

## SPECIFICATION FOR APPROVAL

CUSTOMER: \_\_\_\_\_

DESCRIPTION: AC/DC Power Supply

CUSTOMER PART NO: \_\_\_\_\_

MODEL NO: US-12-5A

DATE: 2025 年 10 月 10 日

APPROVED SIGNATURE		
DATE:	DATE:	DATE:

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# AC/DC Switch Power Specifications

## 1、Description:

12V 5A

The purpose of the document is to specify the functional requirements of a **60W** AC/DC Switch Power.

## 2、INPUT CHARACTERISTICS:

### 2.1 Input Voltage:

Nominal Voltage: **176-264Vac**

### 2.2 Input Frequency:

Nominal Frequency: **47-63Hz**

### 2.3 Input Current:

1Arms max At any input voltage and rated, DC output rated load.

### 2.4 Inrush Current:

20Amps Max. Cold start at 240Vac input, with rated load and 25°C ambient.

### 2.5 AC (Ac Leakage Current):

0. 25mA Max At 240Vac input.

## 3、OUTPUT CHARACTERISTICS:

### 3.1 Power Output;

<u>Voltage</u>	<u>Min. Load</u>	<u>Max. Load</u>	<u>Peak</u>	<u>Output Power</u>
DC12.0V	0A	5A	5.5A	60W

### 3.2 Combined Load/Line Regulation:

<u>Voltage</u>	<u>Min. Voltage</u>	<u>Max. Voltage</u>	<u>Line Regulation</u>	<u>Load Regulation</u>
+12.0Vdc	11.4V	12.6V	±5%	±5%

### 3.3 Ripple And Noise:

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

<u>Voltage</u>	<u>Ripple And Noise(Max.)</u>
+12.0Vdc	100mVp-p

### 3.4 Turn On Delay Time:

2 second Max. At 176Vac input and output Max. Load.

### 3.5 Rise Time:

40mS Max. At 176Vac input and output Max. Load.

### 3.6 Hold Up Time:

5mS Min. At 176Vac input and output Max. Load.

### 3.7 Efficiency:

>80%.At 176Vac input and output Max. Load.

>83%.At 240Vac input and output Max. Load.

### 3.8 Overshoot:

15%Max. When power supply at turn on or turn off.

## 4、 PROTECTION REQUIREMENT:

### 4.1 Short Circuit Protection:

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

### 4.2 Over Voltage Protection

The power supply will not be auto recovered when faults remove.

## 5、 ENVIRONMENTAL REQUIREMET:

### 5.1 Operating Temperature:

0°Cto40°C, Full load Normal operation.

### 5.2 Storage Temperature:

-20°Cto75°C, (With package).

### 5.3 Relative Humidity:

5%(0°C)~90%(40°C)

### 5.4 Vibration:

1、 Operating: IEC 721-3-3 3M3

5~9Hz,A=1.5mm (9~200Hz,Acceleration 5m/s<sup>2</sup>)

2、 Transportation: IEC 721-3-2 2M2

5-9Hz, A=3.5mm

9~200Hz, Acceleration=5m/S<sup>2</sup>

200~500HZ, Acceleration=15m/S<sup>2</sup>

3、 Axes,10 cycles per axis.

No permanent damage may occur during testing.

The product has to restore its original situation after power off/on.

## 5.5 Dropping (Packed):

1 corner, 3 edges, and 6 surfaces

Height: 76cm

## 6、 MECHANICAL REQUIREMENT:

### 6.1 Enclosure:

The power supply size : 116\*35\*21mm

NET WEIGHT : 100g

CARTONS SIZE: 43\*24\*23CM 150 PCS/CARTONS 30KG

12V5A 60W IP20



**Material:** Aluminum

**Endure heat** above 105°C

**Thickness:** 0.2-0.3mm

3\*RI ± 0.1mm

**Angle** 2.5mm