



承认书



SPECIFICATION FOR APPROVAL

客户名称 (CUSTOMER): _____ W1219 _____

客户料号 (CLIENT P/N): _____

客户品名 (DESCRIPTION): _____

金华升品名 (MODEL): _____ RS-ACYH015J00 (欧规) _____

日期 (DATE): _____ 2017-03-01 _____

| 承认书 APPROVED SIGNATURES | | | | | |
|-----------------------------|--------------------|-------------------|--------------------------|--------------------|----------------|
| 客户承认 (CUSTOMER APPROVAL) | | | 金华升公司承认 (RS APPROVAL) | | |
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客户确认签字、盖章后请回传一份承认书给我司./ Please return to us one copy of "SPECIFICATION FOR APPROVAL" with you approved signature.

深圳市金华升电源技术有限公司

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1. 引言 Introduction

1.1 电源概况 Power Supply Overview

这份规格书定义了 20.7 W 的电源适配器的功能需求, 此电源将市电变换为 1 组稳定、连续的直流电压输出, 并符合 ROHS 标准。

This specification defines 20.7 W power adapter functional requirements, the power adapter transformed a AC into stable, continuous DC voltage output, And the power supply shall meet the RoHS requirements.

1.2 描述 Description

- 插墙式适配器 SMPS Adaptor(Wall mount)
- 桌面型适配器 SMPS Adaptor(Desk-top)
- 开放式结构 Open Frame
- 带铁壳型 SMPS Unit (With Case)
- 其他 Others

2. 电气规格 Electrical Specification

2.1 输入电压 Input Voltage

工作电压范围为 90V-264V~, 额定工作电压为 100V-240V~, 在 2.7 定义负载范围下, 电源能正常工作并符合所有电气特性。

Operating voltage range 90-264V~, rated operating voltage 100-240V~, the power shall work normally and meet all electrical requirements as per the load range specified in section 2.7.

2.2 输入频率 Input Frequency

交流输入电压频率范围 47~63Hz./Input AC voltage frequency range 47~63Hz.

额定交流输入电压频率 50/60Hz./Input rated AC voltage frequency range 50/60Hz.

2.3 冲击电流 Inrush Current

冲击电流峰值在额定输入电压, 冷启动 (25℃) 时, 不大于 50A; 且在任何负载和输入条件下, 不导致永久性损坏或危险, 输入电压的定义 2.1 节。

Peak inrush current shall be limited to 50 A while the cold start at 25 degrees C and rated input voltage, and shall not result in a permanent damage of the power supply under any conditions of load and input voltage as specified at any input voltage in section 2.1.

2.4 最大输入电流 Input Current Limiting

在输入电压最小值, 负载为满载条件下, 最大输入电流不大于 0.8 A。

The input current should be less than 0.8 A, under minimum AC input and full loads.

2.5 效率 Efficiency

在额定输入电压, 额定负载条件下, 电源的效率大于 77.2 %。空载输入功率 ≤ 0.5W。

The power supply efficiency shall be greater than 77.2 % under rated input voltage. It will be measured at the typical load. no load input watt ≤ 0.5W.

2.6 输出电压范围 DC Output voltage range

13.8V 13.11V—14.49V (在适配器的输出线材的端子上测量)

13.8V 13.11V—14.49V (measure the terminal of output wire in the adapter)

2.7 输出电流 DC Output Current

表格 1: 输出电流限值

Table 1: DC output current limits

| Output 输出 | Min. 最小值 | Max. 最大值 | Unit 单位 |
|--------------|-------------|-------------|------------|
| 1.5 | 0 | 1.5 | A |

2.8 输出纹波与噪声 Output Ripple and Noise

下面表格 2 是纹波与噪声要求，以 2.6 节中定义的负载范围和 2.1 节定义的输入电压为测试条件，纹波与噪声均应符合要求，测试时示波器设置为 20MHz 带宽，输出端并接一 0.1uF 瓷片电容和一 10uF 钽电解电容（低 ESR 值）。

The following table 2 is output ripple and noise requirements, it will be met throughout the load ranges specified in Section 2.6 and under all input voltage conditions as specified Section 2.1, Measurements will be made with an oscilloscope set to 20MHz bandwidth limit. The outputs will be bypassed with one 0.1uF multilayer (type X7R) and one 10uF tantalum electrolytic (low ESR) capacitors.

