

PYP ELECTRONIC LTD

SWITCHING POWER SUPPLY

SPECIFICATION FOR APPROVAL

Customer : _____

Part NO. : _____

Customer Approval NO. : _____

Model NO: SPS-123000EU ROHS : Yes

Description: 12V 3000mA Revision : 02

Issued Date: 2018.03.12 Certification : CE

CUSTOMER APPROVED

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Remark:

- 1).Please approve and sign back to PYP.
- 2).If there is on signing back,this Approval sheet will be regarded as being approved automaticly once the first P.O of the model specified in the sheet is issued.

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Change List

ECN No.	REV	Revision Description	Date
1	01	NO SAMPLE	2018.05.18
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

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1. Description.

This product is a [Switching Power Supply](#)(AC TO DC power transfer device) , it can provide for a [36W \(12V DC 3000mA\)](#) single DC output with constant voltage source, it covers all the related electrical, mechanical, environmental and safety aspects.

2. Electrical.

2.1 Input Voltage (AC) :

- a. From [100- 240Vac](#) Nominal.
- b. From [90 - 264Vac](#) Maximum.

2.2 Input Frequency Range

[47 Hz](#)(min) ~ [63 Hz](#)(max)

2.3 Input In-rush Current.

[50A](#) Max at Cold start@[25°C](#), AC input [220V](#) and dc output full-loading.

2.4 Input Current.

- a. [0.8A](#) Max at 90V ac
- b. [0.7A](#) Max at 264V ac

2.5 Hold-Up time.

[3mS](#) minimum at dc output full loading and 115 Vac 50/60Hz input.

2.6 Input wattage at output no-load / minimum-load condition.

Less than [0.1W](#) Pin DC output load and 240Vac input voltage and frequency condition.

2.7 Efficiency.

[86%\(Level VI\)](#)minimum at dc output full loading and 115/230Vac input voltage range included dc output cable voltage drop loss.

2.8 Safety Test.

- a. Leakage current less than [0.25mA](#) at 264Vac, 50Hz.
- b. Hi-Pot test : [3000Vac, 10mA, 3Sec](#) between Primary to Secondary ground.
- c. Insulation : at dc [500Vdc, 1 Sec](#) between Primary to Secondary circuit, IR shall \geq [50MΩ](#).

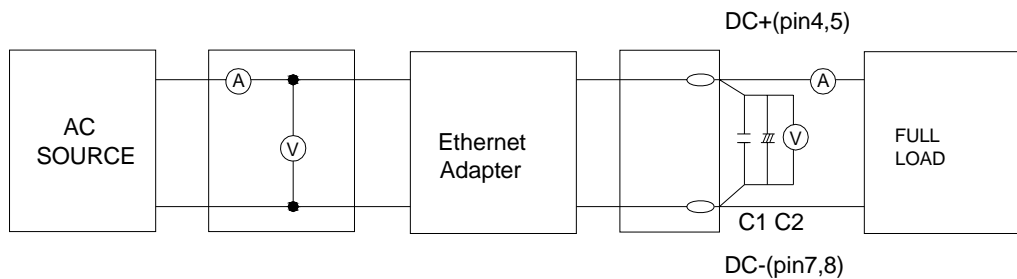
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2.9 Output Voltage and Current (DC).

V/out	V/range	I /out(Nominal)	I/out(max)10Sec
12.0V	12.6—11.4V	3.0A	

2.10 Ripple and Noise.

Low frequency ripple (< 100KHz) \leq 100mVpp, and Total composite Ripple and Noise. Less than 120mVpp, tested by dc loading side parallel with a 10uF/EC(C2) and 0.1uF/Ceramic(C1). Capacitors and Measured Band-Width with DC-20MHz.



2.11 Over-Shoot and under-shoot.

Less than 10% of nominal Voltage value.

- a. 3.2A (the condition of 100Vac input)
- b. 3.3A (the condition of 240Vac input)

2.12 Protection.

- a. SCP: For short circuited protection and with auto-recovery function.

