

## LED 电源规格书 LED Power Supply Specification

<b>CURTOMER /客户:</b>	
<b>PRODUCT /产品类型:</b>	LED Power Supply/LED驱动电源
<b>MODEL NO. /产品型号:</b>	WP-HHA-100U Series
<b>PART NO./物料编号:</b>	

<b>DESIGNED BY / 拟制</b>	<b>CHECKED BY / 审核</b>	<b>APPROVED BY / 批准</b>
<b>Date / 日期:</b>	<b>Date / 日期:</b>	<b>Date / 日期:</b>

<b>CUSTOMER APPROVED SIGNATURES</b> 客户承认签核		
<b>Testing Engineer /测试工程师</b>	<b>CHECKED BY / 审核</b>	<b>APPROVED BY / 批准</b>
<b>Date / 日期:</b>	<b>Date / 日期:</b>	<b>Date / 日期:</b>
<b>For confirmation, please sign and return this specification to us.</b> 客户确认签字, 盖章后请回传一份承认书给我司.		

## 1. Electrical / 电气特性

### 1.1 Input characteristics / 输入特性

Classification / 类别	Subject of entry / 项目	
Input characteristics 输入特性	Rated input voltage / 额定输入电压	120-277Vac
	Range input voltage / 电源输入电压范围	108-305Vac
	Input current / 输入电流	<1.1A
	Input frequency / 输入频率	50/60Hz
	Input frequency range / 输入频率范围	47-63Hz
	Turn on delay time / 启动时间	≤500ms
	No-load power consumption / 空载功耗	≤1.5W
	Stand-by power consumption / 待机功耗	≤1W
	Inrush current / 浪涌电流	<60A
	Power factor (@70%Load to Full load) / 功率因数	≥0.9
	THD (@70%Load to Full load) / 总谐波失真	≤15%

### 1.2 Output Characteristics / 输出特性

#### Constant Current Mode / 定电流模式 (CV测试)

Model No. / 型号	Output Voltage range / 输出电压范围 (V)	Rated Current 额定电流 (mA)	OVP / 过压保护 (V)	Output power (Rated) / 输出功率 (额定) (W)	Efficiency / 效率 (%) (Full load)		Output ripple (peak to peak) 输出纹波 (峰-峰值) ①
					@120Vac	@277Vac	
WP-HHA-100U0521500	35-52	1500	63	78	≥88	≥89	<4V
WP-HHA-100U0521550	35-52	1550	63	80.6	≥88	≥89	<4V
WP-HHA-100U0521600	35-52	1600	63	83.2	≥88	≥89	<4V
WP-HHA-100U0521650	35-52	1650	63	85.8	≥88	≥89	<4V
WP-HHA-100U0521700	35-52	1700	63	88.4	≥88	≥89	<4V
WP-HHA-100U0521750	35-52	1750	63	91	≥88	≥89	<4V
WP-HHA-100U0521800	35-52	1800	63	93.6	≥88	≥89	<4V
WP-HHA-100U0521850	35-52	1850	63	96.2	≥88	≥89	<4V
WP-HHA-100U0501900	35-50	1900	63	95	≥88	≥89	<4V
WP-HHA-100U0482000	35-48	2000	63	96	≥88	≥89	<4V
WP-HHA-100U0462100	35-46	2100	63	96.6	≥88	≥89	<4V
WP-HHA-100U0442200	27-44	2200	63	96.8	≥87	≥89	<4V
WP-HHA-100U0422300	27-42	2300	50	96.6	≥87	≥89	<4V
WP-HHA-100U0402400	27-40	2400	50	96	≥87	≥89	<4V
WP-HHA-100U0382500	27-38	2500	50	95	≥87	≥89	<4V
WP-HHA-100U0382550	27-38	2550	50	96.9	≥87	≥89	<4V

#### Note / 注释①

Ripple noise measurement method / 纹波噪声测量方法

10% of nominal output voltage (whichever is greater), measured at 20MHz bandwidth with 0.1uF ceramic capacitor in parallel with 10uF electrolytic capacitor connected at the end of the output connector.

