

客户 CUSTOMER	A096	型号 MODEL NO.	GPU481202000WAOO	
承制 MANUFACTURER			版本 EDITION	A/0

# Revise record

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12/25/2013	首次制作	A0	

APPROVE BY	CHECK BY	PREPARED BY
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## Power adapter specifications

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## 1. 电气特性 (ELECTRICAL PERFORMANCE) :

### 1.0 初级特性 / PRIMARY PERFORMANCE

初级额定电压 / Primary rated voltage	120VAC
初级额定频率 / Primary rated frequency	60Hz
初级空载电流 / Primary exciting current	150mA Max
初级负载电流 / Primary Loading current	330mA Max

### 1.1 次级额定电压及电流 (Secondary rated voltage and current) :

测试点 TEST POINT	电压调整率 VOLTAGE REGULATION	负载额定电压 FULL LOAD RATED VOLTAGE	空载电压 NO LOAD VOLTAGE	额定电流 RATED CURRENT
5~6		12Vac ± 5%	14.5Vac ± 5%	2.0A

1.2 最大空损 (Empty loss max) : 2.5W Max, At input 120VAC 60Hz

1.3 额定负载下电阻法线圈最大温升75°C. 热偶法外壳表面最大温升55°C, 环境温度25°C.

Temperature rise: 75°C max on primary coil by the resistance method, and 55°C max on the surface of the case by the thermometer method at 25°C ambient, rated load condition.

### ~~1.4 效率 (Efficiency) :~~

~~当输入115Vac/60Hz时, 4个负载 (25%、50%、75%、100%) 的平均效率最小为75.22%, 符合能源之星V等级。~~

~~When input 115Vac/60Hz, the average efficiency of (25%, 50%, 75%, 100%) current at load shall be 75.22% Min. Meet CEC level V.~~

### 1.5 绝缘电阻 (Insulation resistance) :

线圈与铁芯间加500VDC, 绝缘电阻不小于100MΩ.

500VDC supplied, 100M ohms minimum between winding & core.

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#### 1.6 耐压强度测试(HI-pot test):

1.6.1 初级-次级&初级-铁芯: 1500VAC 50Hz 60秒 (漏电流5毫安) 无击穿、无拉弧。  
或者提高20%电压1秒.

1500VAC 50Hz for 60seconds (leakage current 5mA) primary to secondary&core.  
Potential 20% higher may be applied for one second

1.6.2 次级-铁芯: 500VAC 50Hz 60秒 (漏电流5毫安) 无击穿、无拉弧。  
或者提高20%电压1秒.

500VAC 50Hz for 60seconds (leakage current 5mA) secondary to core.  
Potential 20% higher may be applied for one second.

#### 1.7 倍频倍压测试(Induce voltage test)

所有次级开路, 初级需承受电压240VAC 360Hz 60秒而无击穿.

All secondary opened, primary should withstand 240VAC 360Hz for  
60second without breakdown.

#### 1.8 老化测试(Life test):

环境温度25°C, 相对湿度90-95%, 输入额定电压和额定频率时, 带额定负载  
连续工作24小时, 产品输出正常且满足1.5 / 1.6项特性要求.

In an ambient temperature of 25°C , 90-95% R.H., applying a power source  
of rated voltage and frequency, with full load for 24hours continuously,  
unit output normally and meet the requirements of item 1.5 / 1.6 .

#### 1.9 耐湿测试 (Humidity test) :

在环境温度25±2°C, 相对湿度90-95%条件下放置48小时, 取出10分钟后,  
产品需满足第1.6项要求, 且绝缘电阻不小于10MΩ

In an ambient temperature of 25±2°C and 90-95% R.H.. for 48 hours  
after 10 minutes out of the oven, the unit should meet item 1.6 requirements,  
and insulation Resistance shall be 10M ohms minimum.

## 2. 机械特性 (MECHANICAL CHARACTERISTICS) :

#### 2.1 落地测试(Drop test):

从3英尺高自由落下到表面铺有1/8英寸厚聚乙稀垫的水泥地板上, 三个不同面各一次,  
产品需符合1.6项特性要求.