表格 2: 纹波与噪声限值

Table 2: Output ripples and noise limits

| Output 输出 | 最大值 Max. |
|-----------|----------|
| ≤ 140mV | 140mV |

2.9 电压过冲 Overshoot at turn-on/ turn-off

开机或关机时，电压过冲不得超过标称值的 110%。

Any overshoot at turn on or turn off shall be less than 110% of rated output voltage.

2.10 过压保护 Over Voltage Protection

电源提供的过压保护，详细定义如下表：

The power supply will provide over voltage protection function as defined below.

表格 3: 过压保护限值

Table 3: Over Voltage Protection limits

| Output 输出 | Min. 最小 | Max 最大值 | Unit 单位 |
|--------------|------------|------------|------------|
| 13.8V | NA | NA | V |

2.11 短路保护 Short Circuit Protection

电源输出的短路将自动进入保护状态，在保护过程中，不会出现诸如元器件、连接器等损坏危险，断开短路后，电源将自动恢复正常。

An output short circuit will automatically enter the protected status .The power supply will protect without damage to overseers of to the unit (components, connectors, etc) under the protection of process.

2.12 过流保护 Over Current Protection

电源过流点符合下表限值要求，而且过流保护无任何危险和损坏，在保护去除后，电源要断开 AC 输入让电容放电完后方能恢复其功能。

The power supply shall meet the limitation requirement as below table without any damage, the unit shall recover the function after the protection is removed.

表格 4: 过流保护限值

Table 4: Over Current Protection limits

| Output | Min. | Max | Unit |
|--------|------|-----|------|
| 输出 | 最小 | 最大 | 单位 |
| 1.5A | 2.5 | 5 | A |

2.13 保持时间 Hold up Time

满载条件下，电源在 100 Vac 输入时，保持时间不小于 10 mS。

Hold-up time no less than 10 mS at 100 Vac input, the output loading should be set up with full load during the test.

2.14 启动时间 Start up Time

满载条件下，电源在 100 Vac 输入时，启动时间不大于 3 秒。

Start up time no more than 3 seconds at 100 Vac input, the output loading should be set up with full load during the test.

3 环境要求 Environment Requirement

3.1 温度 Temperature

工作环境温度: 0+40°C

Operating Ambient: 0+40°C

贮存环境温度: -20+75°C

Non-operating Ambient: -20+75°C

3.2 湿度 Humidity

工作时: 20%~85%相对湿度 (非冷凝)

Operating: 20%~85%relative humidity (Non- condensing)

贮存时: 10%~90%相对湿度 (非冷凝)

Non-operating: 10%~90% relative humidity (Non- condensing)



4 可靠性 Reliability

4.1 平均无故障间隔时间 MTBF

25℃环境温度，满载条件，额定电压输入条件，平均无故障间隔时间 ≥ 10000 小时(MIL-HDBK-217F)。(可根据客户要求设计为 50000 小时)

MTBF no less than 10000 hours (25 degrees C, Full load and rated voltage input, MIL-HDBK-217F) (we can design MTBF for 50000hours if customer request.)

4.2 老化寿命测试 Burn-in and Life test

公司将与客户评估并确认电源产品室内老化寿命测试过程。

Company shall discuss with customer to make sure the power in house Burn-In and life test procedures.

5 产品安规要求 Product Safety Requirement

5.1 标准 Standard

遵循 IEC60950、EN55022 要求。

Meet IEC60950、EN55022 standard requirement.

