



IDEAL POWER
IDEAL POWER SOLUTIONS

FOR APPROVAL

CUSTOMER: _____

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

HKSC-070396EP

MODEL NO: HK-HP-A12

PART NO: ROHS Compliance

DESIGNED NO: 070396-0323 DATE: JUN.16th.2007

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: 47 Hz to 63 Hz

2.3 Input Power Consumption at no-load : 0.5W 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: 0~2.5A

3.4 Output Ripple & Noise: 120mV 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.

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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.

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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:

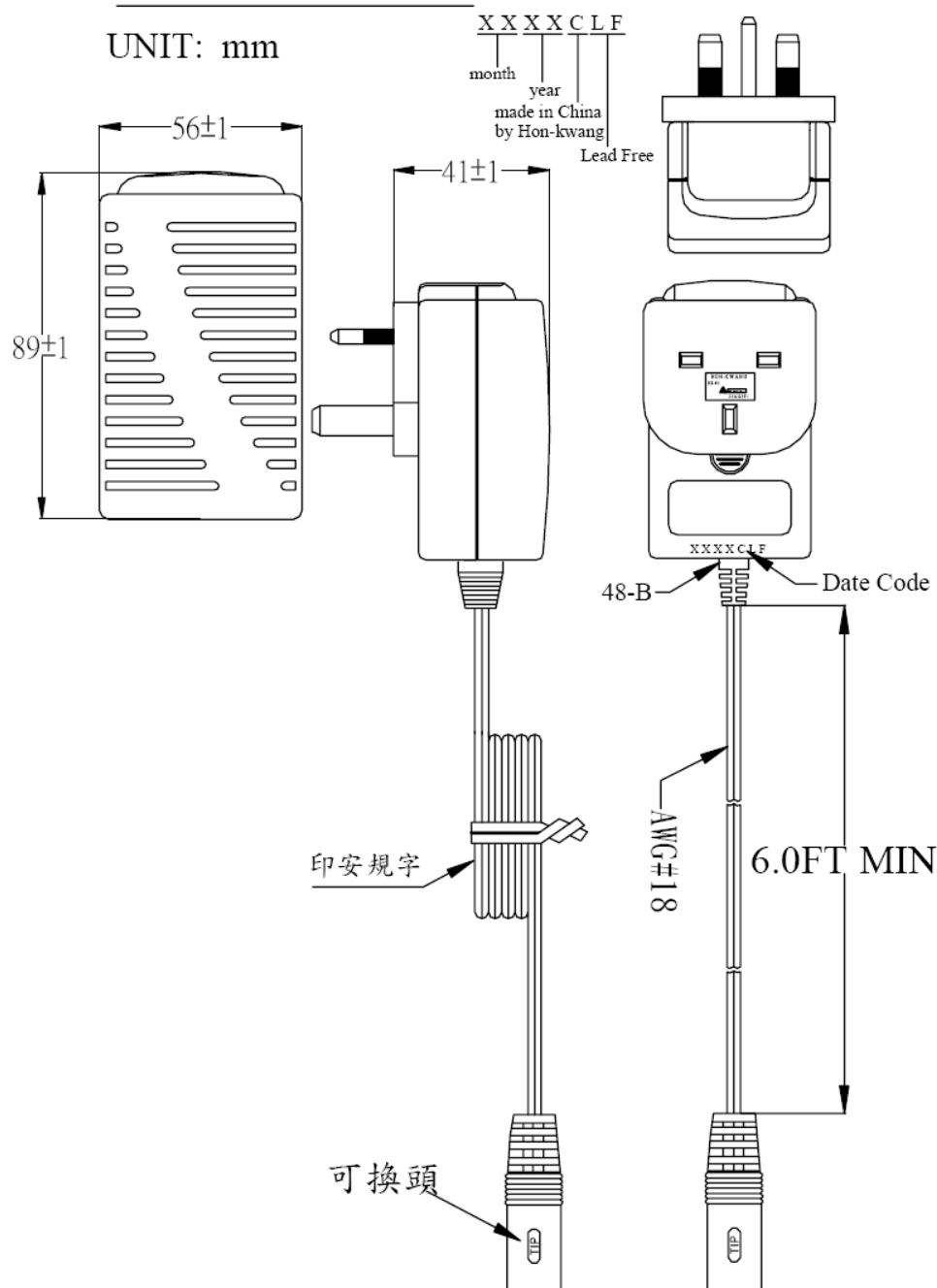
UL60950-1 (First Edition) CAN/CSA-C22.2 No.950-95

