



HON-KWANG ELECTRIC CO., LTD.  
HON-KWANG ELECTRIC(SHENZHEN) CO., LTD  
HON-KWANG ELECTRIC(KUNSHAN) CO., LTD

## SPECIFICATION FOR APPROVAL

# Jameco

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

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

MODEL NO: HK-AR-050A200-US PART NO: HKSC-180181

DESIGNED NO: 180181-0510 DATE: MAY.10th.2018

| CUSTOMER APPROVED SIGNATURES |  |  | VENDOR APPROVED SIGNATURES   |   |   |
|------------------------------|--|--|--|---|---|
|                              |  |  |  |  |  |

鳳冠電機股份有限公司  
鳳冠電機(深圳)有限公司  
鳳冠電機(昆山)有限公司





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## 1.0 INTRODUCTION

This document specifies a switching power supply with a output of +5V, 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 In-rush Current: 50A Max

2.4 Input Power Consumption at no-load : 0.1W Max

Test condition will be tested after No load operating for 30min then measure it.

2.5 Input Current: 0.35A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +5V

3.2 Output Regulation: 4.75-5.3V

3.3 Output Load Range: 0-2.0A

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

4.0 EFFICIENCY:  $\geq 77.72\%$  @ average of 25/50/75/100% loads 115V&230VAC input

Test condition will be tested after full load operating for 30min then measure it.

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.



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8.0 TEMPERATURE COEFFICIENT: 0.05%/°C

## 9.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

Primary to Secondary :AC 3000Vrms, 5 mA , 1 minute 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 2.0A fusing resistor 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.



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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 designed to meet the following safety standards:  
FCC PART 15 Class B

## 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 designed to meet the following safety standards:

UL 60950-1, 2nd Edition,2014-10-14

CSA C22.2 NO.60950-1-07, 2nd Edition,2014-10



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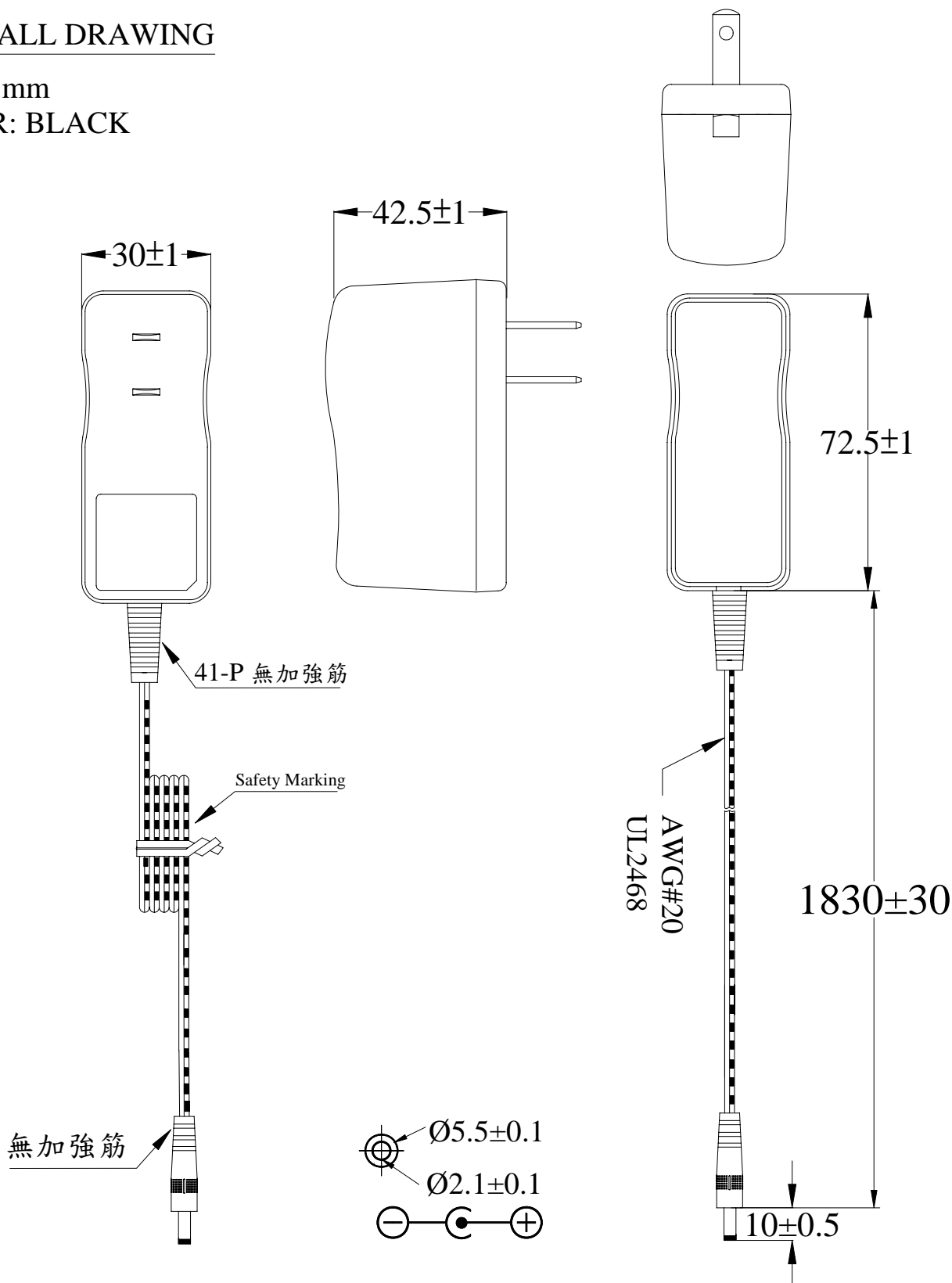
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## 16. OVERALL DRAWING