5.2 安规认证

| 类型/Type | 国家/Country | 类型/Type | 国家/Country |
|--|---------------|--|--------------|
| <input type="checkbox"/> UL/CUL | 美国/USA | <input type="checkbox"/> CCC | 中国/China |
| <input type="checkbox"/> TUV/GS | 欧洲/Europe | <input type="checkbox"/> PSE | 日本/Japan |
| <input type="checkbox"/> FCC | 美国/USA | <input checked="" type="checkbox"/> CB | 欧洲/Europe |
| <input checked="" type="checkbox"/> CE | 欧洲/Europe | <input type="checkbox"/> C-TICK | 澳洲/Australia |
| <input type="checkbox"/> IRAM | 阿根廷/Argentina | <input type="checkbox"/> EK/KC | 韩国/Korea |
| <input type="checkbox"/> MEPS | 澳洲/Australia | | |

5.3 绝缘强度 Dielectric Strength Testing

绝缘强度满足下表的要求，100% 在线产品执行此项测试，并每一项目至少保持 3S 时间，无任何故障。

Hi-pot test shall be met the table 5 requirements, an item listing this test as a 100% production test must be performed and be maintained at that level for a minimum of 3seconds without failure.

表 5: 耐压测试 Table 5: Hi-pot test

| 项目 Item | 规格要求 Specification | 备注 Remark |
|-------------------------------|-----------------------|--------------------------------|
| 输入----输出 Primary to Secondary | 3KVac < 5mA | 无飞弧 No arcing 无击穿 No broken |

5.4 绝缘阻抗 Insulation Resistance

初级对次级: ≥50M 欧姆, 500VDC

-Primary to Secondary: 50 Meg. Ohms min. 500VDC

6 外观结构图 Case Mechanical Dimensions



以实物为准

长高=93.5mm *47mm *33mm
Size=93.5*47*33 MM

输出线材(公差±30mm)

Output cable (Tolerance ±30mm)

输出线材: 长度 L=1200±30mm;

Output cable: Length L= 1200±30mm

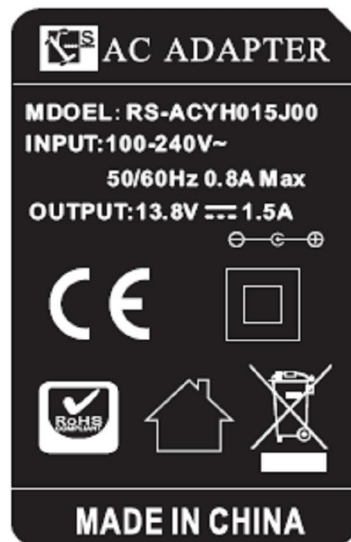
线材规格: 20# 黑色 圆线 带磁环 圆尾卡;

DC cable : 20# black 1185 round with magic ring

插头规格: 外径*内径*深度 = $\Phi 5.5 * \Phi 2.5 * 12\text{mm}$ 音叉自锁 直头

DC Jack : OD*ID*H = $\Phi 5.5 * \Phi 2.5 * 12\text{mm}$ Turning Fork Straight

7 铭牌 Label:



8 包装 Packing

若客户未提出包装方式时，均使用金华升公司之包装方式

Unless specially requirement of customer, the packing according to RS company style.

