



IDEAL POWER  
IDEAL POWER SOLUTIONS

## SPECIFICATION FOR APPROVAL

# Ideal Power

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

DESCRIPTION: I.T.E. POWER SUPPLY REV: (A2)

HKSC-070395EP

MODEL NO: HK-CP12-A12 PART NO: ROHS Compliance

DESIGNED NO: 070395-0323 DATE: JUN.09th.2011

CUSTOMER APPROVED SIGNATURES			VENDOR APPROVED SIGNATURES		
					



MODEL NO. :	HK-CP12-A12	PAGE NO. :	1 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

## 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. USE SPECIFICATION
18. PACKING
19. MARKING

MODEL NO. :	HK-CP12-A12	PAGE NO. :	2 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

## 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

2.3 Input In-rush Current: 50A Max

2.4 Input Current: 0.8A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +12V

3.2 Output Regulation: 11.4V~12.6V

3.3 Output Load Range: 0~1.0A

3.4 Output Ripple & Noise: 120mV Max @20MHz bandwidth with  
22UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY:  $\geq 77.85\%$  @average of 25/50/75/100% loads 115&230VAC input

5.0 LINE REGULATION: 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-CP12-A12	PAGE NO. :	3 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

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.

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

10.0 INSULATION RESISTANCE

Primary to secondary: 50MOHM to 500VDC.

11.0 PROTECTION

11.1 Input Protection

The switching power supply has a 1 Amps inner current fuse to protect itself.

11.2 Output Protection

11.2.1 Output Current:

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

11.2.2 Short Circuit Protection: Auto Recovery.

11.2.3 Over Voltage Protection: 15V ±1V

MODEL NO. :	HK-CP12-A12	PAGE NO. :	4 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

## 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

(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:

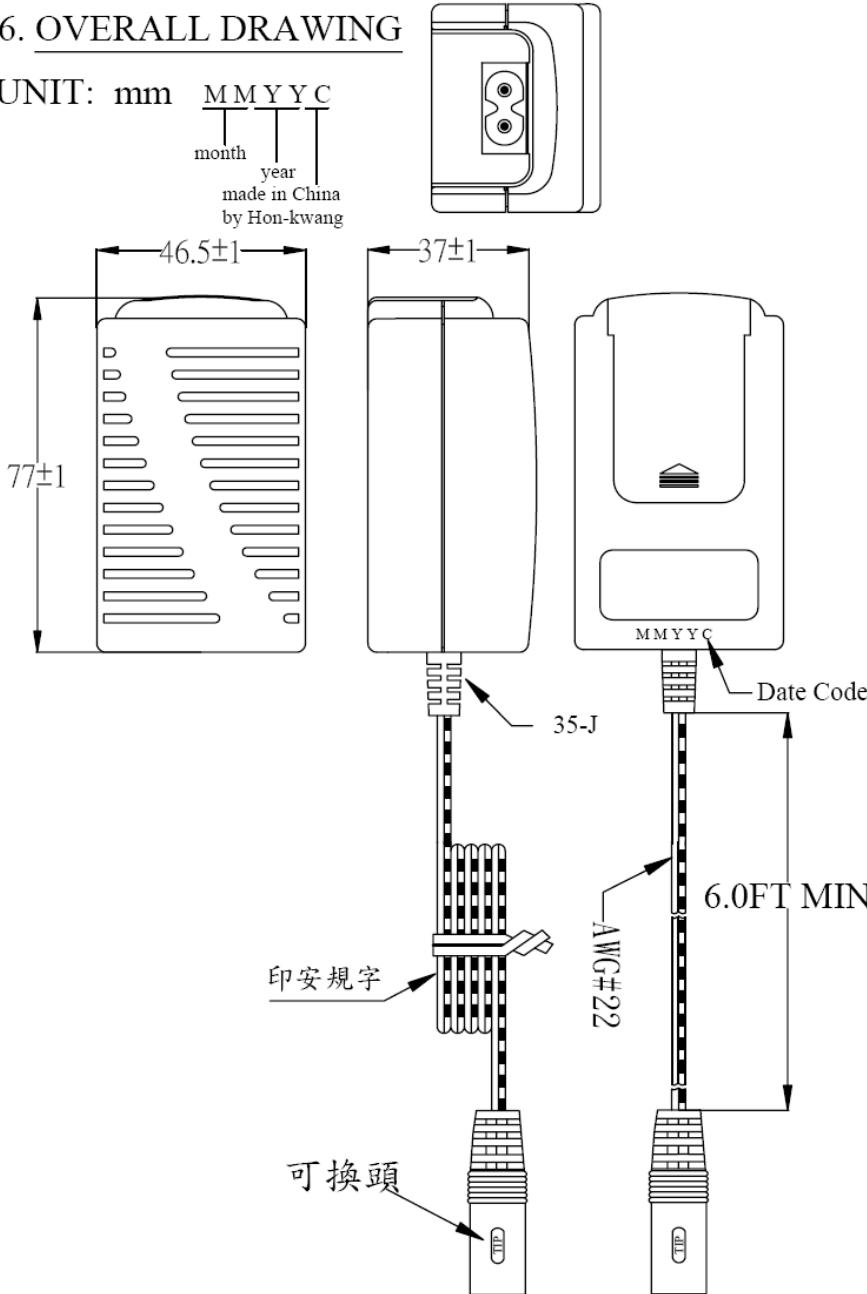
UL60950-1 (First Edition) CAN/CSA-C22.2 No.950-95

