

Switching Power Supply

Input: 100~240V_{AC} | 50/60Hz | Output: 12.0V_{DC} | 1.0A | 12W

1. Scope

The purpose of the document is to specify the functional requirements of a 12.0 W switching power supply.

2. Input Characteristics

Input Voltage

| | |
|-----------------|------------|
| Rated Voltage | 100~240Vac |
| Variation Range | 90~264Vac |

Input Frequency

| | |
|---------------------|---------|
| Rated Frequency | 50/60Hz |
| Variation Frequency | 47-53Hz |

Input Current

| |
|--|
| 0.4 Amps max At any input voltage and rated, DC output rated load. |
|--|

Leakage Current

| |
|-----------------------------|
| 0.25mA Max. At 264Vac input |
|-----------------------------|

3. Output Characteristics

Power Output

| Voltage | Min.Load | Rated Load | Peak Load | Output Power |
|---------|----------|------------|-----------|--------------|
| 12.0Vdc | 0.00A | 1.0A | | 12.0W |

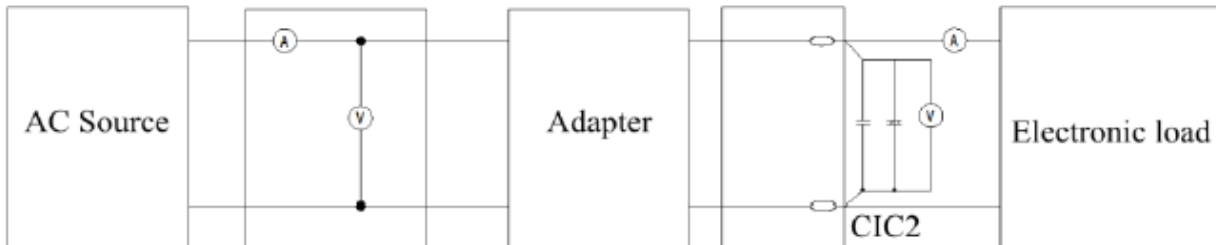
Combined Load / Line Regulation

| Voltage | Min.Load | Rated Load | Line Regulation | Load Regulation |
|---------|----------|------------|-----------------|-----------------|
| 12.0Vdc | 0.0A | 1.0A | ±3% | ±5% |

YS12V-1201000E

Ripple and Noise

Output Ripple voltage is 200mV peak to peak or peak to peak or less.(100Vac 60Hz/240Vac 50Hz)



Measured methods:

*The ripple is measured from peak to peak with band width limit of 20MHz (C1:0.1uF Ceramics capacitor C2:47uF/50V Aluminum capacitor under DC output full load,AC nominal input 25°C ambient temperature).

Turn on delay time:

3 Second Max.at 100 Vac input and output Max.load.

Rise Time

40 mS Max.at 100 Vac input and output Max load.

Hold up

10 mS Min.at 100Vac input and output Max.Load.

Efficiency

Energy Star Compliance: Level VI Requirement

Average Efficiency achieve: 82.96 at 115 Vac input

Average Efficiency achieve: 82.96 at 230Vac input

Standby Power

Rated Voltage: 100 240 Vac 0. 1 W max

4. Protection Function

Short circuit protection

The power supply will be auto recovered when short circuit faults remove.

Over current protection

The power supply will be auto recovered when over current faults remove.

Output voltage achieve over voltage protection point

will auto protection without output. be capable of auto-recovery function

5. Environmental Requirement

Operating Temperature: 0°C to +40°C, Full Load Normal operation

Storage Temperature: -10°C to +80°C, with package

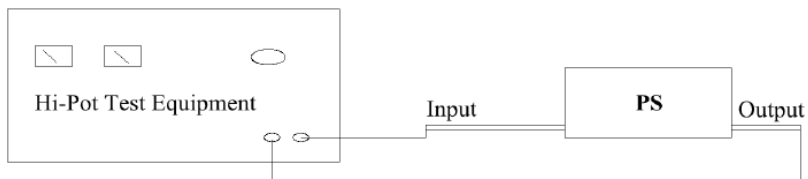
Relative Humidity: 25%(0°C)~75%(40°C)RH, 72Hrs, Full load, Normal operating