2.13 Rise time.

The output voltage should rise from 10%~90% volt and settle within regulation in less than 20 msec from apply of AC input voltage condition.

2.14 Output voltage Temperature Coeffience.

Less than 0.5%/C.

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3. Environment.

3.1 Temperature

- a. Operation : -10 to 40 °C
- b. Storage : -30 to 80 °C

3.2 Humidity

- a. Operation : 10 to 95%
- b. Storage : 10 to 95%

3.3 Altitude.

From sea level to 10,000Ft (operation) and 40,000Ft (Non operation)

4. EMC.

4.1 EMS

Test Item	Test Specification	IEC Standards
ESD	Contact	61000-4-2
ESD	Air	61000-4-2
RF	FR:26MHz-1.0GHz, Field Strength :3V/M	61000-4-3
EFT	1KV on AC power line	61000-4-4
SURGE	1KV	61000-4-5
CS 3	V/M	61000-4-6
DIPS	0%250Cy,40%5Cy, 0% .5Cycle	61000-4-11

4.2 EMI for both Conduction & Radiation.

5. Reliability.

Refering Standards	Specification
CISPR	Part 22,class B

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5.1 .Life.

a. Average life expectancy of 3 years. 8(H)×300(D)×3(Y).

b. Environment Ambient: 25°C

5.2. M.T.B.F.

30,000 Power On Hours at 25°C

5.3 Temperature Rise.

Less than 45°C at nominal AC input / DC output full loading and environment temperature 25+/-1°C on Top/Bottom of plastic case.

5.4. Burn-in.

100% Burn-In with 80~100% loading & 35~45°C Environment temperature .

5.5. Vibration Test.

a. Non operation vibration with shipping container shall be 2G'S peak, 7-50Hz, 4G'S peak 50-500Hz, after test no abnormally to be found.

b. Operation vibration shall be 0.5G'S peak, 10-60Hz, 3 Axes, after test no abnormally to be noted.

5.6. Drop-Test.

The product to be dropped from 1000mm height onto a concrete floor covered with 20mm vinyl tile one times from 3 different surface(X-Y-Z),after test,the switching power supply is not broken, disassembled, or damaged to access hazardous parts.

