



RAID System (Auto Range)

(Hot Swap) 200W SNP-R203



Description:

The redundancy family with output power from 80W to 450W, meets the needs of Disk Array, RAID system, and Sub-system applications.

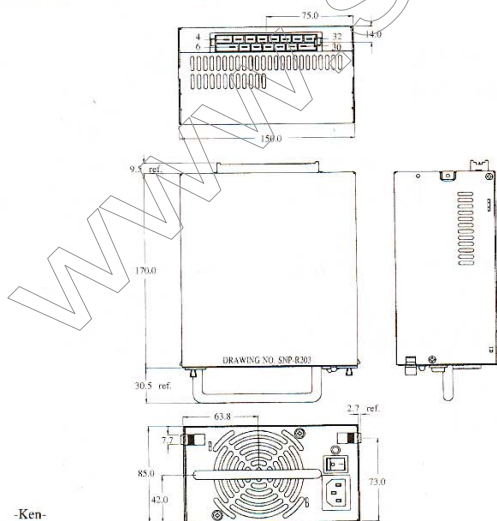
SNP-R203 features hot swap capability and redundant operation that is useful for storage data system.

General Specifications:

Input voltage 90 VAC to 135 VAC
 180VAC to 270VAC, auto range
 Input frequency 47 Hz to 63 Hz
 Input current 5A at 115VAC, 3A at 230VAC
 Inrush current less than 30A, cold start 25°C
 Outputs See output table
 Efficiency 65% typical
 Hold up time > 16ms, at nominal line and rated load
 Over current protection auto recovery
 Short circuit protection..... auto recovery

Over voltage protection latch-off
 Redundancy built in isolation diodes
 DC ok present 5V operation ok
 Operating temperature 0°C to 40°C
 Cooling forced air convection
 Storage temperature -20°C to +85°C
 EMI FCC 20780 "B", EN55022 "B"
 EMS IEC-801-2/3/4/5
 Safety meet UL 1950
 CSA 22.2 No. 234
 EN60950

Mechanical Specifications:



Notes:

- Dimensions shown in mm as left.
Tolerance: ±0.8mm.
- Size:
150 x 170 x 85 (mm)
- Connectors:
AC inlet : meet IEC 320
DC output :
Din 41612 H15 male connector



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4. Pin assignment:

Pin 4	FAN OK	20	GND
6	+5V	22	+12V
8	+5V	24	+12V
10	GND	26	+12V
12	GND	28	+12V
14	GND	30	DC ok
16	GND	32	Safety Earth
18	GND		

Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD				VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.
		MIN.	RATED	MAX.	PEAK				
SNP-R203	+5V	1A	7A	14A		+5.0V~+5.2V	50mVpp	±1%	±3%
	+12V	2A	14A	14A	26A	+11.4V~+12.6V	120mVpp	±1%	±5%

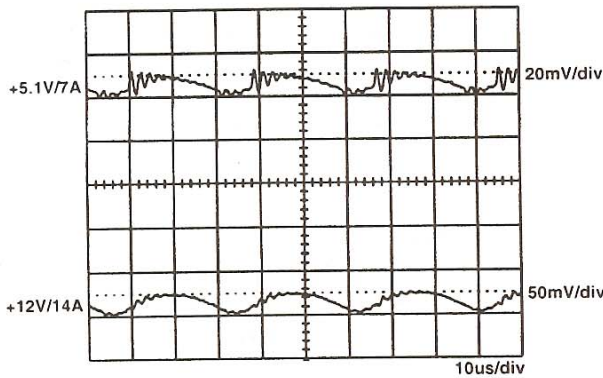
Note:

1. The max. load should be kept within 200W and the peak load can provide up to 30 seconds.
2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
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 $\pm 40\%$ 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 and a 47u electrolytic 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.

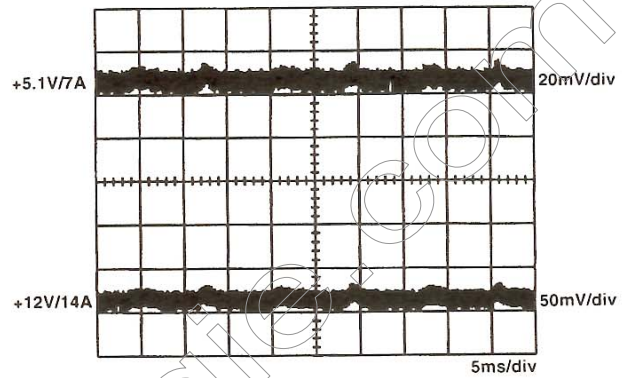


Performance:

