

Specification For 116.8Watts/ Lithium iron phosphate battery charger

116.8W/磷酸铁锂电池充电器

客户名称Customer: JZX-VIP-890079

产品编号Part No : JZX-VIP-890079-22030022

产品型号Model No: GJS150-1460800

规格: Specifications 14.6V8A (CE)

版本 Rev: A6.6

描述Description: 充电装置

发行日期Issue Date: 2022.4.1

供应商SUPPLIER:			客户CUSTOMER:		
拟定PREPARED	检查CHECKED	批准APPROVED	拟定PREPARED	检查CHECKED	批准APPROVED
张川	李赐奇	梁辉			

客户确认签字,盖章后请返回承认书一份

Please return to us one copy of "Specification for Approval" with your approved signature

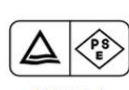
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 CNS14336	 IS13252	 K60950-1	 J60950-1	 AS/NZS60950-1	 TPTC004	 EN60950-1	 UL60950-1
 GB4943	 MS IEC60950-1 (optional)	 VI	 CB IEC60950-1	 FCC	 PFC	 CE	 Energy Verified Rendement Energétique Vérifié

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- ☒----- Selected/选择;
- ☐----- Unselected/未选择

1. Change history

E.C.LIST/变更履历表

[illegible]

General

The specification defines the performance characteristics of a 116.8W, Single Output level

Switching Power Supply for GJS150-1460800. The power supply has designed highly reliable and meet international safety and electromagnetic compatibility requirements.

2. Input Characteristics.

2.1 Normal Input Voltage:

It is normal for **100~240Vac** input AC voltage

2.2 Input Voltage Range :

The Power shall operate form **90-264Vac**

2.3 Input Current :

<u>2.5A</u> rms max	At AC low line input and DC output full load
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2.4 Rated Input Frequency:

It is normal for **50Hz** or **60Hz** and single phase.

2.5 AC Input Frequency Range:

The Power shall operate with an input frequency from **47Hz** to **63Hz**

2.6 No Load Power Consumption:

Maximum non-load power consumption is less than 2W at 115Vac/60Hz and 230Vac/50Hz

(Retest it after full load for 15 minutes)

2.7 Inrush Current (cold start) : 30A Max. @110Vac/60Hz

: 60A Max. @230Vac/50Hz

2.8 Active Power Factor Correction: Typical :

2.9 Input protection

<u>3.15A</u> Fuse	The power supply shall be protected against power line surges and any abnormal condition.
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2.10 Efficiency:

The efficiency of the Supply shall meet the following requirements (Warm up after 30 minutes test):

230Vac/50Hz Efficiency(Typical full load)	115Vac /60Hz Efficiency(Typical full load)	230V/50Hz Average Efficiency(25%,50%, 75%,100% rated load)	115V/60Hz Average Efficiency(25%, 50%,75%,100% rated load)
84%		83%	

3. Output Characteristics.

3.1 Rated Voltage

The rated output voltage is specified at 14.6V

3.2 Voltage Range

The output voltage will be performed $14.6V \pm 0.2V$ when the load is **0A**

3.3 DC Load Characteristics

Output Current (Constant Current)	Red to green	charging voltage (CV mode)	Output Power
<u>8000mA$\pm$200mA</u>	<u>300mA$\pm$100mA</u>	<u>9V-14.6V</u>	<u>0-116.8W</u>

3.4 load regulation: 3%

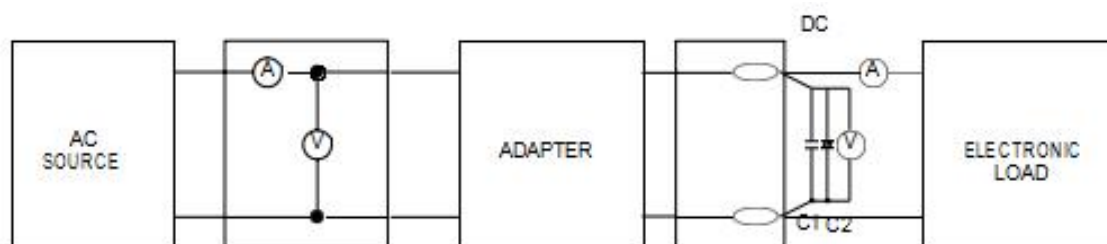
3.5 Linear adjustment rate: 1%

3.6 Use status indication

Status	LED Indication
Standby	Green light
Recharge	Red Lights
full	Green light

3.7 Ripple/Noise

Output Ripple voltage is $\leq 300mV$ peak to peak or less.(100Vac 60Hz/240Vac 50Hz)



