

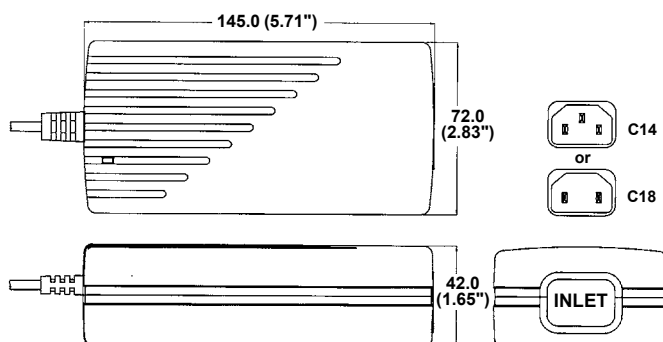


**72 x 145 x 42 (mm)**

## General Specifications:

Input voltage ..... 90 VAC to 264 VAC  
Input frequency ..... 47 Hz to 63 Hz  
Inrush current ..... < 35A at 115VAC  
(cold start at 25°C) or < 70A at 230VAC  
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  
Over voltage protection ..... latch off

## Mechanical Specifications:



## Features:

- IEC320 C14 or C18 Input Socket
- With Medical safety
- CEC level IV compliant
- Compatible to Class I / II safety & EMC
- No load input power < 0.3W

## Applications:

- For medical device such as monitors.
- For peak power required system.

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. Size:  
72 x 145 x 42 (mm)
2. Connectors:  
AC input : IEC 320 Inlet C18 : SNP-A08X  
C14 : SNP-A08X-3

DC output :

SNP-A08X

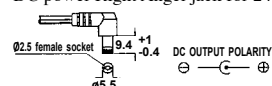
4 pin Hosiden equivalent plug

for 12V/15V/18V

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

SNP-A08X-3

DC power Right Angel jack for 24V/48V



Note: Other type available by customer requested

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

## Output Specifications:

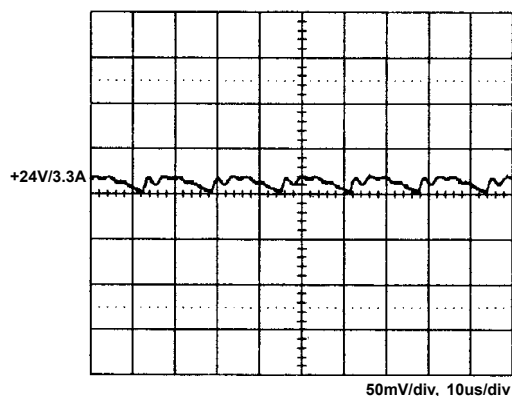
MODEL NO.	OUTPUT RAIL	LOAD				VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	EFFICIENCY TYPICAL
		MIN.	RATED	MAX.	PEAK					
SNP-A087 SNP-A087-3	+12V	0A	6A		9A	+11.40V~+12.60V	100mVpp	±0.5%	±3%	84%
SNP-A088 SNP-A088-3	+15V	0A	5A		7.5A	+14.25V~+15.75V	100mVpp	±0.5%	±3%	85%
SNP-A085 SNP-A085-3	+18V	0A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

### Note:

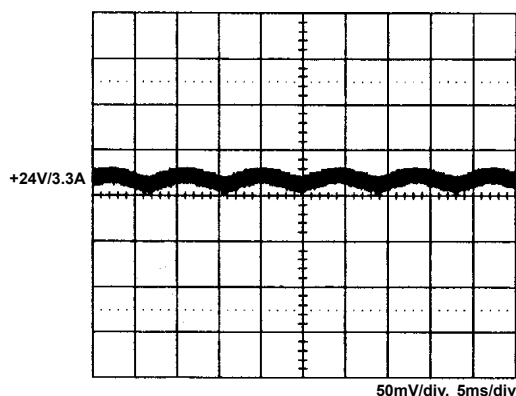
- At peak load, the output can last for 10 seconds without shut down.
- At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- 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.
- 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.
- Efficiency is measured at rated load, and nominal line.
- Model Selection:  
SNP-A08x is for Class II, ITE and Medical applications.  
SNP-A08x-3 is for Class I, ITE and Medical applications.

