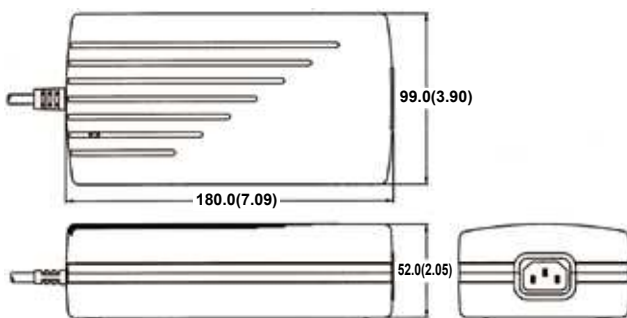




## General Specifications:

Input voltage ..... 90 VAC to 264 VAC  
 Input frequency ..... 47 Hz to 63 Hz  
 Inrush current ..... < 40A at 115VAC  
 (cold start at 25°C) or < 80A at 230VAC  
 Efficiency ..... 87% typical  
 Holdup time..... > 16 ms  
 at rated load and 115VAC  
 Average efficiency ..... > 87% at 25%, 50%, 75%, 100%  
 of rated load and 115VAC/230VAC input  
 No-load input power ..... < 0.5W at 230VAC input  
 Energy saving .....energy star version 2.0 level V  
 Over voltage protection ..... latch off

## Mechanical Specifications:



## Features:

- External Desktop Adaptor
- With ITE & Medical (-M) safety
- Built-in active PFC
- No load input power < 0.5W
- Energy Star V2.0 level V

## Applications:

- For patient contact medical device such as Breath Machine.
- For power saving required system such as LCD Monitor.

Short circuit protection.....auto recovery  
 Over load protection .....auto recovery  
 DC OK indicator ..... green LED  
 Operating temperature .....0°C to 60°C  
 above 40°C, derate at 2.5% per degree  
 Cooling ..... free air convection  
 Storage temperature ..... -20°C to +85°C  
 EMI ..... FCC class "B"  
 CISPR22 level "B"  
 Harmonics ..... EN61000-3-2 class D  
 EMS ..... EN61000-4-2, -3, -4, -5,-6,-8-11  
 Safety ..... UL60950-1 : (cULus)  
 EN 60950-1 : 2006 +A11 (TUV)  
 ANSI/AAMI ES60601-1 : 2005 (cULus)  
 EN 60601-1 : 2006 (TUV)

## Notes:

1. Dimensions shown in mm (inch) as left. Tolerance: ±1mm (Excluding cables).
2. Size:  
99.0 x 180.0 x 52.0 (mm)
3. Packing:  
Net weight: 950 g approx. / unit  
Gross weight: 16 kg approx. / carton, 14 units / carton  
Carton size (mm): 531 (L) x 326 (W) x 371 (H)
4. Connectors:  
AC input : IEC 320 Inlet  
DC output : Molex 5557-06 or equivalent
5. Output cable length: 90 ~ 150 cm
6. DC OK LED: Green light on top of box
7. Box color: Black

## Output Specifications:

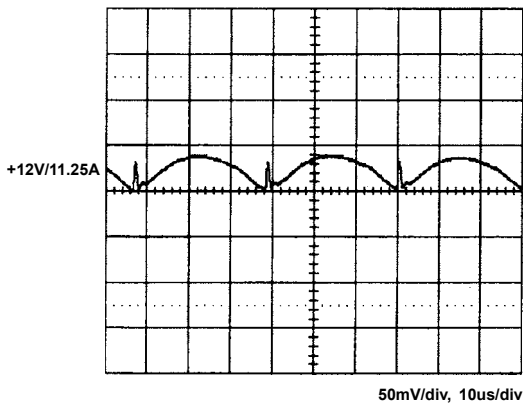
MODEL NO.	OUTPUT RAIL	LOAD				VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	EFFICIENCY TYPICAL
		MIN.	RATED	MAX.	PEAK					
SNP-A157 SNP-A157-M	+12V	0A	11.25A		14A	+11.40V~+12.60V	100mVpp	±0.5%	±3%	87%
SNP-A158 SNP-A158-M	+15V	0A	9.3A		12.1A	+14.25V~+15.75V	100mVpp	±0.5%	±3%	87%
SNP-A155 SNP-A155-M	+18V	0A	7.8A		10.1A	+17.1V~+18.9V	100mVpp	±0.5%	3%	87%
SNP-A159 SNP-A159-M	+24V	0A	6A		7.2A	+22.80V~+25.20V	100mVpp	±0.5%	±3%	87%
SNP-A15T SNP-A15T-M	+48V	0A	3A		N.A.	+45.60V~+50.40V	200mVpp	±0.5%	±3%	87%

### Note:

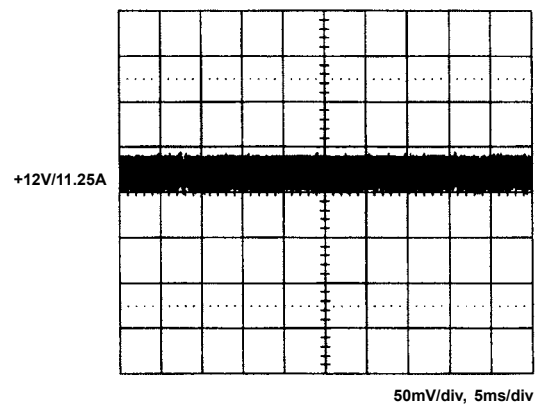
1. At peak load, the output can last for 10 seconds without shut down.
2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Load regulation is defined by changing ±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 + 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-A157 (input voltage is 115VAC, unless others specified):