Dropped freely from 3 feet height onto a concrete floor covered with 1/8  
inch vinyl tile 3 times from 3 different surface, the unit should meet the item 1.6 .

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2.2 S/R吊重试验 (Strain relief test) :

在正常位置, 输出线需吊重10英磅, 持续60秒钟不可断裂. S/R不可有移位现象.

At normal position, 10 lbs to output cord for 60 secods each, there shall be no breakage displacement.

2.3 摇摆测试 (Bending test) :

输出线吊重200克, 摆动角度120度, 每分钟40来回, 1000个来回后仍需导通.

The plug and S/R should withstand weight of 200 gram, swinging from left to right at an angle of 120 degree for 1000 cycles, and 40cycles per minute. The cord shall be conductible.

3. 外观要求 (MECHANICAL REQUIRMENTS) :

无损伤无锈迹 (Appearance: Damage and rusting are not permitted.)

4. 外部条件 (ENVIROMENTAL CONDITION) :

4.1 正常工作温度 (Operating temperature range) : -10°C --- +25°C

4.2 存贮温度 (Storage temperature range) : -20°C --- +80°C

4.3 正常工作湿度 (Operation humidity range) : 30 --- 85% R. H

5. 绝缘系统 (INSULATION SYSTEM) :

CLASS A (105°C)

CLASS B (130°C)

CLASS E (120°C)

CLASS F (155°C)

6. 安规标准 (SAFETY STANDARD) :

符合/Meet

认可/Approved

<input checked="" type="checkbox"/> UL/CUL	<input type="checkbox"/> TUV/CE	<input type="checkbox"/> BSI/CE	<input type="checkbox"/> T-MARK
<input type="checkbox"/> CQC	<input type="checkbox"/> CCC	<input type="checkbox"/> CSA	

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## 7. 线上检测 (INSPECTION ON LINE) :

7.1 全检项目 (The test items for each produce) :

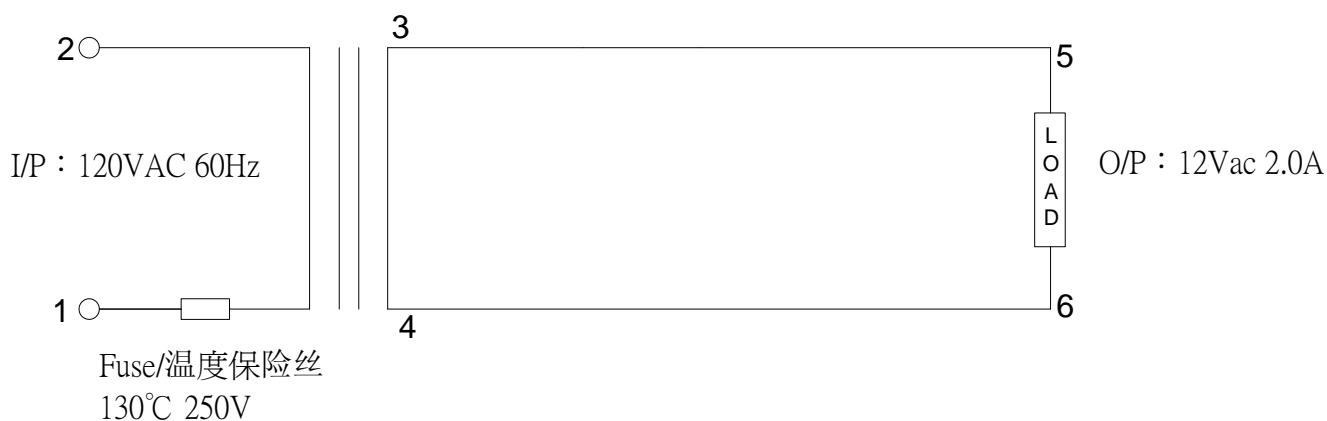
- ✓ 初级激磁电流 / Primary exciting current
- ✓ 铁芯损耗 / Core loss
- ✓ 输出电压 / Output voltage
- ✓ 输入电流及功率 / Input current and power at rated load
- ✓ 敲击听异物 / Foreign mass by shock
- ✓ 输出极性 / Polarity of output plug
- ✓ 耐压测试 / Hi-pot test
- ✓ 外观检查 / Apperance