额定输出电压的 10%，测试条件：输出端由 0.1uF 瓷片电容和 10uF 电解电容并联，20M 带宽范围测试。

## 1.3 protection Characteristics / 保护特性

### 1.3.1 Short circuit protection / 短路保护

Hiccup/short happened between the output terminals and shall not result in fire and any damage. The power no output, output will auto recover upon removal of over load.

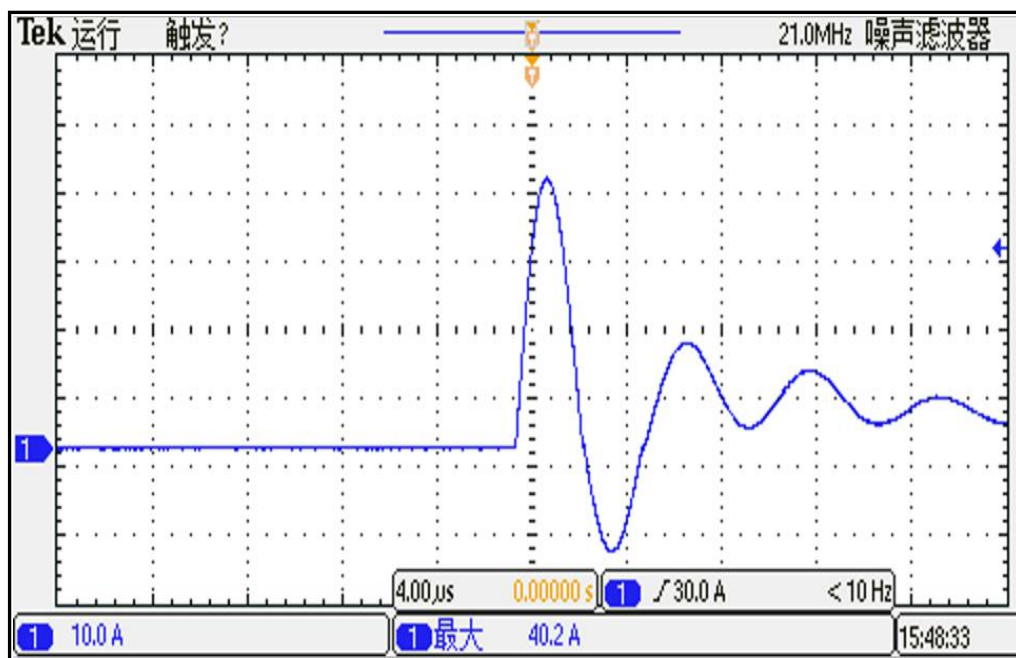
当输出端短路时，产品输入功率降低或无输出且不会损伤，当短路情况解除后，产品将会自动恢复正常。

### 1.3.2 Other protection / 其他保护

Rely on input fusing.

