

**fullwat**<sup>®</sup>  
professional *solutions*

---

**FU-A1000-2 • Switching power supply**



## FU-A1000-2 • Switching power supply

### 1. Scope

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

### 2. Input characteristics

<b>Input Voltage</b>	Rated voltage	100~240VAC
	Variation range	90-264VAC
<b>Input Frequency</b>	Rated frequency	50/60Hz
	Variation frequency	47-63Hz
<b>Input Current</b>	0.4Amps max At any input voltage and rated, DC output rated load	
<b>AC Leakage current</b>	0.25mA Max. At 264Vac input	

### 3. Output characteristics

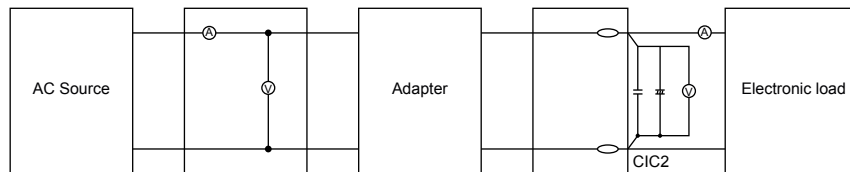
Power output				
Voltage	Min. Load	Rated Load	Peak Load	Output power
3.0-12.0VDC	0.00A	1.0A		12.0W

Combined Load/Line Regulation				
Voltage	Min. Load	Rated Load	Peak Load	Output power
3.0-6.0VDC	0.00A	1.0A	±3%	±10%
7.5-12.0VDC	0.00A	1.0A	±3%	±5%

#### 3.1 Ripple and Noise

Output Ripple voltage is 200mV 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).

#### 3.2 Turn on delay time

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

#### 3.3 Rise time

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

#### 3.4 Hold up time

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

#### 3.5 Efficiency

3V: 69.64% / 4.5V: 72.81% / 5V: 73.62% / 6V: 78.88% / 7.5V: 80.26% / 9V: 81.34% 12V: 82.96%at 115Vac input and output Max.Load.

#### 3.6 Standby Power

Rated Voltage: 100~240Vac 0.1W max.

## 4. PROTECTION FUNCTION

### 4.1 Short circuit protection

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

### 4.2 Over current protection

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

### 4.3 Output voltage achieve over voltage protection point.will auto protection without output.be capable of auto-recovery function.

## 5. ENVIRONMENTAL REQUIREMENT

### 5.1 Operating Temperature

-20°C to 50°C, Full load, Normal operating.

### 5.2 Storage Temperature: -40°C to 80°C

With package.

### 5.3 Relative humidity

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

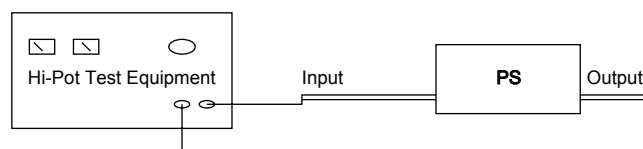
## 6. SAFETY AND EMI REQUIREMENT

### 6.1 Safety: Comply with EN62368.

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

### 6.3 Dielectric withstand Hi-Pot

HI-POT-- primary to secondary 3000Vac 5mA 1min.