6. EMI / Safety and EMI Requirement

Safety: Comply with EN62368

Insulation Resistance: 500VDC primary to the secondary input impedance of 100MΩ(Min)

Dielectric withstand Hi Pot: HI POT primary to secondary 30 00Vac 5mA 1min



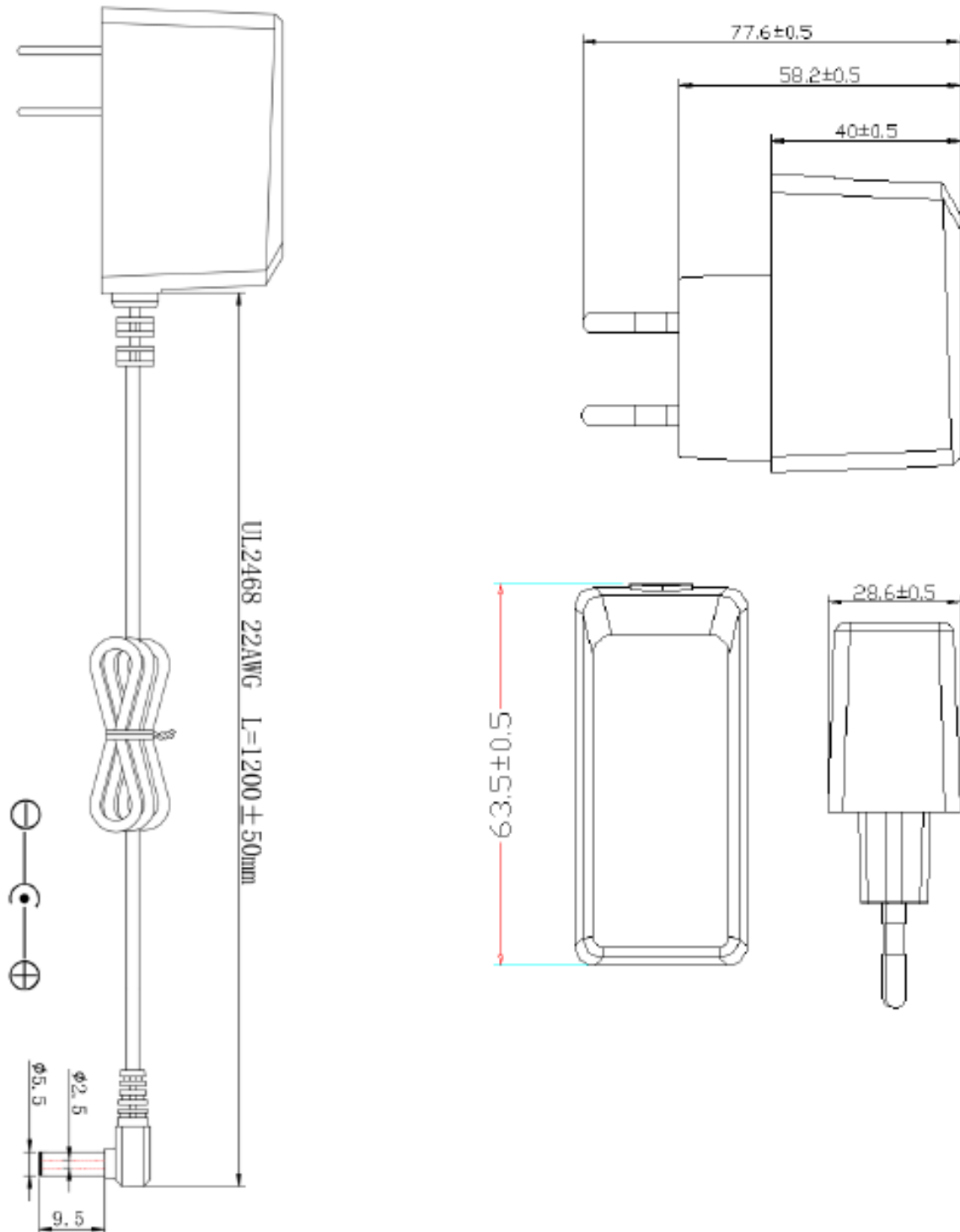
EMI Standard: Meets the Limits of EN55032 class B rules