IEC60950-1: 2001, EN60950-1: 2001

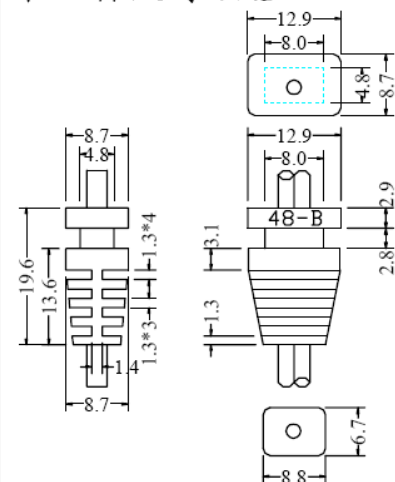
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16. OVERALL DRAWING

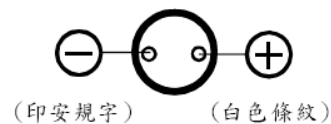
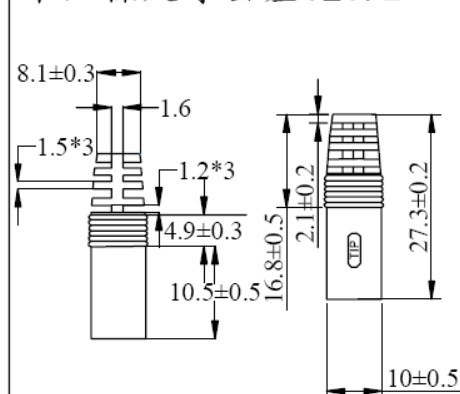
UNIT: mm