Measured methods:

* The ripple is measured from peak to peak with band width limit of 20MHz (C1 : 0.1uF Ceramics capacitor C2 : 10uF/50V Aluminum capacitor under DC output full Load, AC nominal input 25°C ambient temperature).

3.8 Turn on delay (CV mode)

The power shall switch on in less than 3 seconds at input voltage is 220Vac

3.9 Hold-up time (CV mode)

The output voltage shall be sustained 6mS within regulation requirement after loss 100Vac and maximum load

3.10 Rise time (CV mode)

DC output rise time from 10% to 90% of output voltage shall be less than 40mS at nominal line and maximum load

4. Protection

4.1 Over Voltage Protection:

Over Voltage Protection	
The output shall be protection to latch off at over-voltage condition , maximum value can't be over 2 times the rated voltage (<u> V</u>) , That might be return to normal state by AC reset $\cong$ 3Minutes	☐
The power supply will be auto recovered when faults remove	☒

4.2 Over Current Protection: Maximum constant current of not greater than 8.2A

The power shall be auto-recovery

4.3 Short Circuit:

Output can be shorted without damage No odor, smoke, fire, plastic deformation, and excessive heat happen. The power shall be auto-recovery. (It will enter into normal condition when then the fault condition is removed)

5.Environment (temperature and humidity)

5.1:Operating temperature 0℃~40℃

5.2:Operating humidity 20%~ 90% (Relative humidity).

5.3: Storage temperature -20℃ ~ 80℃.

5.4:Storage humidity 0 % ~ 95 % .(Relative humidity).

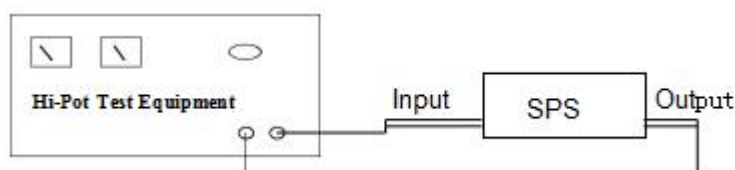
5.5: Dropping Packed:

Wall mount type and Height 76cm for desktop type as , the horizontal surface consists of hardwood at least 13mm thick , mounted on two layers of plywood each 19mm to 20mm thick , all supported on a concrete or equivalent non-resilient floor

6. Immunity

6.1 Dielectric Withstand Voltage (HI-POT)

HI-POT---A IEC 320 3pin primary to secondary (FG) 1500Vac 5mA 1min	☒
HI-POT---B IEC 320 2pin primary to secondary 3000Vac 5mA 1 min	☐



6.2 Leakage Current:

The AC leakage current is less than 0.5mA when power is connected to 120Vac/60Hz at normal condition

6.3 Insulation Resistance:

The insulation resistance shall be not less than 30M ohms after application of 500Vdc/10mA for 1 minute

6.4 Lightning Surge Immunity

This is to follow the norm of IEC-61000-4-5 Level 3

requirements L-N 2KV/1.2*50Us 5 times No function error

L-FG or N-FG 2KV/1.2*50Us 5 times No damage

6.5 Electric Fast Transients (EFT)

This is to follow the norm of IEC-61000-4-

4/1995 (EN 61000-4-4) Level 3 requirements

6.6 Electrostatic Discharge (ESD)

This Power is capable to withstand ESD test voltage at any point around the enclosure

as (EN 55024:1998+A1:2001+A2:2003,EN 61000-4-2)

±8KV air discharge No damage.

