



**IDEAL POWER**  
IDEAL POWER SOLUTIONS

# FOR APPROVAL

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

DESCRIPTION: I.T.E. POWER SUPPLY REV: (A0)

HKSC-070699EP

MODEL NO: HK-HP-A15

PART NO: ROHS Compliance

DESIGNED NO: 070699-0615 DATE: JUN.16th.2007

APPROVED SIGNATURES			



MODEL NO. :	HK-HP-A15	PAGE NO. :	1 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 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-HP-A15	PAGE NO. :	2 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 1.0 INTRODUCTION

This document specifies a switching power supply with a output of +15V, 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 : 0.5W MAX

2.4 Input In-rush Current: 50A Max

2.5 Input Current: 0.8A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +15V

3.2 Output Regulation: 14.25V~17.75V

3.3 Output Load Range: 0~2.0A

3.4 Output Ripple & Noise: 150mV Max @20MHz BANDWIDTH WITH  
22UF/50V CAPACITANCE AND 104/50V CERAMIC CAPACITOR

4.0 EFFICIENCY:  $\geq 80.61\%$  @ AVERAGE OF 25/50/75/100% LOADS & 115 VAC 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-HP-A15	PAGE NO. :	3 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

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 2 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.



MODEL NO. :	HK-HP-A15	PAGE NO. :	4 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 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

(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:

