

SPECIFICATION

60W Single Output Medical Type

RPS-60 series



Features:

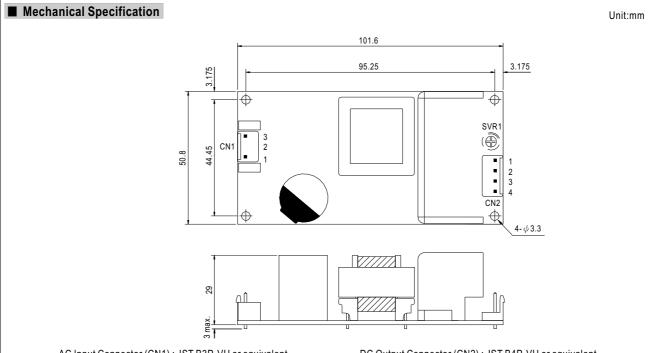
- 4"x2" miniature size
- Universal AC input/Full range
- Low leakage current<200uA
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- UL60601-1/IEC60601-1/EN60601-1 medical safety approved
- UL60950-1/IEC60950-1/EN60950-1 ITE safety approved
- No load power consumption<0.75W
- Fixed switch frequency at 100KHz
- 3 years warranty



MODEL		RPS-60-3.3	RPS-60-5	RPS-60-12	RPS-60-15	RPS-60-24	RPS-60-48	
120	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V	
	RATED CURRENT	10A	10A	5A	4A	2.5A	1.25A	
	CURRENT RANGE	0 ~ 11A	0 ~ 11A	0 ~ 5.5A	0 ~ 4.4A	0~2.75A	0 ~ 1.375A	
	RATED POWER	33W	50W	60W	60W	60W	60W	
	PEAK LOAD(10sec.) Note.4	36.3W	55W	66W	66W	66W	66W	
OUTDUT	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	150mVp-p	240mVp-p	300mVp-p	
OUTPUT	VOLTAGE ADJ. RANGE	3.1 ~ 3.6V	4.75 ~ 5.5V	11.4 ~ 13.2V	13.5 ~ 16.5V	22.8 ~ 27.6V	45.6 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	
	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%	
	SETUP, RISE TIME	500ms, 30ms/230VAC 500ms, 30ms/115VAC at full load						
	HOLD UP TIME (Typ.)	50ms/230VAC 13ms/115VAC at full load						
	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz					14000	
INPUT	EFFICIENCY (Typ.)	74%	79%	83%	84%	85%	86%	
INFUI	AC CURRENT (Typ.)	1.8A/115VAC 1 A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 60A/230VAC 30A/115VAC 30A/115VAC						
	LEAKAGE CURRENT	For earth <200uA / 264VAC, For patient <100uA/264VAC						
		115 ~ 150% rated output power						
	OVER LOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed						
PROTECTION		3.8 ~ 5V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	28.4 ~ 32.4V	55.2 ~ 64.8V	
	OVER VOLTAGE	Protection type :	Shut down o/p voltag	e, re-power on to reco	ver	<u> </u>		
	WORKING TEMP.	-20 ~ +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 (0~45°C)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, UL60601-1, TUV EN60601-1, IEC60601-1 approved						
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:1.5KVAC						
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC						
EMC T	EMI CONDUCTION & RADIATION							
(Note 5)	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						
	MTBF	353.6Khrs min. MIL-HDBK-217F (25°C)						
OTHERS	DIMENSION	101.6*50.8*29mm (L*W*H)						
J.112110	PACKING	0.15Kg; 96pcs/15.4Kg/0.89CUFT						

- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.
- 5. 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.
- 6. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.





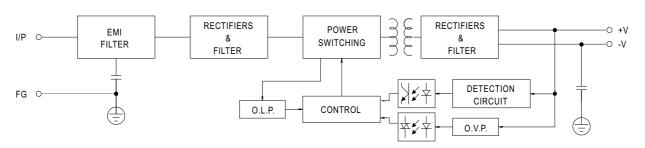
AC Input Connector (CN1): JST B3P-VH or equivalent

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

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

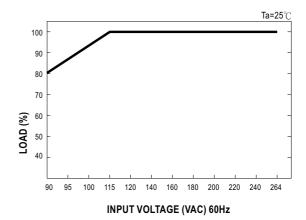
■ Block Diagram



■ Output Derating

100 80 60 40 20 -20 40 60 65 70 (HORIZONTAL) AMBIENT TEMPERATURE (°C)

■ Output Derating VS Input Voltage



fosc: 100KHz