7. Mechanical Requirement:

Enclosure: The power supply size:L 63.5 x W 28.6 x H 58.2 mm

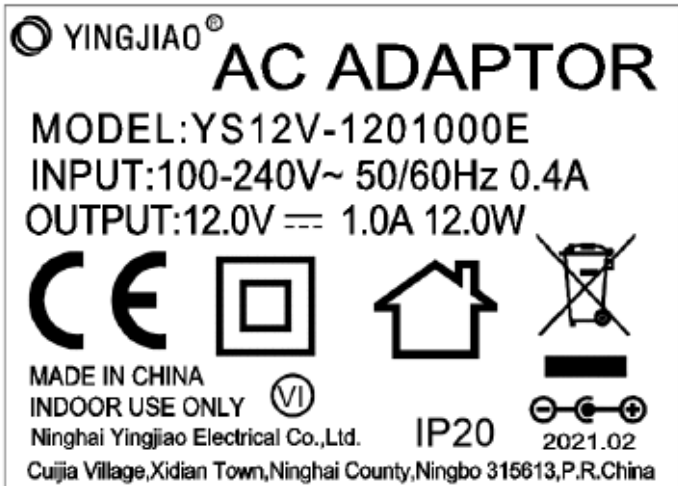
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8. Outline Dimensions

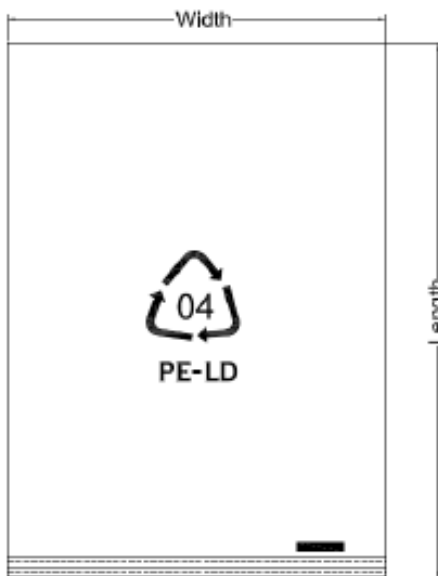


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9. Label

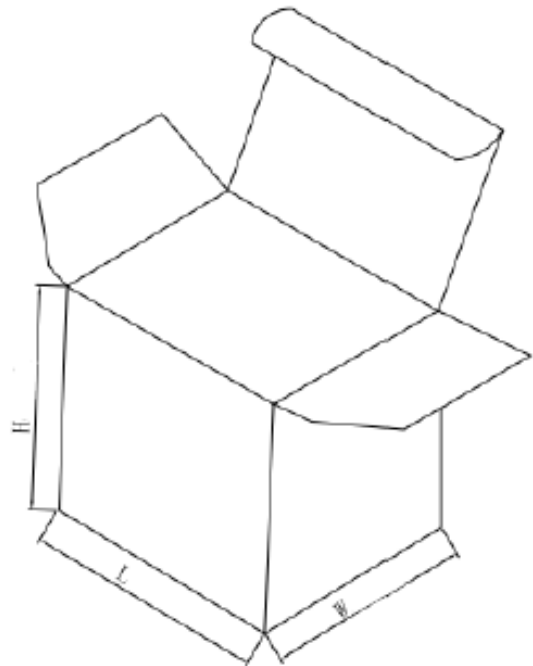


10. Packing Step:



PE bag:

