

■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 5"x3" compact size
- Standby 5V@1A function (Optional)
- Free air convection for 120W and 160W with 20.5 CFM forced air
- With power good and fail signal output
- Built-in remote sense function for 5~15V
- No load power consumption under 0.5W by PS-ON control (Optional)
- 3 years warranty

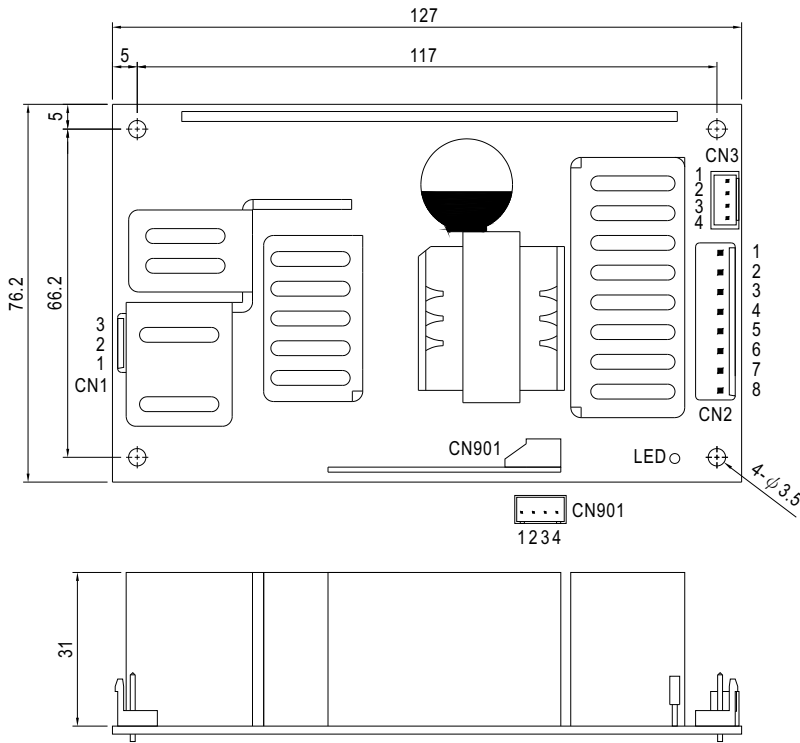


SPECIFICATION

MODEL		RPS-160-5		RPS-160-12		RPS-160-15		RPS-160-24		RPS-160-48		
OUTPUT	OUTPUT NUMBER	CH1	STANDBY	CH1	STANDBY	CH1	STANDBY	CH1	STANDBY	CH1	STANDBY	
	DC VOLTAGE	5V	5VSB	12V	5VSB	15V	5VSB	24V	5VSB	48V	5VSB	
	RATED CURRENT (20.5CFM)	30A	1A	12.9A	1A	10.3A	1A	6.5A	1A	3.25A	1A	
	CURRENT RANGE (convection)	0 ~ 22A	0 ~ 1A	0 ~ 9.5A	0 ~ 1A	0 ~ 7.6A	0 ~ 1A	0 ~ 4.8A	0 ~ 1A	0 ~ 2.4A	0 ~ 1A	
	CURRENT RANGE (20.5CFM)	0 ~ 30A	0 ~ 1A	0 ~ 12.9A	0 ~ 1A	0 ~ 10.3A	0 ~ 1A	0 ~ 6.5A	0 ~ 1A	0 ~ 3.25A	0 ~ 1A	
	RATED POWER (convection)	115W		119W		119W		120.2W		120.2W		
	RATED POWER (20.5CFM)	155W		159.8W		159.5W		161W		161W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	50mVp-p	100mVp-p	50mVp-p	100mVp-p	50mVp-p	150mVp-p	50mVp-p	250mVp-p	50mVp-p	
	VOLTAGE ADJ. RANGE	CH1:4.5 ~ 5.5V		CH1:10.8 ~ 13.2V		CH1:13.5 ~ 16.5V		CH1:22 ~ 27V		CH1:43.2 ~ 52.8V		
	VOLTAGE TOLERANCE Note.3	4.0%	2.0%	3.0%	2.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
	LINE REGULATION	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
	LOAD REGULATION	1.0%	2.0%	1.0%	2.0%	1.0%	2.0%	1.0%	2.0%	1.0%	2.0%	
SETUP, RISE TIME	500ms, 30ms/230VAC		500ms, 30ms/115VAC at full load									
HOLD UP TIME (Typ.)	16ms/230VAC/115VAC at full load											
INPUT	VOLTAGE RANGE Note.6	90 ~ 264VAC		127 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz										
	POWER FACTOR (Typ.)	PF>0.94/230VAC		PF>0.98/115VAC at full load								
	EFFICIENCY (Typ.)	85%		88%		87%		87%		88%		
	AC CURRENT (Typ.)	2.2A/115VAC		1.2A/230VAC								
	INRUSH CURRENT (Typ.)	COLD START 35A/115VAC		70A/230VAC								
LEAKAGE CURRENT	<200uA / 240VAC											
PROTECTION	OVERLOAD	105 ~ 135% rated output power (Rated power is under fan cooling condition) Protection type : Hiccup mode, recovers automatically after fault condition is removed										
	OVER VOLTAGE	5.75 ~ 6.75V		13.8 ~ 16.2V		17.25 ~ 20.25V		27.6 ~ 32.4V		55.2 ~ 64.8V		
	OVER TEMPERATURE	110°C (TSW1) detect on heatsink of power transistor Protection type : Shut down o/p voltage, recovers automatically after temperature goes down										
FUNCTION	PS-ON INPUT SIGNAL (OPTIONAL)	Power on: PS-ON = "Hi" or ">2V" ; Power off: PS-ON = "Low" or "<0.5V"										
	POWER GOOD / POWER FAIL	500ms>PG>10ms		PF>1ms								
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°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 ~ 50°C)										
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes											
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60601-1, TUV EN60601-1 approved										
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC										
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC 25°C 70% RH										
	EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11), EN55022 (CISPR22) Class B										
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3										
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN60601-1-2, EN61204-3, medical level, criteria A											
OTHERS	MTBF	Khrs min. MIL-HDBK-217F (25°C)										
	DIMENSION	127*76.2*33mm (L*W*H)										
	PACKING	Kg										
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> <li>5. HS1,HS2 &amp; HS3 can not be shorted.</li> <li>6. Derating may be needed under low input voltages. Please check the derating curve for more details.</li> </ol>											

## Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B3P-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		

DC Output Connector (CN2) : JST B8P-VH or equivalent

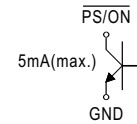
Pin No.	Assignment	Mating Housing	Terminal
1,2,3,4	+V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
5,6,7,8	-V		

Power Good Connector(CN3):JST B4B-XH or equivalent

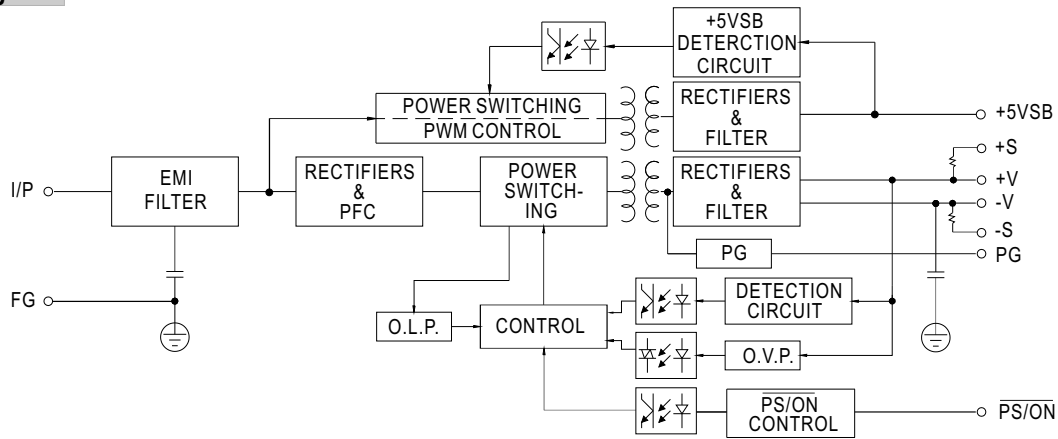
Pin No.	Status	Mating Housing	Terminal
1	PG	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	GND		
3	-S		
4	+S		

5VSB Connector(CN901) : JST B-XH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	PS/ON	JST XHP or equivalent	JST SXH-001T or equivalent
2,4	GND		
3	5VSB		

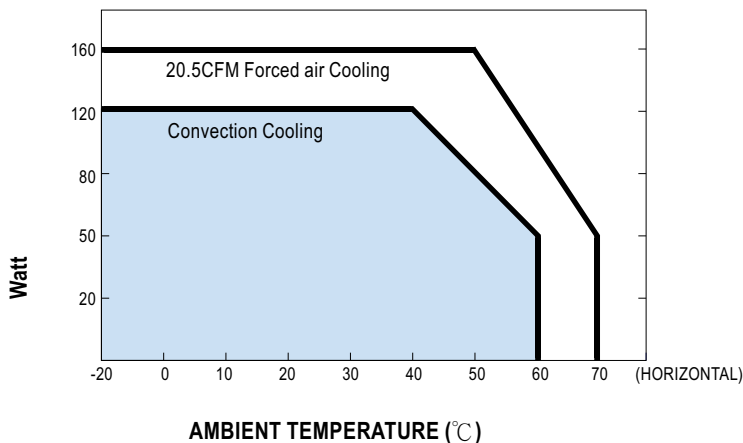


## Block Diagram



fosc : KHz

## Derating Curve



## Output Derating VS Input Voltage