8.1 内包装: PE袋

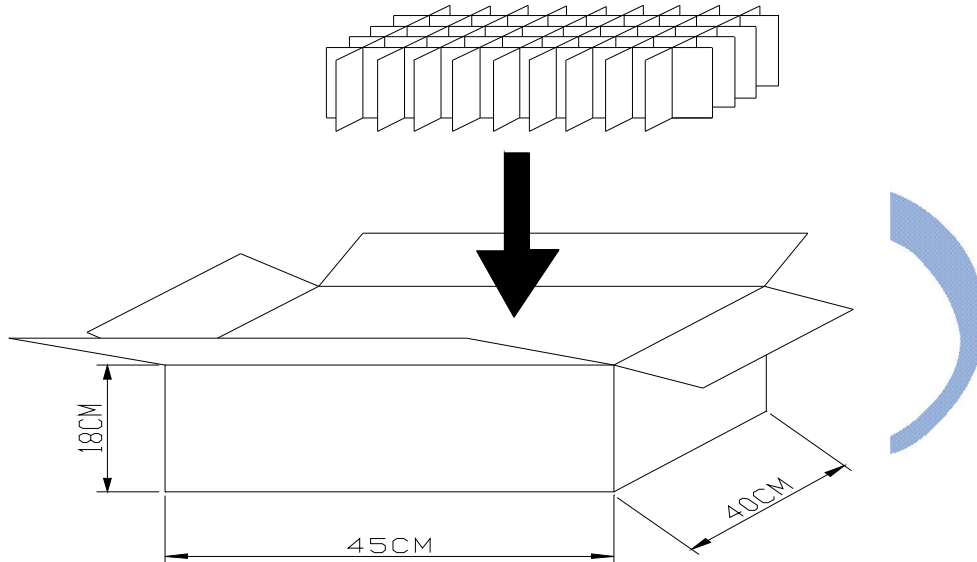
Inner package: PE bag

8.2 外包装: 纸箱

Outer package: paper-box.

8.3 外包装箱标识: 客户、订单号、品名、数量、日期等信息

Outer package notes include the information: Customer Name, LOT Number, Model No., Date, and so on.



9 主要测试设备 Major Test Equipment

9-1 交流输入电源 AC SOURCE

9-2 电源功率计/ POWER METER

9-3 电子负载/ ELECTRONIC LOAD

9-4 示波器/ OSCILLOSCOPE

9-5 万用表/ MULTIMETER

9-6 直流输入电源/ DC POWER

9-7 耐压测试仪/ HI-POT TESTER

9-8 多路温度测试仪/Multi-routes temperature test instrument

10 出货检验标准 Inspection Standards

表格 8 出货检验要求 Table 8 Inspection Requirement

| NO. | 检查项目 Test project | 检验标准 Test standard | 抽样水准 Sample Level | 检验水准 Test standard |
|-----|-------------------------|-----------------------|----------------------|--|
| 1 | 电气性能 Performance | MIL-STD-105E | II | 严重缺点: CR=0 Serious defect: CR=0 |
| 2 | 尺寸 Size | | | 主要缺点: AQL=0.4 Main defect: AQL=0.4 |
| 3 | 外观、包装 Shell, Package | | | 次要缺点: AQL=1.0 Petit defect: AQL=1.0 |

CERTIFICATE



Registration No. Report No.
12EHS07037 0801 12EHS07037 11

DECLARATION OF CONFORMITY

This Verification of Compliance is hereby issued to the product designated below

Holder of Certificate : Shenzhen Jinhua Sheng Power Technology Co., Ltd.
G315, Jiahuiyuan, Guihua Fangmapu Vallage, Guanlan,
Baoan, Shenzhen, China 518110

Product : AC ADAPTER
Model No.: RS-x0yJ00, JHS-x0yJ00 (for x,y refer to the test report for details)
Rated input : 100-240V~ 50/60Hz 0.8A Max
Rated output : Refer to the test report for details

Tested according to : EN 55014-1:2006+A1:2009
EN 55014-2:1997+A1:2001+A2:2008
EN 61000-3-2: 2006+A1:2009+A2:2009
EN 61000-3-3: 2008

This certificate of conformity is based on evaluation of a sample of the above mentioned product. Technical report and documentation are at the licence Holder's disposal. This is to certify that the tested sample is in conformity with all revision of Annex I of Council Directive 2004/108/EC, referred to as the EMC. This certificate does not imply assessment of the series-production of the product. The holder of the certificate is authorized to use this certificate in Connection with the EC declaration of conformity according to Annex IV of the Directive.

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Date of issue: 08/01/2012 (mm/dd/yy)

Certification Body


Signature: Mr. King Wang
(Manager)



The CE Marking may be used if all relevant and effective EC Directives are complied with.