6. MECHANICAL CHARACTERISTICS.

6.1 Dimension: 95.0mm(L) * 50.0mm(W) * 73.0mm(H)

6.2 AC Inlet: EU plug

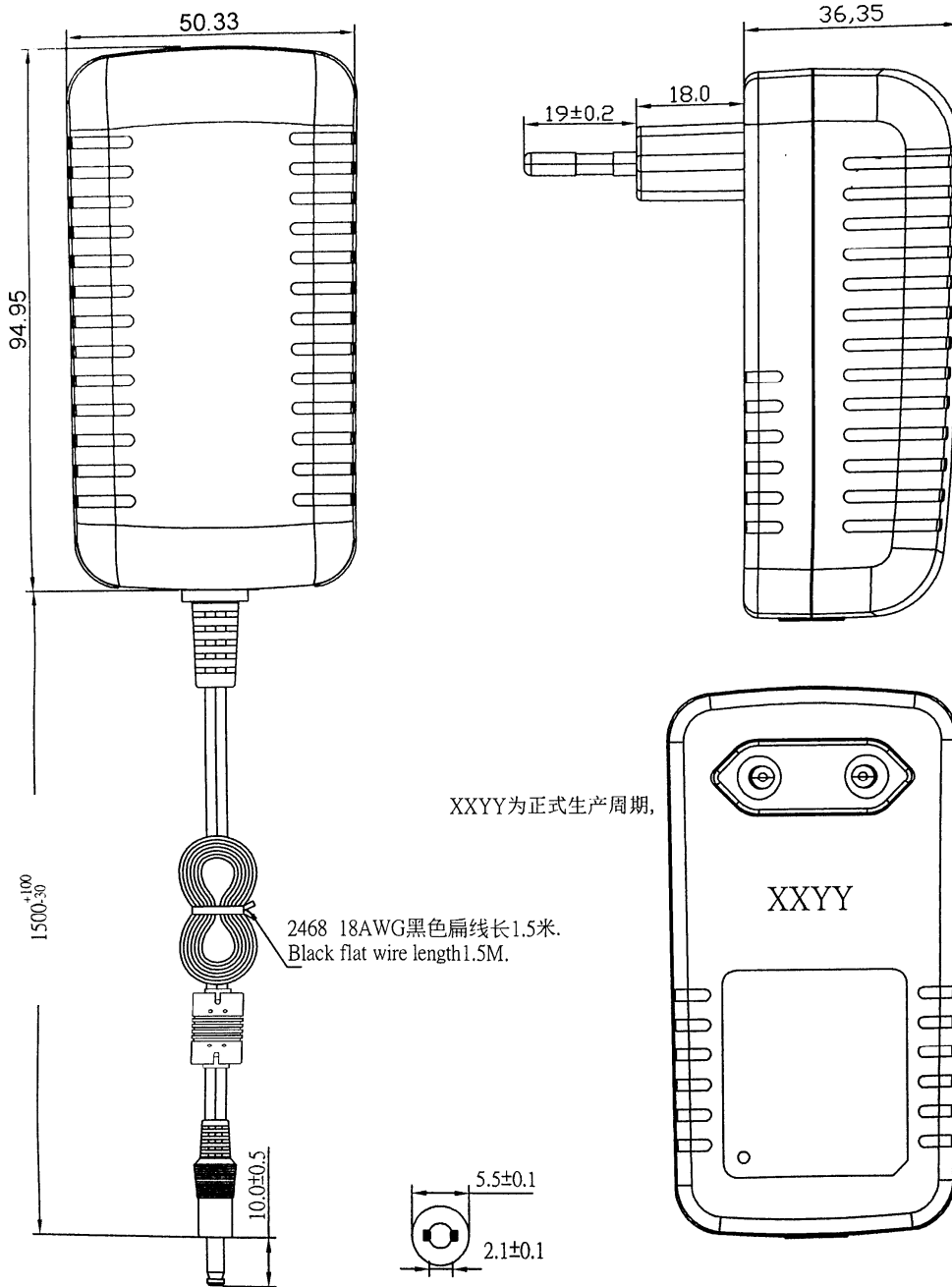
6.3 Case Material: NORYL (PC,PC+ABS,or equivalent),94V-0, Color;Black

6.4 Output Plug: 2468 22awg L=1.5M 5.5*2.1 DC

6.5 Surface: Damaged, or rusted surface is not permitted

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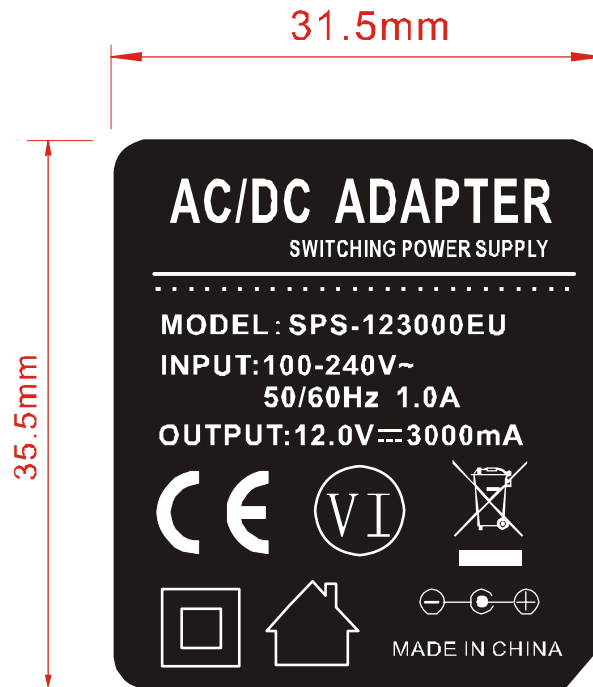
7. OUTLINE DIMENSIONS(Unit:mm).



