



WEJ Lighting Technology Co., Ltd.

SPECIFICATION

Document Number: HS14081406

Product Type : LED DOWN LIGHT

Product Model : WHPPR1-18

Draft: Toboo Check: Ding Recheck: George

VERSION: A0

Product Brief

LED DOWN Light



LED downlight is the application of new LED lighting the traditional lamp based on the improvement in the development of products, and traditional downlight contrast has the following advantages: energy saving, low-carbon, long life, good color, fast response. LED downlight design more beautiful light, can reach to maintain the overall architectural unity and perfect installation, does not destroy the lighting setup, light hidden architectural interior light is not exposed, no glare, visual effects people soft, evenly.

Key Applications:

- Home
- Office building
- Industrial Applications
- Industrial Buildings
- Airfield Lighting
- Effect light
- Medical Applications
- Projection Systems

Features:

- Professional LED lamp
- Very low energy consumption
- Extremely long life
- Robust against vibrations
- Mercury-free lamps
- No UV and near-IR radiation in the light beam
- Efficient generation of white light
- High color consistency

18W LED Panel Down light Electrical Parameter

Part No	LED Type	Nominal ANS/CCT	Input Voltage(V)	Input Current (mA)	Power (W)	Lumens (Lm)	CRI Min	View Angle	Operating-Life
WHPPR1-18V	SMD 2835	3000K	DC 24-36V	600mA	18W	1260	75	120°	35000H
WHPPR1-18S		4500K				1350	75	120°	
WHPPR1-18W		6000K				1440	75	120°	

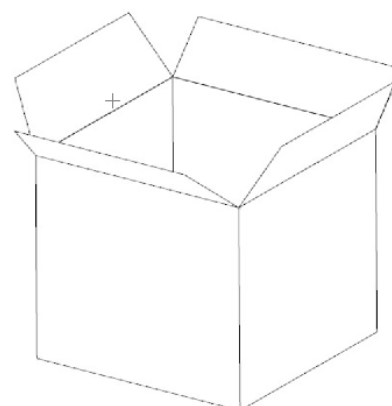
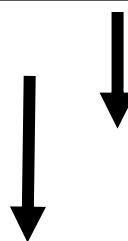
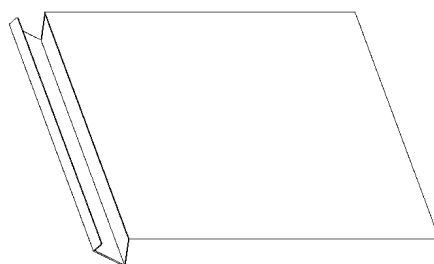
Essential Characteristics:

Surface Treatment	: Spray Paint
Material	: Aluminum + Plastic
Shell Color	: White
Operating Temperature Range	: -20 to +40℃
Storage Temperature Range	: -30 to +60℃
Water proof	: IP20

Dimension:



Package:



C/T NO. 箱号	XXX
Car Size 外箱尺寸	475*305*280MM
Quantity 数量	20PCS
N.W. 净重	XXX
G.W. 毛重	XXX
Remark 备注	XXX

Remark:

1. Operating voltage for this LED lamp is DC24-36V, so make sure the operating voltage suitable before connecting power supply to the spotlight, and then choose the correct power supply for it.

Because incorrect connection of voltage lighting may cause permanent damage.

2. This item is semi-outdoor application product, do not use it in the places where will be showered by rain.

3. Use lamp holder matching when it is installed.

4. It is not allowed to disassemble the lamps unless you are technician.



規 格 書 SPECIFICATION

20W LED POWER SUPPLY

Issued date: February 27, 2014

REV : V1.1

Model: SS-20R-36

Description: 20W AC to DC LED POWER SUPPLY

Customer : _____

Customer Approval Signature	WEJ Lighting Technology CO., Ltd		
	WRITTEN	CHECKED	APPROVED
	Toboo January 20, 2013	Ding January 20, 2013	George January 20, 2013

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变更履历表/E.C.LIST

版本 /Rev.	变更内容描述/Description of Change		日期/Changed Date	备注 /Remark
	变更前/Before	变更后/After		
V1.0	初次发行 (Original release)	-----	2013/01/20	
V1.1	V1.0	V1.1	2014-02-27	

