

SNP-G12 series

2"x 4" Open Frame AC/DC Power Supply

Power Capacity 120W Fanless Operating; 150W with 8 CFM Air Flow
Optional +12V, +15V, +18V, +24V, +28V, +36V, +48V DC Power Output

Datasheet

2012.09.10



- » Small Form Factor 2" x 4" Footprint with 50.8 x 101.6 x 32.5 mm (W x D x H)
- » Power Capacity up to 120W under Fanless Operation, 150W with 8 CFM Air Flow
- » High Efficiency up to 91% ; True Power Input Below 0.5W under No-Load Mode
 - » Support -20 to 70°C Wide Temperature Operating
- » Single DC Power Output with Optional +12V / +15V / +18V / +24V / +36V / +48V
 - » Built-in Active PFC ; ITE / Medical Models Available



Liantec Systems Corporation

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Overview and Features

Liantec SNP-G12 is an industrial AC/DC open frame power supply with 120W of power capacity under fanless operating, 150W of power capacity with 8 CFM of forced air flow.

Key Features :

- Small Form Factor 2" x 4" Footprint with 50.8 x 101.6 x 32.5 mm (W x D x H).
- Power Capacity up to 120W under Fanless Operation; 150W with 8 CFM Forced Air Flow; 200W for Peak Loading.
- High Efficiency up to 91% .
- True Power Input Below 0.5W under No-Load Mode.
- Single DC Power Output with Optional +12V / +15V / +18V / +24V / +36V / +48V.
- Operating Temperature -20 to 70°C.
- Built-in Active PFC.
- ITE / Medical Models Available.



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Specification

Power Capacity

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

- Initial accuracy is set at 60% rated load and 115VAC input.
- Peak load can last 2 seconds with 10% duty cycle and average power < 100W.
- Ripple & Noise is defined with 20MHz BWL oscilloscope and 1X probe with 0.47uF output capacitor.

Power Input / Output

Input Voltage Range	90 to 264 VAC
Label Voltage	100 to 240 VAC
Nominal Line Voltage	115VAC / 230 VAC
Input Frequency Range	47 to 63 Hz
Inrush Current	Under 30A at 115VAC; Under 60A at 230VAC
Average Efficiency	Over 87%
No-Load Input Power	Under 0.5W (fan disconnected)
Line Regulation	Under $\pm 0.5\%$
Load Regulation	Under $\pm 1\%$



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Hold-up Time	20ms (typically)
Protection	
Over Voltage	Latch-off
Over Load / Short	Auto-Recovery
Environment	
Dimension	50.8 x 101.6 x 32.5 mm or 2" x 4" x 1.28" (W x D x H)
Operating Temperature	-20 to 70°C
Cooling	Convection for rated load 8 CFM forced air for 150W load
Power Derating	Refer to Power Derating Curve
Storage Temperature	-40 to 85°C
Relative Humidity	5 to 90% RH, non-condensing
Operating Altitude	0 to 3000 meters
MTBF	Over 180,000 hrs.
EMC	
Emission	FCC/CISPR Level B
Harmonic Current	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



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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
Voltage Dips	EN61000-4-11 30% Dips 10ms, Criterion A 60% Dips 10ms, Criterion C 95% Dips 10ms, Criterion C
Safety	
Approval	60950-1, 2nd Edition (TUV, UL, CSA) 60601-1, 3rd Edition (TUV, UL, CSA) CB Report, CE Mark



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Ordering Guide

Ordering Code	Features
SNP-G127	Industrial 2" x 4" 120W AC/DC Open Frame Power Supply with +12VDC / 10A Power Output
SNP-G128	Industrial 2" x 4" 120W AC/DC Open Frame Power Supply with +15VDC / 8A Power Output
SNP-G125	Industrial 2" x 4" 120W AC/DC Open Frame Power Supply with +18VDC / 6.6A Power Output
SNP-G129	Industrial 2" x 4" 120W AC/DC Open Frame Power Supply with +24VDC / 5A Power Output
SNP-G12G	Industrial 2" x 4" 120W AC/DC Open Frame Power Supply with +28VDC / 4.2A Power Output
SNP-G12J	Industrial 2" x 4" 120W AC/DC Open Frame Power Supply with +36VDC / 3.3A Power Output
SNP-G12T	Industrial 2" x 4" 120W AC/DC Open Frame Power Supply with +48VDC / 2.5A Power Output
SNP-G12x-M	Medical model with same specification as SNP-G12x as above.
SNP-G12-OEM	Customized OEM configuration based on the existing SNP-G12 power supply with indicated power output voltage.

For the further information about SNP-G12 industrial 2" x 4" AC/DC open frame power supply, please visit the website at <http://www.liantec.com/product/SNP-G12.htm> or email to info@liantec.com.