

General Purpose (Universal)

PFC + 300W **SNP-Z30 Series**



Features:

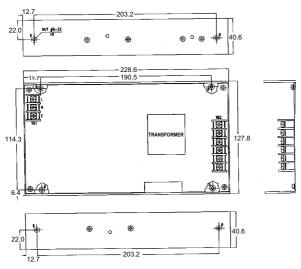
- With built-in PFC
- Only 1.6 inch height
- 4.2 Watt per cubic inch
- With ITE safety only
- Efficiency between 80% to 90%
- Operation from 0°C to 70°C by convection

General Specifications:

Input voltage	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz
Inrush current	less than 30A at 110VAC
	or 60A at 220VAC cold start, 25°C
Efficiency	80% to 90% depending on model
Hold up time	20 mS typical
	at rated load and 115VAC
Over load protection	auto recovery
Short circuit protection.	auto recovery
Over voltage protection.	latch off
Over temperature protect	etion depending on model

Remote sense	compensates for 0.5V load drop min.
Operating temperatu	re
	derating: $2.5\% / ^{\circ}C > 50^{\circ}C$
Cooling	300W free air convection
360V	W with 18 CFM cooling for single output
Storage temperature	20°C to $+85$ °C
EMI	EN55022 "B", FCC "B"
Harmonics	EN61000-3-2 class D
EMS	EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety	UL 60950
	CSA C22.2 No. 234
	EN60950-1

Mechanical Specifications:



Notes:

- Dimensions shown in mm as left. Tolerance: +/-1mm (Excluding cables).
- Size: 127.8 X 228.6 X 40.6 (mm)
- 5 X 9 X 1.6 (inch) 3. Packing:
 - Net weight: 1000 g approx. / unit Gross weight: 14 kg approx. / carton, 12 units / carton Carton size (mm): 485 (L) x 291 (W) x 360 (H)
- Connectors: AC input: Terminal blocks DC output: Terminal blocks

Remote Sense: Molex 5045-02A or equivalent

-James-



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Output Specifications:

MODEL	OUTPUT			ı	VOLTAGE	RIPPLE	LINE	LOAD
NO.	RAIL	MIN.	RATED	MAX.	ACCURACY	NOISE	REG.	REG.
SNP-Z301	+5V	0A	32A	45A	+4.95V~+5.05V	50mVpp	±1%	±1%
	+12V	0A	10A	14A	+11.40V~+12.60V	100mVpp	±1%	±1%
	-12V	0A	1A	2A	-11.40V~-12.60V	100mVpp	±1%	±1%
SNP-Z30D	+3.3V	0A	20A	30A	+3.20V~+3.40V	50mVpp	±1%	±1%
	+5V	0A	20A	30A	+4.75V~+5.25V	50mVpp	±1%	±1%
	+12V	0A	8A	10A	+11.40V~+12.60V	100mVpp	±1%	±5%
SNP-Z306	+5V	0A	60A	72A	+4.95V~+5.05V	50mVpp	±1%	±1%
SNP-Z307	+12V	0A	25A	30A	+11.80V~+12.20V	100mVpp	±1%	±1%
	+5V(floating)	0A	2A		+4.80V~+5.20V	50mVpp	±1%	±1%
SNP-Z308	+15V	0A	20A	23A	+14.8V~+15.2V	150mVpp	±1%	±1%
	+12V(floating)	0A	0.5A		+11.76V~+12.24V	50mVpp	±1%	±1%
SNP-Z309	+24V	0A	12A	14.6A	+23.80V~+24.20V	200mVpp	±1%	±1%
	+5V(floating)	0A	2A		+4.80V~+5.20V	50mVpp	±1%	±1%
SNP-Z30T	+48V	0A	6.25A	7.3A	+47.80V~+48.20V	200mVpp	±1%	±1%
	+5V(floating)	0A	2A		+4.80V~+5.20V	50mVpp	±1%	±1%
SNP-Z30B	+3.3V	0A	70A	90A	+3.14V~+3.47V	50mVpp	±1%	±1%

Note:

- 1. Each output can provide up to max load separately. Continuous staying in more than total output power is not allowed in free air convection. The max. load must be with 18 CFM fan cooling.
- 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 ±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 drops down to low limit of main output at rated load and nominal line.
- 7. Efficiency is measured at rated load and nominal line.

-James

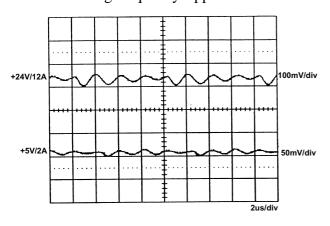


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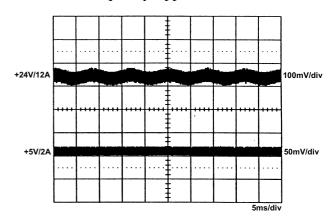
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Performance for SNP-Z309 (input voltage is 115VAC, unless others specified):

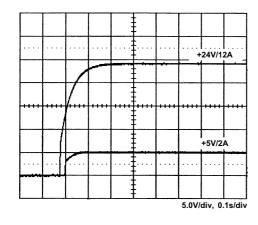
1. Switching frequency ripple



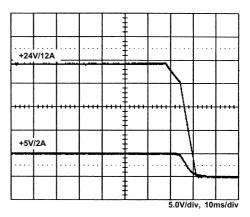
2. Line frequency ripple



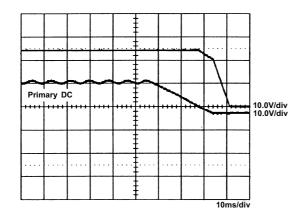
3. Output turn on wave form



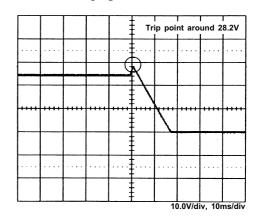
4. Output turn off wave form



5. Hold-up time



6. Over voltage protection



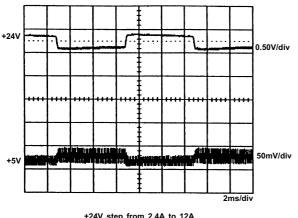
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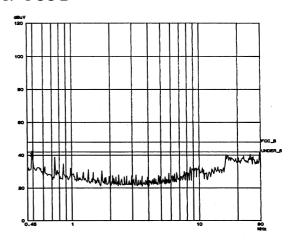
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7. +24V step response

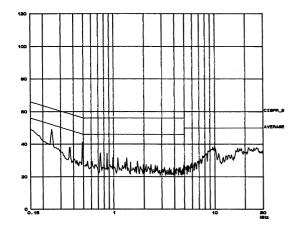


+24V step from 2.4A to 12A other output at 60% load

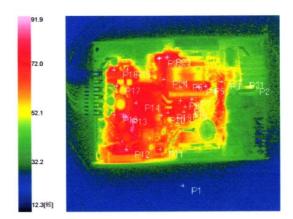
8. FCC B



9. CISPR 22 B



10. Thermal Profile



-James