7.2 抽测项目 (The test item for part of products) :

- ✓ 额定负载时哼声 / Hum operating at rated load
- ✓ 直流电阻 / D.C. Resistance
- ✓ 绝缘测试 / Insulation test

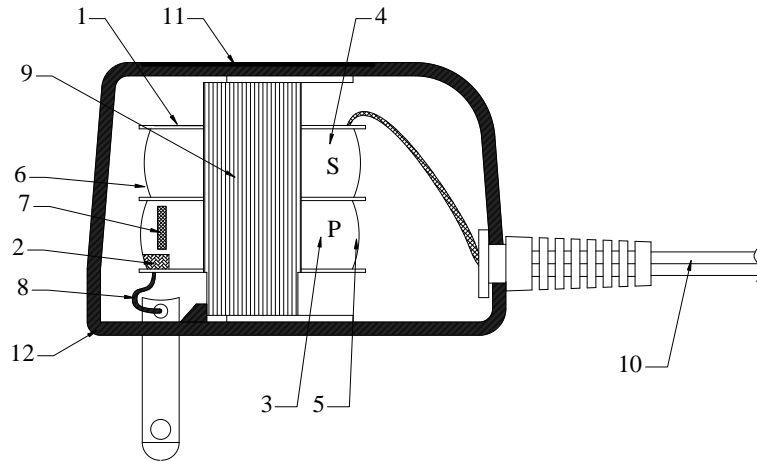
8. 单体净重 (NET WEIGHT) : 489g

9. 电气原理图 (ELECTRICAL CHARACTERISTICS) :



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### 10. 材料明细 ( MATERIAL LIST ) :