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【1.产品应用 Applications】

LED 广告牌	LED Signage / Channel Letter
LED 建筑照明	LED Architectural Lighting
LED 商业工业照明	LED Commercial Industrial Lighting
LED 灯具	LED General Luminaries



图 1/ Figure 1

【2.产品特点 Features】

◆ 恒流模式和恒压模式可选.	Available Constant Current, or Constant Voltage
◆ 适合干燥、潮湿、淋雨的环境, 防水等级满足 IP66	Suitable for dry and wet Outdoor Environment, Waterproof IP66
◆ 采用自然散热塑胶外壳	Take in(use) natural heat plastic shell
◆ 通过 RoHS 认证	Passed RoHS Certification
◆ 具有主动式 PFC 功能	With Active PFC Function
◆ 适于室内使用	Suitable for indoor use

【3.输入参数 Input】

3.1 额定输入电压范围

rated AC input range: 100---240Vac/50---60Hz

3.2 输入电压范围

AC input range: 100---277Vac/50---60Hz

3.3 输入电流

Input AC Current/AC: 0.3Amax. @ 100---277Vac input & Full load

3.4 输入浪涌电流(冷启动)

Input inrush current(cold start): $\leq 25A$ at 110Vac $\leq 15A$ at 230Vac

3.5 功率因数

Power factor: ≥ 0.93 (at full load, 115Vac/230Vac)

3.6 总谐波 (THD%)

符合 IEC61000-3-2 标准要求

3.7 浪涌雷击

Surge: L-N: 0.5KV

【4.输出参数 Output】

4.1 选型列表 Model Listing

N O	型号 MODEL	输出电压 Output Voltage		输出电流 Output current	输出电 流精度 Output current tolerance	纹波和 噪声 ripple & Noise	输出 功率 output power	短路 功率 short-cir cuit power	效率 Efficie ncy	认证 Certificate
		空载电压 no-load Voltage	满载电压 full load Voltage	满载电流 full load current						
1	SS-20R-36	38V ±3%	24---36V	700mA max	±3%	2200mVmax	20W	≤3W	≥85%	TUV/UL/CUL/CE
2	SS-20R-36A	38V ±3%	24---36V	650mA max	±3%	2200mVmax	20W	≤3W	≥83%	TUV
3	SS-20R-36B	38V ±3%	24---36V	600mA max	±3%	2200mVmax	20W	≤3W	≥83%	TUV

表2/Table 2

纹波与噪声：量测时示波器选用 20MHz 带宽限制, 输出端要并联一颗 0.1uF 的陶瓷电容和一颗 10uF 的电解电容. (在额定输入及输出的条件下检测)

Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. (test under the condition of rated input and rated output)

