

SPECIFICATION APPROVAL SHEET

CUSTOMER	客户名称:
CUST P/N	客户料号:
MODEL NO	机型编号: M168500-90-01
DESCRIPTION	规格描述: 17V5A 储能电源适配器
ITEM NO	生产编号:
FILE NO	文件编号: EN19112501

CUSTOMER DISPOSITION 客户回签:

Prepared by	Checked by	Approved by	

- APPROVED 合格
- CONDITIONAL APPROVED 有条件接收
- REJECTED 不合格

Prepared by	Checked by	Q. C	Approved by
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1 Product description 产品描述

This product is a AC to DC transfer device, it can provide for a 7Ampere single 16.8V output with constant voltage source and it is constructive with class II basic isolation level.

本产品是 AC/DC 电源转换设备，能够提供 16.8V5A 稳定输出，属于 I 类绝缘设备

2 Electrical Requirement 电气特性

2-1 Input Requirement 输入特性

2-1-1 Input Voltage 输入电压

Nominal Voltage: 100 to 240Vrms

Voltage range : 90 to 264Vrms

2-1-2 Input Frequency 输入频率

From 47Hz to 63Hz

2-1-3 Input Current 输入电流

<2.5Arms at 100Vac input

2-1-4 Inrush Current 浪涌电流

60A max at cold-start at 25°C,DC output full-loading and 230Vac input.

25°C 输入 230V 满载冷起机时最大的浪涌电流为 60A

2-2 Output Requirement 输出特性

2-2-1 Output Voltage ,Current and Ripple 输出电流,电压和纹波

Output Voltage	Minimum Output Voltage	Maximum Output Voltage	Output Current	Output Ripple (Vp-p)
17Vdc	16.5Vdc	17.5Vdc	5A	≤200mV

2-2-2 Built-In battery 内置电池

Output Voltage	Minimum Output Voltage	Maximum Output Voltage	Output power	capacity
16.8Vdc	12Vdc	16.8Vdc	84w	20000mAh

2-2-3 Dual USB output 双 USB 输出

接口	输出参数
Super charge A	支持协议 PDPPS、PD3.0/PD2.0、QC3.0/2.0、FCP、SCP、AFC、PE、SFCP 4.5V5A 5V4.5A 9V2A 12V1.5A
Super charge B	支持协议 PDPPS、PD3.0/PD2.0、QC3.0/2.0、FCP、SCP、AFC、PE、SFCP 4.5V5A 5V4.5A 9V2A 12V1.5A
Dual USB output	各 5V2A

2-2-2 Output Voltage Regulation 输出电压调整

The total output voltage regulation shall met above table (as you see that) , including the effects of line voltage variations, load current, ripple and noise, and the AC component of the load current .The effect of dynamic load changes is not included in this limit

输出电压的调整应符合上表，包括输入电压的波动，负载电流，纹波，杂讯和 AC 电流元件的影响，动态负载不包括其中。

2-2-3 Ripple and Noise 纹波和噪音

Tested ripple voltage is measured using oscilloscope with bandwidth limited to 20MHz. A 47uF electrolytic capacitor and a 0.1uF ceramic capacitor shall be connected to the connector in parallel.

测试纹波电压时必须把示波器的带宽限制在 20MHz, 并且在输出端并联一个 47uF 的电解电容和一个 0.1uF 的陶瓷电容。

2-2-4 Standby Power 待机功耗

When line input voltage(115Vac or 230Vac),the Standby Power must be less than 0.5W .

在输入 115Vac (230Vac) 时，待机功耗必须小于 0.5W

2-2-5 Efficiency 效率

When line input voltage(115Vac or 230Vac),the efficiency shall be 87% or better under maximum load.

在输入 115Vac (230Vac) 时，平均效率大于 87%

2-2-6 Rise time 上升时间

The output voltage should rise from 0Voltage to within regulation in less than 20msec with full loading.

满载起机时输出电压从 0V 上升至正常的时间必须小于 20msec

2-3 Protection 保护

2-3-1 Short Circuit Protection (Auto recovery) 短路保护 (自动恢复)

The power supply shall not be damaged by short between DC output and DC ground
在输出短路时电源不能坏

3 Environmental Requirements 工作环境

3-1 Temperature 温度

Operation : 0°C to 25°C

Storage: 0°C to 60°C

3-2 Humidity 湿度

Operation : 20%-85%

Storage: 10%-95%

4 Reliability 可靠性

4-1 Mean Time between Failures (MTBF) 平均无故障时间

The power supply shall be designed and produced to have a mean time Between failures (MTBF) of 20,000 operating hours
设计,生产电源供应器必须满足 20000 小时的平均失效时间,

4-2 Temperature 温升测试

Less than 60°C at nominal 100-240Vac input DC out put full loading and environment temperature 25+/-1°C on top of plastic case
在常温下,产品在标准输入和满负载输出时,外壳顶部的温升应小于 60°C

5 Burn-in 老化测试

100% burn-in with 80-100% loading & 25-35°C environment temperature

所有产品在 25-35°C 环境里进行 80-100% 负载老化测试

6 SAFETY REQUIREMENT 安规要求

6-1 Hi-Pot Test 高压测试

Apply 3000Vac between primary and secondary for 1 minute. The leakage current should be less than 10mA

在初次级之间加 3000Vac 1 分钟,漏电流必须小于 10mA

6-2 Insulation Resistance Test 绝缘电阻测试

Measure the resistance between primary and secondary with a

500V Megaohm meter. The resistance shall be greater than 100Mohm.