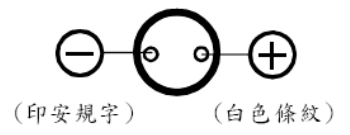
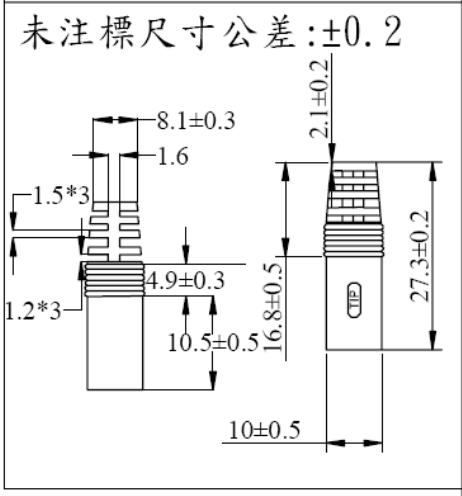
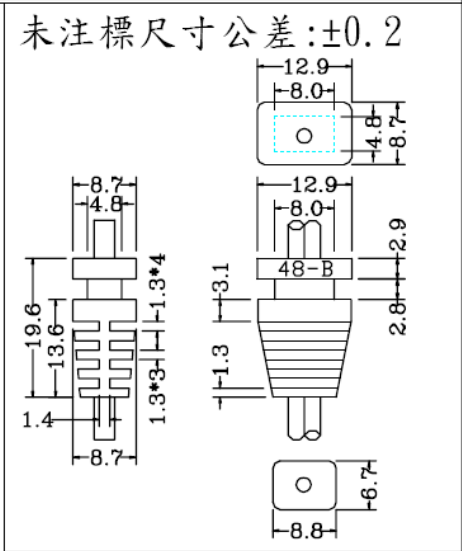
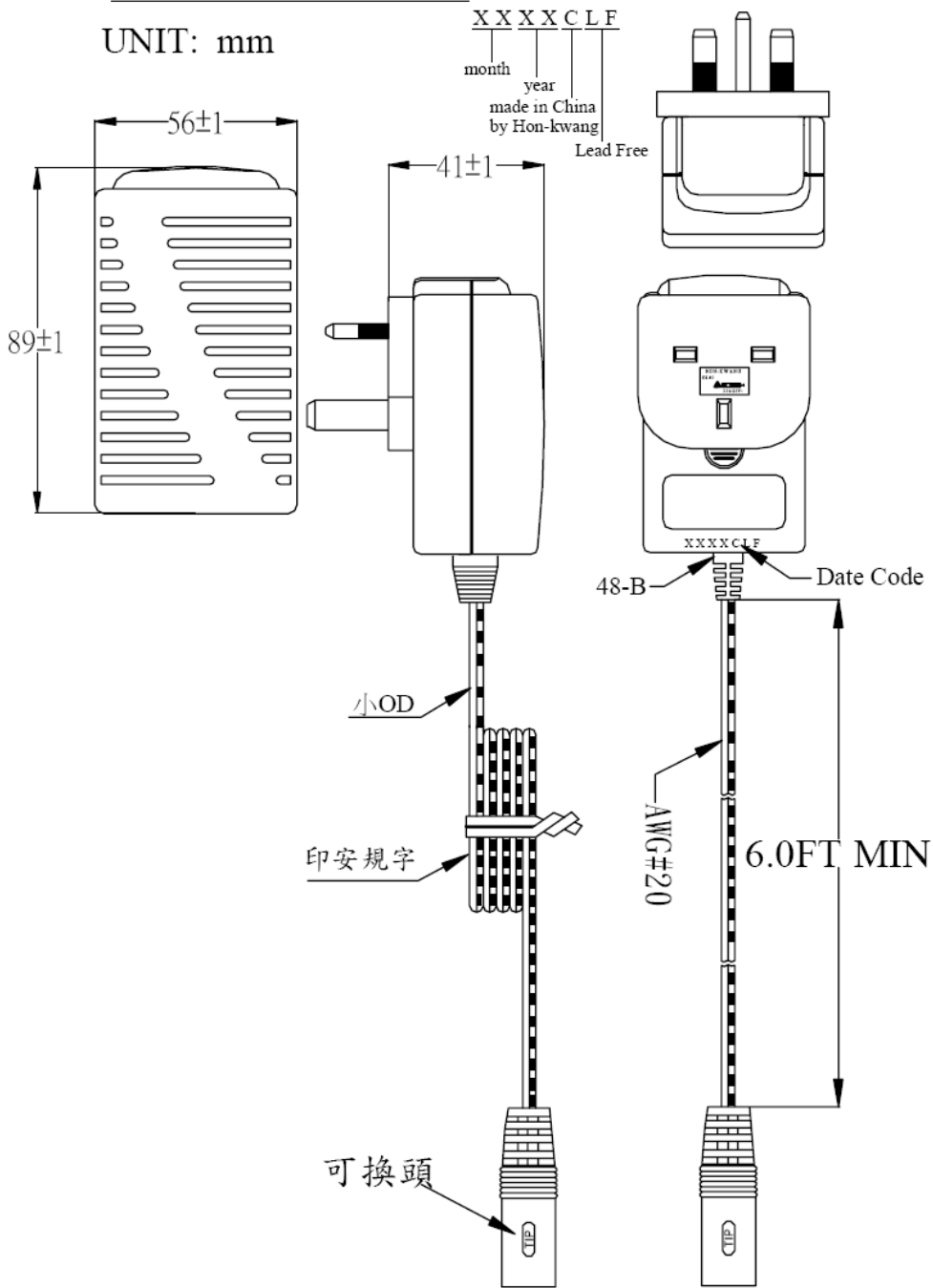
UL60950-1 (First Edition) CAN/CSA-C22.2 No.950-95

IEC60950-1: 2001, EN60950-1: 2001

MODEL NO. :	HK-HP-A15	PAGE NO. :	5 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