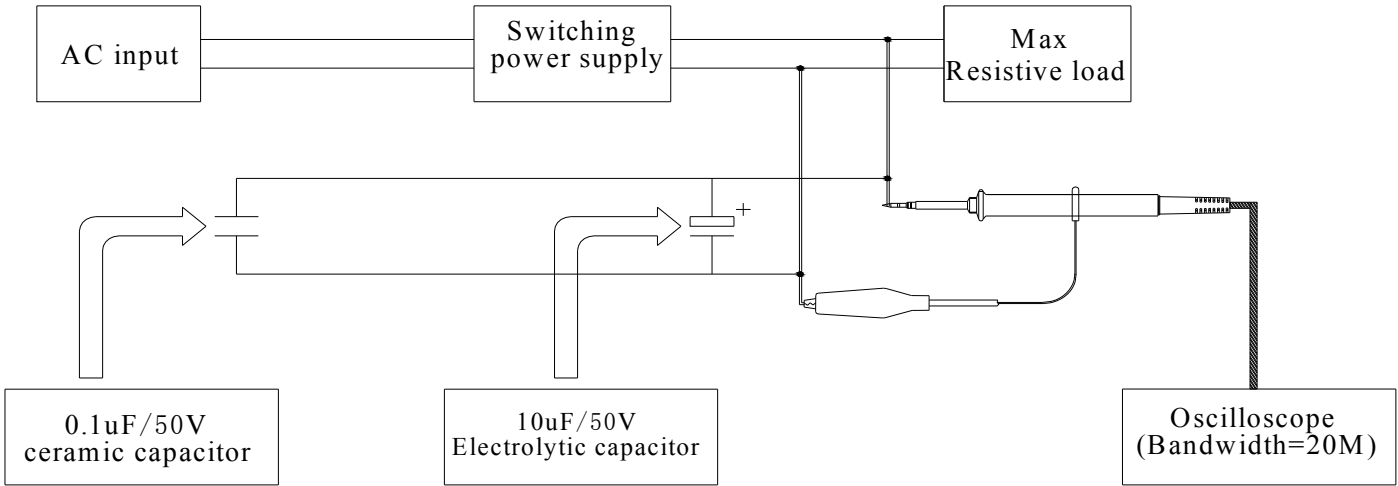


图 2/Figure 2

- 4.2 开机延迟时间 **Turn - on Delay Time**
230Vac输入和满载条件下, 最大3S。
3S max. @ 230 Vac input & full load.
- 4.3 关机保持时间 **Hold-up Time**
在230V输入、满载&最差情况下关机, 最小10mS。
10mS min. @ full load & 230Vac/50Hz input turn off at worst case.
- 4.4 上升时间 **Rise Time**
在满载条件下最大100mS。 100mS max. @ full load.
- 4.5 下降时间 **Fall Time**
在满载条件下最大50mS。 50mS max. @ full load.

4.6 输出过冲/欠冲 Output Overshoot / Undershoot

当电源开/关机时最大10%。 10% max. When the power on or off

【5. 保护功能 PROTECTION FUNCTION】

5.1 输出过压保护 Output Over- Voltage Protection

当输出电压超过 10%时, 产品进入保护状态, 如打嗝或钳在某输出最高电压状态, 产品不受损伤, 当故障排除或重新起机时, 电源工作正常

When the output voltage is over 10% the product is protected such as hiccup or when it is at the highest point of output voltage the product would not be hurt when the fault is excluded or is start working again the power supply is working normally

5.2 输出过流保护 Output Over-Output Current Protection

当输出电流超过130%时, 打嗝保护, 去掉后能自动恢复

When the output currents is over 130%, Return to normal status when Output Limit current to get right.

5.3 短路保护 Short Circuit Protection

当输出短路时, 产品输入功率降低且不会损伤, 当短路情况解除后, 产品将会自动恢复正常

The input power shall decrease when the output rail short, the power supply shall no damage, and shall be self-recovery when the fault condition is removed

【6. 环境要求 Environment requirement】

6.1 工作温度 Operating Temperature

-35°C to +50°C

6.2 贮藏温度 Storage Temperature

-40°C to +85°C

6.3 相对工作湿度 Relative Operation Humidity

10%RH to 100%RH

6.4 相对贮藏湿度 Relative Storage Humidity

5%RH to 100%RH

6.5 冷却方式 Cooling Method

空气自然冷却 Air Cooling

6.6 振动 Vibration

1.0mm, 10 –25Hz, 15 minutes per cycle for each axis (X, Y, Z)

6.7 海拔高度 Height Above Sea Level

电源在海拔-65~4000m能正常工作。

The power supply can normal operate at -65~4000 meter.

【7. 可靠性要求 Reliability Requirements】

7.1 老化 Burn-in

产品至少要在40℃±5℃的环境下老化8小时（详见建议验收测试标准）。

The power supply shall be burn-in for 8 hours at 40℃±5℃(The detail is at suggest Test Standard).

7.2 平均间隔故障时间估算 MTBF Estimation

平均间隔故障时间：至少30,000 小时, 50℃环境及额定输入与100%负载条件下。

The MTBF shall be at least 30,000hours at 50℃, 100%load and nor. input condition.

【8. EMI/EMS标准 EMI/EMS Standards】

8.1 EMI 标准 EMI Standards

EN55015:2006+A1:2007+A2:2009	参照表 2/Refer to table 2
EN61547:2009	参照表 2/Refer to table 2
EN61000-3-2:2006+A1:2009+A2:2009	参照表 2/Refer to table 2
EN61000-3-3:2008	参照表 2/Refer to table 2

表3/Table 3

【9. 安规标准 Safety Standards】

9.1 介电耐压强度(高压) Dielectric Strength(Hi-pot)

初级对次级: 3000Vac /5mA Max / 60秒 (生产时高压测试时间: 3750 Vac /3秒)。

Primary to Secondary: 3000Vac/5mA Max/60 seconds (3750 Vac /3 seconds for production).

