

# Medical & ITE

**General Purpose** 

Rated **200W** Max. 300W **Peak 400W** SNP-G20x-U Series



3.3" x 5" x 1.7"

#### **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:**

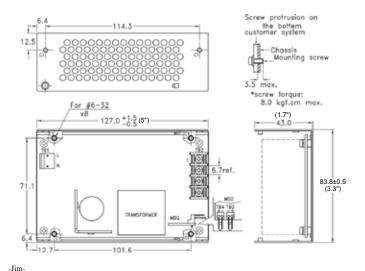
- For peak load and surge load applications, such as motor drive, coffee machine, vending machine, gaming machine, and other industrials.
- For EMI class B application, such as home healthcare device, and other medical devices.

# **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: $2.5\% / {}^{\circ}\text{C} > 50^{\circ}$	C for convection cooling
Storage temperature	40°C to +85°C

EMI	EN55022 "B", EN61000-3-3
Harmonics	EN61000-3-2, class D
EMS	EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety	UL/CSA/EN60950-1, 2 <sup>nd</sup> edition
ANSI/	AMMI/CSA/EN60601-1, 3.1 edition
	CB report, CE mark, RM report/file
Energy Saving (for w/o -A	A suffix)ENERGY STAR
	for computers version 6.0
	for displays version 6.0
	ErP regulation EC(No) 1275/2008

# **Mechanical Specifications:**



#### **Notes:**

Size: Fits 1U Height

2. Mounting Hole: Side edge: 12.5 x 114.3 (mm) 3.3" x 5" x 1.7" Connectors: Bottome 71.1 x 101.6 (mm)

AC input: Molex 5277-02A or equivalent

DC output: Terminal blocks (default for SNP-G207-U) or Molex 5273-08A (default for others) or equivalent Fan, Remote sense: Molex 5045-02A or equivalent

Output Pin assignment:

Function Pin assignment:

Pin No.	1	2	3	4	5	6	7	8
SNP-G207-U	+Vo	+Vo	GND	GND				
OTHER MODELS	+Vo	+Vo	+Vo	+Vo	GND	GND	GND	GND

	TB3	TB4
Function Pin	FAN Output	Remote Sense
1	GND	Sense -
2	+12V	Sense+

Net weight: 539 g approx. / unit Gross weight: 15.3 kg approx. / carton, 24 units / carton Carton size (mm): 384 (L) x 339 (W) x 327 (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-G207 -U SNP-G207 -UA SNP-G207 -UM SNP-G207 -U5	+12V	0A	16.5A	25A	33A	+11.9V~+12.1V	83%	89%	89%	87%
SNP-G208 -U SNP-G208 -UA SNP-G208 -UM SNP-G208 -U5	+15V	0A	12A	18A	22.5A	+14.9V~+15.1V	83%	89%	89%	87%
SNP-G205 -U SNP-G205 -UA SNP-G205 -UM SNP-G205 -U5	+18V	0A	11.1A	16.6A	22.3A	+17.9V~+18.1V	83%	89%	90%	87.3%
SNP-G209 -U SNP-G209 -UA SNP-G209 -UM SNP-G209 -U5	+24V	0A	8.4A	12.5A	16.7A	+23.9V~+24.1V	83%	90%	90%	87.6%
SNP-G20G-U SNP-G20G-UA SNP-G20G-UM SNP-G20G-U5	+28V	0A	7.2A	10.7A	13A	+27.9V~+28.1V	85%	90%	90%	88.3%
SNP-G20J -U SNP-G20J -UA SNP-G20J -UM SNP-G20J -U5	+36V	0A	5.6A	8.3A	11A	+35.8V~+36.2V	85%	90%	90%	88.3%
SNP-G20T-U SNP-G20T-UA SNP-G20T-UM SNP-G20T-U5	+48V	0A	4.2A	6.3A	8.4A	+47.8V~+48.2V	85%	90%	90%	88.3%

#### 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:

200W for convection cooling; 300W for forced air cooling.

