



# IDEALPOWER

experts in power conversion

Ideal Power Ltd Product Specification Document

<b>Description</b>	Ext. PSU
<b>Model Number</b>	25HK-AH-120A500-DH
<b>Revision</b>	A4
<b>Notes</b>	-

CUSTOMER APPROVED SIGNATURES			VENDOR APPROVED SIGNATURES		
					

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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. The adaptor meets the requirement of lead free and RoHS.

## 2.0 INPUT REQUIREMENTS

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

2.2 Input Frequency Range: 50 Hz to 60 Hz

2.3 Input Power Consumption at no-load : 0.5W Max

2.4 Input In-rush Current: 60A Max

2.5 Input Current: 1.6A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +12V

3.2 Output Regulation: 11.4-12.6V

3.3 Output Load Range: 5.0A

3.4 Output Ripple & Noise: 200mV Max @20MHz bandwidth with

10UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY:  $\geq 87\%$  @ average of 25/50/75/100% loads 115V&230VAC input

5.0 LINE REGULATION:  $\pm 2\%$  maximum

6.0 HOLD UP TIME: 10ms Min at 110VAC full load.

7.0 TURN ON TIME: 2S Max at 110VAC full load.

8.0 TEMPERATURE COEFFICIENT: 0.05%/°C

9.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

9.1 Finished product withstands AC 3.0KV, for 2 second, 4mA Max primary to secondary.

10.0 INSULATION RESISTANCE

Primary to secondary: 50M OHM to 500VDC.

11.0 PROTECTION

11.1 Input Protection

The switching power supply has a 3.15 Amps inner current fuse to protect itself.

11.2 Output Protection

11.2.1 Output Current:

Overload conditions shall decrease the output voltage. Removal of an

Output overload shall provide automatic recovery for the output voltage.

11.2.2 Short Circuit Protection: Auto Recovery.

## 12.0 ENVIRONMENTAL CONDITIONS

The switching power supply can withstand the following environmental conditions:

12.1 Storage Temperature: -20°C ~ +80 °C

Relative Humidity: 5% ~ 95%

12.2 Operation Temperature: 0°C ~ 40°C

Relative Humidity: 5% ~ 95%

## 13.0 EMI / EMC

The switching power supply has approved by the following standards:

FCC PART 15B J55022(H22), J3000(H21) AS/NZS 55022/55024

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

(2) EN55024(IEC61000-4-2.IEC61000-4-3.IEC61000-4-4.IEC61000-4-5.  
IEC61000-4-6.IEC61000-4-8.IEC61000-4-11.)

## 14.0 RELIABILITY AND QUALITY CONTROL

### 14.1 Burn-in

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

### 14.2 MTBF

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

## 15.0 SAFETY

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

UL60950-1 2nd Edition ,2007-03-27 CSA C22.2 No.60950-1-07,

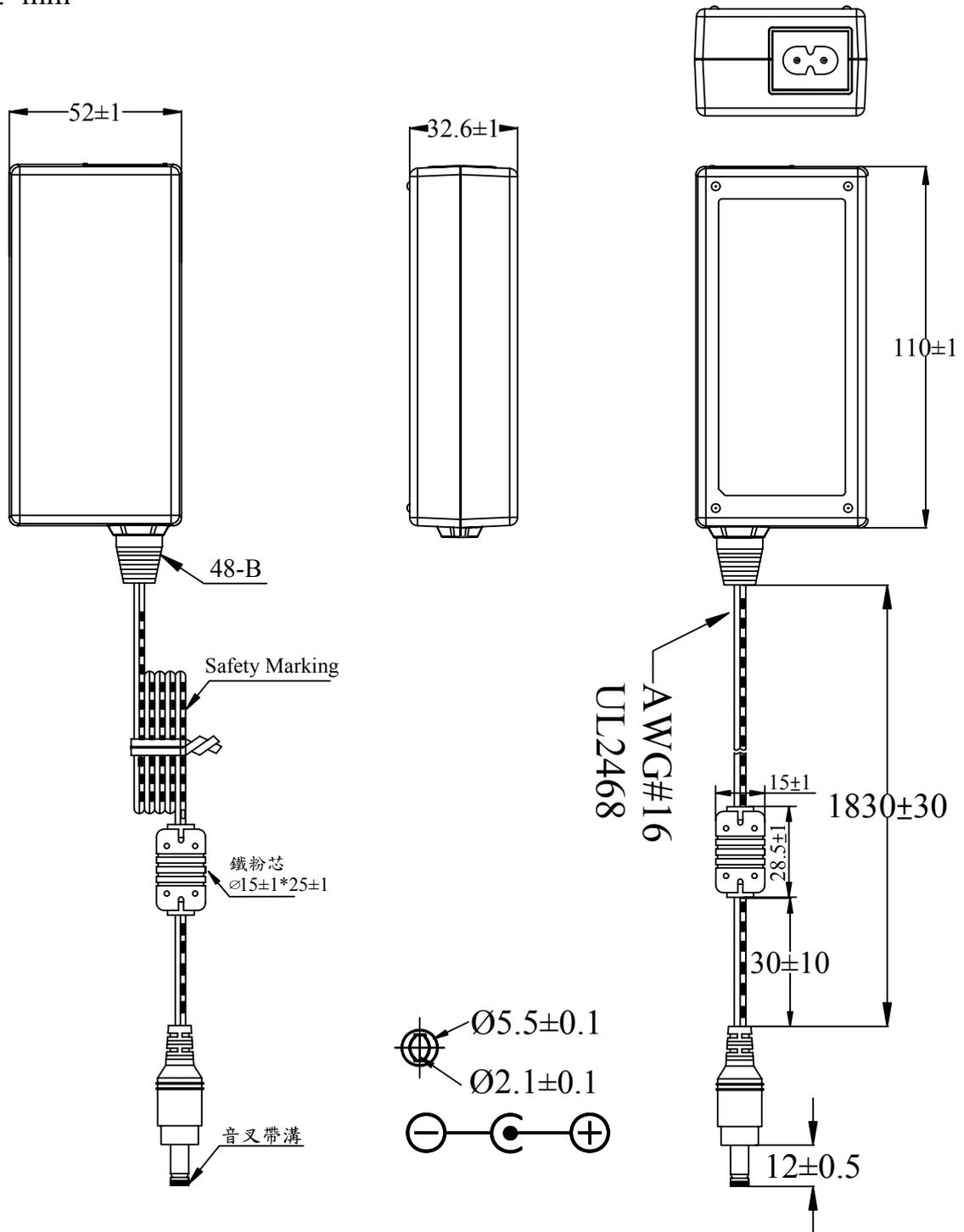
2nd Edition,2007-03 EN60950-1:2006+A11+A1+A12