9.2 漏电流 Leakage Current

最大为5mA

5mA max.

9.3 阻抗 Insulation Resistance

在初级与次级间加500Vdc 进行测试, 最小10MΩ。

10MΩ min. at primary to secondary adds 500Vdc test voltage.

9.4 标准 Regulatory Standards

Type/安规	Country/国家	Standard/标准	State/状况	Mark/备注
CE	Europe	EN61347-1:2008+A1:2011 EN61347-2-13:2006	参照表 2/Refer to table 2	
TUV	Europe	EN61347-1:2008+A1:2011 EN61347-2-13:2006	参照表 2/Refer to table 2	
UL /CUL	North American	UL1310	参照表 2/Refer to table 2	
CQC	China	GB17625-1 GB7743	参照表 2/Refer to table 2	

表4/Table 4

【10. 外型尺寸 Dimension】

10.1 长*宽*高 L 96 mm*W 41 mm*H 25 mm

【11. 产品重量 Product weight】

11.1 重量：约 161 克

Weight : about 161 gram

【12. 铭牌 Label】

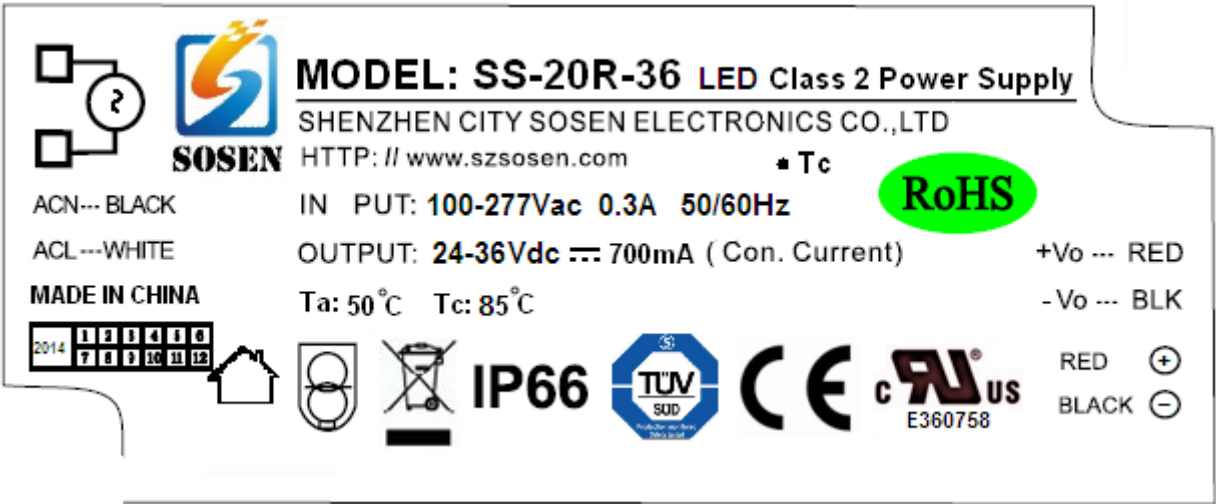


图 3/Figure 3

【13. 线材规格 Wire Specification】

1. AC 输入线：黑白线材：1015# 18AWG 105℃ 剥线镀锡 8mm 外露 170mm

AC input line: Black and white wire: 1015 # and 18AWG 105 °C wire stripping tin 8 mm exposed 170 mm

2. DC 输出线输出线：红黑线材：1430# 18AWG 105℃ 剥线镀锡 8mm 外露 170mm

DC output line : Red and black wire: 1430 # and 18AWG 105 °C wire stripping tin 8 mm exposed 170 mm