**Peak Load Duration:** 

Peak 400W can last for 5 sec.

**Isolation Grade:** 

: 1MOPP (1500Vac) Primary ←→ Ground ← Secondary : 2MOPP (4000Vac)
 ← Ground : 1MOPP (1500Vac) Primary Secondary ←→ Ground

Leakage Current: Earth leakage current < 300uA Touch current < 100uA

**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-G20x-U is for ITE application which requires standby mode.

SNP-G20x-UA is for ITE application but without burst sound and no standby mode.

SNP-G20x-UM is for medical application which requires standby mode.

SNP-G20x-U5 is for medical application but without burst sound and no standby mode.

SNP-G20x-U5, 5=MA

-Jim-

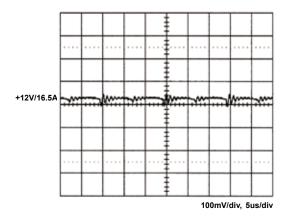


# Medical & ITE General Purpose

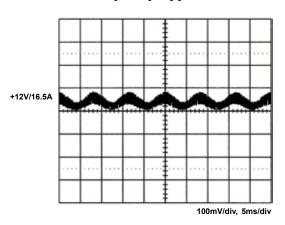
Rated 200W Max. 300W Peak 400W SNP-G20x-U Series

#### **Performance for SNP-G207-U:**

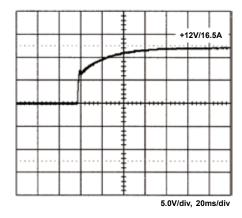
# 1. Switching frequency ripple



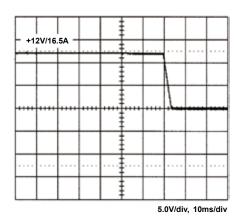
# 2. Line frequency ripple



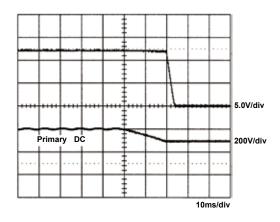
#### 3. Output turn on wave form



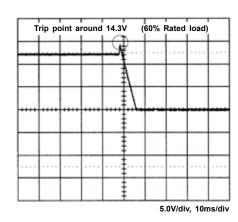
4. Output turn off wave form



#### 5. Hold-up time



# 6. Over voltage protection



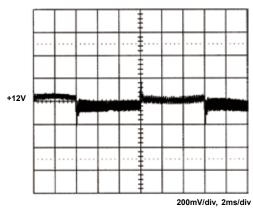
-Jim-



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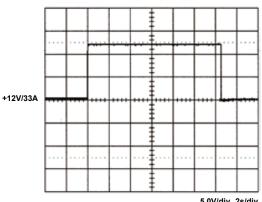
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# 7. +12V step response



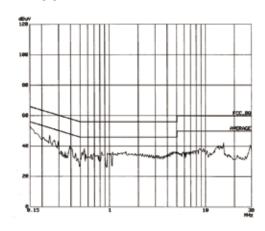
+12V step from 4.95A to 16.5A

#### 8. Peak load

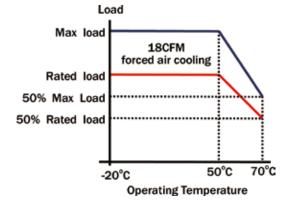


5.0V/div, 2s/div

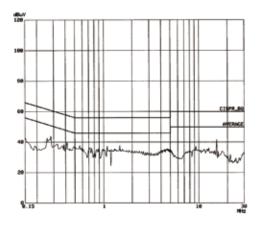
#### 9. FCC B



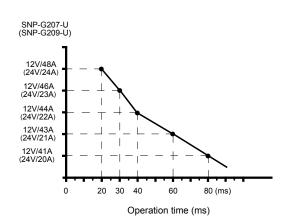
# 11. Power derating curve



#### 10. EN55022 B



#### 12. Max. load fan location



-Jim-

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