IEC60950-1: 2001, EN60950-1: 2001 AS/NZS60950-1

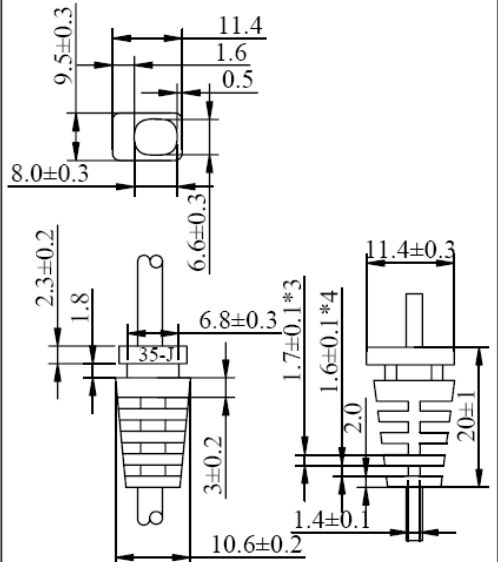
MODEL NO. :	HK-CP12-A12	PAGE NO. :	5 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

### 16. OVERALL DRAWING

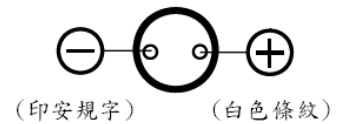
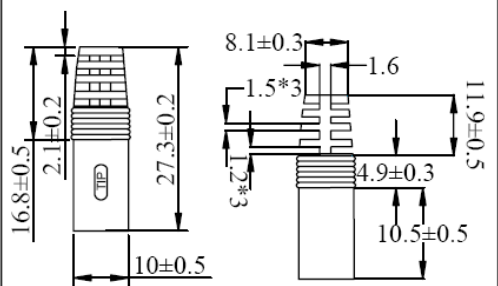
UNIT: mm **MMYYC**  
 month      year  
 made in China  
 by Hon-kwang