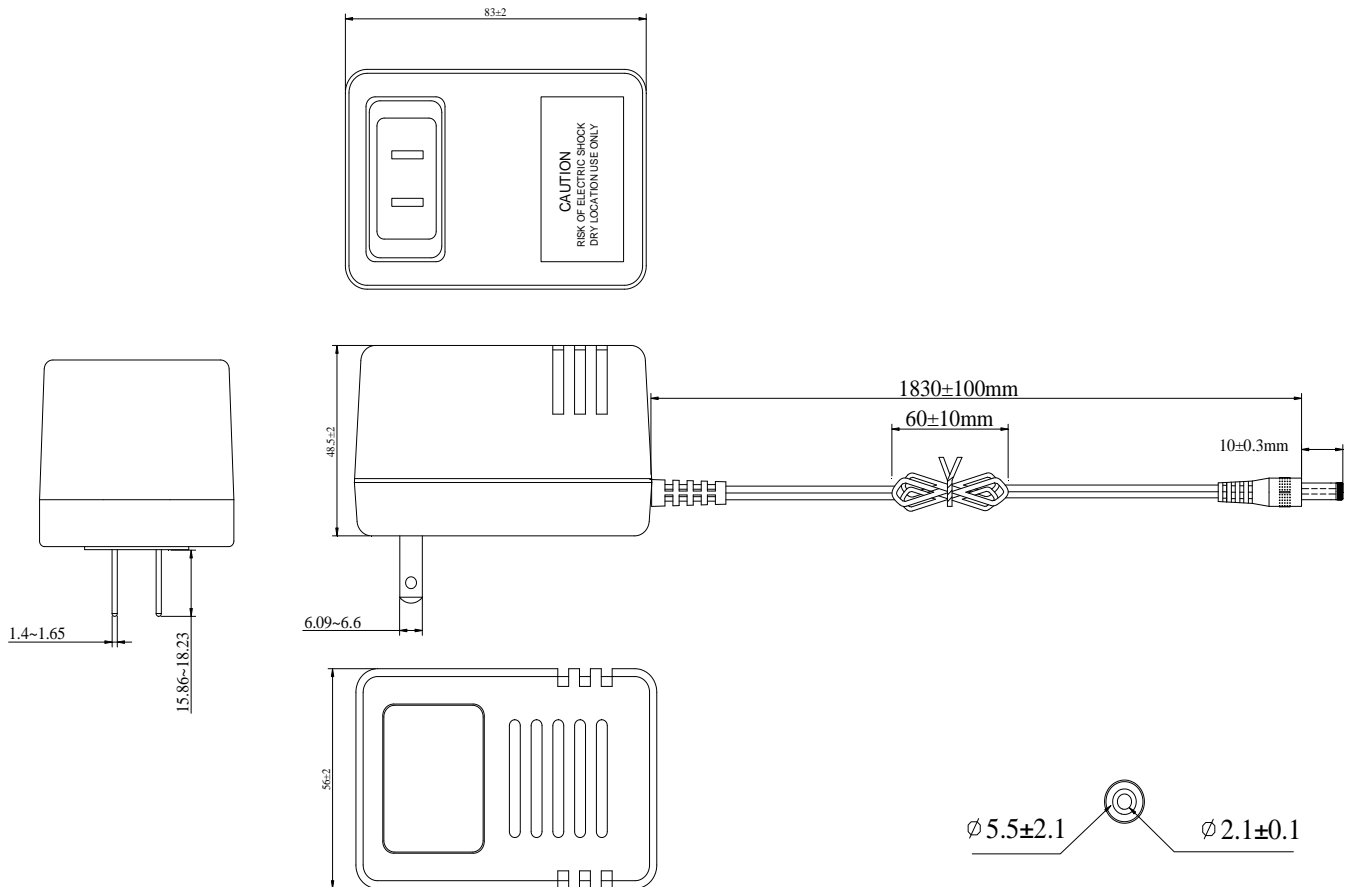
序号 ITEM	材料名称 PARTS NAME	材质 MATERIAL&SPEC	供应商 MANUFACTURER
1	线架/BOBBIN	PA66 THICK0.71mm MIN	E I DUPONT DE NEMOURS&CO INC. E41938
2	Primary Crossover Insulation/初级直立绝缘	ACETATE CLOTH TAPE CLASS B 皱纹胶	DUCK SUNG TAPE CO., LTD. E105147
3	PRI. WINDING 初级线圈	2UEW MAGNET WIRE CLASS B 2UEW漆包线	PACIFIC ELECTRIC WIRE & CABLE CO., LTD E201757
4	SEC. WINDING 次级线圈	2UEW MAGNET WIRE CLASS B 2UEW漆包线	JUNG SHING WIRE CO., LTD. E174837
5	PRI. OUTER INSULATION 初级绝缘	MYLAR TAPE 0.025mm 玛拉胶带0.025mm CLASS B	JING JIANG PRESSURE SENSITIVE GLUE FTY. E165111
6	SEC. OUTER INSULATION 次级绝缘	MYLAR TAPE 0.025mm 玛拉胶带0.025mm CLASS B	SUZHOU JINGYI SPECIAL ADHESIVE TAPE
7	PROTECTION 保护器	THERMAL CUTOFF 温度保险130℃ 250V	JOINTFORCEMETALRESEARCH&CO D. E142267
8	LEAD WIRE/引线	UL1015# 22AWG	SHENZHENDONGJUWIRE&CABLE CO., LTD. E189674
9	CORE 铁芯	E-I LAMINATED SILICON STEEL/E-I硅钢片	BEST LEGEND HUI DINGS LTD.
10	OUTPUT CORD/输出线	UL2468#20AWG 1.83M	XIN LONG ENTERPRISE CO. E207567 DESAY WIRE CO., LTD. E252840/E214500
11	NAMEPLATE 铭牌	PET (UL/CSA) OR ALUMINUM PET (UL/CSA认可) 或铝质	JING XING PRINTING FACTORY MH45133 SANLI PRINTING FACTORY. MH20917 GUANG NING YOU TONG. MH27610
12	ENCLOSURE/外壳	48#UL插	SABICINNOVATIVEPLASTICSJAPAN LC. E45587 GE PLASTICS AUSTRALIA. E101788
NOTE	Varnish凡立水	V821A	QUALIPOLY CHEMICAL CORP. E213437