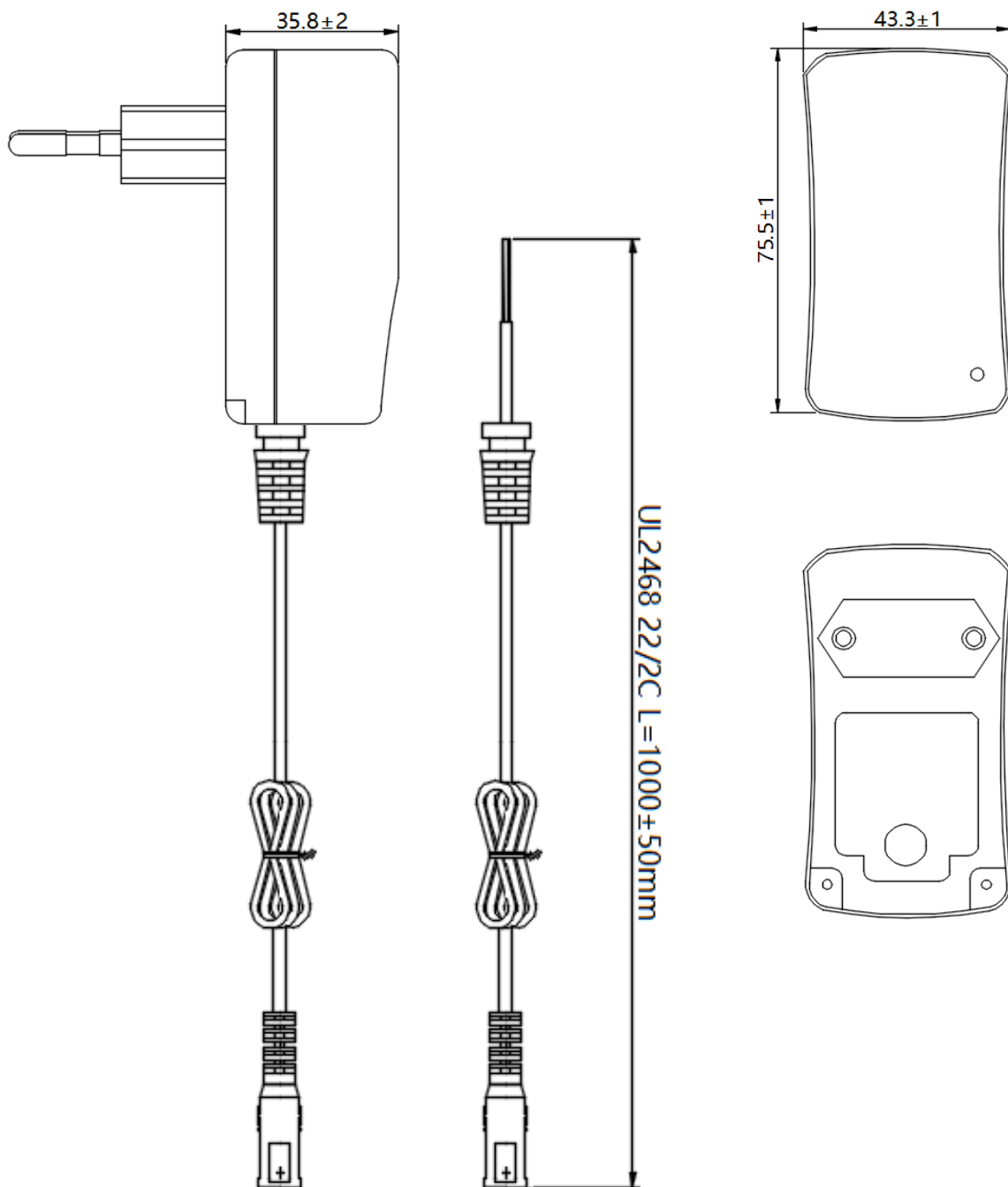


### 6.4 EMI standard

Meets the Limits of

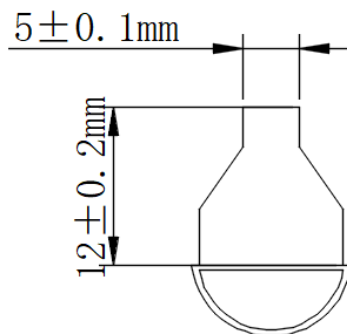
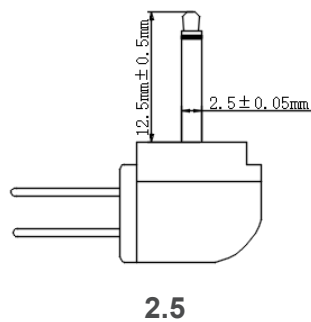
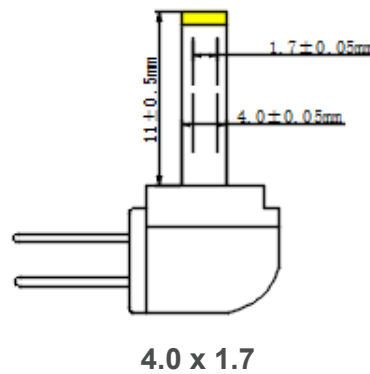