未注標尺寸公差: ±0.2

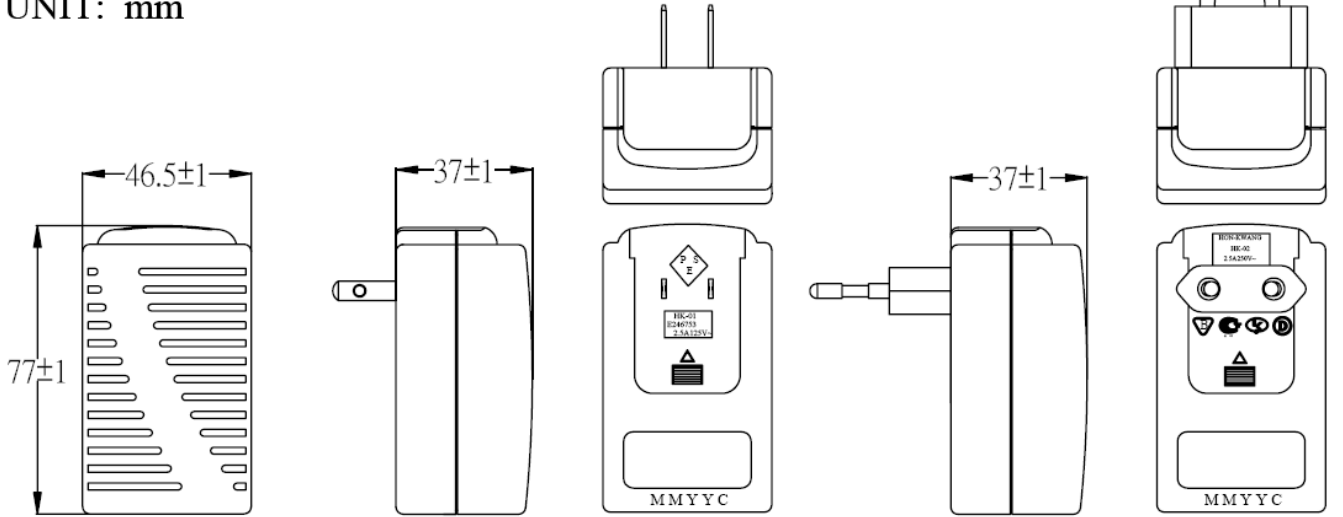


未注標尺寸公差: ±0.2



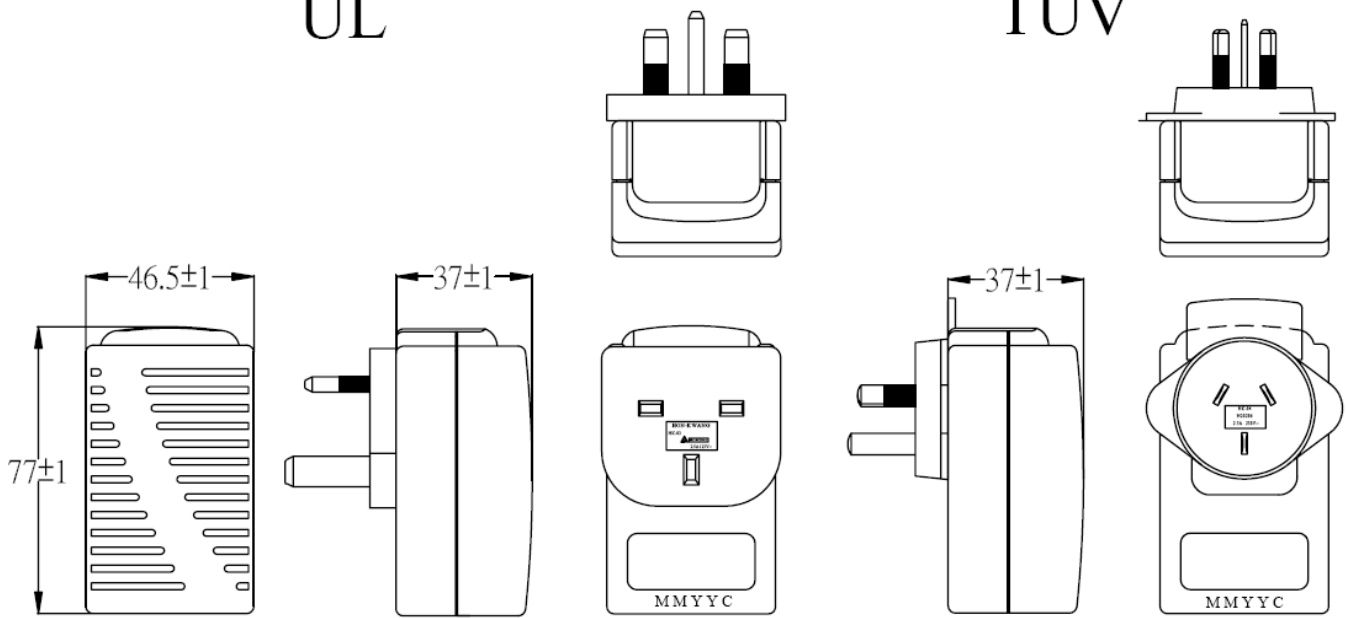
MODEL NO. :	HK-CP12-A12	PAGE NO. :	6 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

