.4W	225W	225.6W	225.6W
PROTECTION	Over Voltage	3.6~4.4V	5.5~7.4V	13.2~16.3V	16.5~20.2V	26.4~32.4V	52.8~64.8V
		Shutdown o/p voltage, re-power on to recover					
	Over Temperature	90°C ±5°C (RTH2; Detect on heatsink of power transistor)					
		Shut down o/p voltage, re-power on to recover					
ELEC. CHAR.	Over Load	105~150% Rated output power; Constant current limiting, recovers automatically after fault condition is removed					
	Rise Time	<30mS@ 115~230VAC at full load					
	Hold up Time	>22mS@ 115~230VAC at full load					
	Setup Time	<0.5Sec @ 115~230VAC					
ENVIRONMENT	Temperature	Operating: -20 ~ +65°C ; Storage: -40~ +85°C					
	Humidity	Operating: 20% ~ 90% RH; Storage: 10% ~ 95% RH (non condensing)					
SAFETY	Withstand Voltage	I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC, 1minute					
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG 100MΩ/500VDC					
	Safety Standard	UL60950-1; TUV EN60950-1 Approved					
EMC	EMI	EN55022; EN61000-3-2,3					
	EMS	EN61000-4-2,3,4,5,6,8,11; ENV50204					
OTHERS	Cooling	Natural cooling					
	M.T.B.F.	220K hrs min. MIL-HDBK-217F (25°C)					
	Packing	0.85Kg; 16pcs/14.6Kg/0.76 CUFT					

1 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature

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

3 Tolerance: Includes set up tolerance, line regulation and load regulation

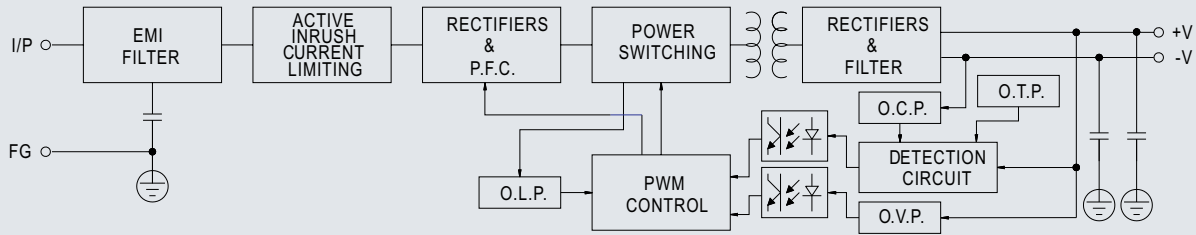
4 The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

USP-225 Series

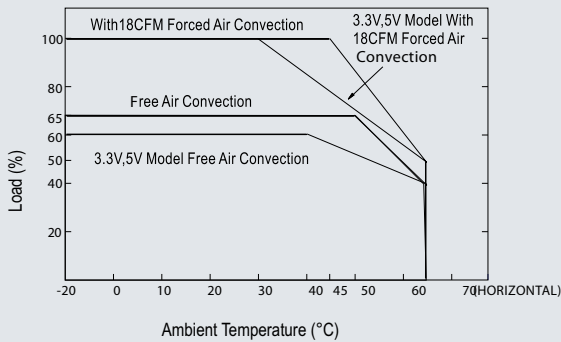
225W U-Bracket Single Output Power Supply with PFC



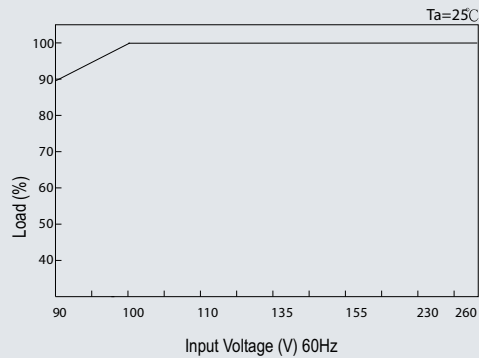
Block Diagram



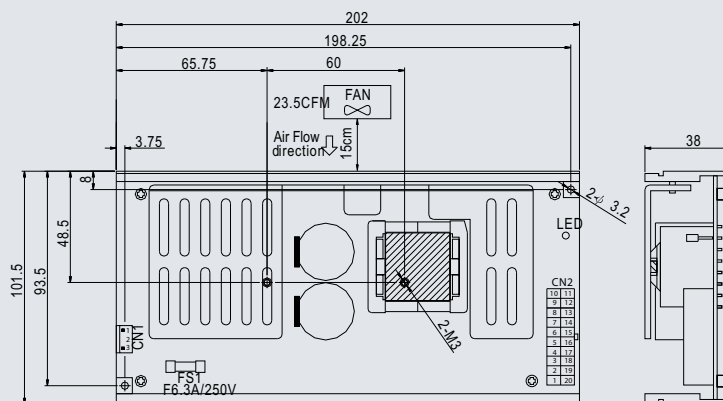
De-Rating Curve



Static Characteristics (5V)



Dimensions



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

DC Terminal pin No. Assignment (CN2)

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

Pin No.	Assignment	Mating House	Terminal
1~5	+V	MOLEX 5557 or equivalent	MOLEX 5556 or equivalent
6~15	-V	MOLEX 5557 or equivalent	MOLEX 5556 or equivalent
16~20	+V	MOLEX 5557 or equivalent	MOLEX 5556 or equivalent