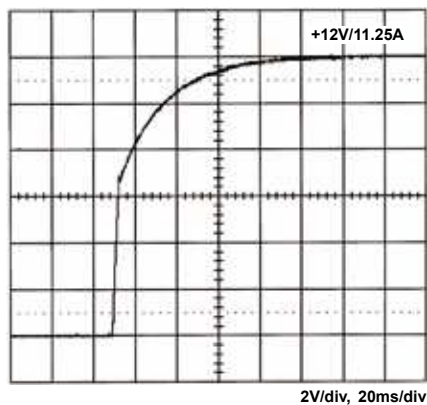
### 1. Switching frequency ripple



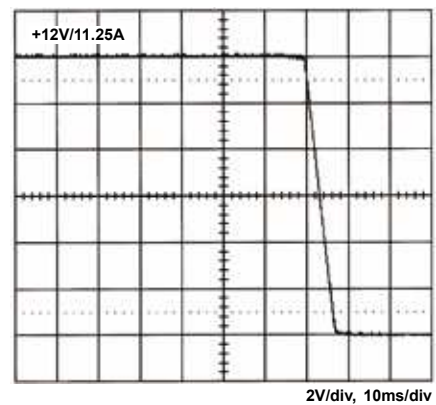
### 2. Line frequency ripple



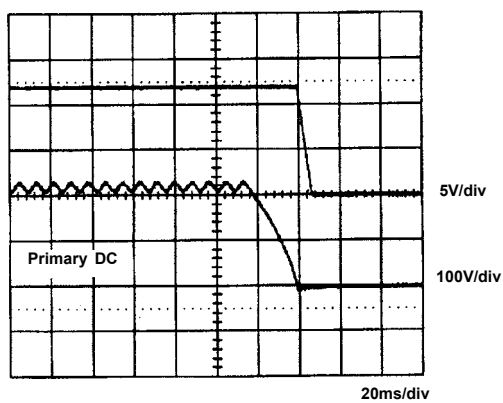
### 3. Output turn on wave form



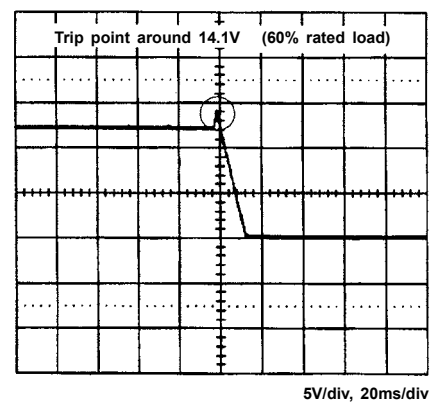
### 4. Output turn off wave form



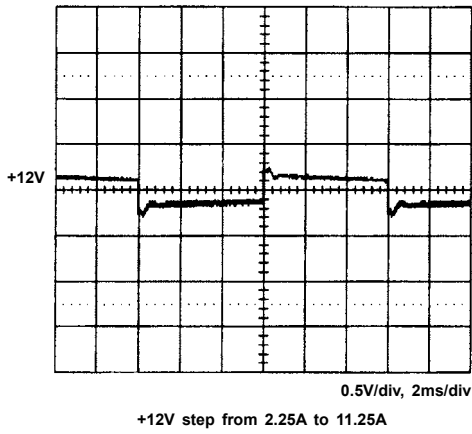
### 5. Hold-up time



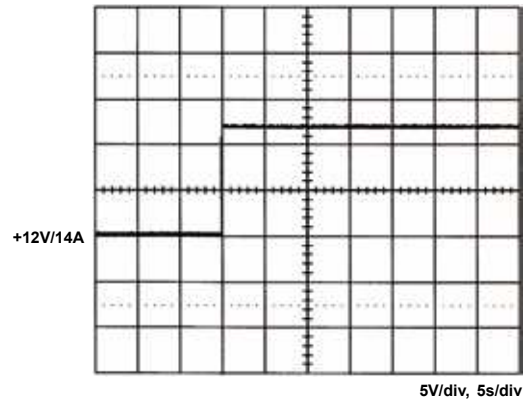
### 6. Over voltage protection



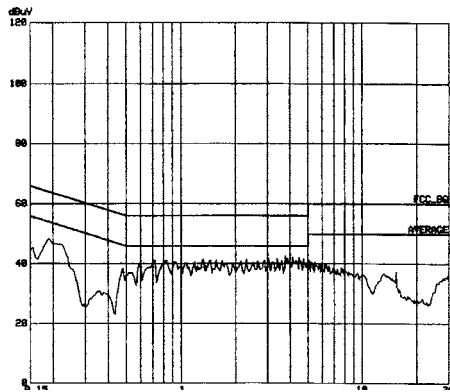
## 7. +12V step response



## 8. Peak load



## 9. FCC B



## 10. EN 55011 B