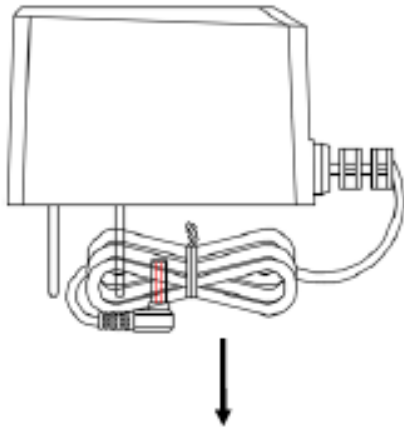
Length: 170mm
Width: 120mm



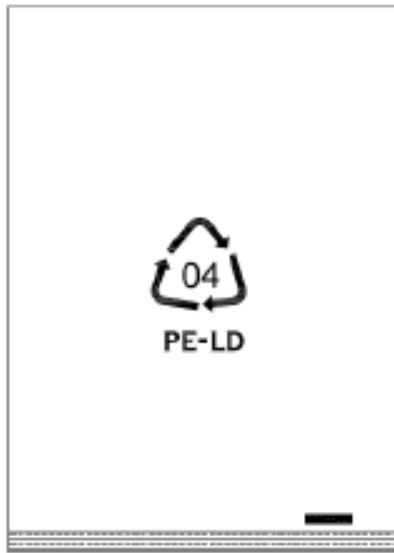
Inner box:

Length: 85mm
Width: 52mm
Height: 80mm

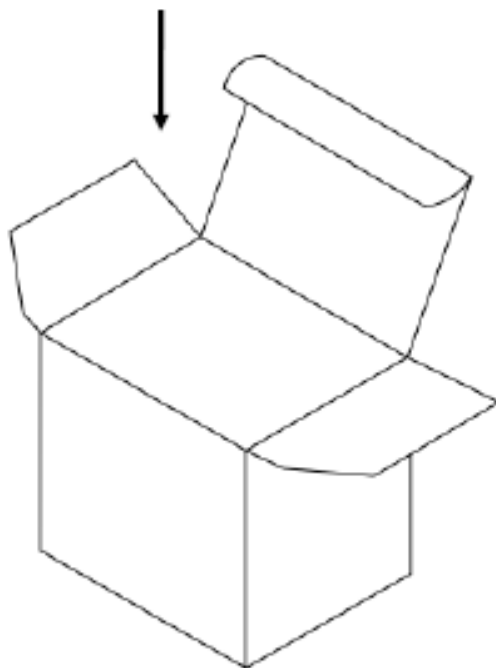
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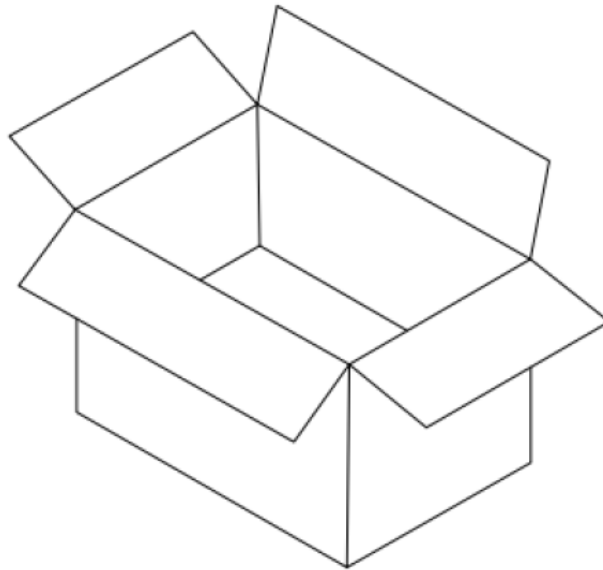
A: Product



B: PE Bag



C: Inner box



Packing request:

Packaging

Outside box: 450L*285W*340H
Quantity: 100PCS/CTN

Remarks:

1. Firstly, put the product into PE bag according to the picture "A/B".
2. After finishing the first step, then put the product into white box according to the picture "C".
3. Then put the product into outer carton.
4. When packing finished, then seals the carton and labels the mark.
5. Through the QA inspection, the products can be shipped