技術基準 省令第2項 : J60950-1(H22), J55022(H22), J3000(H21)

Technical Requirements Clause 2: J60950-1 (H22): 2010, J55022 (H22): 2010, J3000 (H21): 2009  
AS/NZS 60950.1:2011 BS EN 60950-1: 2006

## 16. OVERALL DRAWING

UNIT: mm



## 17. PACKING

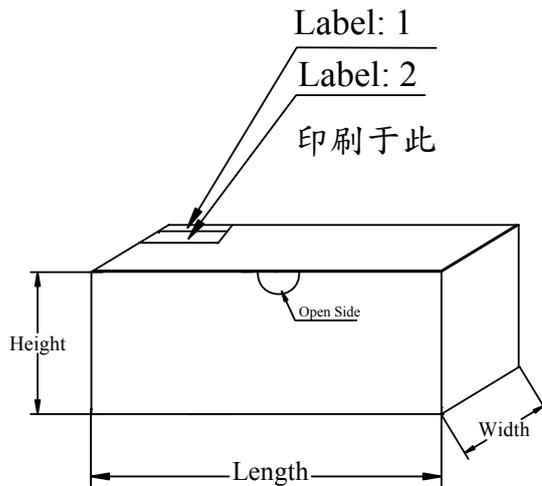
### 17.1 Inner Box

UNIT: mm

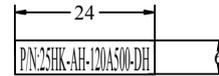
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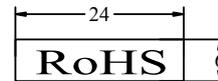
Height:55



Label: 1



Label: 2



### NOTICE:

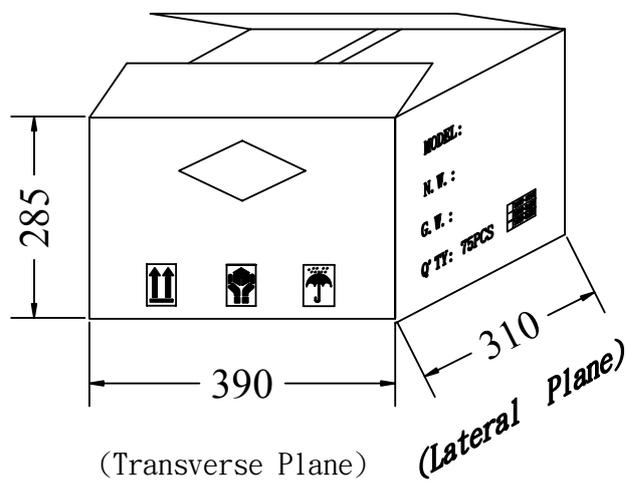
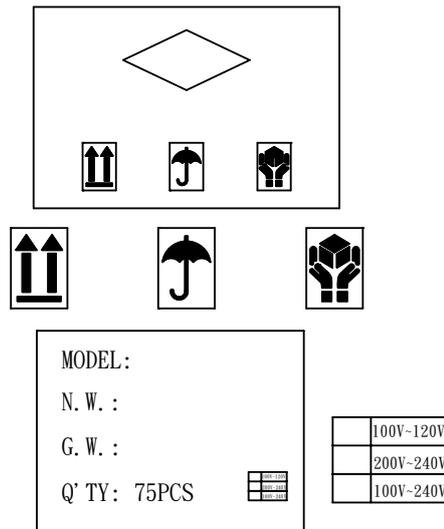
Its probably different from the white box of the sample and the figure dimension.  
The white box is used to pack during product.

注意:樣品使用的小白盒尺寸可能與此圖面尺寸不同,此圖面尺寸是用于生產時的包裝。

## 17. PACKING

### 17.2 Carton

UNIT: mm



## 18. MARKING

200# CPC 合成紙+上光 NAME-PLATE: WHITE CHARACTERS BLACK BACKGROUND.

UNIT: mm  $\overline{MMYYC}$   
 month | year  
 made in China  
 by Hon-kwang

