

■ Features :

- Universal AC input / Full range
- Built in active PFC circuit compliance to EN61000-3-2
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Free air convection for 300W and 350W with 23.5CFM forced air
- High power density 6.3w/in³
- ZVS technology to reduce power dissipation
- Active AC surge current limiting
- U-bracket low profile: 38mm

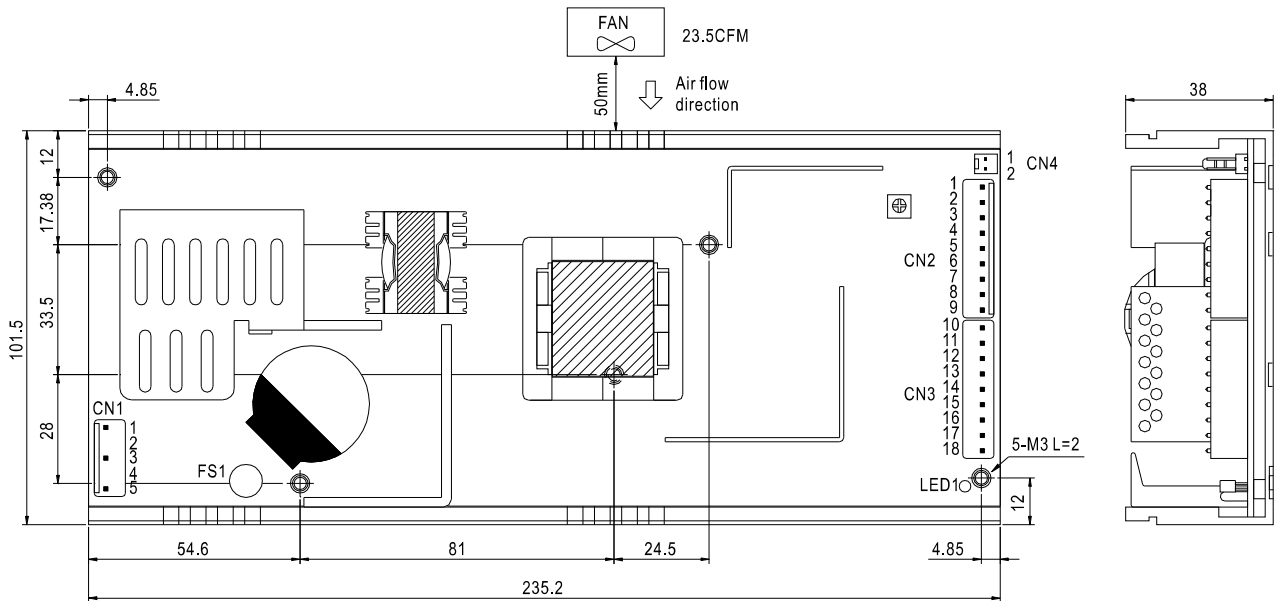


SPECIFICATION

MODEL	USP-350-3.3	USP-350-5	USP-350-12	USP-350-15	USP-350-24	USP-350-48	
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V
	RATED CURRENT	70A	70A	29.2A	23.4A	14.6A	7.3A
	CURRENT RANGE (convection)	0 ~ 50A	0 ~ 50A	0 ~ 25A	0 ~ 20A	0 ~ 12.5A	0 ~ 6.25A
	CURRENT RANGE (23.5CFM FAN)	0 ~ 70A	0 ~ 70A	0 ~ 29.2A	0 ~ 23.4A	0 ~ 14.6A	0 ~ 7.3A
	RATED POWER (convection)	165W	250W	300W	300W	300W	300W
	RATED POWER (23.5CFM FAN)	231W	350W	350.4W	351W	350.4W	350.4W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p
	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
	VOLTAGE TOLERANCE Note.3	±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	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME	2000ms, 100ms/230VAC 4000ms, 100ms/115VAC at full load						
HOLD TIME (Typ.)	12ms/230VAC 16ms/230VAC 16ms/115VAC at full load						
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC 127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	0.94/230VAC	0.95/230VAC	0.98/115VAC at full load			
	EFFICIENCY (Typ.)	78%	84%	88%	88%	88%	89%
	AC CURRENT (Typ.)	4A/115VAC 2A/230VAC					
