

# SNP-G12 Series

120 W AC/DC Switch Mode Power Supplies – Open Frame

CoolPower  
Solutions

- 2"×4" footprint
- High efficiency up to 91%
- High Power Density up to 11W/in<sup>3</sup>
- Built-in Active PFC
- Operation from -20°C to 70°C
- ITE & Medical models available



## Electrical specifications

Input	Voltage	90-264 VAC
	Frequency	47-63 Hz
	Current (Full load)	1200 mA max.
	Inrush Current	< 60 A at 230 VAC, cold start, 25°C
Output	Output Power	120 W, Max 150 W, Peak 200 W
	Voltage (VDC)	See table below
	Current (A) max.	See table below
	Line / Load regulation	<± 1.0%
	Efficiency	90% ... 91% (rated load), >87% average, see note
	Ripple	See table
	Hold-up Time	20 ms typical
Protection	No-load power consumption	< 0.5 W
	Over Load Protection	Auto recovery
	Over Voltage Protection	Latch off
Dielectric Withstand	Short Circuit Protection	Auto recovery
	Pri-Sec	3000 VAC
Environment	Operating Temperature	-20°C ... +70°C (derating)
	Storage Temperature	-40°C ... +85°C
	Humidity	5% to 90% RH, non-condensing
Physical	Dimension (L x W x H)	50.8 x 101.6 x 32.5 mm (2"×4"×1.28")
	Weight	160 g
	Cooling	Convection for rated load, 8CFM forced air for max load
	Connections	TB1 AC input : JST B2P3-VH; TB2 DC output : Terminal Blocks; TB3 fan output Molex 5045-02A
Safety & EMC	Emission	FCC/CISPR, level B
	Harmonic currents	EN61000-3-2, class D
	Voltage flicker	EN61000-3-3
	ESD	EN61000-4-2, criterion A, 6kV contact, 8kV air discharge
	Radiated immunity	EN61000-4-3, 10V/M with 80% AM, criterion A
	EFT/Burst	EN61000-4-4, 2kV, criterion A
	Surge	EN61000-4-5, 1kV L-L, 2kV L-E, criterion A
	Conducted immunity	EN61000-4-6, 10V with 80% AM, criterion A
	MS	EN61000-4-8, 10A/m, criterion A
	Safety Approvals	60950-1, 2nd edition (Tuv, UL, CSA) 60601-1, 3rd edition (Tuv, UL, CSA) CB Report, CE Mark

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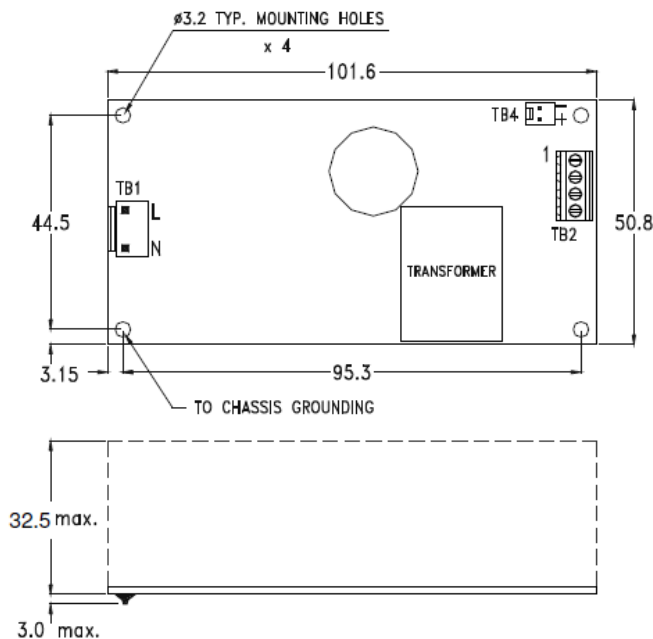
## Models

Model	Output	Load				Initial accuracy*	Ripple & Noise*	Rated Load Efficiency
		Min	Rated	Max	Peak			
SNP-G127	+12 V	0 A	10 A	12.5 A	16.7 A	11.9V~12.1V	120 mV	90 %
SNP-G128	+15 V	0 A	8.0 A	10.0 A	13.4 A	14.9V~15.1V	100 mV	90 %
SNP-G125	+18 V	0 A	6.6 A	8.3 A	11.1 A	17.9V~18.1V	150 mV	90 %
SNP-G129	+24 V	0 A	5.0 A	6.3 A	8.3 A	23.9V~24.1V	150 mV	90 %
SNP-G12G	+28 V	0 A	4.2 A	5.4 A	7.2 A	27.9V~28.1V	150 mV	90 %
SNP-G12J	+36 V	0 A	3.3 A	4.2 A	5.6 A	35.8V~36.2V	200 mV	91 %
SNP-G12T	+48 V	0 A	2.5 A	3.1 A	4.2 A	47.8V~48.2V	250 mV	91 %

## Notes

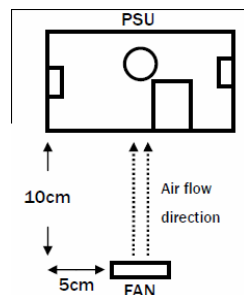
- All specifications without special notices are defined at nominal line, rated load and 25°C.
- To order medical model, please add suffix "-M" in the end of the ITE model name, e.g. SNP-G127-M.
- Initial accuracy is set at 60% rated load and 115VAC input.
- Peak load can last 2 sec with 10% duty cycle and average power < 100W.
- Ripple & Noise is defined with 15MHz BWL oscilloscope and 1X probe with 0.47uF output capacitor.
- Inrush current is defined at 25°C cold start and EMI capacitors are excluded.
- Over voltage protection mode is defined at 60% rated load.
- Average efficiency is the average efficiency value of 25%, 50%, 75% and 100% rated load at nominal line.
- MTBF is calculated according to MIL-HDBK-217F at rated load/nominal line input and 45°C ambient temperature.
- All specifications subject to change without notice.
- This datasheet is only for model selection. Please contact info@coolpowersolutions.fi for formal specification.

## Dimensions



Output pins				
Pin no	1	2	3	4
Pin assign	+ V		GND	

## Max load fan location



## Derating