未注標尺寸公差:±0.2

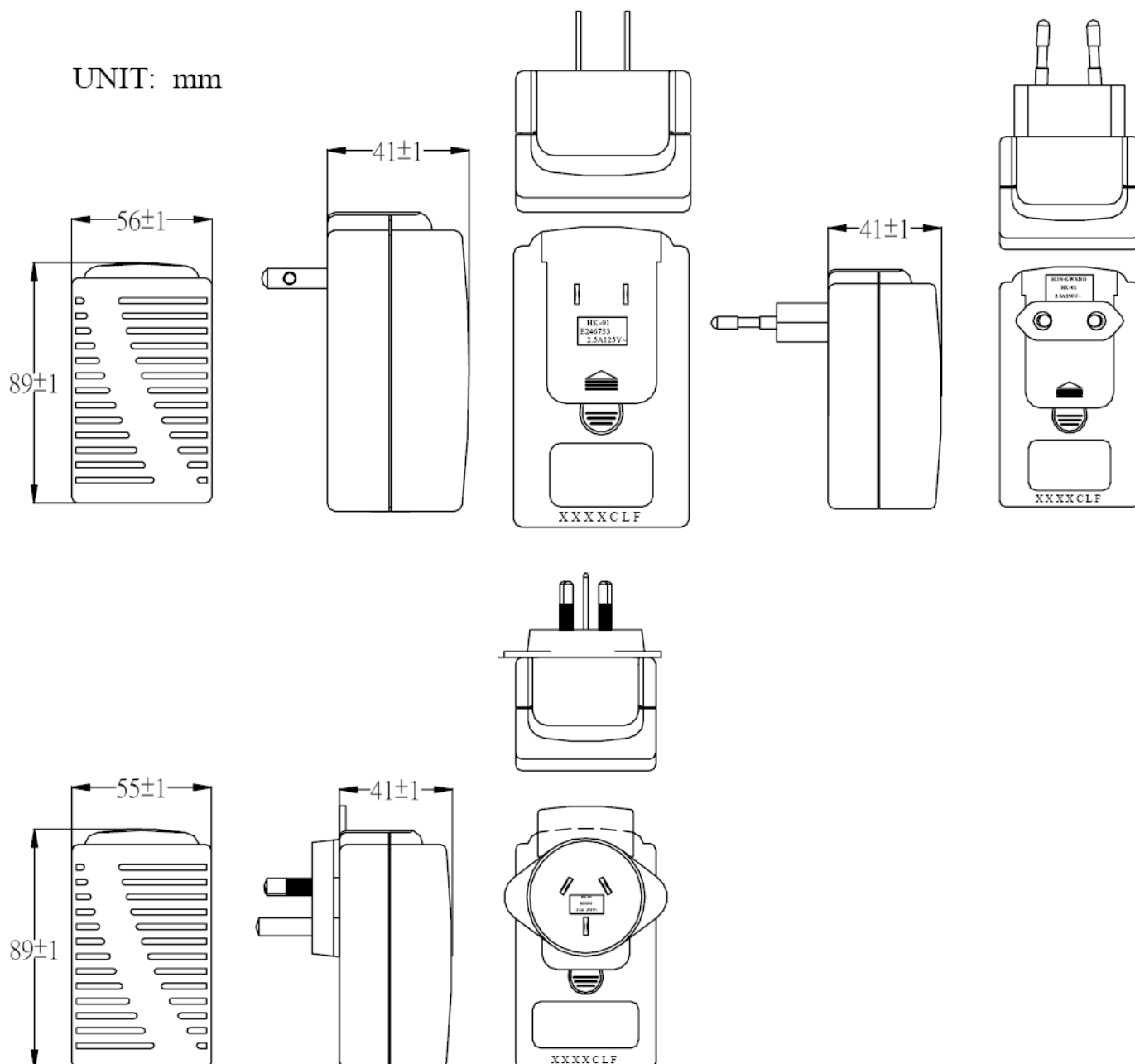


未注標尺寸公差:±0.2



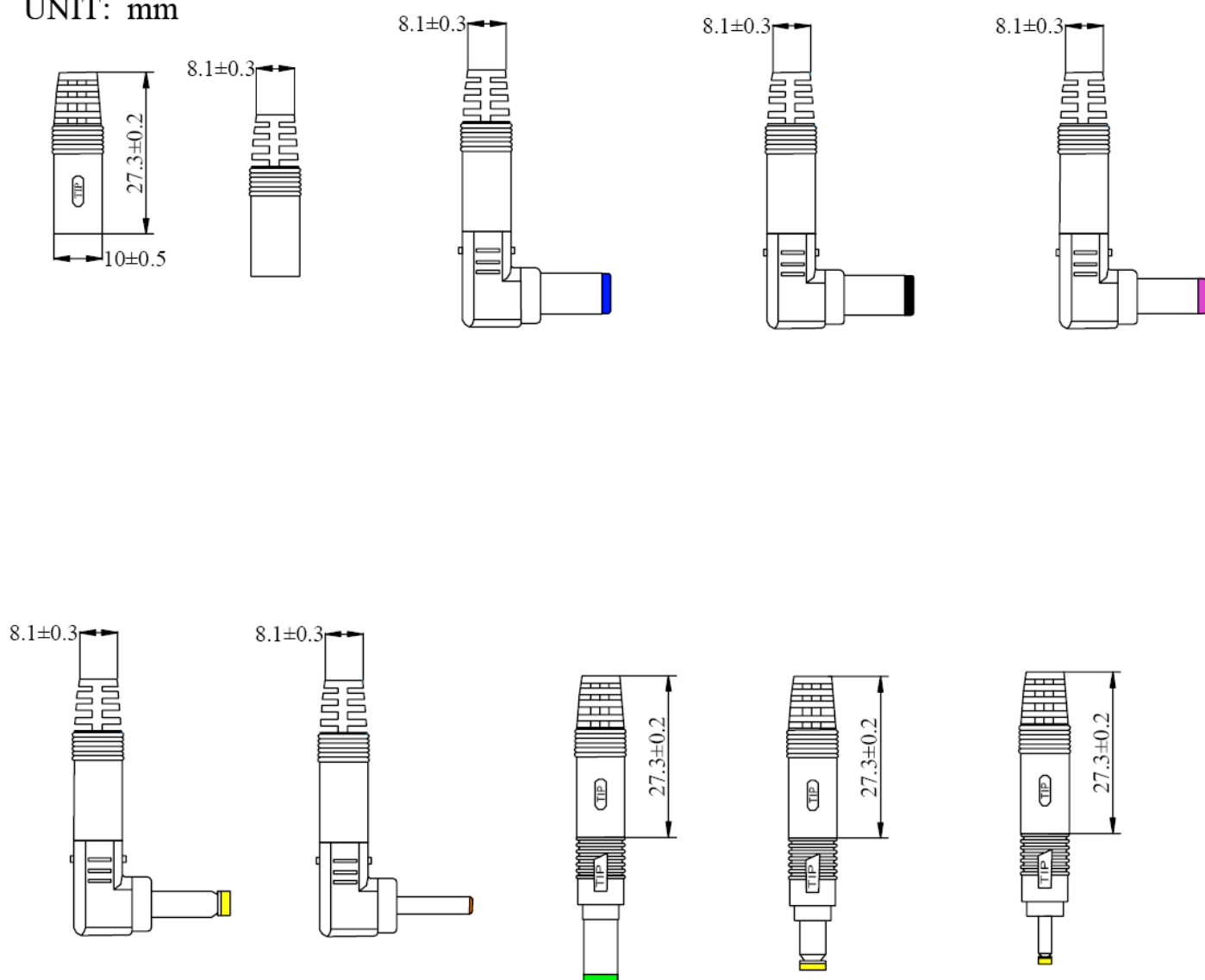
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UNIT: mm