UNIT: mm

COLOR: BLACK





|               |                     |              |            |
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## 17. PACKING

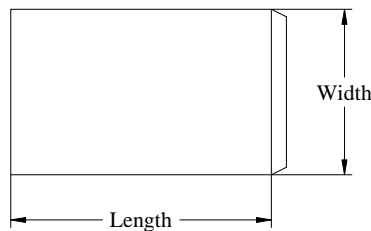
### 17.1 Inner Box

UNIT: mm

PE BAG

Length :

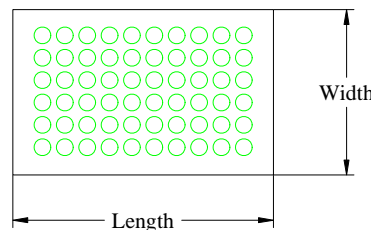
Width :



BUBBLE BAG

Length:

Width:

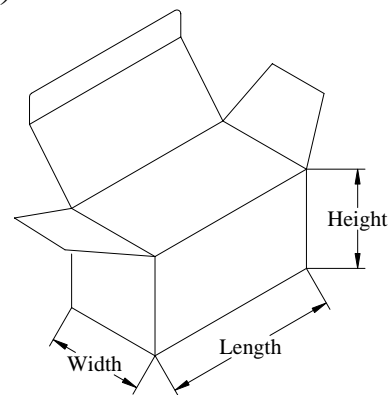


BOX(  Normal BOX  Corrugated BOX)

Length:82

Width:67

Height:30



### 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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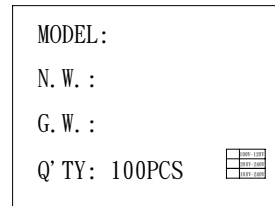
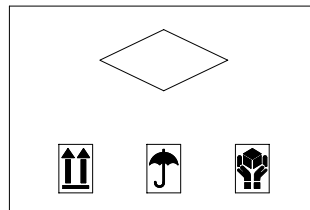
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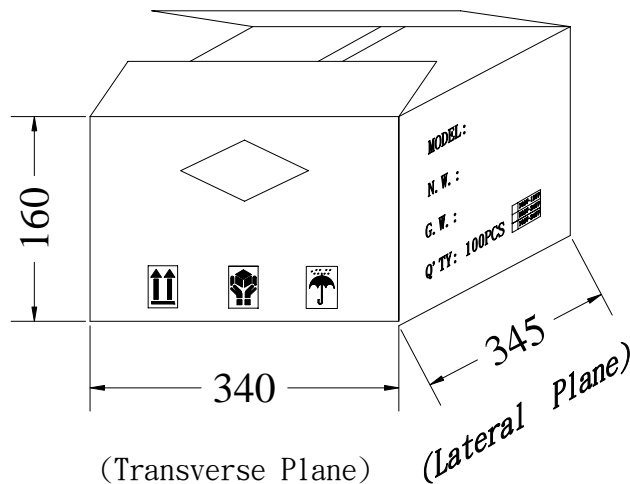
## 17. PACKING

### 17.2 Carton

UNIT: mm



|           |
|-----------|
| 100V-120V |
| 200V-240V |
| 100V-240V |





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## 18. MARKING

100# CPC 壓花底+上光 NAME-PLATE:WHITE CHARACTERS BLACK BACKGROUND.

UNIT: mm

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

