# SPECIFICATION FOR APPROVAL

CUSTOMER: ____________________________

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

MODEL NO: HK-AB-120A250-D56 PART NO: HKSC-160363

DESIGNED NO: 160363-0317  DATE: JUL.14th.2017

<table>
<thead>
<tr>
<th>CUSTOMER APPROVED SIGNATURES</th>
<th>VENDOR APPROVED SIGNATURES</th>
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<tbody>
<tr>
<td></td>
<td>経理 田青松 2017.07.14</td>
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<tr>
<td></td>
<td>工程師 欧陽建瓊 2017.07.14</td>
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<tr>
<td></td>
<td>繪圖員 羅珍珍 2017.07.14</td>
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</tbody>
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<table>
<thead>
<tr>
<th>CUSTOMER</th>
<th>Ideal Power</th>
<th>PART NO</th>
<th>HKSC-160363</th>
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<td>HK-AB-120A250-D56</td>
<td>REV</td>
<td>(A2)</td>
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<td>A0</td>
<td>16.03.17</td>
<td>新發行承認書. (New issue)</td>
<td>何寶玲</td>
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<td>A1</td>
<td>16.05.13</td>
<td>銘板追加PSE,BSMI,CCC規LOGO. (Add PSE,BSMI and CCC logo on the label)</td>
<td>羅珍珍</td>
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<td>A2</td>
<td>17.07.14</td>
<td>更新EMC標準.(Update EMC standards)</td>
<td>羅珍珍</td>
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SAFETY APPROVAL:

ENGINEER APPROVAL:

ELECTRICAL

STRUCTURAL

張偉松

歐陽建瓊

陳 銘
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1.0 INTRODUCTION

This document specifies a switching power supply with an 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: 0.1W Max
2.4 Input In-rush Current: 50A Max

Test condition will be tested after No load operating for 30min then measure it.
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: 0-2.5A
3.4 Output Ripple & Noise: 120mV Max @20MHz bandwidth with 10UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY: ≥ 86.94% @ 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: ±2% maximum

6.0 HOLD UP TIME: 10ms Min at 110VAC full load.

7.0 TURN ON TIME: 2S Max at 110VAC full load.
8.0 TEMPERATURE COEFFICIENT: 0.05%/°C

9.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

9.1 Primary to Secondary: AC 3000 Vrms, 4mA, 1 minute for type test, 2 seconds 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.
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 15 Class B J55022(H22) GB17625.1-2012; GB 9254-2008
EN61000-3-2:2014 IEC61000-4-4:2012 CNS 13438 (095/06/01年版)
EN61000-3-3:2013 IEC61000-4-5:2014
IEC61000-4-2:2008 IEC61000-4-6:2013
IEC61000-4-8:2009
IEC61000-4-11:2004
CISPR 32:2015(Ed2.0) AS/NZS CISPR 32:2015;
CISPR 24:2010+A1:2015(Ed2.1)

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:

EN60950-1:2006+A11+A1+A12+A2 BS EN60950-1:2006+A2
AS/NZS 60950.1:2015 GB4943.1-2011 J60950-1(H27)
CNS 14336-1(099/09/30年版)
16. OVERALL DRAWING

UNIT: mm

MODEL NO.: HK-AB-120A250-D56
PART NO.: HKSC-160363
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17. PACKING

17.1 Inner Box

UNIT: mm

- 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：样品使用的小白盒尺寸可能与此图面尺寸不同，此图面尺寸是用于生产时的包装。
17. PACKING

17.2 Carton

UNIT: mm

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18. MARKING

UNIT: mm

MODEL NO.: HK-AB-120A250-D56
PART NO.: HKSC-160363
DESCRIPTION: I.T.E. POWER SUPPLY

REF: (A2)
ISSUED DATE: 2017.07.14

NAME-PLATE: WHITE CHARACTERS BLACK BACKGROUND.

MODEL: HK-AB-120A250-D56
INPUT: 100-240V 50/60Hz 0.8A 60VA
OUTPUT: 12V 2.5A

注意事項: 僅供室內使用
警告: 注意安全

IDEALPOWER
experts in power conversion

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