±4KV contact discharge No damage

6.7 Electrostatic Interference (EMI)

The power supply shall complied to:

FCC part 15 : Class B for radiated and conducted emissions.

EN55032:2015, Class B for radiated and conducted emissions.

GB9254-2008,GB17625.1-2012

7.Safety Approval:

7.1 Safety Certification Standards

The power supply shall comply the following international regulatory standards

Trademark	Country	Standard& Certified Status		
CE	Europe	☒ Declared& CE Mark		
UL/ETL	USA/ Canada	☐ UL 60950	☐ UL62368	☐ UL1310
GS	Europe	☐ EN60950	☐ EN62368	☐ EN61558
CCC&CQC	CHINA	☐ GB4943	☐ GB8898	☐ GB4706.1
PSE	Japan	☐ J60950	☐ J60065	☐ J61558-1
SAA	Australia	☐ EN60950	☐ EN60065	☐ EN61558
KC	Korea	☐ EN60950		
BS	England	☐ EN60950		
BIS	India	☐ IS13252		
LPS	/	☐ IEC60950		

8. Reliability:

8.1 MTBF (Mean-Time-Between-Failures) Calculation

The calculated MTBF shall be 50K hours of continuous operation at 20℃, maximum load and normal voltage.

8.2 MTBF Verification

The MTBF shall be verified from life testing performed by factory Quality department. The operating conditions are: 40℃ ambient temperature , sea level , both nominal line voltage ranges (115Vac or 230Vac) and a minimum load of 70% of the maximum load

8.3 Burn-in 24hrs,40+/-5℃ 240Vac

ON/OFF cycling full load nominal line

8.4. Vibration:

(1)、Operating: IEC 721-3-3 3M3 , 5~9Hz,A=1.5mm , 9~200Hz,Acceleration 5m/s²

(2)、Transportation:

IEC 721-3-2 2M2 5-9Hz, A=3.5mm 9~200Hz, Acceleration=5m/S² , 200~500Hz Acceleration=15m/S²

(3)、Axes,10 cycles per axis

No permanent damage may occur during testing.

The product has to restore its original situation after power off/on.

11. Mechanical Specification:

11.1: Net Weight (g) : 510g/pcs

11.2: Outline Dimension: 179.6*75*36.7mm

11.3: Outline Color: Black

11.4: DC Cable:1 M belt ring 18 # 2-core nylon male head SR: 12 * 8 * 3

11.5:DC ConnectorDimension:

LD= mm

OD= mm

ID= mm

11.6: AC Line: C16 input pedestal.