UNIT: mm



UL

TUV



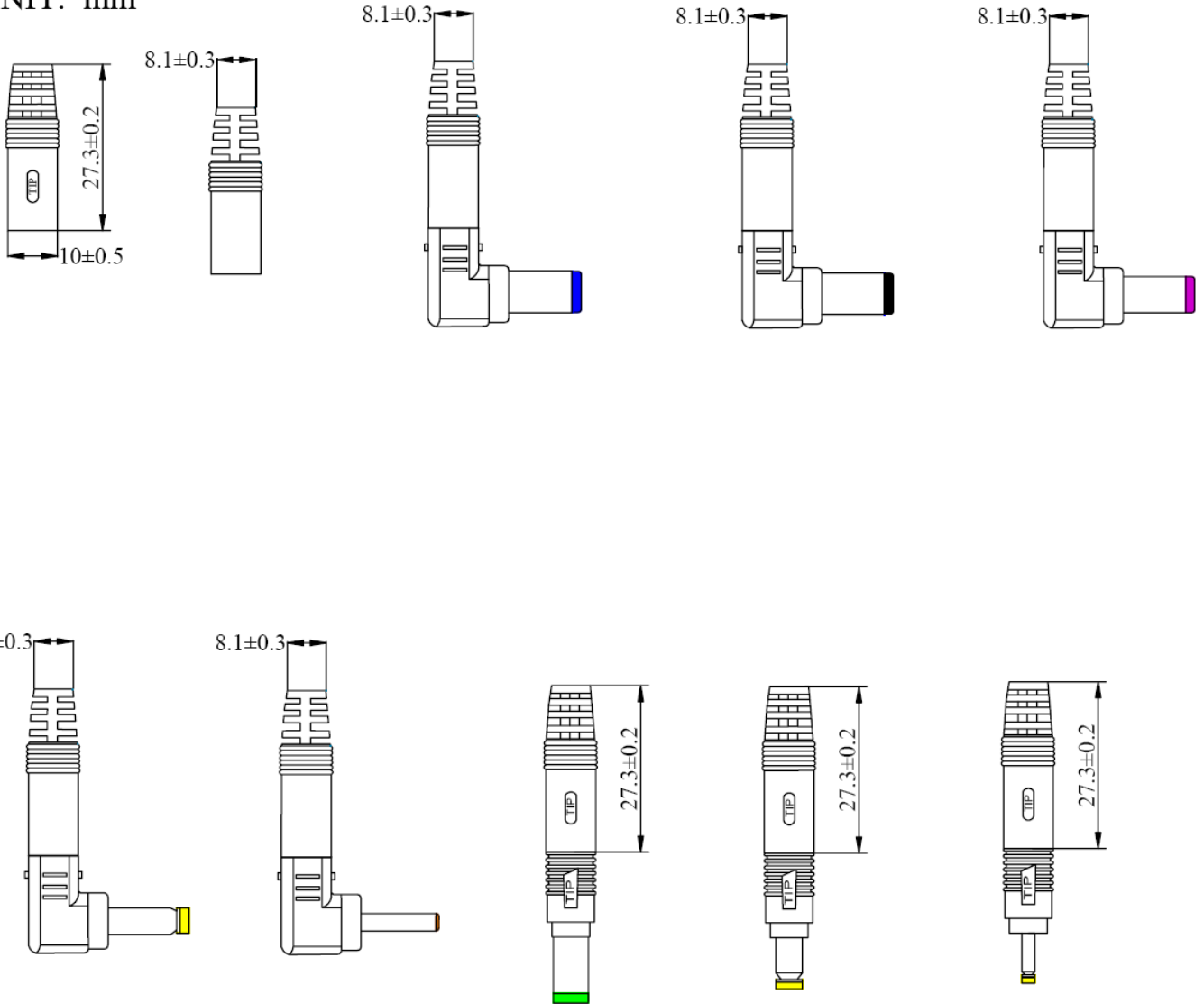
UK

SAA



MODEL NO. :	HK-CP12-A12	PAGE NO. :	7 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