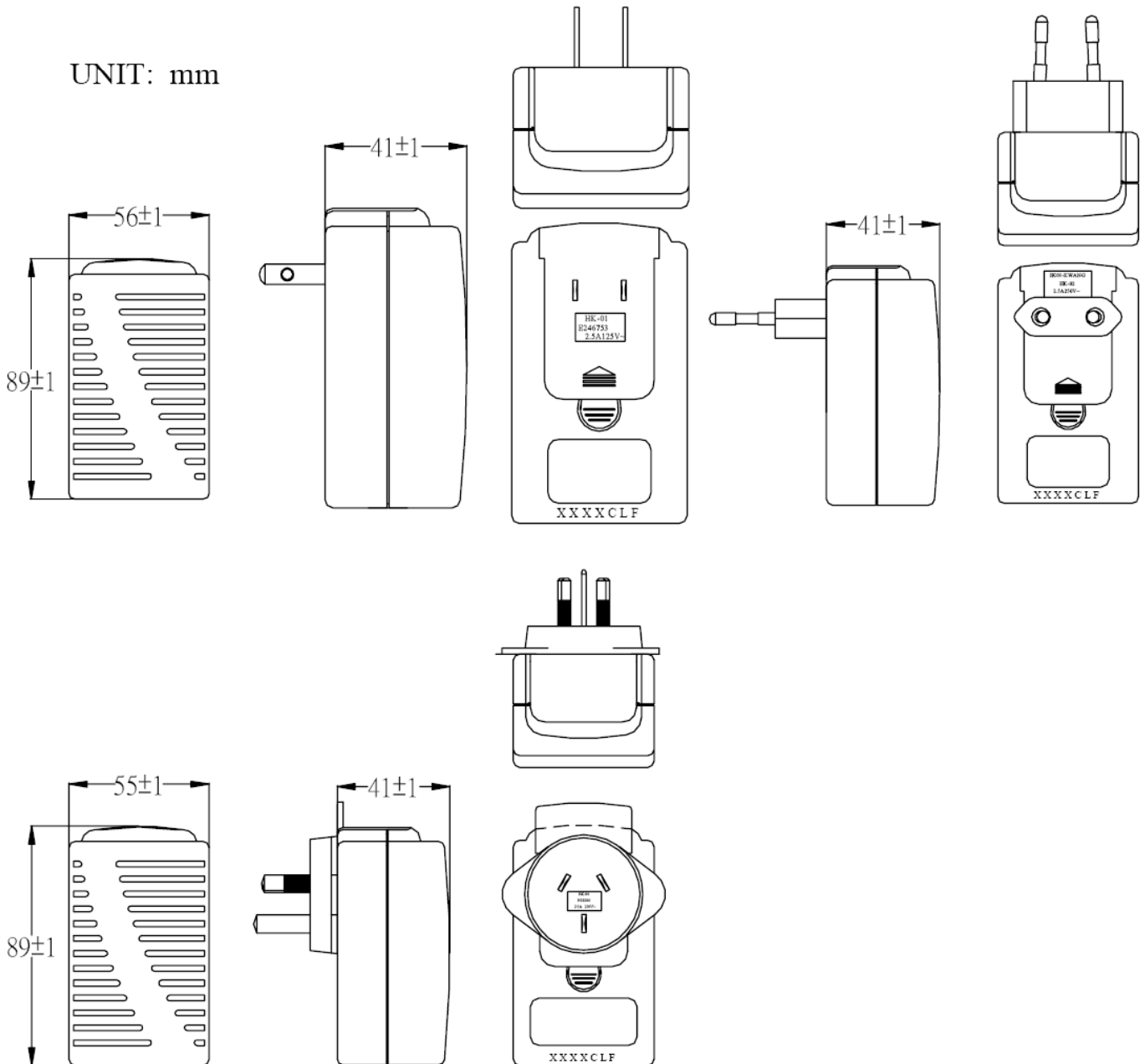
16. OVERALL DRAWING

UNIT: mm



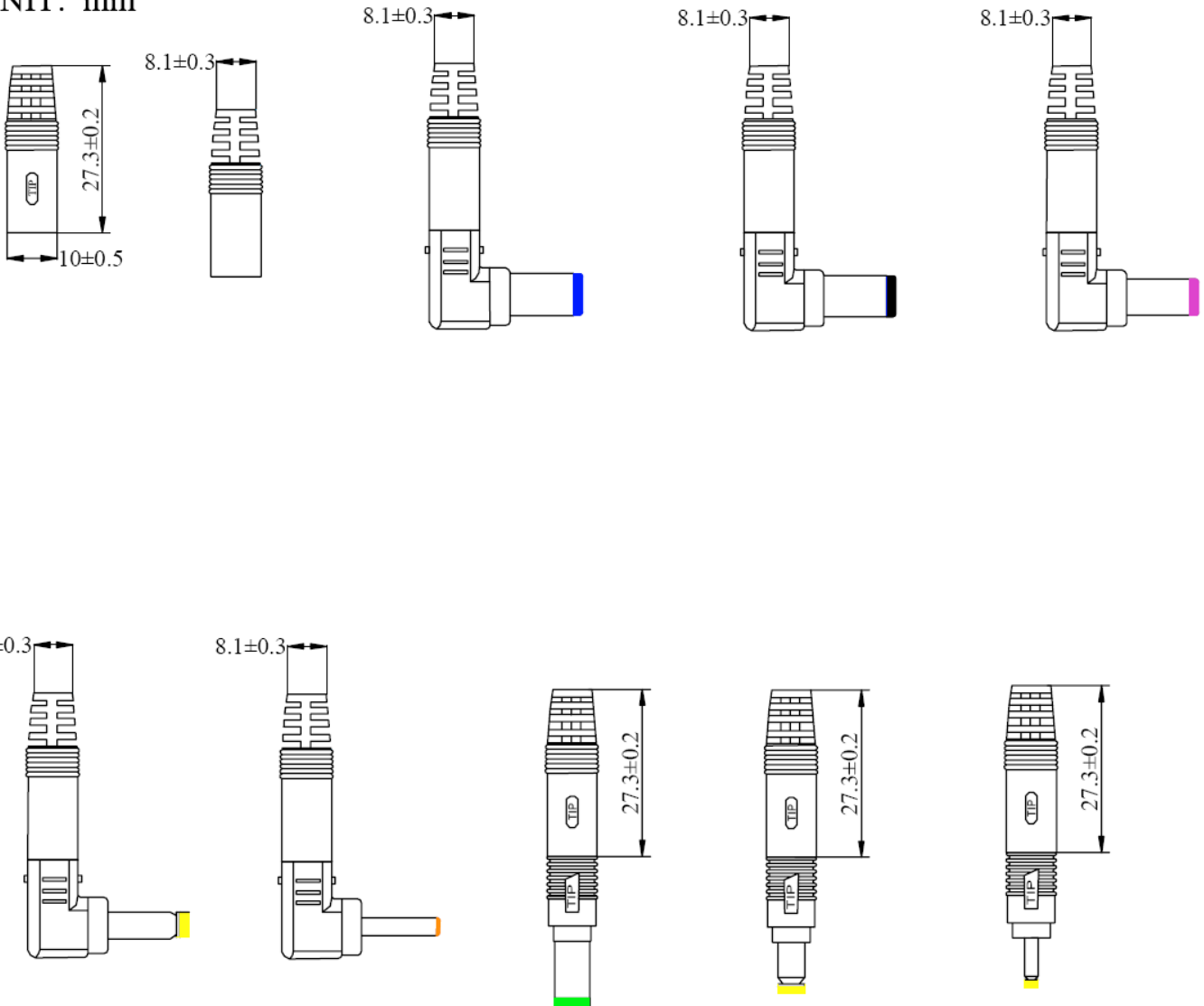
MODEL NO. :	HK-HP-A15	PAGE NO. :	6 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

UNIT: mm



MODEL NO. :	HK-HP-A15	PAGE NO. :	7 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