- NOTE:**
1. Case cover & chassis material **PC: BLACK**
 2. AC PIN MATERIAL: BRASS (NI PLATED)
 3. Tolerance: **±2**
 4. Case cover: NO company LOGO

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8.LABEL DIAGRAM.

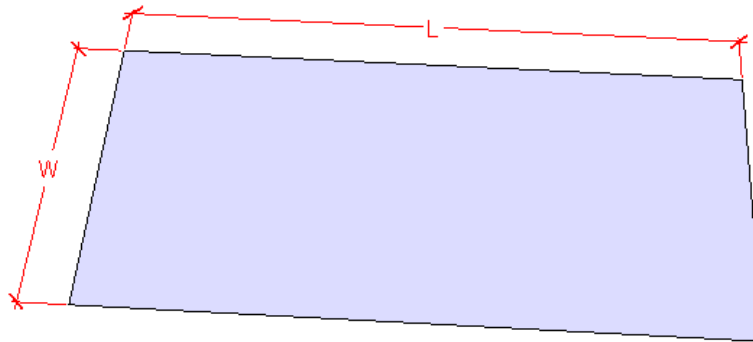


- Note:**
1. MATERIAL: POLYESTER+PVC; COATING: 0.25+-0.05mm
 2. SILVER characters BLACK background
 3. LEAD FRE
 4. Tolerance: ±0.1

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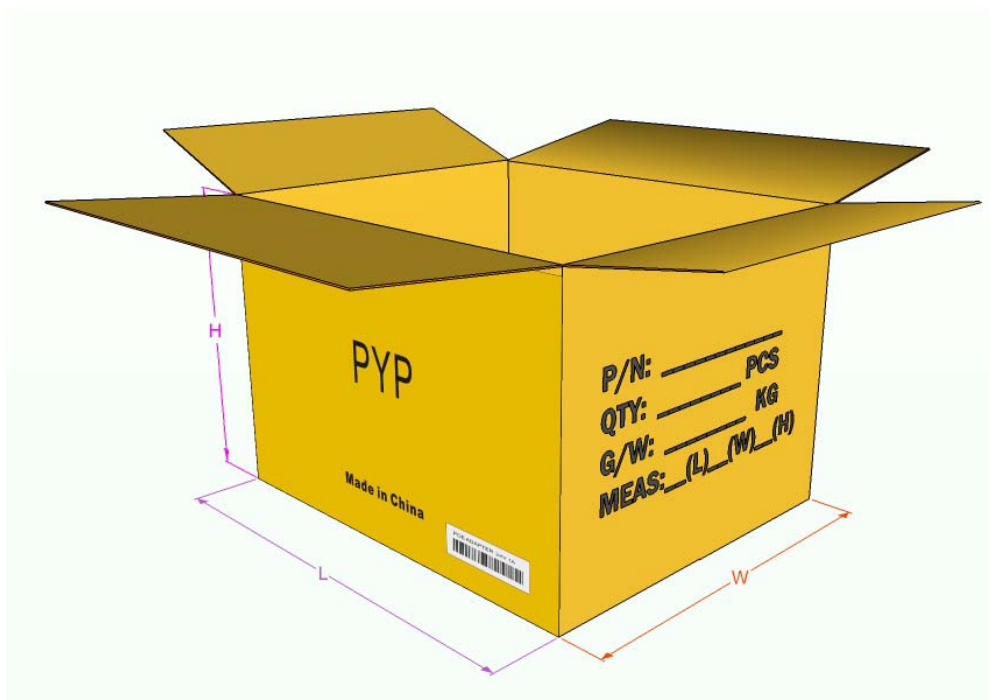
9. Packing Drawing(Unit: mm).

PE Bag



Dimensions (L*W): 280*120mm

Q'ty: One bag /PCS



Outer Carton: Dimensions (L*W*H): 480*415*265mm Q'ty: One Box/60PCS

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