UNIT: mm

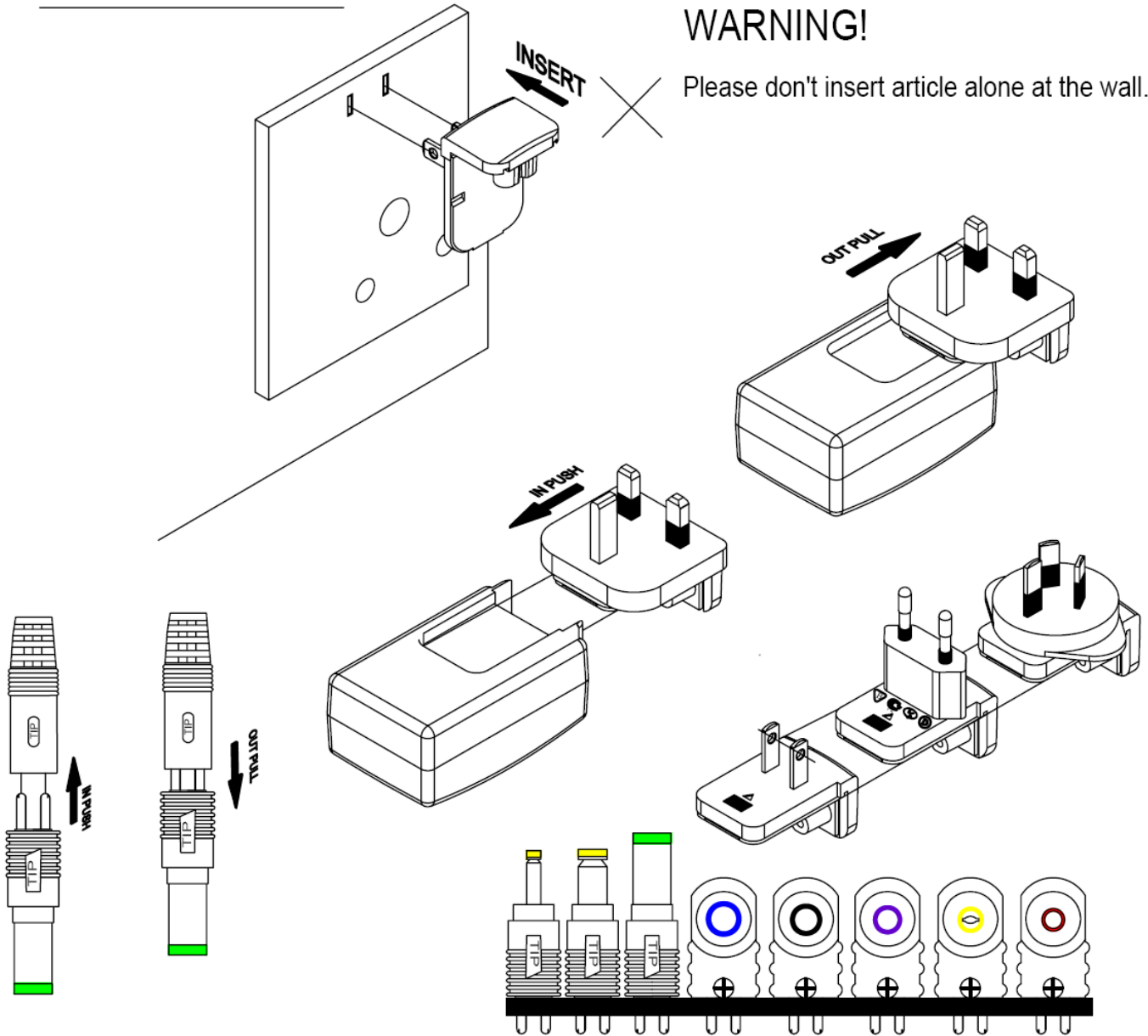


MODEL NO. :	HK-CP12-A12	PAGE NO. :	8 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

## 17. USE SPECIFICATION

### WARNING!

Please don't insert article alone at the wall.



MODEL NO. :	HK-CP12-A12	PAGE NO. :	9 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

## 18. PACKING

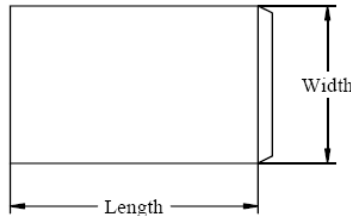
### 18.1 Inner Box

UNIT: mm