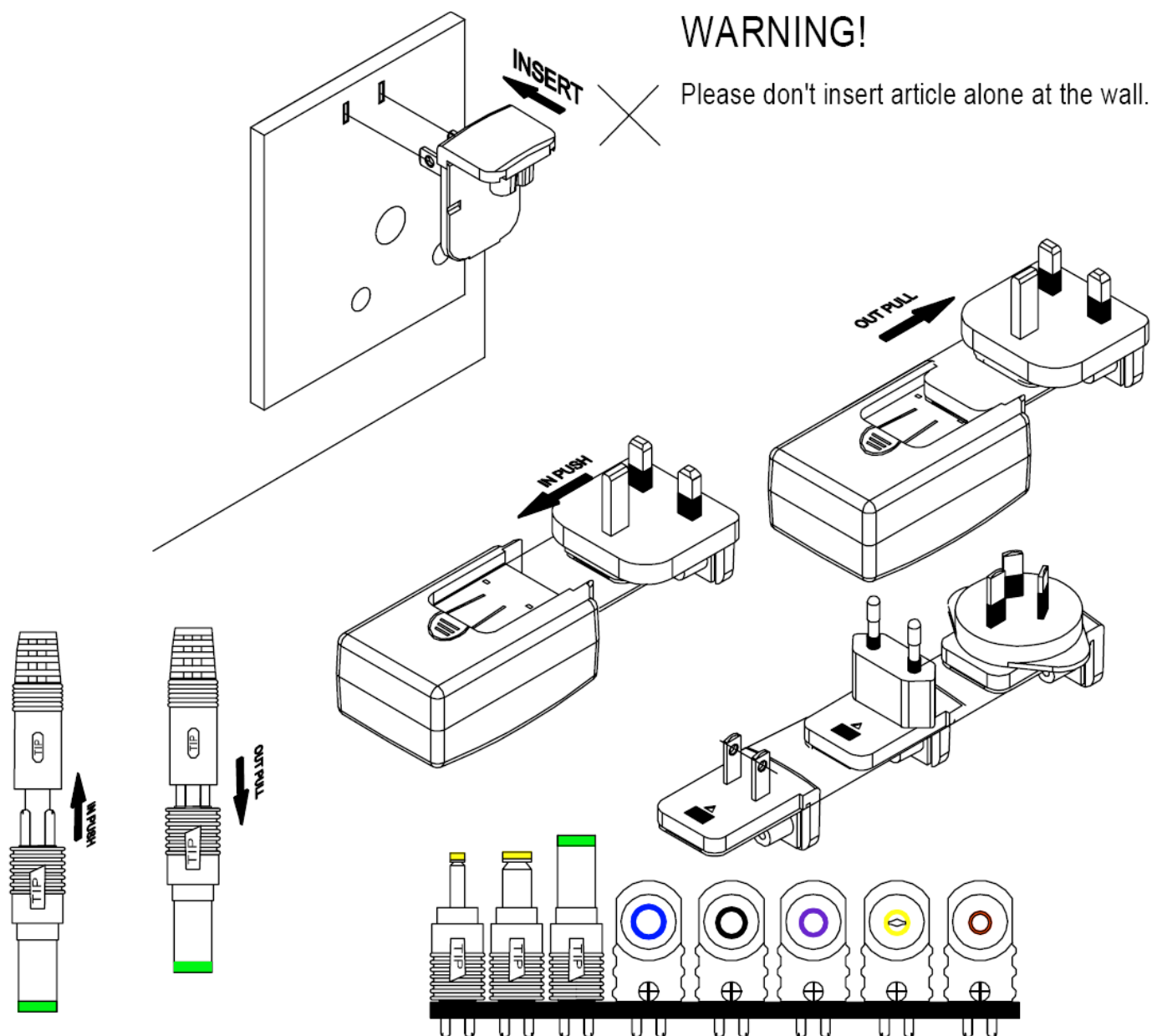
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UNIT: mm