测量初次级之间的绝缘电阻必须大于 100Mohm

6-3 Leakage Current Test 漏电流测试

Leakage current shall be no more than 0.25mA at 254Vac/50Hz
在 254Vac/50Hz 时漏电流必须小于等于 0.25mA

6-4 Safety 安全标准

Safety referring standards		File Record
KC(KETI)	K60950	
UL	UL60950	
TUV-GS	EN60950	
CE	IEC60950	

6-5 CE

Referring Standards	Test Specification
ESD	Contact ±4KV
ESD	Air ±8KV
RF	Fr:26MHz-1.0GHz,Field Strength 3V/M
EFT	1KV on AC power line
SURGE	1KV (L-N)&2KV (L,N-PE)

6-6 EMI for both Conduction & Radiation 传导和辐射

Referring Standards	Specification
FCC	Part 15,Class B

CISPR	Pub 22, Class B

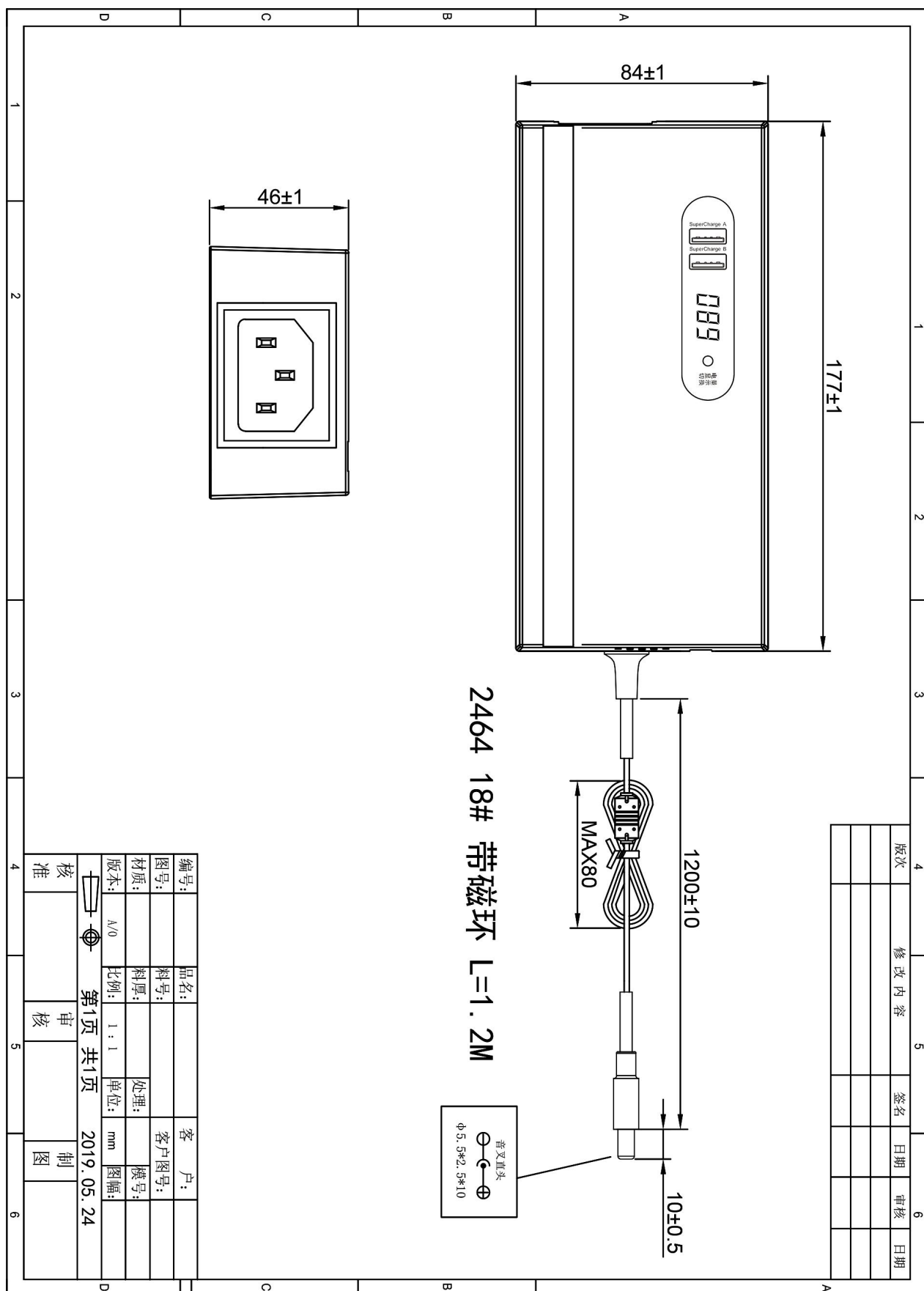
7 Mechanical 机械特性

7-1 Plastic case : PC+ABS GE C2950 material,color Black

7-2 Physical size: 168mm(L)*84mm(w)*44.5H)

7-3 DC cord: UL2464(EMI core) 18wg ,F5.5*2.5*10mm
Iplug(Centre+),1200mm Black

附件一：



附件二:

PACKAGING

注:图中的尺寸单位均为 mm。

附件三:

LABEL

