

Medical & ITE

General Purpose

Rated **120W** Max. 150W **Peak 200W SNP-G12 Series**



x 4.2" x 1.4"

Features:

- Peak load $(1.4 \sim 2 \text{ x rated current}, \text{Vo=rated for 5 sec})$
- Design for BF application
- Convection cooling for Rated power
- Built-in PFC and 12V output for fan, available for G12x, G16x, and G20x
- EMI class B
- -20°C to +70°C operating temperature

Applications:

- For peak load and surge load applications, such as motor drive, coffee machine, vending machine, gaming machine, and other industrials.
- For EMI class B application, such as home healthcare device, and other medical devices.

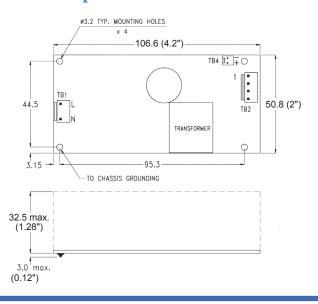
General Specifications:

Input voltage	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz
Inrush current<	30/60A at 115/230VAC
Hold up time	20ms typical
Over load/Short circuit protection	auto recovery
Over voltage protection	latch off
Operating temperature	20°C to 70°C
derating: $2.5\% / {}^{\circ}\text{C} > 45{}^{\circ}\text{C}$	C for convection cooling
Storage temperature	-40°C to +85°C

EN55022 "B", EN61000-3-3
EN61000-3-2, class D
EN61000-4-2,-3,-4,-5,-6,-8,-11
CSA 60950-1, 2 nd Ed., EN 62368-1, 2 nd Ed.
ANSI/AMMI/CSA/EN60601-1, 3.1 Ed.
CB report, CE mark, RM report/file
w/o -A suffix)ENERGY STAR
for computers version 6.0
for displays version 6.0
ErP regulation EC(No) 1275/2008

Mechanical Specifications:

-Jim-



Notes:

- Size:
 - 2" x 4.2" x 1.4" / 50.8 x 106.6 x 35.5 (mm)
- Mounting Hole:
- 44.5 x 95.3 (mm)

Connectors:

AC input: JST B2P3-VH or equivalent

DC output: JST B4P--VH

Fan: Molex 5045-02A or equivalent Output Pin assignment:

4 GND GND Vo Vo

Fur	nction Pin	assignm	ent:
		TB3	
	Function Pin	FAN Output	
	1	GND	
	2	+12V	

Net weight: 160 g approx. / unit Gross weight: 10 kg approx. / carton, 80 units / carton Carton size (mm): 422 (L) x 412 (W) x 287 (H)

10 years Warranty (contact Skynet's Distributors for details)



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Output Specifications:

MODEL	OUTPUT	LOAD		INITIAL	STEP EFFICIENCY		AVERAGE			
NO.	RAIL	MIN.	RATED	MAX.	PEAK	ACCURACY	@ 20% LOAD	@ 50% LOAD	@ 100% LOAD	EFFICIENCY
SNP-G127 SNP-G127 -A SNP-G127 -M SNP-G127 -MA SNP-G127 -H	+12V	0A	10.0A	12.5A	16.6A	+11.9V~+12.1V	82%	89%	90%	86.5%
SNP-G128 SNP-G128 -A SNP-G128 -M SNP-G128 -MA	+15V	0A	8.0A	10.0A	13.4A	+14.9V~+15.1V	82%	89%	90%	86.5%
SNP-G125 SNP-G125 -A SNP-G125 -M SNP-G125 -MA	+18V	0A	6.6A	8.3A	11.1A	+17.9V~+18.1V	82%	89%	90%	86.5%
SNP-G129 SNP-G129 -A SNP-G129 -M SNP-G129 -MA SNP-G129 -H	+24V	0A	5A	6.3A	8.3A	+23.8V~+24.2V	83.5%	90%	90.5%	88%
SNP-G12G SNP-G12G-A SNP-G12G-M SNP-G12G-MA	+28V	0A	4.3A	5.4A	7.2A	+27.9V~+28.1V	83.5%	90%	90.5%	88%
SNP-G12J SNP-G12J -A SNP-G12J -M SNP-G12J -MA	+36V	0A	3.4A	4.2A	5.6A	+35.8V~+36.2V	83.5%	90%	90.5%	88%
SNP-G12T SNP-G12T-A SNP-G12T-M SNP-G12T-M SNP-G12T-H	+48V	0A	2.5A	3.1A	4.2A	+47.8V~+48.2V	83.5%	90%	90.5%	88%

Note:

Standby Power Cosumption with System: For computers and displays, ENERGY STAR in U.S. and ErP regulation in Europe require the input power should be less than 0.5W at standby mode.