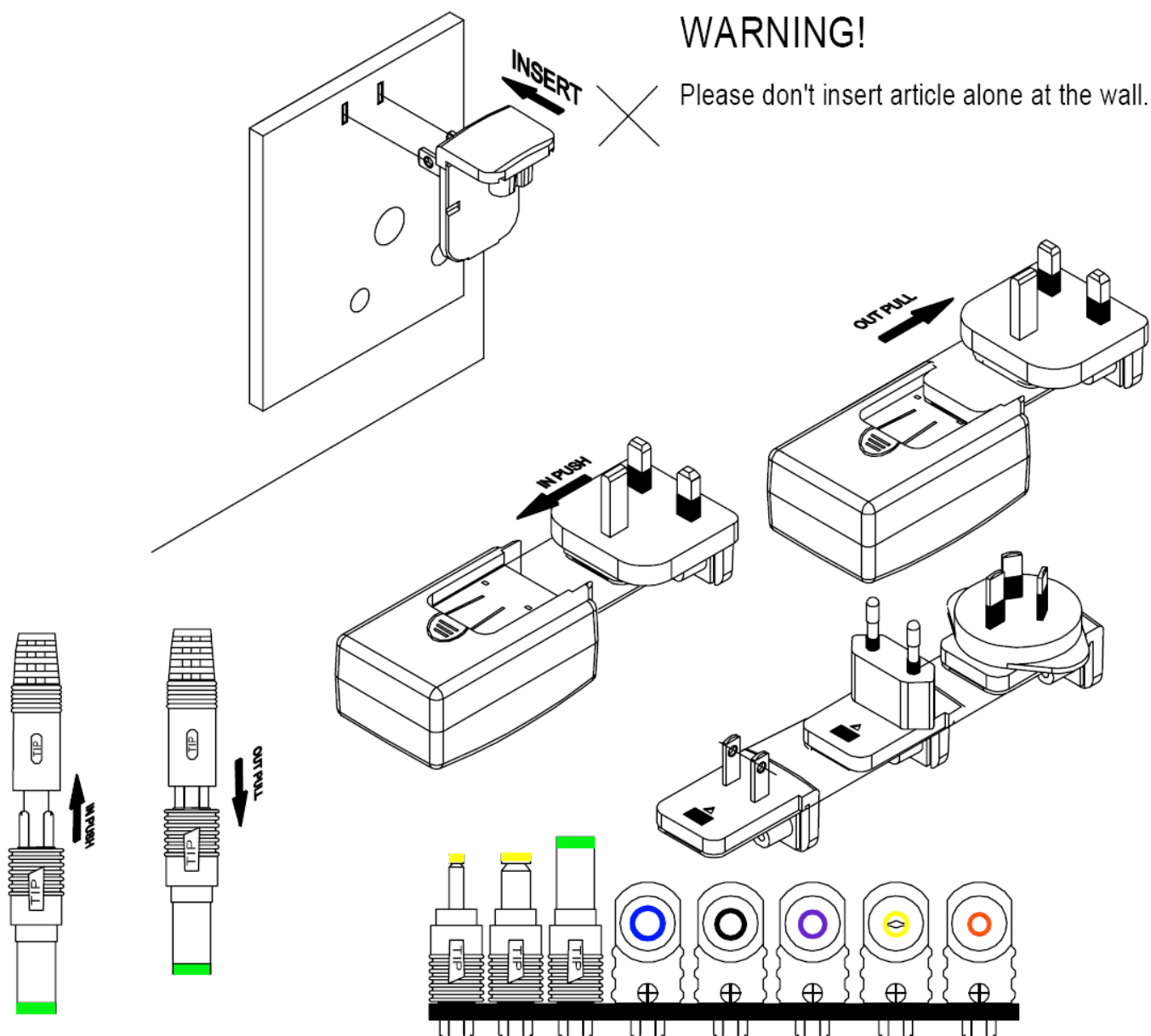
UNIT: mm





MODEL NO. :	HK-HP-A15	PAGE NO. :	8 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 17. USE SPECIFICATION



### WARNING!

Please don't insert article alone at the wall.