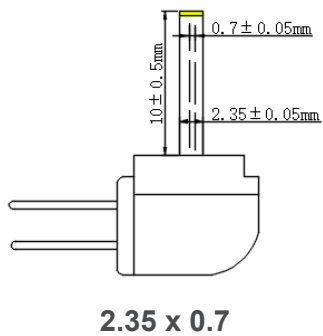
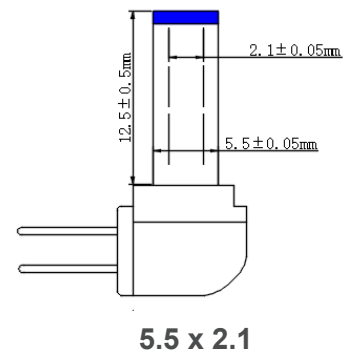
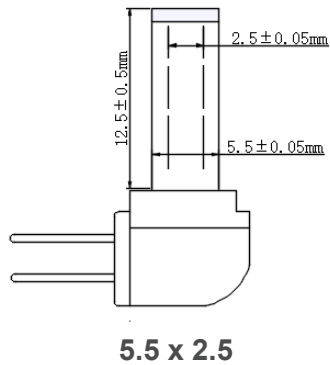
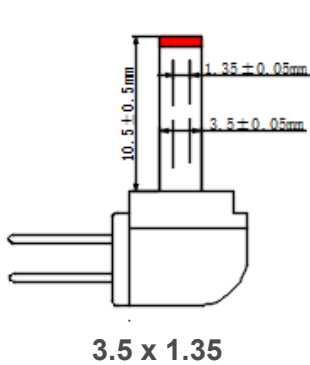
<1>. EN55032 class B rules

