www.simpex.ch contact@simpex.ch CHE-108.018.777 MWST



# **Medical & ITE General Purpose**

Rated 154W Max. 185W **Peak 220W** 

**SNP-P15x-S Series** 



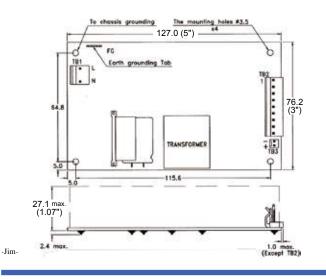


3" x 5" x 1.07"

# **General Specifications:**

Input voltage	90 VAC to 264 VAC
Input frequency	47 Hz to 63 Hz
Green power < 0.5V	V/1W at no load/5Vsb/0.1A
Inrush current	< 30/60A at 115/230VAC
Efficiency	89%
Hold up time	20ms
Over load/Short circuit protection	1 auto recovery
Over voltage protection	latch off
Operating temperature	20°C to 70°C
	derating: $2.5\% / ^{\circ}\text{C} > 50 ^{\circ}\text{C}$

# **Mechanical Specifications:**



#### **Features:**

- Peak load  $(1.5 \sim 2 \text{ x rated current}, \text{Vo=rated for 5 sec})$
- Design for BF application
- Convection cooling for Rated power
- With +5Vsb & +12V Fan output
- Remote on/off & remote sense
- Fan speed controlled by loading
- EMI class B
- -30°C to +70°C operating temperature
- 5,000m operation altitude

### **Applications:**

- For peak load and surge load applications, such as active speaker and audio power amplifier, 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.

Remote control	active low
Cooling	convection cooling
Storage temperature	40°C to +85°C
EMI	EN55022 "B", EN61000-3-3
Harmonics	EN61000-3-2
EMS	EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety	UL/CSA/IEC60950-1, 2 <sup>nd</sup> edition
ANSI	/AMMI/CSA/IEC60601-1, 3 <sup>rd</sup> edition
Energy Saving	ENERGY STAR
	for computers version 6.0
	for displays version 6.0
	ErP regulation EC(No) 1275/2008

#### **Notes:**

- Size:
- 3" x 5" x 1.07"
- Mounting Hole: 64.8 x 115.6 (mm)
- Connectors:

AC input: Molex 5277-02A or equivalent DC output: Molex 5273-09A or equivalent

Output Pin assignment:

Output Pin assignment:								,	ГВ3:	
1	2	3	4	5	6	7	8	9		1
+5Vsb	Remote	+5V RTN	Vo	Vo	Vo	RTN	RTN	RTN		+12V

Packing:

Net weight: 277 g approx. / unit Gross weight: 17.5 kg approx. / carton, 48 units / carton Carton size (mm): 397 (L) x 339 (W) x 327 (H)

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

1 +12V RTN



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### **Output Specifications:**

MODEL	OUTPUT	LOAD				INITIAL STEP EFFICIENCY			AVC EEE	CTATIC	
NO.	RAIL	MIN.	RATED	MAX.	PEAK	ACCURACY	@ 20% LOAD	@ 50% LOAD @ 100% LOAD		AVG. EFF.	STATUS
SNP-P157 -S	+12V +5Vsb	0A	12A 2A		18A	+11.9V~+12.1V	83%	87%	86%	85%	ready
SNP-P158 -S	+15V +5Vsb	0A	9.6A 2A		14.4A	+14.9V~+15.1V	83%	87%	86%	85%	ready
SNP-P155 -S	+18V +5Vsb	0A	8A 2A		12A	+17.9V~+18.1V	83%	87%	86%	85%	ready
SNP-P159 -S	+24V +5Vsb	0A	6A 2A		9A	+23.9V~+24.1V	83%	87%	86%	85%	ready
SNP-P15G-S	+28V +5Vsb	0A	5.1A 2A		7.7A	+27.9V~+28.1V	83%	87%	86%	85%	ready
SNP-P15J -S	+36V +5Vsb	0A	4A 2A		6A	+35.8V~+36.2V	83%	87%	86%	85%	ready
SNP-P15T-S	+48V +5Vsb	0A	3A 2A		4.5A	+47.8V~+48.2V	83%	87%	86%	85%	ready

#### Note:

1. 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.