PE BAG

Length :

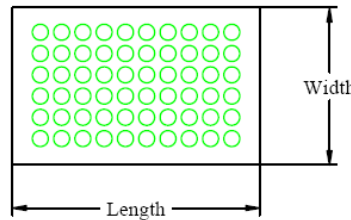
Width :



BUBBLE BAG

Length:

Width:

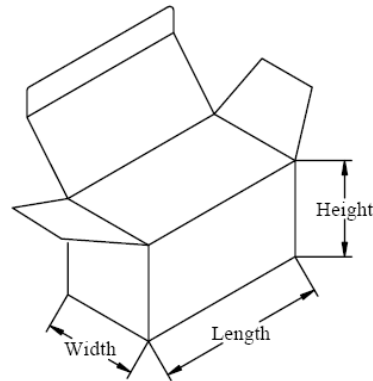


BOX(  Normal BOX  Corrugated BOX)

Length: 143

Width: 70

Height: 60



### NOTICE:

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

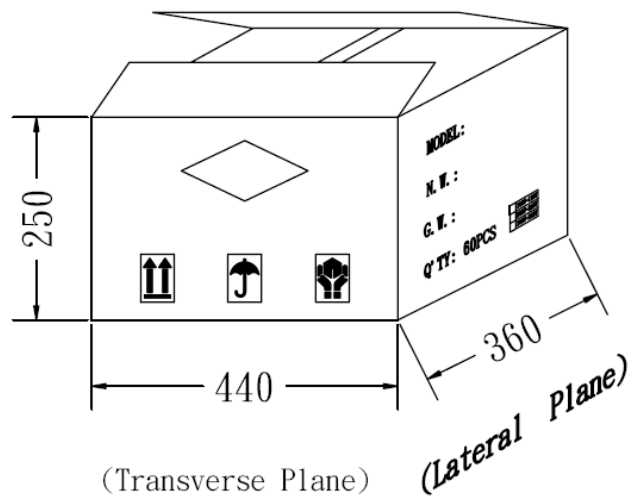
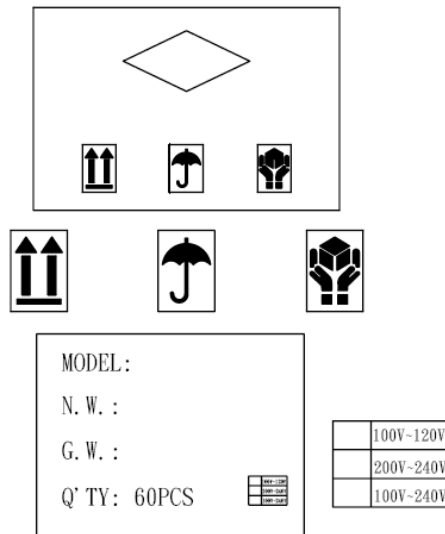
注意: 樣品使用的小白盒尺寸可能與此圖面尺寸不同, 此圖面尺寸是用于生產時的包裝。