12. Dimension :

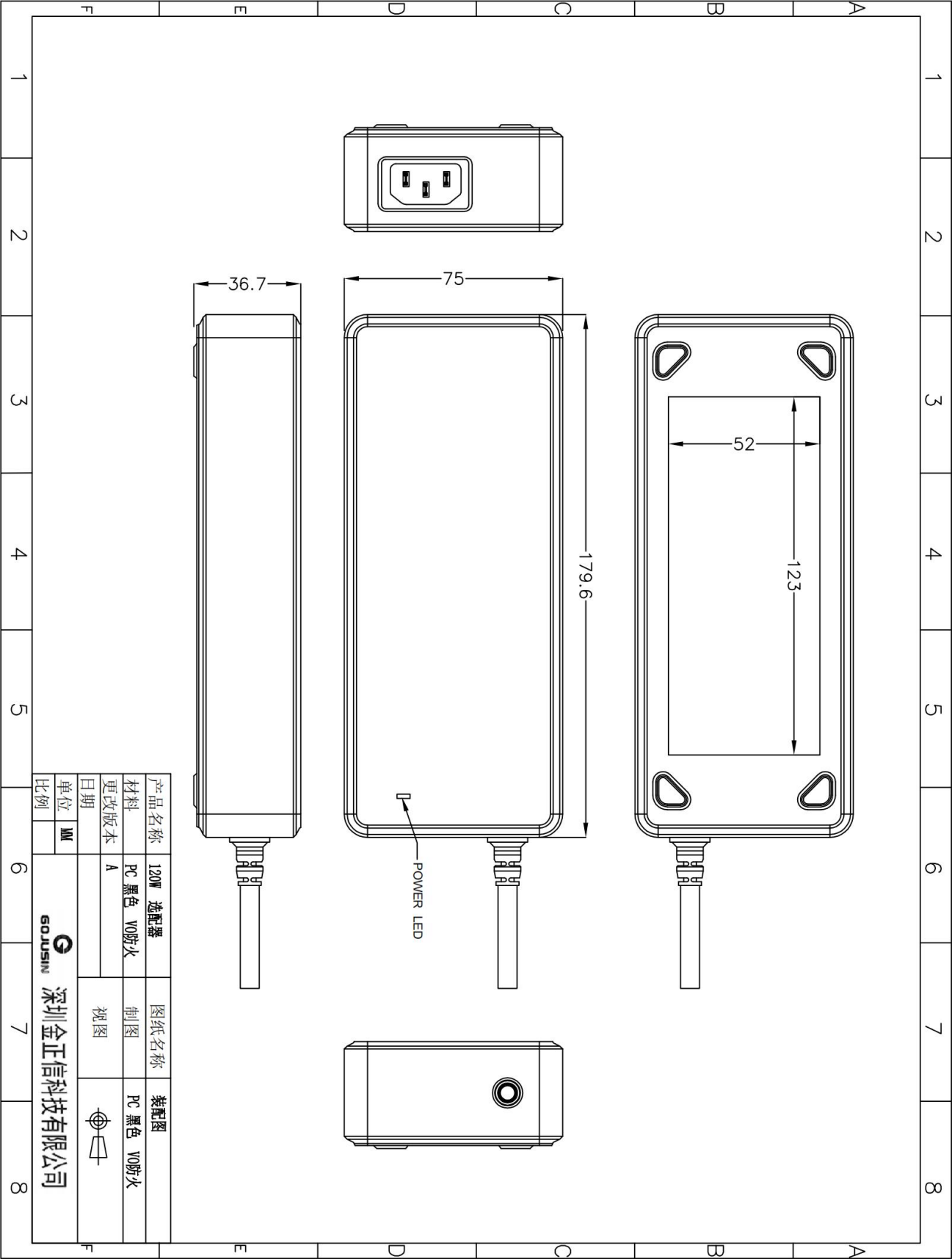
12.1: Physical Dimension ----- page10-11