【14. 安装尺寸 Mechanical Drawing】

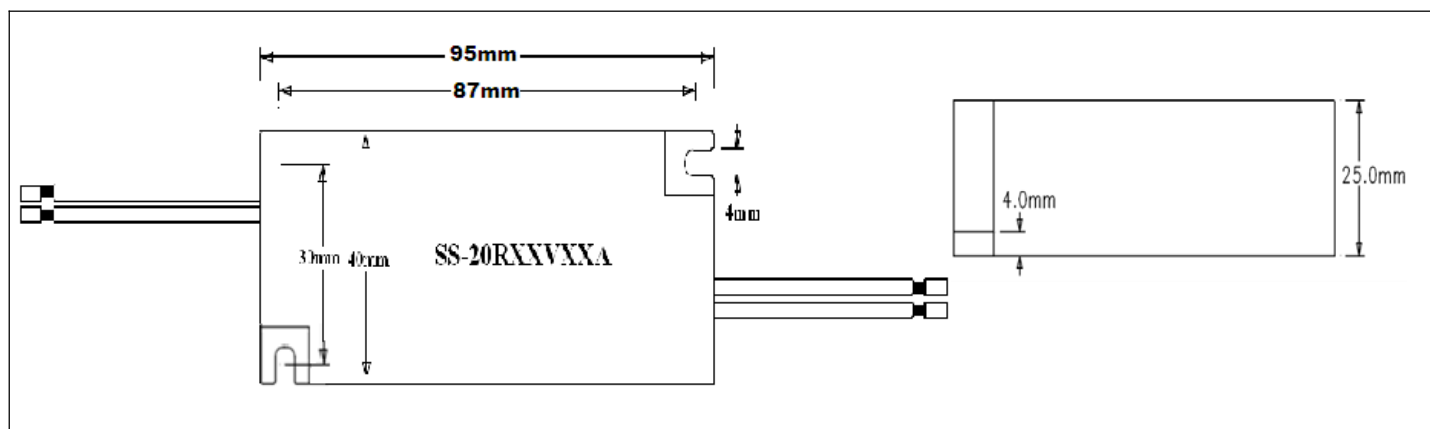


图 4/Figure 4

【15. 方框原理图 Block Diagram】

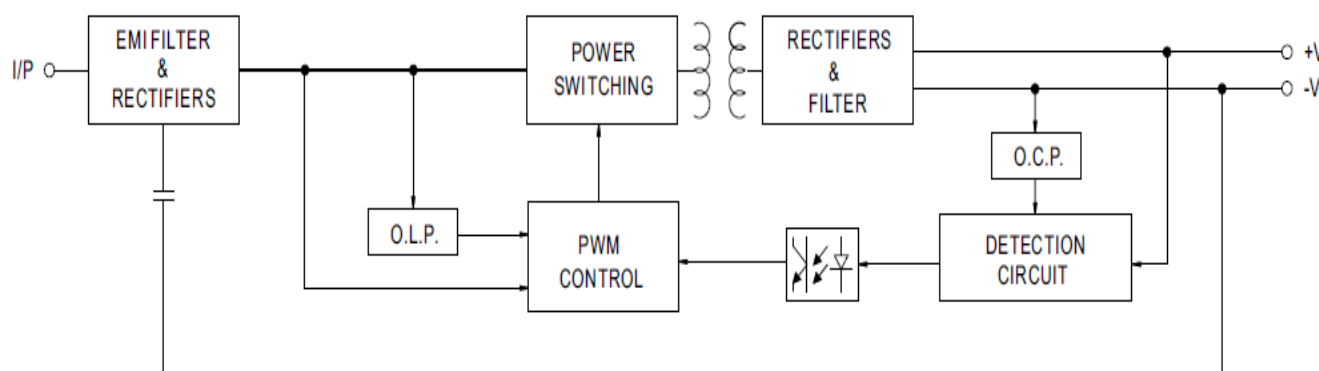


图 5/Figure 5

【16. 可靠性曲线 Reliability Curve】

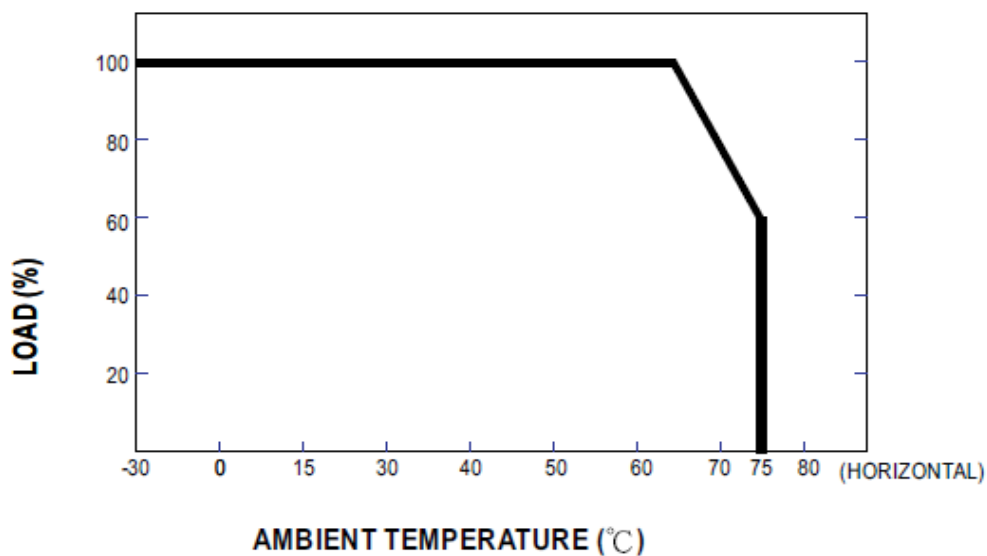


图 6/Figure 6

【17. 静态特性 Static Characteristics】

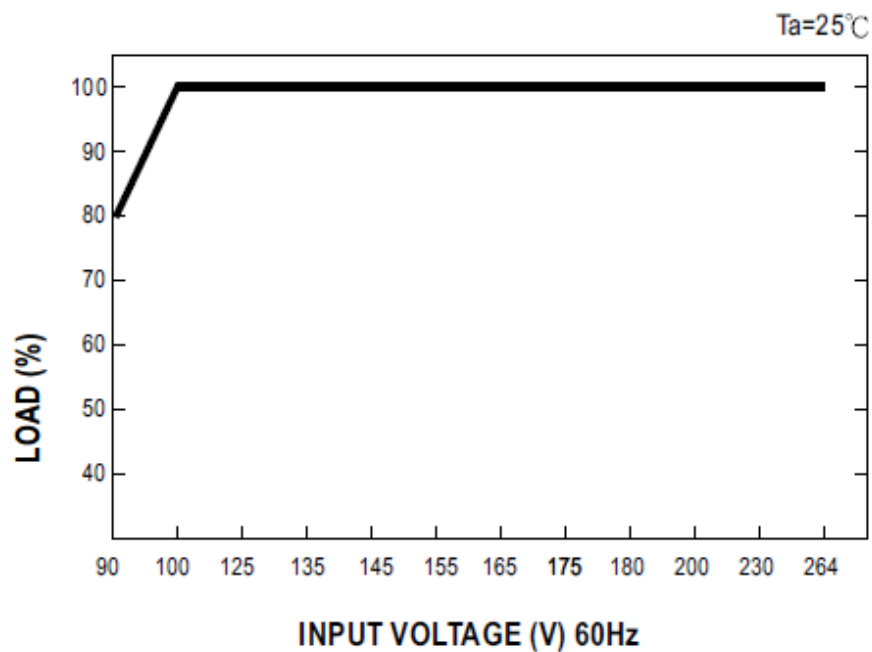


图 7/Figure 7

【18. 包装示意图 Package Drawing】

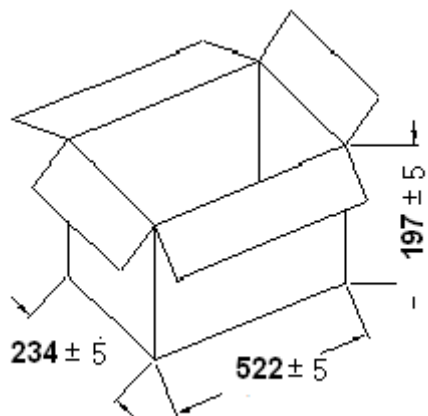


图 8/Figure 8

技术要求 Technical requirement:

1. 纸箱 Carton ;
2. 外箱外度尺寸: L522*W234*H197mm;
Outside carton size: L522*W234*H197mm;
3. 环保要求: 过 RoHS 标准;
Environment request: Passed RoHS;
4. 外观要求: 无破损、无脏污、切口无毛边;
Exterior appearance request: no damage, no dirt, no edges incision;
5. 每箱装 128 台;
Each box 128 pcs;