MODEL NO. :	HK-CP12-A12	PAGE NO. :	10 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

## 18. PACKING

### 18.2 Carton

UNIT: mm

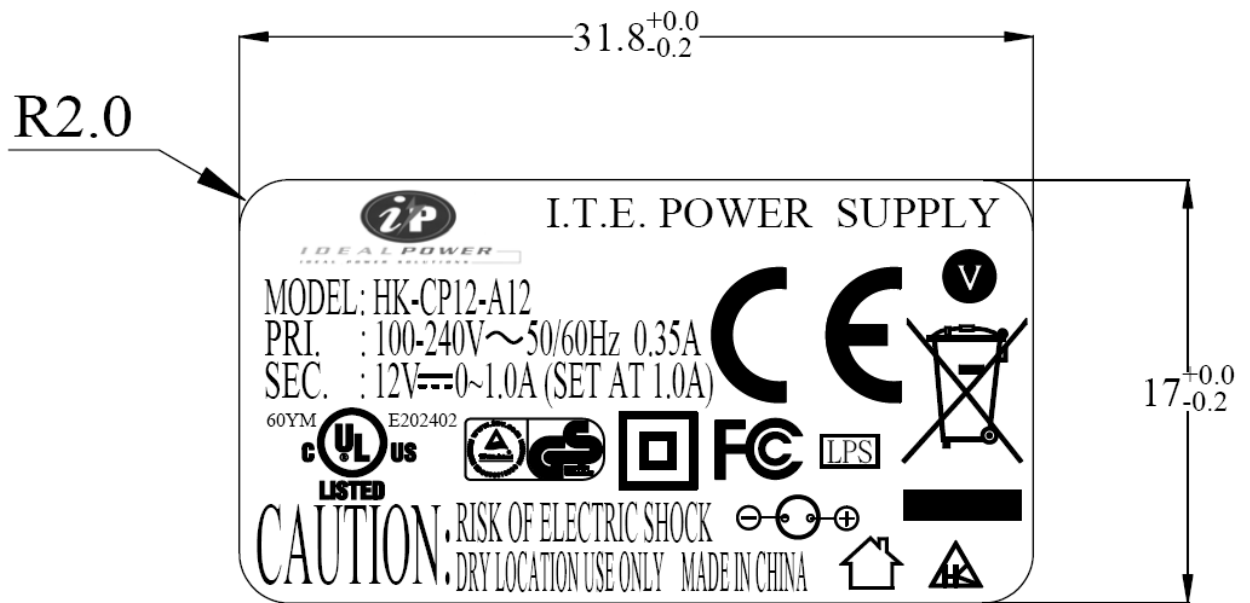


MODEL NO. :	HK-CP12-A12	PAGE NO. :	11 OF 12
PART NO. :	HKSC-070395EP	ISSUED DATE:	2011.06.09
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A2)

### 19. MARKING

0.2mm 變色龍 NAME-PLATE:SILVER CHARACTERS BLACK BACKGROUND.

UNIT: mm



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