Output Load:

120W for convection cooling; 150W for forced air cooling. **Peak Load Duration:**

Peak 200W can last for 5 sec.

Isolation Grade:

 $\begin{array}{lll} & \text{Primary} & \longleftrightarrow & \text{Ground} & : 1\text{MOPP} (1500\text{Vac}) \\ & \text{Primary} & \longleftrightarrow & \text{Secondary} & : 2\text{MOPP} (4000\text{Vac}) \\ & \text{Secondary} & \longleftrightarrow & \text{Ground} & : 1\text{MOPP} (1500\text{Vac}) \\ \end{array}$

Leakage Current:

Earth leakage current < 300uA

Touch current < 100uA

EMI Grounding: If there is a metal sheet under the power supply, connect the EMI ground to the metal sheet.

Model Selection:

Most of power supplies will create audible burst sound at light load, if the application wants to meet input power < 0.5W at standby mode. SNP-G12x is for ITE application which requires standby mode.

SNP-G12x-A is for ITE application which requires standby mode. SNP-G12x-A is for ITE application but without burst sound and no standby mode. SNP-G12x-M is for medical application which requires standby mode. SNP-G12x-H is for Home Healthcare application, input class II.

-Jim-

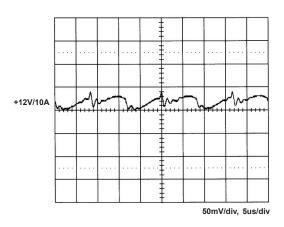


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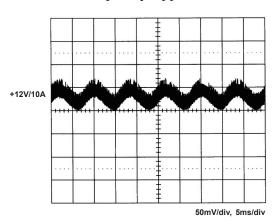
Rated 120W Max. 150W Peak **200W SNP-G12 Series**

Performance for SNP-G127:

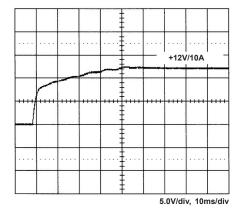
1. Switching frequency ripple



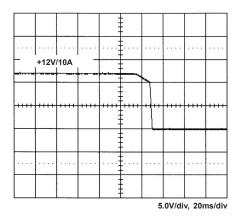
2. Line frequency ripple



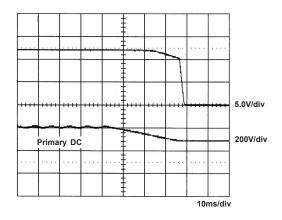
3. Output turn on wave form



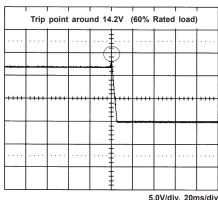
4. Output turn off wave form



5. Hold-up time



6. Over voltage protection



5.0V/div, 20ms/div

-Jim-

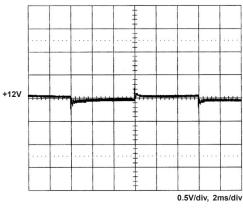


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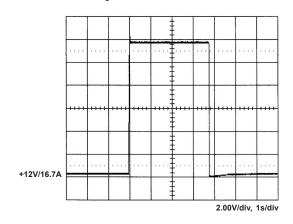
SNP-G12 Series

7. +12V step response

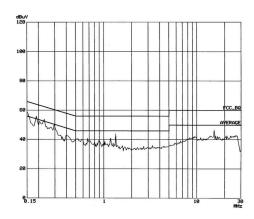


+12V step from 3A to 10A

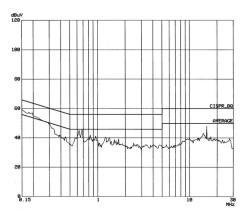
8. +12V peak load



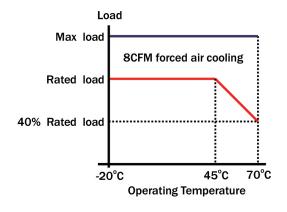
9. FCC B



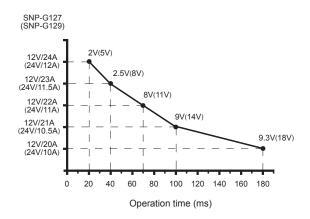
10. CISPR 22 B



11. Power derating curve



12. Capability for driving motor



-Jim-

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