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17. USE SPECIFICATION



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18. PACKING

18.1 Inner Box

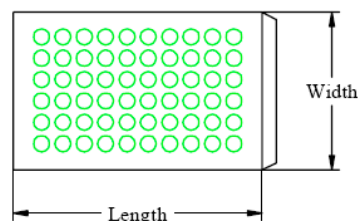
UNIT: mm

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

BUBBLE BAG

Length : 160

Width : 150

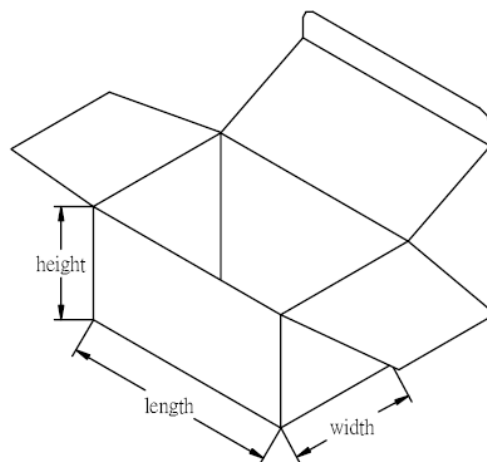


BOX

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.

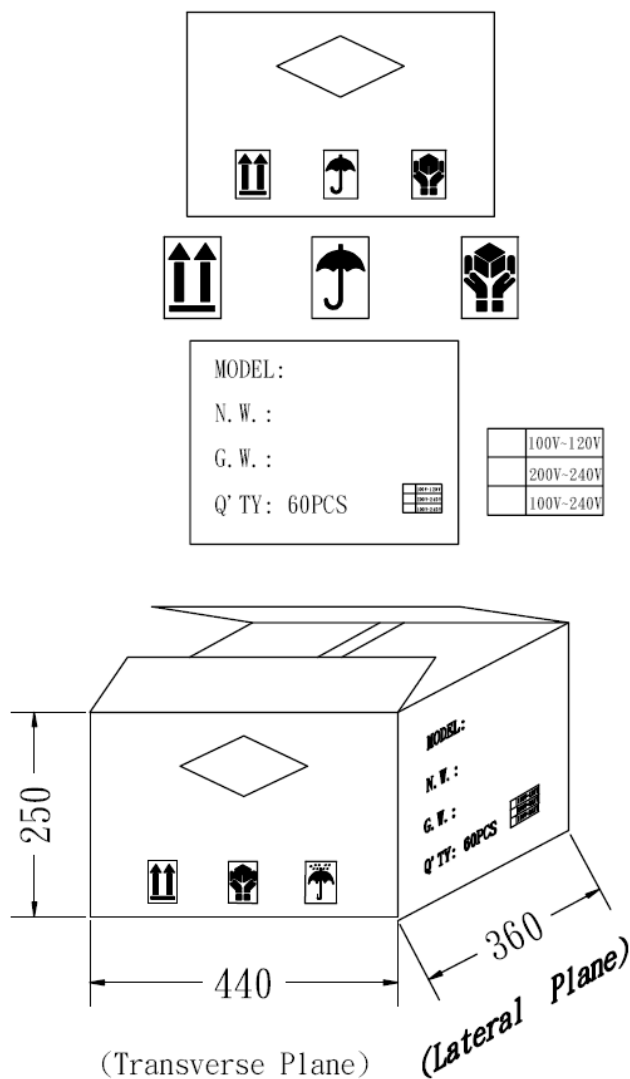
注意: 樣品使用的小白盒尺寸可能與此圖面尺寸不同, 此圖面尺寸是用于生產時的包裝.

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18. PACKING

18.2 Carton

UNIT: mm



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19. MARKING

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

UNIT: mm

