

## **Excellent Integrated System Limited**

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[CUI Inc.](#)  
[DTS120200UC-P5P-KH](#)

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**1.0 INTRODUCTION**

This document specifies a switching power supply with a output of +12V, and electronic process. The switching power supply will provide power for technology equipments including electrical business equipment.

**2.0 INPUT REQUIREMENTS**

2.1 Input Voltage Range: 100(-10%)VAC to 240(+10%)VAC

2.2 Input Frequency Range: 47 Hz to 63 Hz

2.3 Input In-rush Current: 60A Max (Actual test result is 16.5A )

2.4 Input Current: 0.6A Max

**3.0 OUTPUT REQUIREMENTS**

3.1 Output Voltage: +12V

3.2 Output Regulation: 11.4V~12.6V

3.3 Output Load Range: 0~2A

3.4 Output Ripple & Noise: 120mV Max @20MHz BANDWITH

**4.0 EFFICIENCY: 78% @ FULL LOAD & 120 VAC INPUT****5.0 DIELECTRIC STRENGTH (Hi-Pot) TEST**

5.1 Finished product withstands AC 3.0KV, for 2 second, 4mAmax primary to secondary

5.2 Transformer withstands AC 3.0KVrms, 60Hz for 1 minute, primary to secondary.

5.3 Transformer withstands AC 3.0KV, 60Hz for 1 minute, primary to core.

**6.0 INSULATION RESISTANCE**

Primary to secondary: 50MOHM to 500VDC.

**7.0 PROTECTION****7.1 Input Protection**

The switching power supply has a 2 amps inner current fuse to protect itself.

**7.2 Output Protection**

**7.2.1 Output Current:**

Overload conditions shall decrease the output current. Removal of an output  
Overload shall provide automatic recovery for the output voltage.

**7.2.2 Short Circuit Protection: Auto Recovery.****7.2.3 Over Voltage Protection: 14V±1V****8.0 ENVIRONMENTAL CONDITIONS**

The switching power supply can withstand the following environmental conditions:

**8.1 Storage Temperature:-20°C ~ +70 °C**

Relative Humidity: 10% ~ 95%

**8.2 Operation Temperature:0°C~40°C**

Relative Humidity: 10%~95%

**9.0 EMI / EMC**

The switching power supply has approved by the following standards:

FCC PART 15B

(1)EN55022 (EN61000-3-2 EN61000-3-3)

(2)EN55024 (IEC61000-4-2 IEC61000-4-3 IEC61000-4-4  
IEC61000-4-6 IEC61000-4-8 IEC61000-4-11)

**10.0 RELIABILITY AND QUALITY CONTROL****10.1 Burn-in**

The burn-in test will be performed at least 2 hours at 40 centigrade degrees under  
full load condition.

**10.2 MTBF**

When the operation is coupling with this specification, the switching power  
supply's MTBF will be 50,000 hours at 25 centigrade degrees.

**11.0 SAFETY**

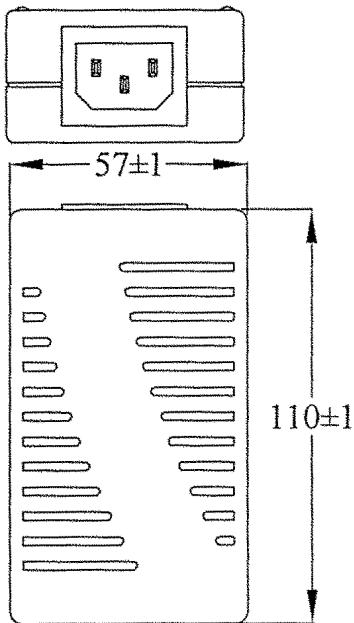
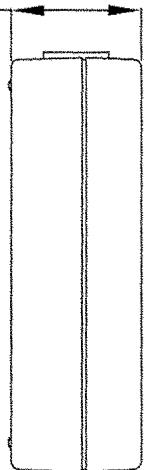
The switching power supply has approved by the following safety standards:

UL1950 (Third Edition),CAN/CSA-C22.2 No.950-95,

IEC 60950:1999,EN60950:2000

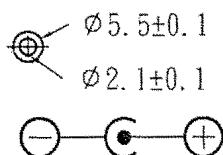
**12. OVERALL DRAWING**

UNIT: mm

 $35\pm1$ 

AWG#20

6.0FT MIN

 $12\pm0.5$ 

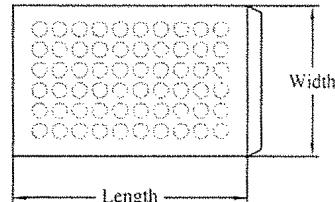
**13. PACKING****13.1 Inner Box**

UNIT: mm

***Bubble bag only used for samples, not for finished products.*****BUBBLE BAG**

Length :160

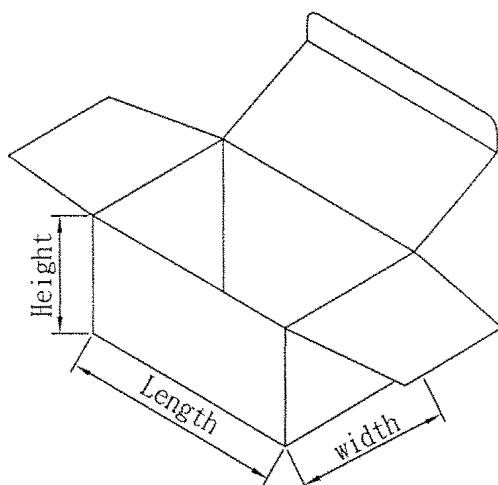
Width : 150

**BOX**

Length:125

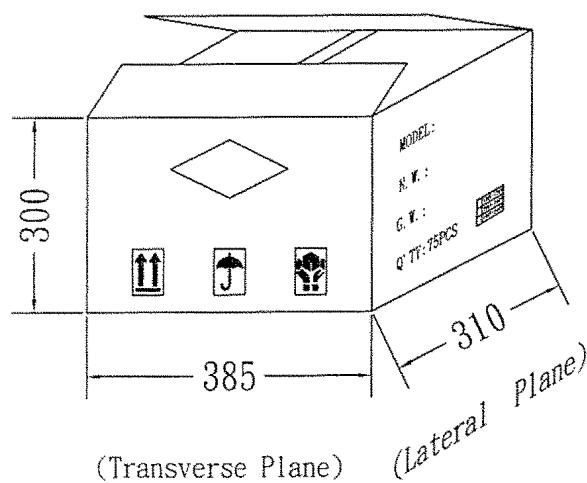
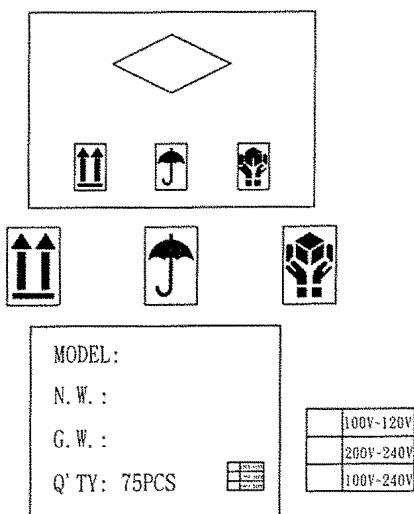
Width:60

Height:58



**13. PACKING****13.2 Carton**

UNIT: mm



**14. MARKING**

0.2mm PVC NAME-PLATE: SILVER CHARACTERS BLACK BACKGROUND.

UNIT: mm