MODEL NO. :	HK-HP-A15	PAGE NO. :	9 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 18. PACKING

### 18.1 Inner Box

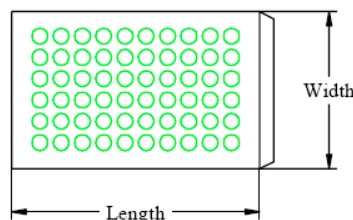
UNIT: mm

Bubble bag only used for samples, not for finished products.

BUBBLE BAG

Length : 160

Width : 150

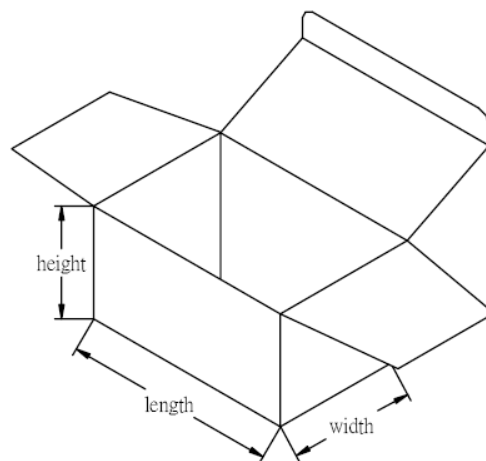


BOX

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.

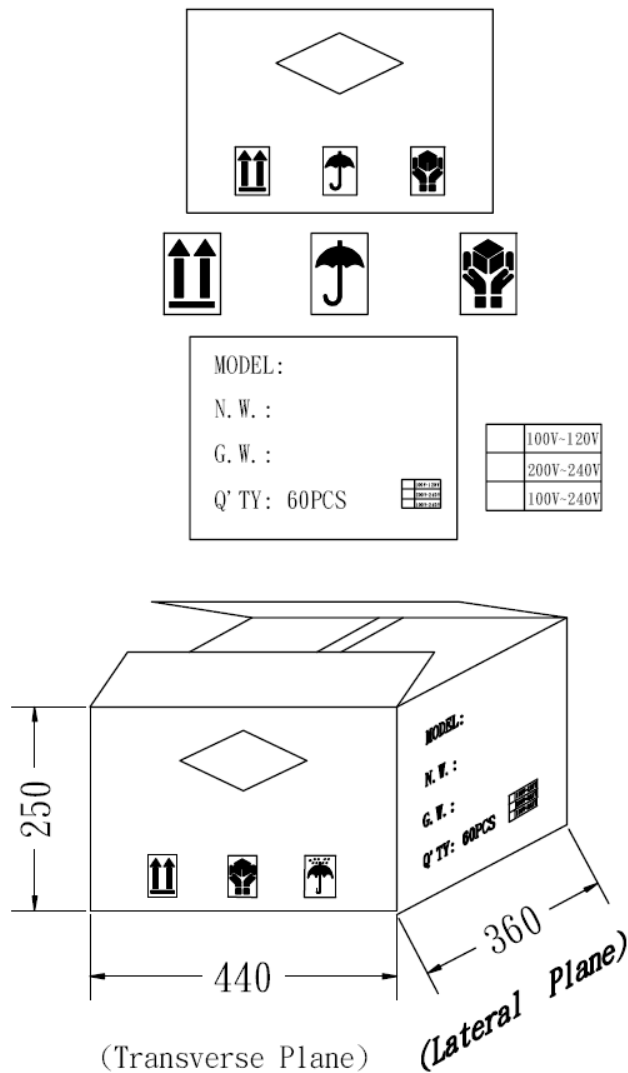
注意:樣品使用的小白盒尺寸可能與此圖面尺寸不同,此圖面尺寸是用于生產時的包裝.

MODEL NO. :	HK-HP-A15	PAGE NO. :	10 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

## 18. PACKING

### 18.2 Carton

UNIT: mm





MODEL NO. :	HK-HP-A15	PAGE NO. :	11 OF 12
PART NO. :	HKSC-070699EP	ISSUED DATE:	2007.06.16
DESCRIPTION :	I.T.E. POWER SUPPLY	REV:	(A0)

19. MARKING

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

UNIT: mm