12.2: Label Drawing ----- page12

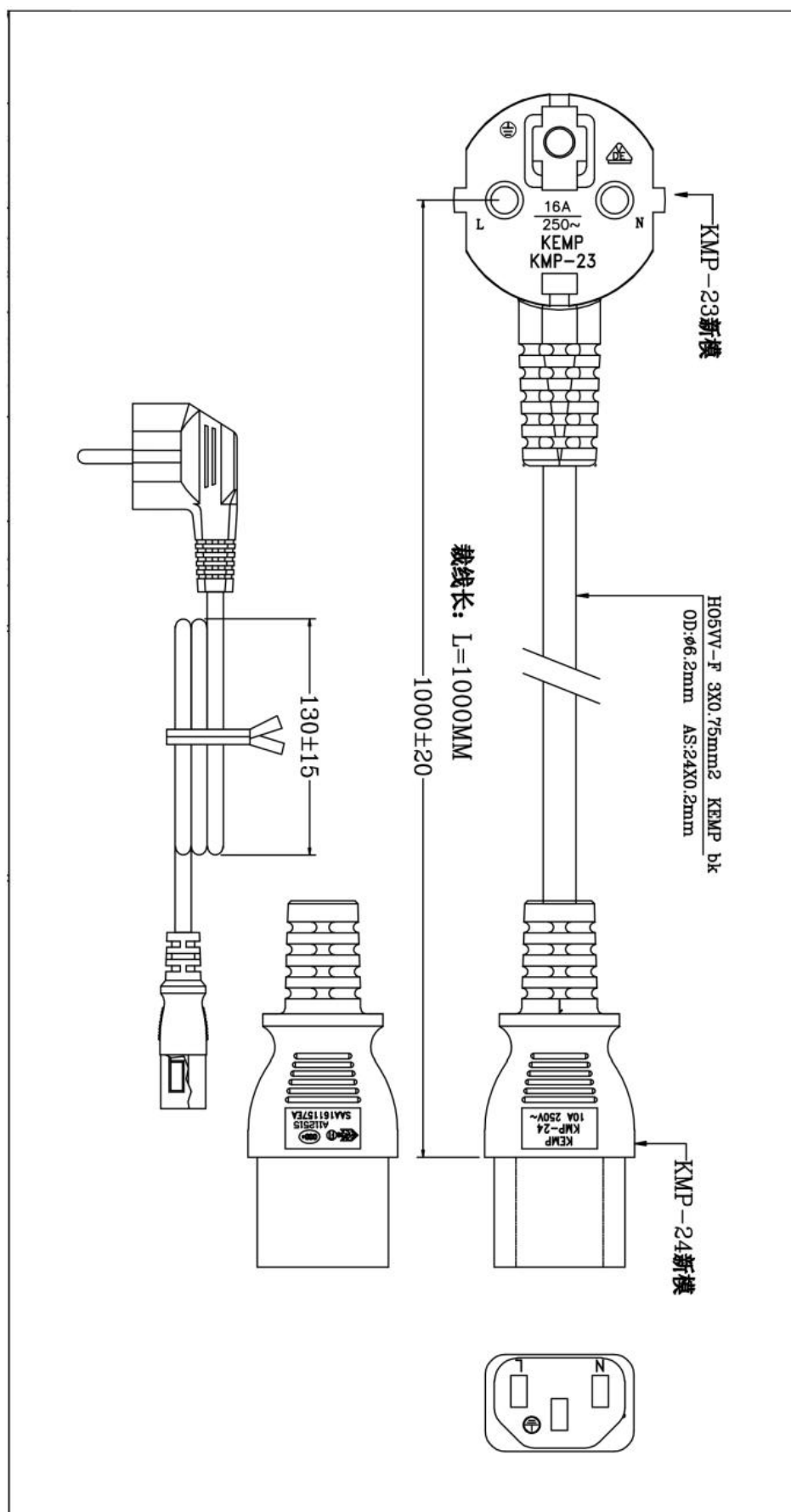
12.3: PE Bag ----- page13

12.4: Packing List ----- page14

Mach. Outline Drawing/外观图



Input line mechanical dimension drawing/输入线机械尺寸图



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Output line mechanical size drawing/输出线机械尺寸图