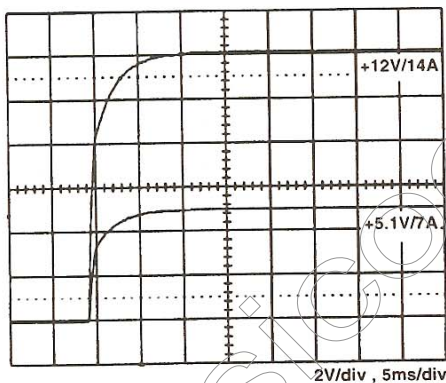
1. Switching frequency ripple



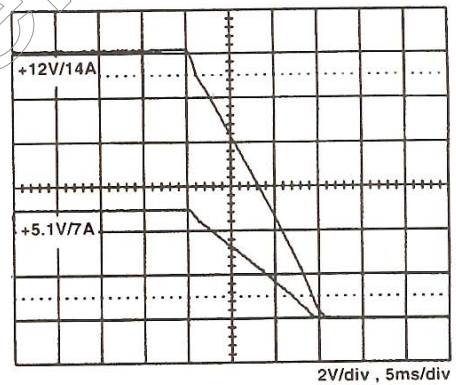
2. Line frequency ripple



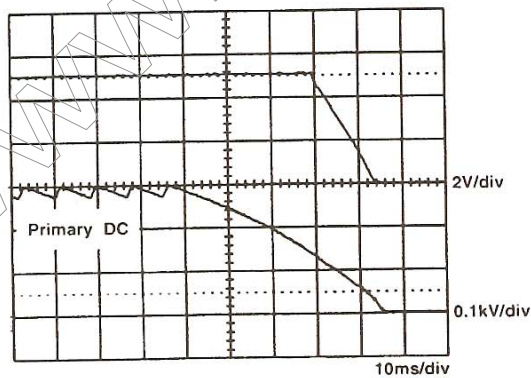
3. Output turn on wave form



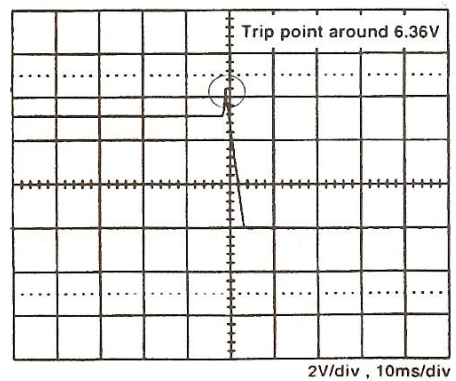
4. Output turn off wave form



5. Hold-up time

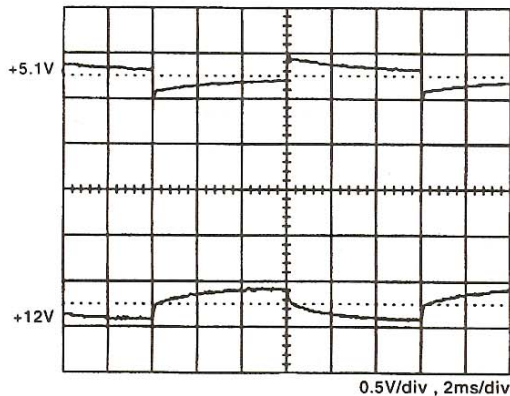


6. Over voltage protection



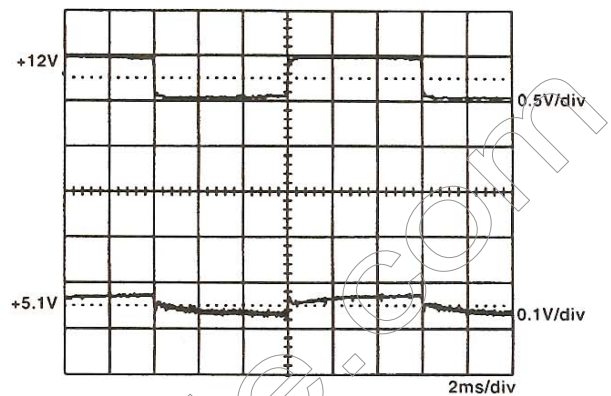


7. +5.1V step response



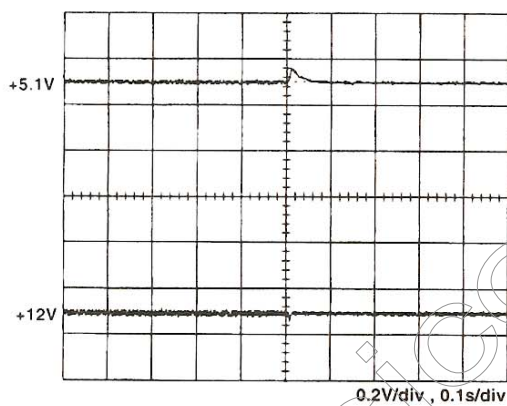
+5V steps from 1.4A to 7A
other output at 60% load

8. +12V step response

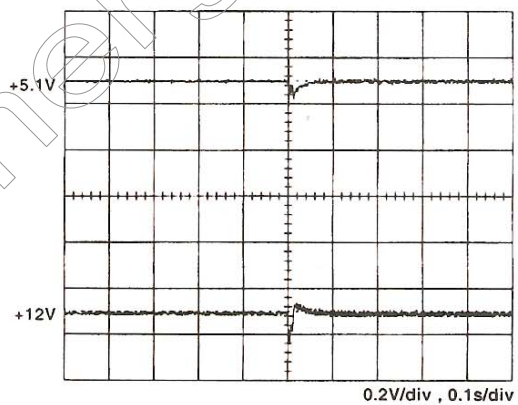


+12V steps from 2.8A to 14A
other output at 60% load

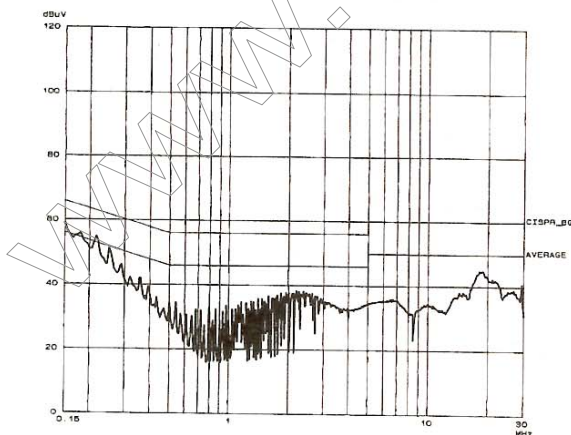
9. Power redundancy (1 --> 2)



10. Power redundancy (2 --> 1)



11. EN 55022 "B"



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