

### 1. Scope

The purpose of the document is to specify the functional requirements of a 12W switching power supply.



#### 2. Input characteristics

Item	Technical Norm		
Rated voltage	100-240VAC		
Variation voltage range	90-264VAC		
Rated frequency	50-60Hz		
Variation frequency	47-63Hz		
Current	0.3Amps max at any input voltage and rated, DC output rated load		
Inrush current	40 Amps Max. Cold start at 230Vac input, with rated load and 25°C ambient.		
AC leakage current	0.25mA Max.At264Vac input		

#### 3. Output characteristics

Power output						
Voltage	Min. Load	Rated Load	Peak Load	Output power		
24VDC	0.00A	0.5A		12W		

Combined Load/Line Regulation						
Voltage	Min. Load	Rated Load	Line regulation	Load regulation		
24VDC	0.00A	0.5A	±3%	±5%		

#### **Ripple and Noise**

Under nominal voltage and nominal load, the ripple and noise are as follows when measure with Max. Bandwidth of 20MHz and Parallel 47uF/0.1uF, crossed connected at testing point.

Voltage: +24Vdc Ripple and Noise: 300mV p-p Max.

Turn on delay time: 3 Second Max.at 100Vac input and output Max.load.

Rise time: 40 mS Max.at 100Vac input and output Max load.

Hold up time: 5 mS Min.at 100Vac input and output Max.Load.

Efficiency: 75% Min. at 115Vac input and output Max.Load.

75% Min. at 230Vac input and output Max.Load.

Load power consumption: Rated Voltage: 100~240Vac 0.3W 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 70°C With package Relative Humidity: 20%-80%, Normal operating.

#### 6. Safety and EMI requirement

Safety: accord with EN 60950-1. Insulation resistance: 500VDC primary to the secondary input impedance of 100MΩ(Min). Dielectric strength Hi-Pot: Primary to secondary, 3000Vac/5mA/1min. Primary to case, 3000Vac/5mA/1min.

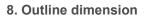
EMI standard: Meets the Limits of EN55032 class B rules

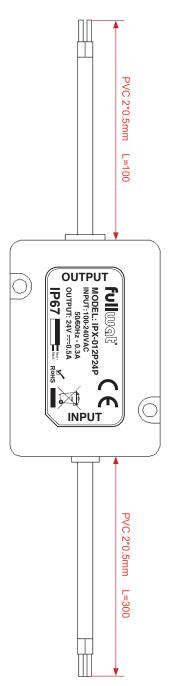
#### 7. Mechanical requirement

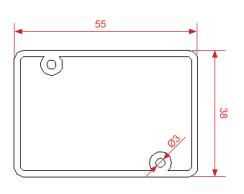
#### Enclosure:

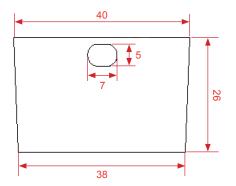
The power supply size: L55xW40xH26mm.

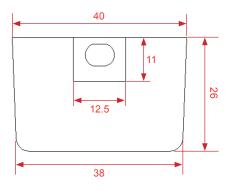




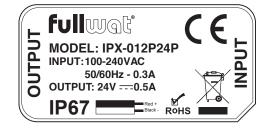






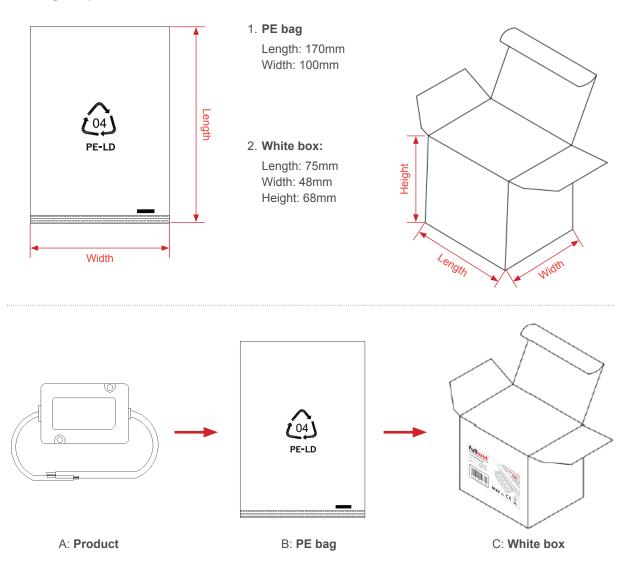


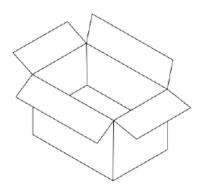
9. Label





10. Packing Step





#### Packing request:

Packaging: Outside box: 405L\*260W\*300H 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.