

# SPECIFICATION FOR APPROVAL

## Ideal Power

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

DESCRIPTION: I.T.E. POWER SUPPLY REV: (A1)

MODEL NO: HK-AB-120A250-D5 PART NO: HKSC-121760  
ROHS Compliance

DESIGNED NO: 121760-1029 DATE: MAR.01th.2013

CUSTOMER APPROVED SIGNATURES			VENDOR APPROVED SIGNATURES		
					



MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	1 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

## CONTENTS

1. INTRODUCTION
2. INPUT REQUIREMENTS
3. OUTPUT REQUIREMENTS
4. EFFICIENCY
5. LINE REGULATION
6. HOLD UP TIME
7. TURN ON TIME
8. TEMPERATURE COEFFICIENT
9. DIELECTRIC STRENGTH (Hi-Pot) TEST
10. INSULATION RESISTANCE
11. PROTECTION
12. ENVIRONMENTAL CONDITIONS
13. EMI/ EMC
14. RELIABILITY AND QUALITY CONTROL
15. SAFETY
16. OVERALL DRAWING
17. PACKING
18. MARKING

MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	2 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

### 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: 47 Hz to 63 Hz

2.3 Input Power Consumption at no-load : 0.3W Max

2.4 Input In-rush Current: 50A Max

2.5 Input Current: 0.8A Max

### 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +12V

3.2 Output Regulation: 11.4-12.6V

3.3 Output Load Range: 2.5A

3.4 Output Ripple & Noise: 150mV Max @20MHz bandwidth with  
10UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY:  $\geq 83.62\%$  @ 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.

MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	3 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

8.0 TEMPERATURE COEFFICIENT: 0.05%/°C

9.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

9.1 Primary to Secondary :AC 3000 Vrms ,4mA,1minute for type test,  
2 second for production test.

10.0 INSULATION RESISTANCE

Primary to secondary: 50M OHM to 500VDC.

11.0 PROTECTION

11.1 Input Protection

The switching power supply has a 2 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.

MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	4 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

## 12.0 ENVIRONMENTAL CONDITIONS

The switching power supply can withstand the following environmental conditions:

12.1 Storage Temperature: -20°C ~ +70 °C

Relative Humidity: 10% ~ 95%

12.2 Operation Temperature: 0°C ~ 40°C

Relative Humidity: 10% ~ 95%

## 13.0 EMI / EMC

The switching power supply has approved by the following standards:

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

(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)

## 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 BS EN60950-1:2006

AS/NZS 60950.1:2011

電気用品の技術上の基準を定める省令第2項

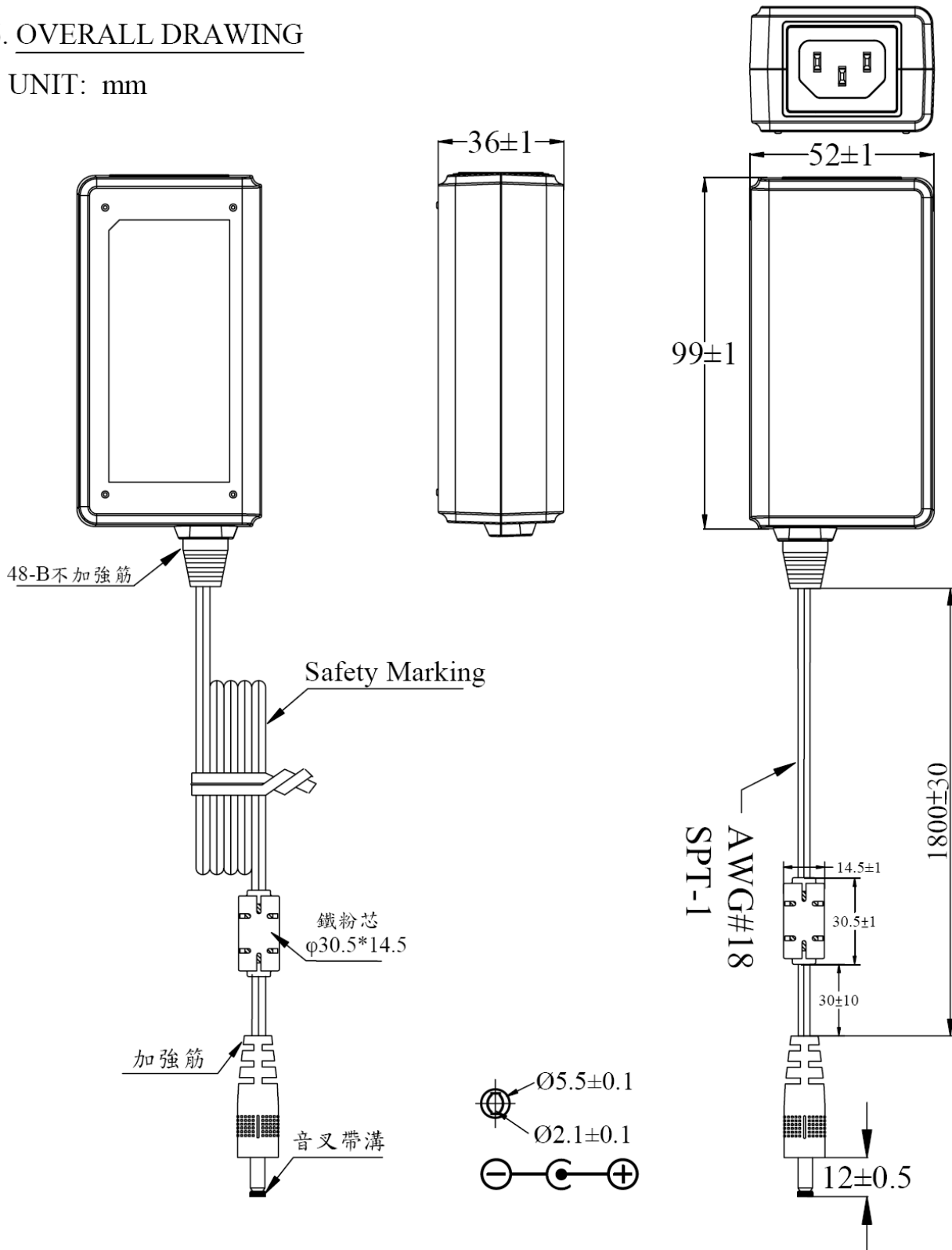
Article 2 of The Technical Requirements of the METI Ordinance