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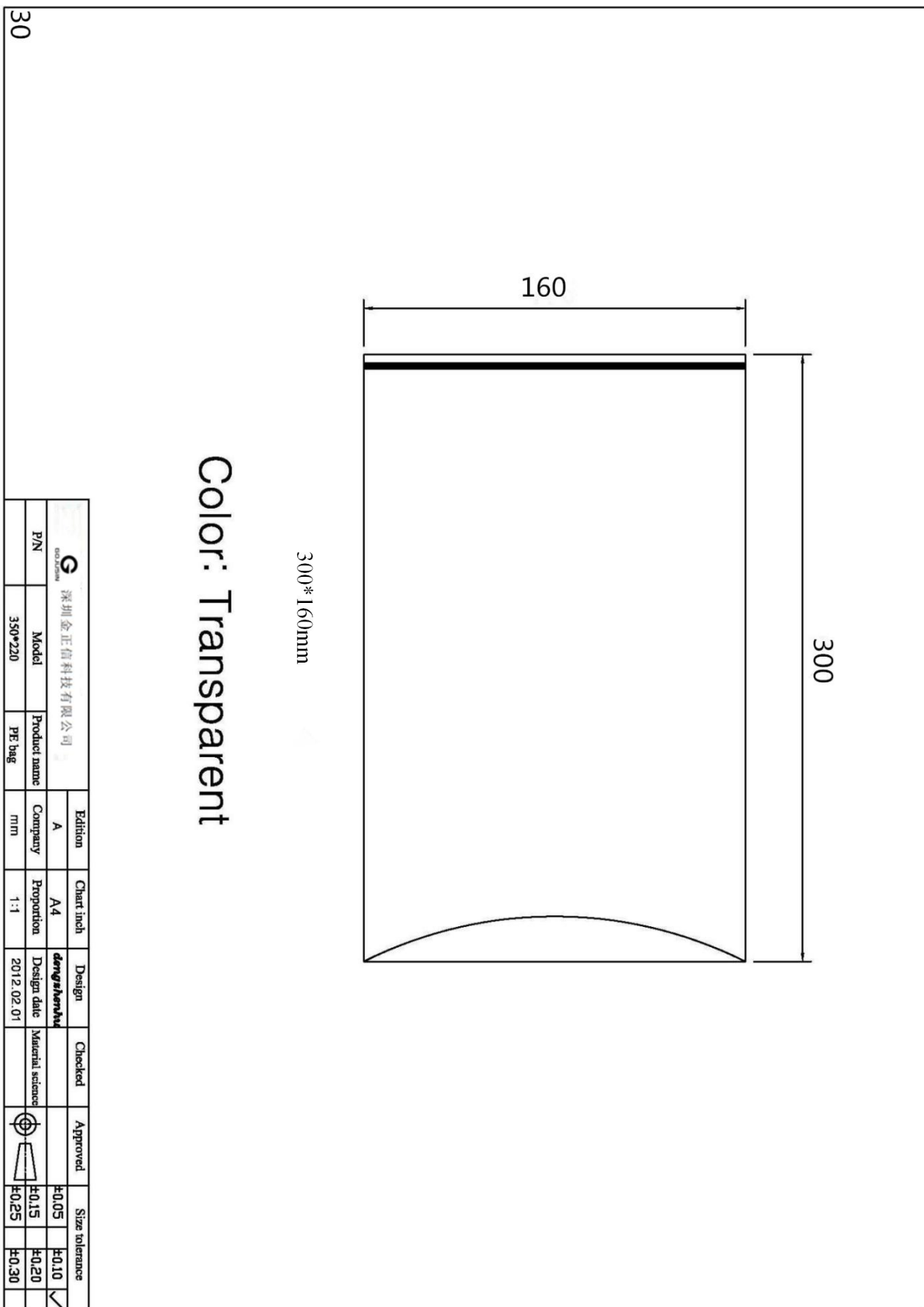
Label Drawing/标贴图

