

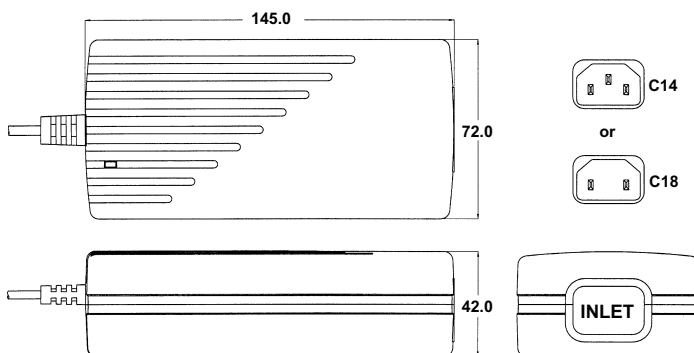
**Green Power**



## General Specifications:

Input voltage .....	90 VAC to 264 VAC
Input frequency .....	47 Hz to 63 Hz
Inrush current .....	less than 35A at 115VAC less than 70A at 230VAC cold start, 25°C
Efficiency .....	85%~90% depends on the models
Holdup time.....	> 20 ms at rated load and 115VAC
Average Efficiency .....	> 85% at 25%, 50%, 75%, 100% of rated load and 115VAC/230VAC input
No-load input power .....	< 0.3W at 230VAC input

## Mechanical Specifications:



## Description:

SNP-A08 series is designed for both medical and ITE applications. It features with no-load input power < 0.3 watt and average efficiency > 85% that can comply with worldwide green power requirements. Its 50% more peak power capability can offer you a cost-effective solution for the loadings such as motoring, solenoid, capacitive bank, etc. For indicating DC OK, a green LED is provided.

SNP-A08X is for class II input, and SNP-A08X-3 is for class I input.

## Model available:

- SNP-A087(-3) for 12V/6A
- SNP-A088(-3) for 15V/5A
- SNP-A085(-3) for 18V/4.5A
- SNP-A089(-3) for 24V/3.3A
- SNP-A08T(-3) for 48V/1.75A

Over voltage protection .....	latch off
Short circuit protection.....	auto recovery
Over load protection .....	auto recovery
DC OK indicator .....	green LED
Operating temperature .....	0°C to 40°C
Cooling .....	free air convection
Storage temperature .....	-20°C to +85°C
EMI .....	FCC class "B" CISPR22 level "B"
Harmonics .....	EN61000-3-2 class A
EMS .....	EN61000-4-2, -3, -4, -5, -6, -8-11
Safety .....	UL60601-1, UL60950-1 CSA C22.2 No. 60950-1(cUL) TUV EN60601-1, EN60950-1

## Notes:

1. Dimensions shown in mm (inch) as left. Tolerance: ±1mm (Excluding cables).
2. Size: 72.0 X 145.0 X 42.0 (mm)
3. Packing:  
Net weight: 470 g approx. / unit  
Gross weight: 12 kg approx. / carton, 20 units / carton  
Carton size (mm): 503 (L) x 362 (W) x 300 (H) (mm)
4. Connectors:  
AC input : IEC 320 Inlet C18 : SNP-A08X  
C14 : SNP-A08X-3

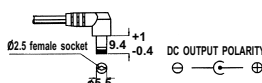
DC output :  
SNP-A08X  
4 pin Hosiden equivalent plug for 12V/15V/18V

PIN	WIRE COLOR
1	GND
3	GND
4	+V
2	+V

SNP-A08X-3

PIN	VOLTAGE
1	GND
3	GND
4	+V
2	+V

DC power Right Angel jack for 24V/48V



Note: Other type available by customer requested

5. Output cable length: 180 cm approx.
6. DC OK LED: Green light on top of box
7. Grounding:  
DC output GND is connected to safety earth internally for SNP-A08X-3.
8. Box color: Black

### Output Specifications:

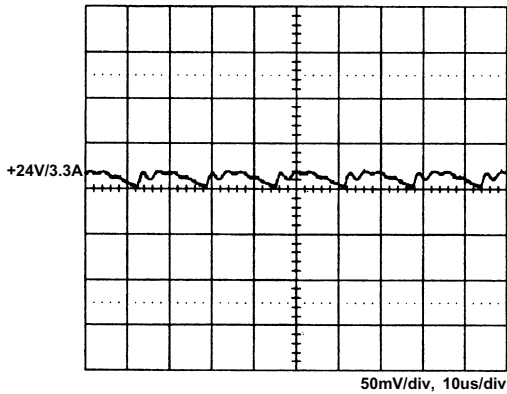
MODEL NO.	OUTPUT RAIL	LOAD			VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	EFFICIENCY TYPICAL
		MIN.	RATED	PEAK					
SNP-A087(-3)	+12V	0A	6A	9A	+11.40V~+12.60V	100mVpp	±0.5%	±3%	84%
SNP-A088(-3)	+15V	0A	5A	7.5A	+14.25V~+15.75V	100mVpp	±0.5%	±3%	85%
SNP-A085(-3)	+18V	0A	4.5A	6.7A	+17.10V~+18.90V	100mVpp	±0.5%	±3%	86%
SNP-A089(-3)	+24V	0A	3.3A	5A	+22.80V~+25.20V	100mVpp	±0.5%	±3%	87%
SNP-A08T(-3)	+48V	0A	1.75A	2.5A	+45.60V~+50.40V	200mVpp	±0.5%	±3%	89%

#### Note:

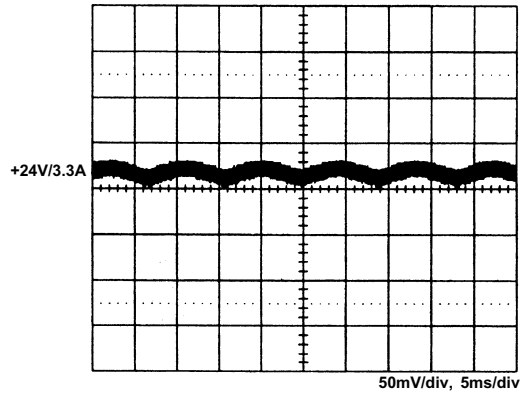
1. At peak load, the output can last for 10 seconds without shut down.
2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
5. Ripple & noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
6. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
7. Efficiency is measured at rated load, and nominal line.