	INRUSH CURRENT (Typ.)	22A/115VAC 44A/230VAC					
LEAKAGE CURRENT	<2mA / 240VAC						
PROTECTION	OVER LOAD	105 ~ 120% rated output power		105 ~ 130% rated output power			
		Protection type : Constant current limiting, recovers automatically after fault condition is removed					
	OVER VOLTAGE	3.7 ~ 4.6V	5.7 ~ 7V	13.5 ~ 16.3V	17 ~ 21V	26.7 ~ 32.4V	53 ~ 64.8V
	Protection type : Hiccup mode, recovers automatically after fault condition is removed						
OVER TEMPERATURE	80°C (3.3V,5V,12V,15V,24V,48V) (TSW1 : Detect on heatsink of power transistor); 80°C ±5°C (3.3V,5V,12V,15V), 75°C ±5°C (24V,48V) (TSW2 : Detect on heatsink of power diode)						
	Protection type : Shut down o/p voltage with auto-recovery						
ENVIRONMENT	WORKING TEMP.	-10 ~ +65°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 45°C)					

Mechanical Specification

Case No. 941A-D Unit:mm



AC Input Connector (CN1) : JST B5P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	FG	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2,4	No Pin		
3	AC/N		
5	AC/L		

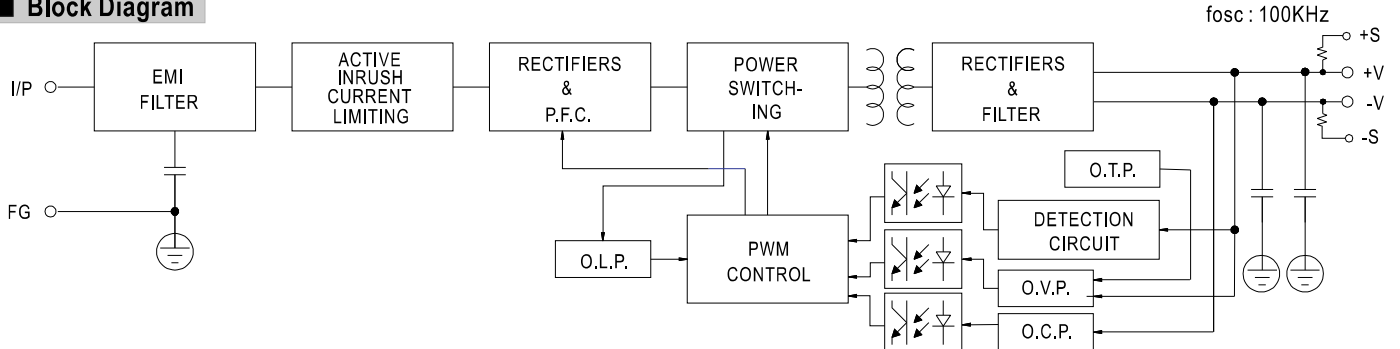
DC Output Connector (CN2, CN3) : JST B9P-VH*2 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1~9	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
10~18	+V		

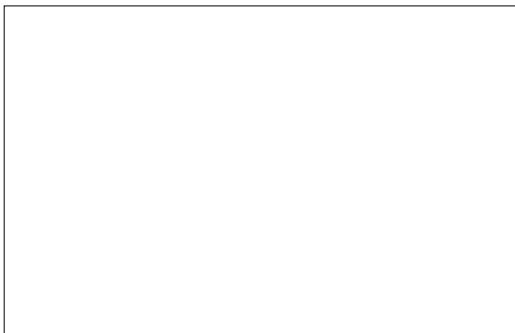
Remote Sense (CN4) : Molex 5045-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	RS+	Molex 5051 or equivalent	Molex 4809 or equivalent
2	RS-		

Block Diagram



Derating Curve



Static Characteristics (5V)

