



RAID System (110V/220V Selectable)

(Hot Swap) **230W**
SNP-R230



Description:

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

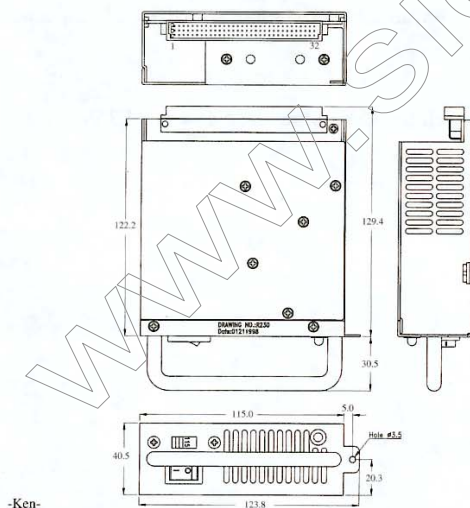
SNP-R230 features hot swap capability and redundant operation that is useful for file server and Data system.

General Specifications:

Input voltage 90VAC to 130VAC,
180VAC to 260VAC, selectable
Input frequency..... 47Hz to 63Hz
Input current 6A at 115VAC, 3A at 230VAC
Inrush current less than 30A at 115VAC
cold start, 25°C
Outputs see output table
Efficiency 70% typical
at nominal line and rated load
Hold up time > 16ms
at nominal line rated load
Over voltage protection latch off

Over current protection latch off
Short circuit protection latch off
Redundancy built in isolation diodes
Power good normally high
Operating temperature 0°C to 60°C,
derating 3.5% /°C from 30°C amb.
Cooling forced air convection
Storage temperature - 40°C to +75°C
EMI FCC 20780 "B", EN55022 "B"
EMS EN61000-4-2,-4,-5
Safety UL 1950 (NRTL/C)
CSA 22.2 No.234
EN60 950

Mechanical Specifications:



Notes:

- Dimensions shown in mm as left. Tolerance specified is ± 0.5 mm.
- Size:
115 x 122.2 x 40.5 (mm)
- Connectors
AC input & DC output : DIN 41612 C96 male connector
- Pin assignment

Pin	1	abc	AC L
	4	abc	AC N
	9	abc	-5V
	10	abc	-12V
	11, 12, 13	abc	+12V
	14 ~ 25	abc	GND
	26 ~ 31	abc	+5V
	32	abc	P.G.



Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD			VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.
		MIN.	RATED	MAX.				
SNP-R230	+5V	4A	20A	25A	+4.8V~+5.2V	50mVpp	±1%	±4%
	+12V	1A	10A	12A	+11.4V~+12.9V	100mVpp	±1%	±5%
	-12V	0.1A	0.5A	1A	-11.3V~-12.6V	100mVpp	±1%	±2%
	-5V	0.1A	0.5A	1A	-4.65V~-5.25V	100mVpp	±1%	±2%

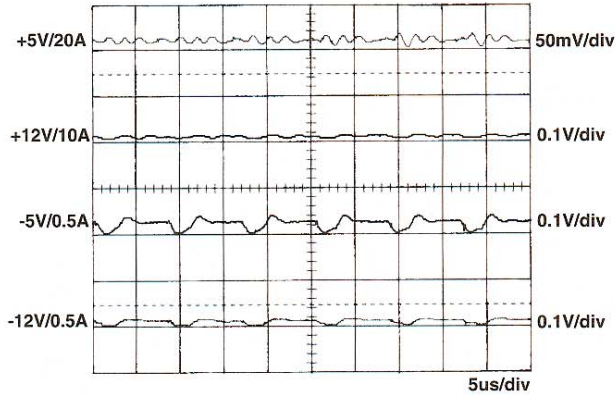
Notes:

1. Each output can provide up to peak load temporarily. The max. power is 230W at 30°C ambient and within 200W at 100VAC below.
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 ±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 0.47µF 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 +5V output drop down to 4.75V at rated load and nominal line.
7. Efficiency is measured at rated load and nominal line.

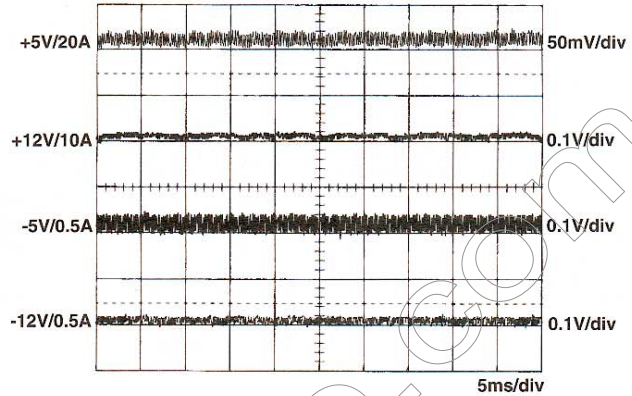


Performance:

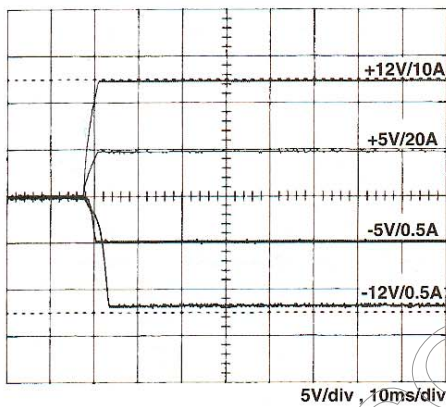
1. Switching frequency ripple



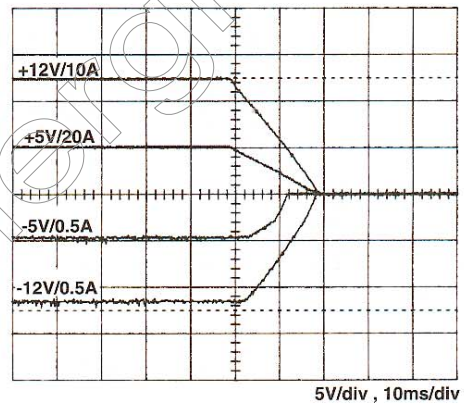
2. Line frequency ripple



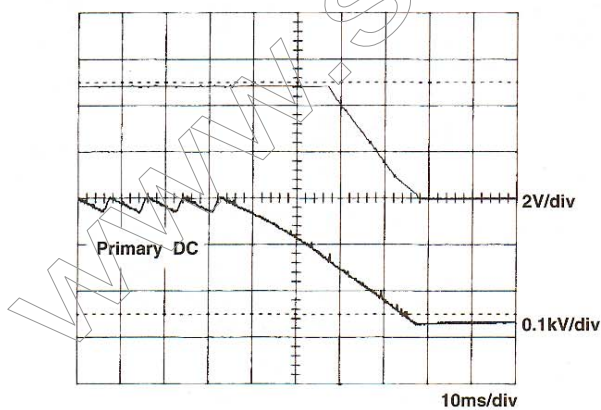
3. Output turn on wave form



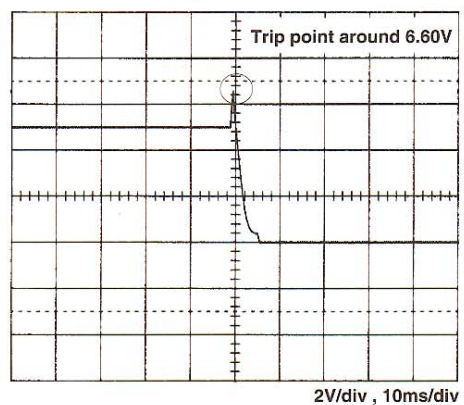
4. Output turn off wave form



5. Hold-up time



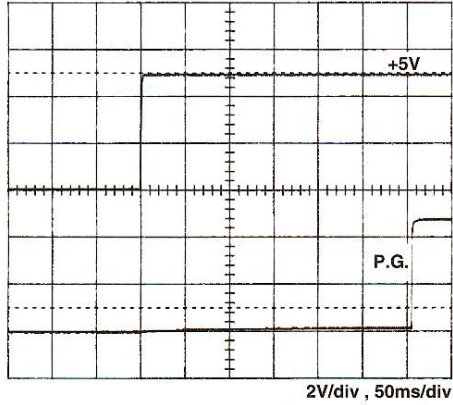
6. Over voltage protection



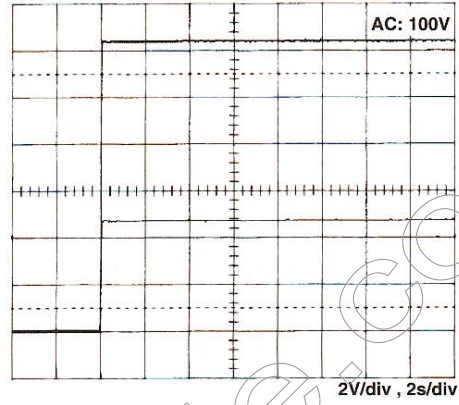
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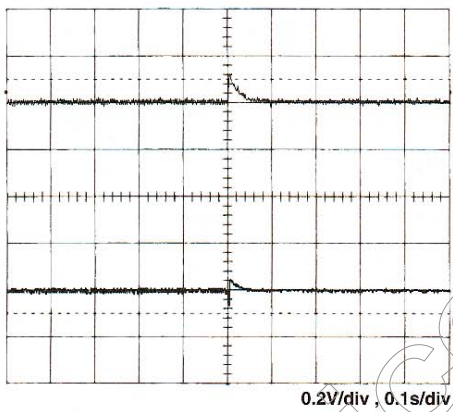
7. Power good signal



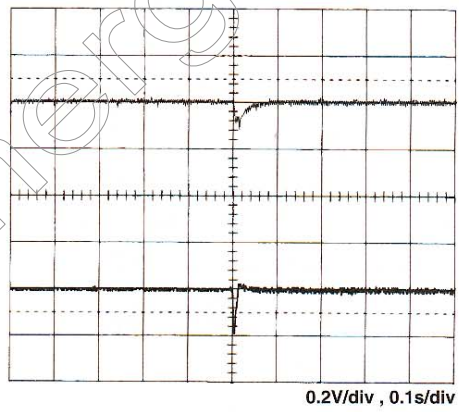
8. Max. load



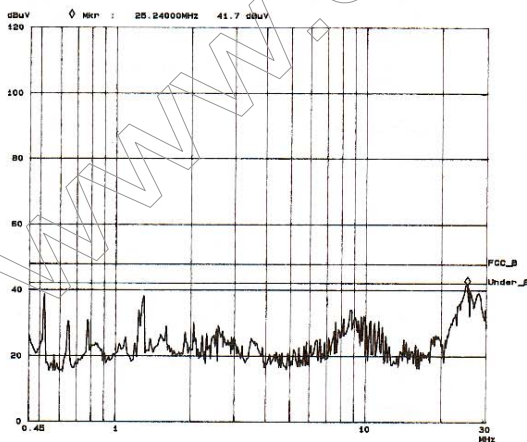
9. Power redundancy (1 --> 2)



10. Power redundancy (2 --> 1)



11. FCC B



12. EN55022 class "B"