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## 11. 结构参数 (MECHANICAL REQUIREMENT) :

11.1 外壳 (Enclosure) : SE-100/PP0 ; BLACK (LEAD FREE) 外壳: 黑色

外壳尺寸 (The power supply size) : L:83\*W:56\*H:48.5mm



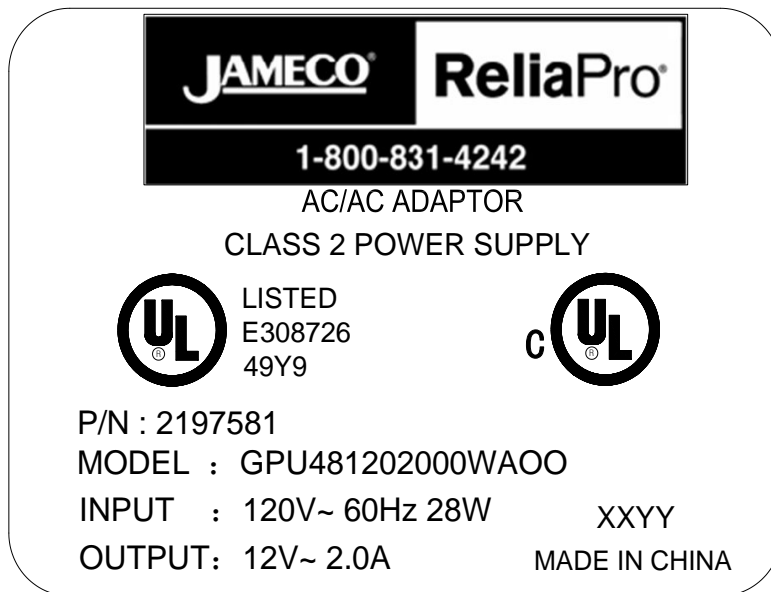
11.2. DC线规格 (DC CABLE SPEC) :

UL2468 20AWG 1.83M 黑色 (BLACK) . DC PLUG:  $\varnothing 5.5 \times 2.1 \times 10 / 180^\circ$



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12. 铭牌 (NAME LABEL) :



"XX YY"

年———月

具体时间根据生产日期定义!

Note: 材质/MATERIAL:消银龙

银底黑字/ BLACK characters SILVER background

厚度/Thickness: 0.2mmT

环保/ROHS

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#### 14. 测试报告 (TEST REPORT) :

### 样品检验记录表 Sample checkout Record

样单编号/Sample single Numbers:

日期 / DATE: 5/2/2013

项目/ITEM	范围 / SPEC	样品编号 / SAMPLE				
		#1	#2	#3	#4	#5
初级空载电流(I0) / PRIMARY EXCITING CURRENT I/P:120VAC 60Hz	150mA Max	108.2 mA				
初级负载电流(IL) / PRIMARY EXCITING CURRENT I/P:120VAC 60Hz	270mA Max	205.5 mA				
次级空载电压(V0) / SECONDARY NO-LOAD VOLTAGE 负载/LOAD: 0mA	14.5VAC±5%	14.1 VAC				
次级负载电压(VL) / SECONDARY LOAD VOLTAGE 负载/LOAD: AC 2.0A	12VAC±5%	12.2 VAC				
初级空载功率(P) / PRIMARY EXCITING POWER I/P:120VAC 60Hz	2.5W Max	2.33 W				
效率 / Efficiency I/P:115VAC 60Hz	平均效率标准 Average Efficiency standard: (25%、50%、75%、100%)					
耐压 / Hi-pot test	初级-次级&初级-铁芯 PRI. TO SEC&CORE	AC 1500V / 5mA / 50Hz 60sec	OK			
	次级-铁芯 SEC. TO CORE	AC 500V / 5mA / 50Hz 60sec	OK			
外壳/CASE	L:83*W:56*H:48.5mm					
DC Cord	UL2468 20AWG 1.83M 黑色 (BLACK) DC PLUG:φ5.5X2.1X10mm直头					
备注:						

核准:

审核: 雷群刚

检验员: 黄亚菲