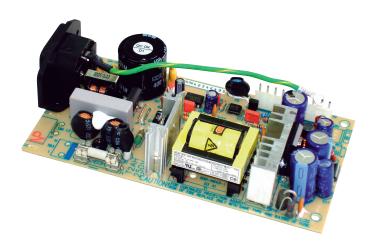


20W~60W SNP-N6XX Series



Description:

The SNP-N6XX series is 20W~60W, universal input switching mode power supply, which is designed specially for the application of Net Work. It is with the following safety approvals.

1) UL, C-UL file number

: E132267, E207942

2) TUV file number

: R2055087.01, R9853104.01 R9954611.01, R9954819.01

R9954837.01

Model available:

- SNP-N623 for 5V/4.5A, 12V/0.3A
- SNP-N641 for 3.3V/4A, 5V/4A, 12V/0.5A
- SNP-N643-D for 3.3V/10A, 12V/0.5A
- SNP-N663 for 3.3V/15A, 12V/0.5A

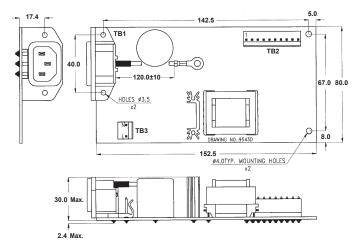
General Specifications:

Input voltage	90VAC to 264VAC
Input frequency	47Hz to 63Hz
Inrush current (cold start)	less than 30A at 115VAC
	less than 60A at 230VAC
Efficiency	>70%
	at rated load and 115VAC
Hold up time	20mS typ. at 115VAC
Over load protection	auto recovery
Short circuit protection	auto recovery

Over voltage protection	crowbar
Operating temperature	0 to 50°C, rated load
Cooling	free air convection
Storage temperature	20°C to +85°C
Ripple and noise	<1%
EMI conduction standard	CISPR 22 "B"
	FCC Class "B"
Safety	meet UL 1950
	CSA C22.2 No. 243
	VDE EN 60950

Mechanical Specifications:

SNP-N643-D



Note:

- 1. Dimensions shown in mm (inch) as left. Tolerance specified is $\pm\,0.4$ mm between mounting holes, and $\pm\,0.8$ mm for other dimension.
- 2. Size: 80 X 152.5 X 30 (mm) 3.14 X 6 X 1.18 (inch)
- 3. Mounting holes: 67 X 142.5 (mm) 2.63 X 5.61 (inch)
- 4. Packing:

Net weight: 220 g approx. / unit Gross weight: 13 kg approx. / carton, 48 units / carton Carton size (mm): 457 (L) x 310 (W) x 403 (H)

5. Connectors:

TB1 -- Meet IEC 320 stand solder on pcb

TB2 -- Molex 5273-08A or equivalent for SNP-N623 Molex 5273-10A or equivalent for SNP-N641, -643-D, -N663

-Clark-



20W~60W SNP-N6XX Series

TB2 Assignment

Pin Model	1	2	3	4	5	6	7	8	9	10
SNP-N623	+5V	+5V	+5V	GND	GND	GND	+12V			
SNP-N641	+5V	+5V	GND	GND	GND	GND	+3.3V	+3.3V	+3.3V	+12V
SNP-N643-D	+3.3V	+3.3V	+3.3V	+3.3V	GND	GND	GND	GND	GND	+12V
SNP-N663	+3.3V	+3.3V	+3.3V	+3.3V	GND	GND	GND	GND	GND	+12V

Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD MIN. RATED PEAK		VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	
SNP-N623	+5V +12V	0.5A 0A	4.5A 0.3A	6A	+4.95V~+5.05V +11.00V~+13.00V	50mV 120mV	±1% ±2%	±1% ±5%
SNP-N641	+3.3V +5V +12V	0.5A 0.2A 0A	4A 4A 0.5A		+3.25V~+3.35V +4.95V~+5.25V +11.60V~+13.80V	50mV 50mV 120mV	±1% ±1% ±1%	±3% ±10% ±10%
SNP-N643-D	+3.3V +12V	0.5A 0A	10A 0.5A		+3.20V~+3.40V +11.00V~+13.00V	50mV 120mV	±1% ±2%	±1% ±5%
SNP-N663	+3.3V +12V	0.5A 0A	15A 0.5A		+3.20V~+3.40V +11.00V~+13.80V	50mV 120mV	±1% ±1%	±3% ±10%

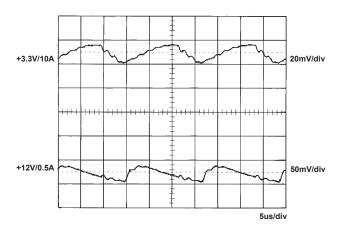
Notes:

- 1. Each output can provide up to peak load temporarily. Continuous staying in more than rated load is not allowed.
- 2. 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 specified accuracy range at rated load.
- 3. Line regulation is defined by changing $\pm 10\%$ 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 at another output set to 60% rated load.
- 5. Ripple & noise is measured by using 15MHz 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 drop down to regulation limit at rated load and nominal line.
- 7. Rated load is maximum loading for flat mounting and free air convection cooling.

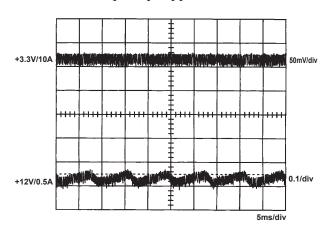
-Clark-

Performance for SNP-N643-D:

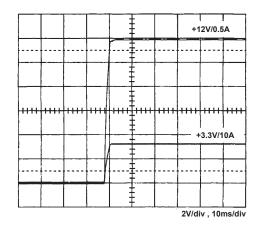
1. Switching frequency ripple



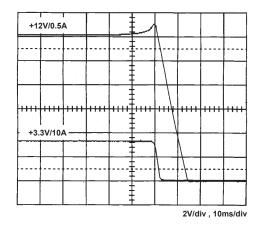
2. Line frequency ripple



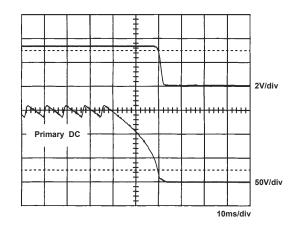
3. Output turn on wave form



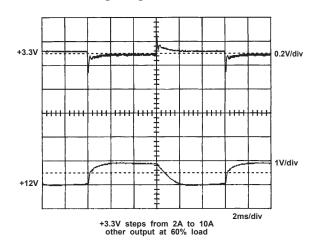
4. Output turn off wave form



5. Hold-up time



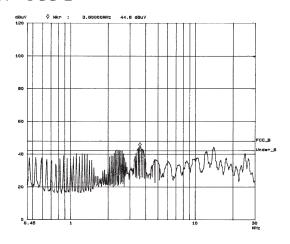
6. +3.3V step response



-Clark-



7. FCC B



8. CISPR 22B