## Performance for SNP-A089:

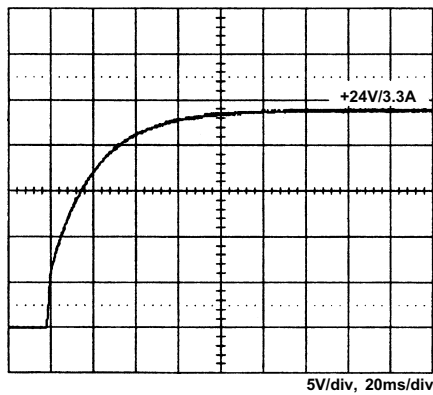
### 1. Switching frequency ripple



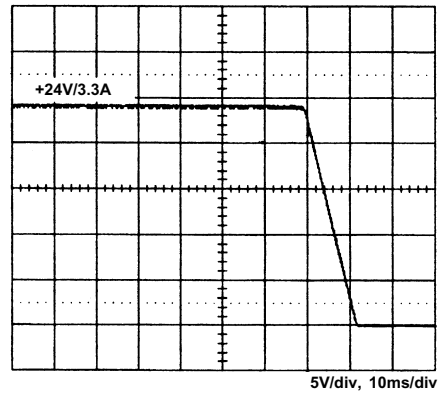
### 2. Line frequency ripple



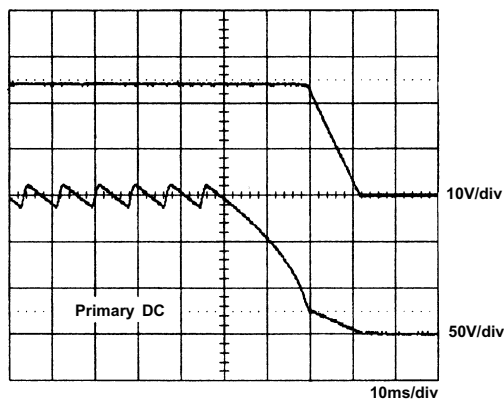
### 3. Output turn on wave form



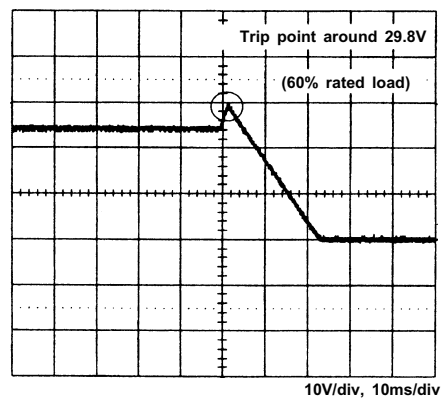
### 4. Output turn off wave form



### 5. Hold-up time

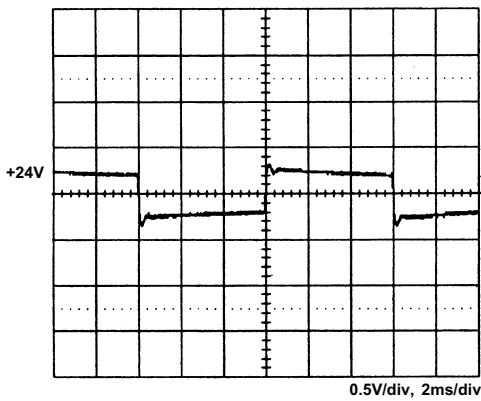


### 6. Over voltage protection



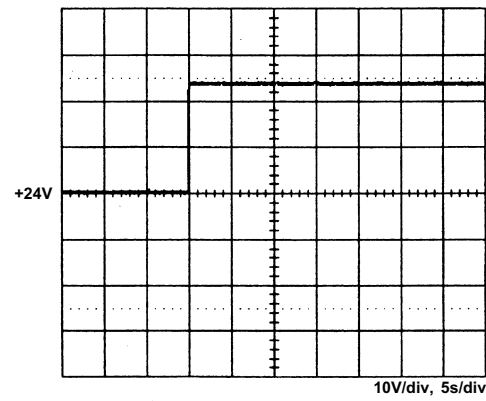
-Vincent-

### 7. +24V step response

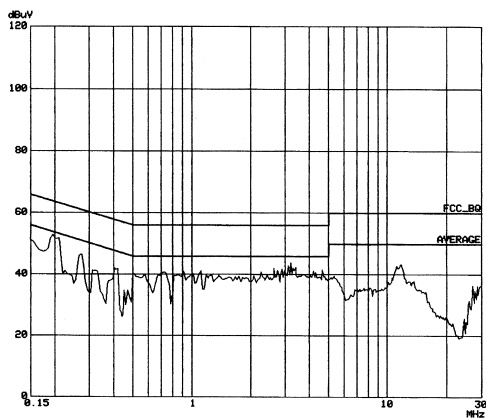


+24V steps from 0.66A to 3.3A

### 8. Peak Load



### 9. FCC B



### 10. CISPR 22

