Switching Adapter (Universal)



Description:

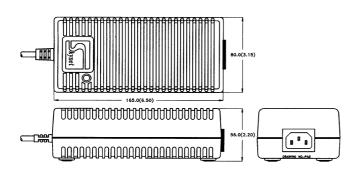
SNP-PA5X series is an universal input, with various options of outputs in plastic box, and a 50 watts switching mode power supply. It is designed to meet UL, CSA, VDE safety approval and VDE 0871 "B" conducted, FCC part 15 class "B" conducted, radiation EMI limits. It is made for external desk top applications.

General Specifications:

Input voltage	90VAC to 260VAC
	47Hz to 63Hz
Inrush current	less than 30A at 115VAC
(Cold start)	less than 60A at 230VAC
Outputs	see output table
Efficiency	higher than 70%
	at nominal line and rated load
Hold up time	longerthan 16ms
_	at rated load and 115VAC
Short circuit protection	nauto-recovery

Over voltage protection	auto-recovery
	trip point at 5.7 to 7V
Operating temperature	0to50°C
Cooling	free air convection
Storage temperature	40°C to +85°C
EMI conduction standard	FCC class "B"
	VDE 0871 curve "B"
EMI radiation	FCC class "B"
Safety	UL 1950 D3
CSA	22.2 No.234,VDE 60 950

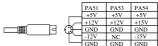
Mechanical Specifications:



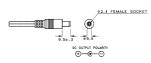
Notes:

- 1. Dimensions 80 X 165 X 56mm 3.15" X 6.50" X 2.20"
- Color SNP-PA5X: Black SNP-PA5X-1: Beige
- AC input: IEC 320/CEE 22 Standard Inlet
- 4. DC output connectors and pin assignment

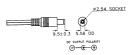
SNP-PA51, SNP-PA53, SNP-PA54: Type: 5 Pin at 180° Din plug



SNP-PA55, SNP-PA57, SNP-PA58: Type: DC Power Jack, Ø 2.1 Socket type



Type: DC Power Jac 2.5 Socket type



-James

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Output Specifications:

MODEL	OUTPUT	LOAD		VOLTAGE	RIPPLE	LINE	LOAD	
NO.	RAIL	. MIN.	RATED	PEAK	ACCURACY	NOISE	REG.	REG.
SNP-PA51	+5V	0A	3A	4A	+4.85~+5.15V	1%	±1%	±5%
	+12V	0A	2.5A	3A	+11.4~+12.6V	1%	±1%	±6%
	-12V	0A	0.3A	0.5A	-11.0~-13.0V	1%	±1%	±5%
SNP-PA53	+5V	0A	3.5A	4A	+4.85~+5.15V	1%	±1%	±5%
	+12V	0A	2.5A	3A	+11.4~+12.6V	1%	±1%	±6%
SNP-PA54	+5V	0A	3A	4A	+4.85~+5.15V	1%	±1%	±5%
	+15V	0A	1.5A	2A	+14.25~15.75V	1%	±1%	±6%
	-15V	0A	0.3A	0.5A	-13.5V~-16.5V	1%	±1%	±5%
SNP-PA5C	+9V	0A	5A		+8.5V~+9.5V	1%	±1%	±5%
SNP-PA55	+18V	0A	3A		+17.0V~+19.0V	1%	±1%	±5%
SNP-PA57	+12V	0A	4.2A		+11.4V~+12.6V	1%	±1%	±5%
SNP-PA58	+15V	0A	3.5A		+14.25V~+15.75V	1%	±1%	±5%
SNP-PA58-C	+13.8V	0A	3.5A	4A	+13.2V~+14.5V	1%	±1%	±5%
SNP-PA59	+24V	0A	2.3A		+23.0V~+25.0V	1%	±1%	±5%
SNP-PA5T	+48V	0A	1.1A		+45.6V~+50.4V	0.05%	±1%	±5%

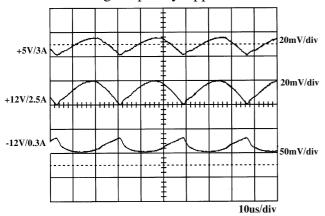
Note:

- 1. Each output can provide up to peak load temporarily. Continuous staying in more than rated load will reduce the reliability.
- At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is setting to within the accuracy range at rated load.
- 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 at another output set to 60% rated load.

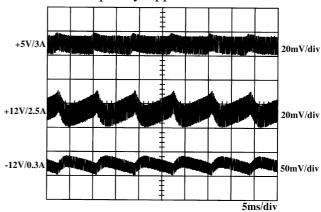
 Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal 5.
- Hold up time is measured from the end of the last charging pulse to the time which the +5V output drop down to 4.75V at rated load and nominal line.
- Efficiency is measured at rated load.

Performance for SNP-PA51

Switching frequency ripple 1.



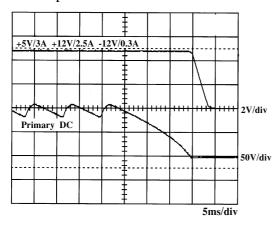
2. Line frequency ripple



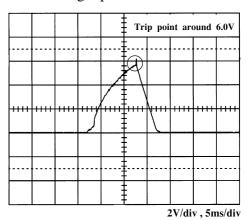
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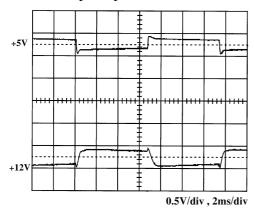
3. Hold-up time



Over voltage protection 4.

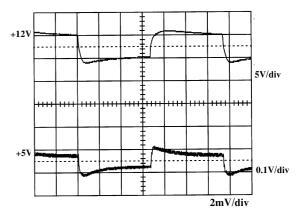


5. +5V step response



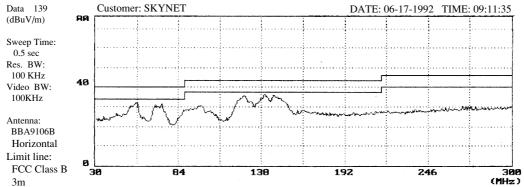
+5V step from 0.6A to 3A other output at 60% load

+12V step response



+12V step from 0.5A to 2.5A other output at 60% load

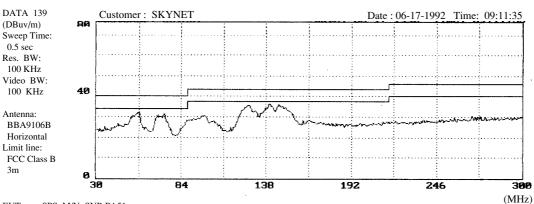
7. Radiation FCC B Performance



EUT : SPS. M/N: SNP-PA51 Power : 120Vac, 60Hz Memo : CHAMBER, 8568B Spectrum Analyzer

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Switching Adapter (Universal)



EUT : SPS. M/N: SNP-PA51 Power : 120Vac, 60Hz

Memo : CHAMBER, 8568B SPECTRUM ANALYZER

TAIWAN TOKIN EMI ENG. CORP.

8. VDE B performance