J60950-1 (H22) , J55022 (H22) 及び J3000 (H21)

MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	5 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

## 16. OVERALL DRAWING

UNIT: mm



MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	6 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

## 17. PACKING

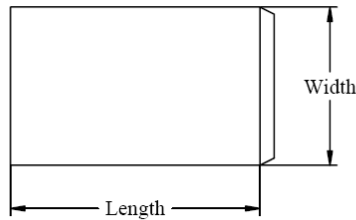
### 17.1 Inner Box

UNIT: mm

PE BAG

Length :

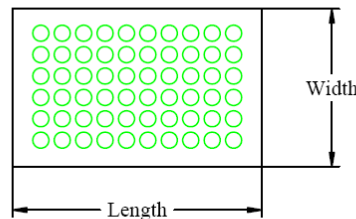
Width :



BUBBLE BAG

Length:

Width:

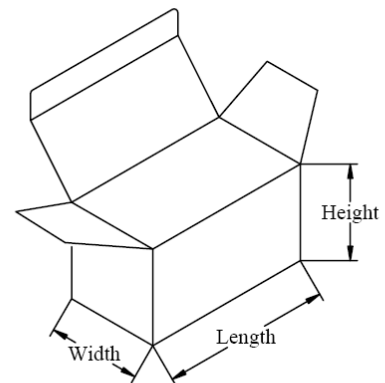


BOX(  Normal BOX  Corrugated BOX)

Length:120

Width: 60

Height: 52



### 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。

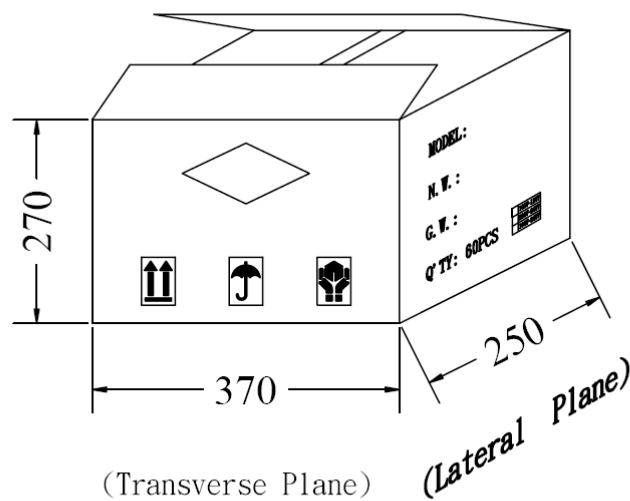
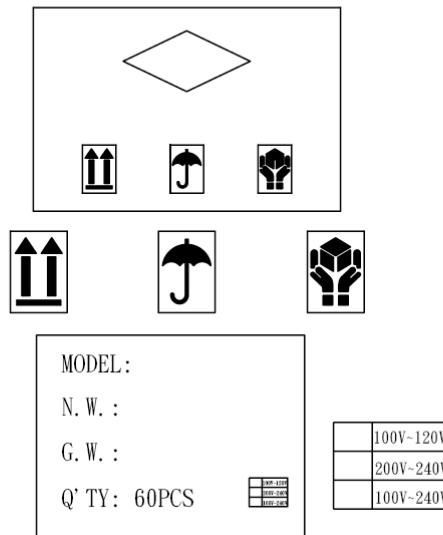


MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	7 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

## 17. PACKING

### 17.2 Carton

UNIT: mm



MODEL NO. :	HK-AB-120A250-D5	PAGE NO. :	8 OF 9
PART NO. :	HKSC-121760	ISSUED DATE:	2013.03.01
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A1)

### 18. MARKING

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

■ LASER PRINTING ON THE PLASTIC CASING.

UNIT: mm    M M Y Y C  
                   |    |    |  
                   month year  
                   made in China  
                   by Hon-kwang