(Radium carving) ☒

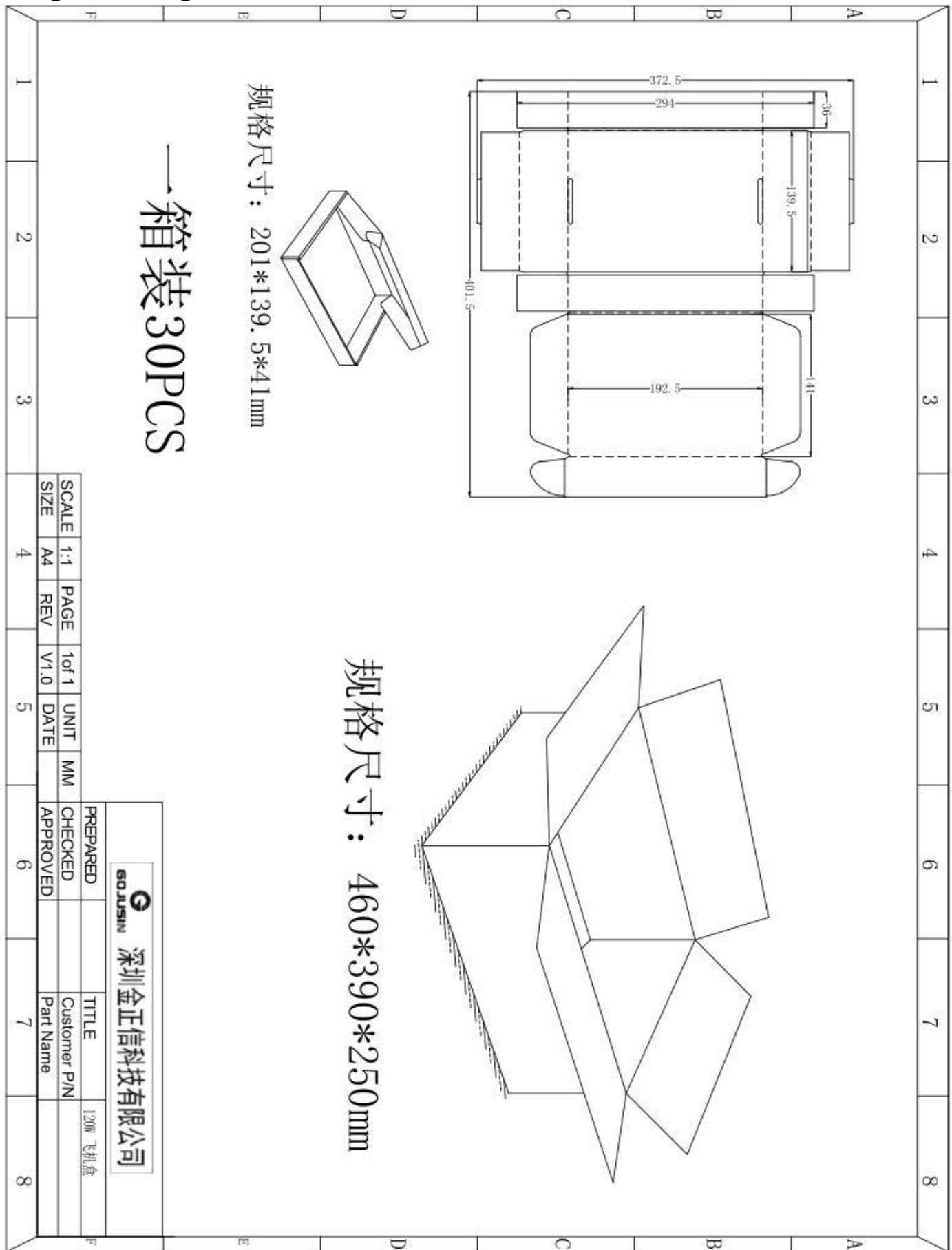
(Labeling) ☐



PE Bag/PE袋

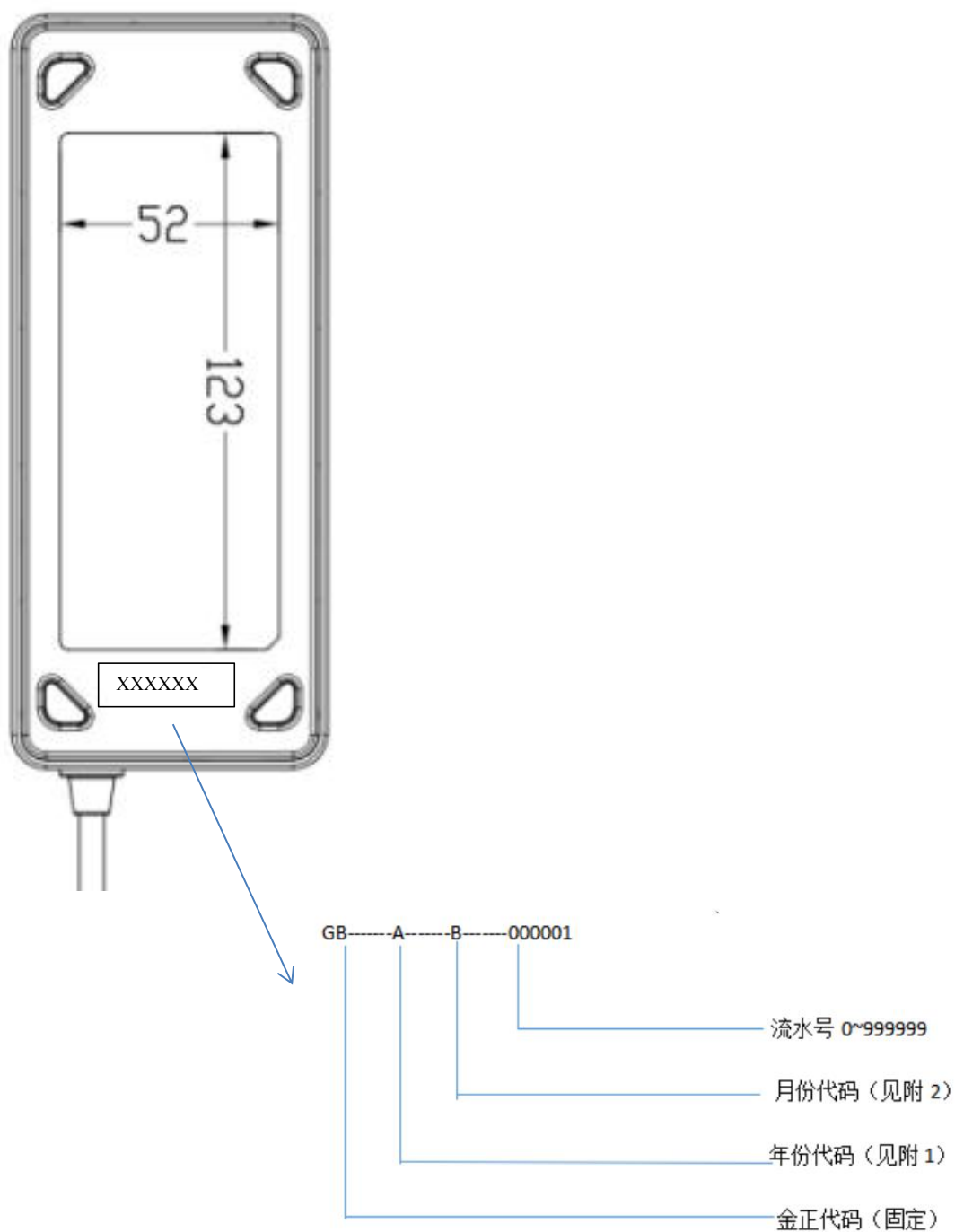


Package Drawing/包装示意图



Warranty barcode diagram/保修条码示意图

条码位置:



Production order/样品任务单

深圳金正信科技有限公司							
物品信息单							
交易状态: ☐ 未付 ☐ 已付 ☐ 已结					订单编号: JZX-202208000001		
序号	下单日期	发货日期	产品型号	数量	承认书编号	批号	
	2022-08-01	2022-08-04	深圳以假乱真九 单基14. GWA	1	JZX-VIP-800070	C8843	
输出项			输入项		产品名称	规格	品牌
1404 (批号: 158) 请见其 包装外盒 (M1: 7708637) 见 附单 颜色为(正新) 蓝色为 负新(1:10) (2:100%) 3.02.1209			称成品字尾1米0.76平方 (3.05.039)		1404-1	PP袋 纸箱、飞 机盒	正
制单: 李强 审核: 谭树彪			制单: 谭树彪 审核: 李强		制单: 谭树彪 审核: 李强		

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Rear view/背面图			Front view/正视图		

样品测试记录表 Test record sheet	1.	PCB 板: GOJUSIN-125W	场管: 10N65*2	肖特基: 20100*2		
	2.	输入电容: 120uF/400V*2	输出电容: 2200uF/25V*4			
	3.	限流电阻: R7/0. 22R R8, R8A/1R	取样电阻: R25/3. 6K R23/0R R24/20K	光耦供电: 330R		
	4.	灯供电: 2K	VCC 电阻: 10R	整流管(桥堆): 807		
	5.	恒流电阻: R29/560R R32/18K R32A/180K	转流电阻: R33/62K R39/82R	恒流基准电阻: 康铜丝*3		
	6.	Remarks/备注: 1. 出样时用0.75平方*2 AC线 2. DC线外表工作温度42° (两小时), 环境温度26°				

Producer/制作者