## Performance for SNP-A089:

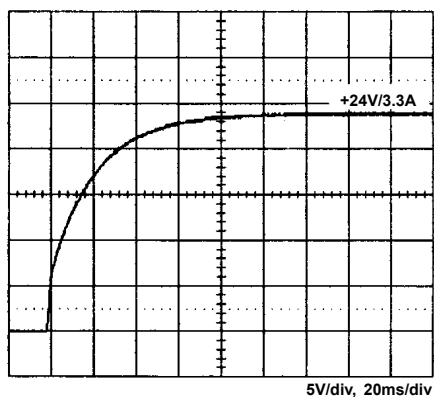
### 1. Switching frequency ripple



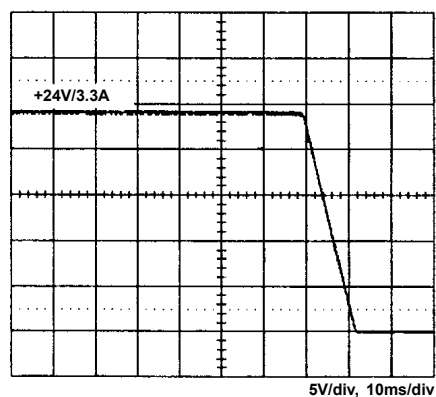
### 2. Line frequency ripple



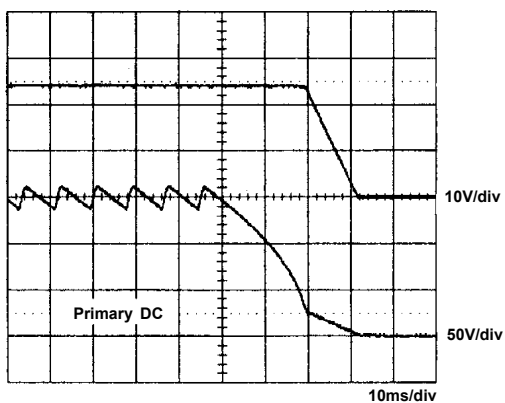
### 3. Output turn on wave form



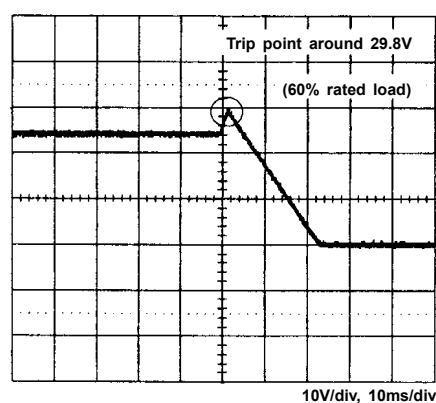
### 4. Output turn off wave form



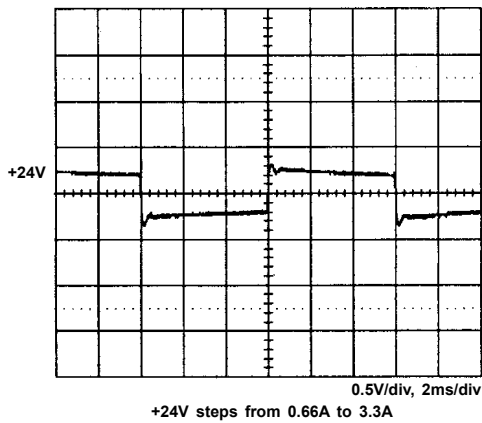
### 5. Hold-up time



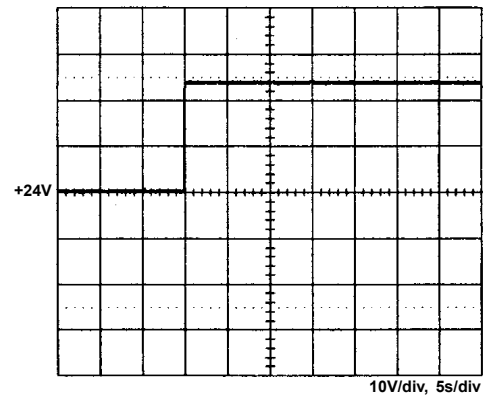
### 6. Over voltage protection



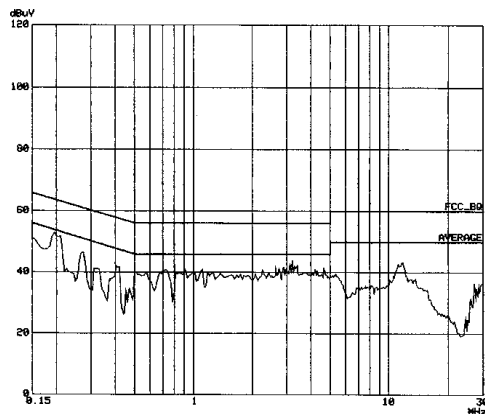
## 7. +24V step response



## 8. Peak Load



## 9. FCC B



## 10. CISPR 22