2. Output Load:

154W for convection cooling.

3. Peak Load Duration:

Peak 220W can last for 5 sec.

4. Isolation Grade:

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

5. Leakage Current:

Earth leakage current < 300uA

Touch current < 100uA

6. EMI Grounding:

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

7. **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-P15x-S is for ITE & medical applications which require standby mode.

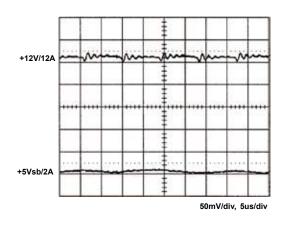


# Medical & ITE General Purpose

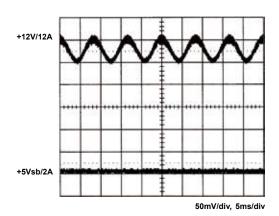
Rated 154W Max. 185W Peak 220W SNP-P15x-S Series

#### **Performance for SNP-P157-S:**

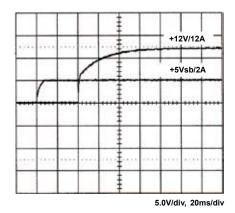
# 1. Switching frequency ripple



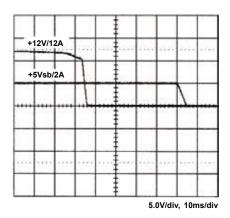
# 2. Line frequency ripple



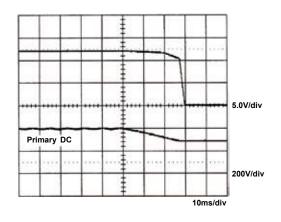
3. Output turn on wave form



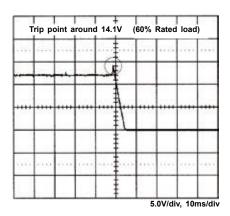
4. Output turn off wave form



5. Hold-up time



6. Over voltage protection



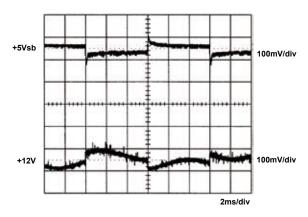
-Jim-



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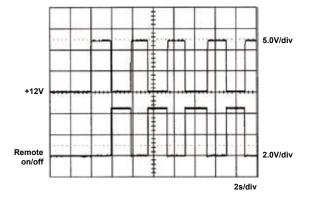
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# 7. +5Vsb step response

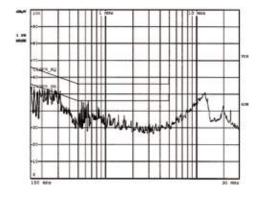


+5V step from 0.4A to 2A other 60% rated load

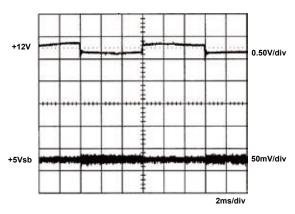
#### 9. Remote on/off



#### 11. EN55011 B

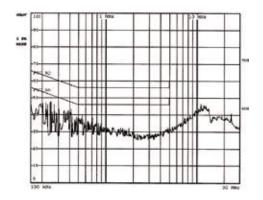


# 8. +12V step response

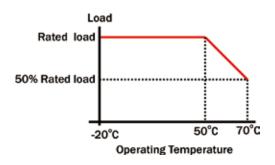


+12V step from 2.4A to 12A other 60% rated load

#### 10. FCC B



#### 12. Power derating curve



-Jim-