## Outline dimensions

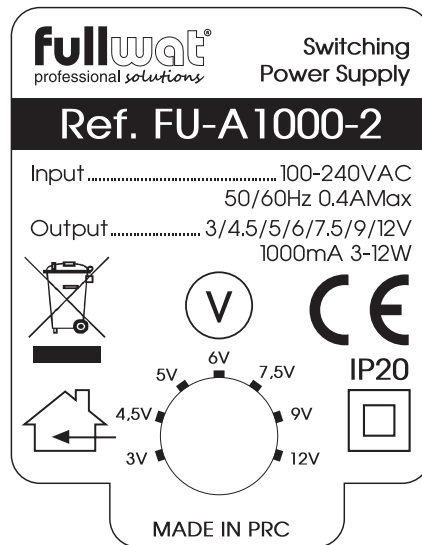


## Outline dimensions

Enchufe de salida de seis filas + llave reguladora de presión

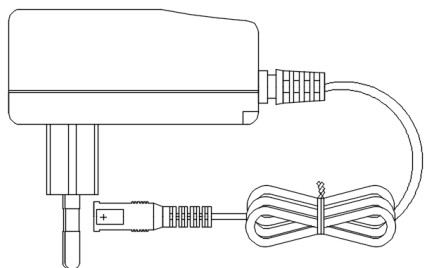


## LABEL

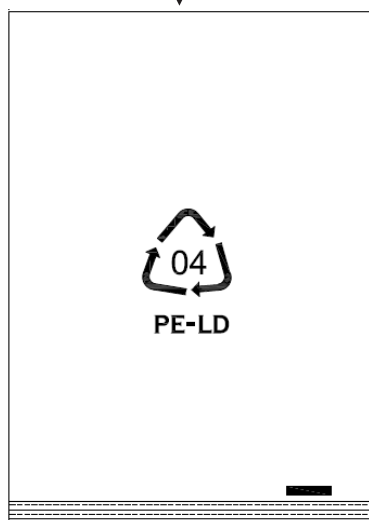


48 x 29.5 mm

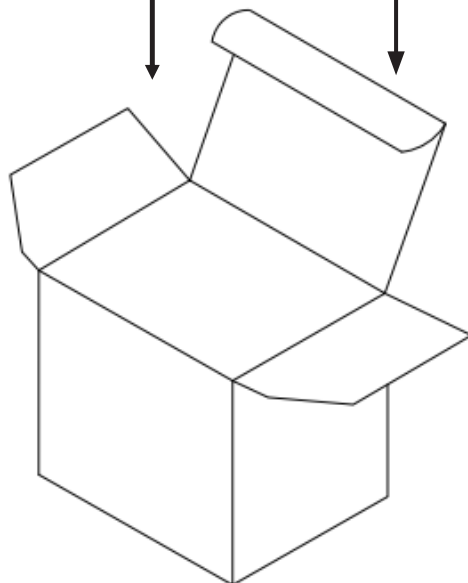
## Packing step



**A. Product**



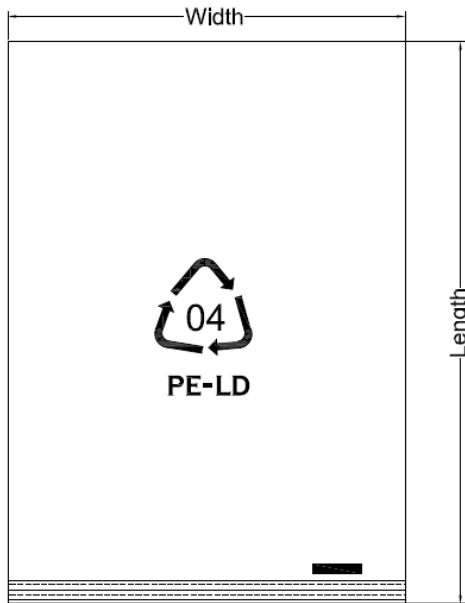
**B. PE bag**



**C. Inner box**



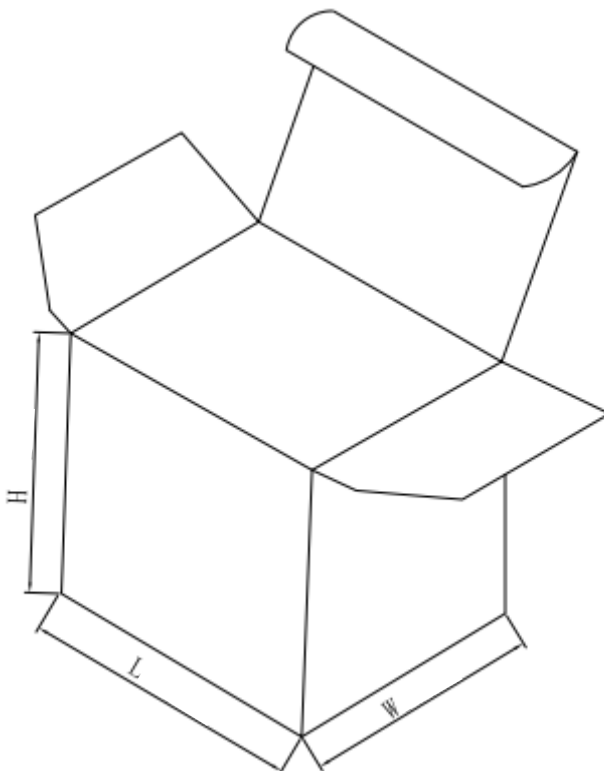
## Packing step



### PE bag

Length: 170mm

Width: 120mm



### Inner box

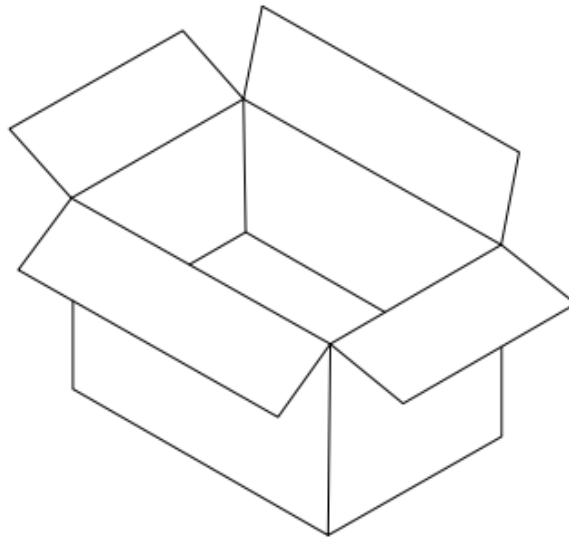
Length: 104mm

Width: 53mm

Height: 80mm



## Packing step



### Packing request

Packaging

Outside box: 425L\*230W\*295H

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.