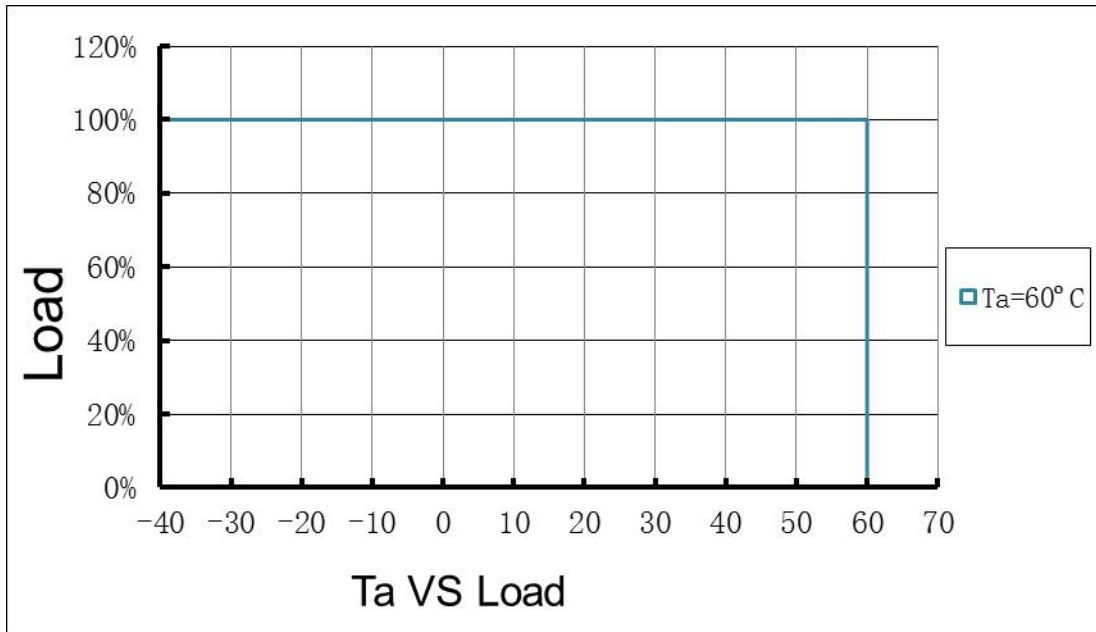
电流保险丝。

### 1.3.3 Inrush current Waveform/浪涌电流波形



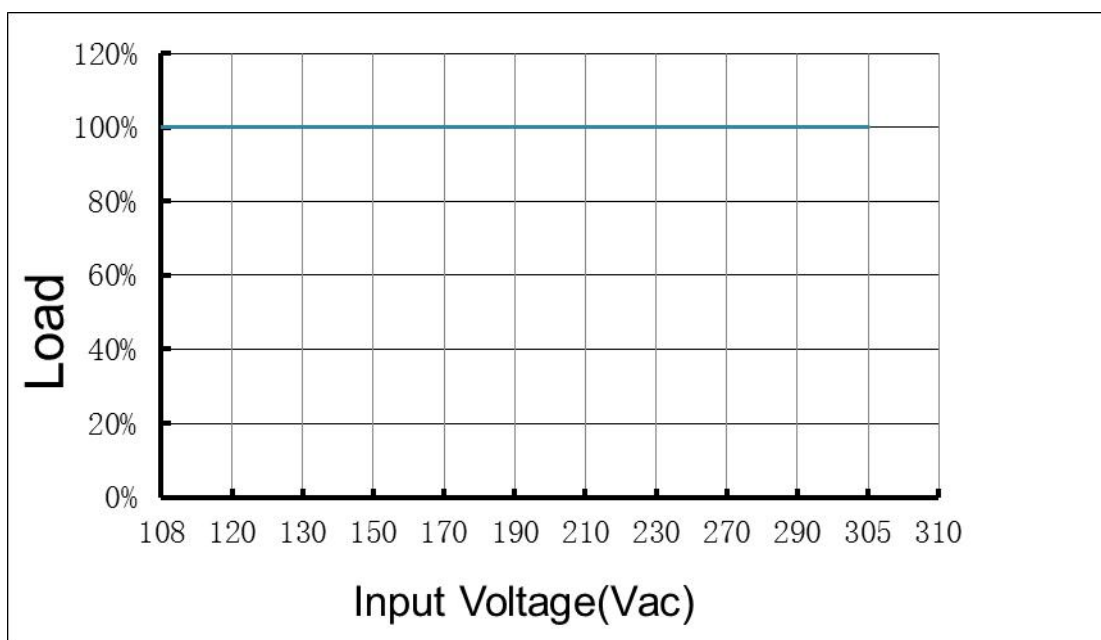
### 1.3.4 Derating curve/冗余曲线图

	-40°C	-25°C	0°C	25°C	45°C	60°C
120V	100%	100%	00%	100%	100%	100%
277V	100%	100%	100%	100%	100%	100%

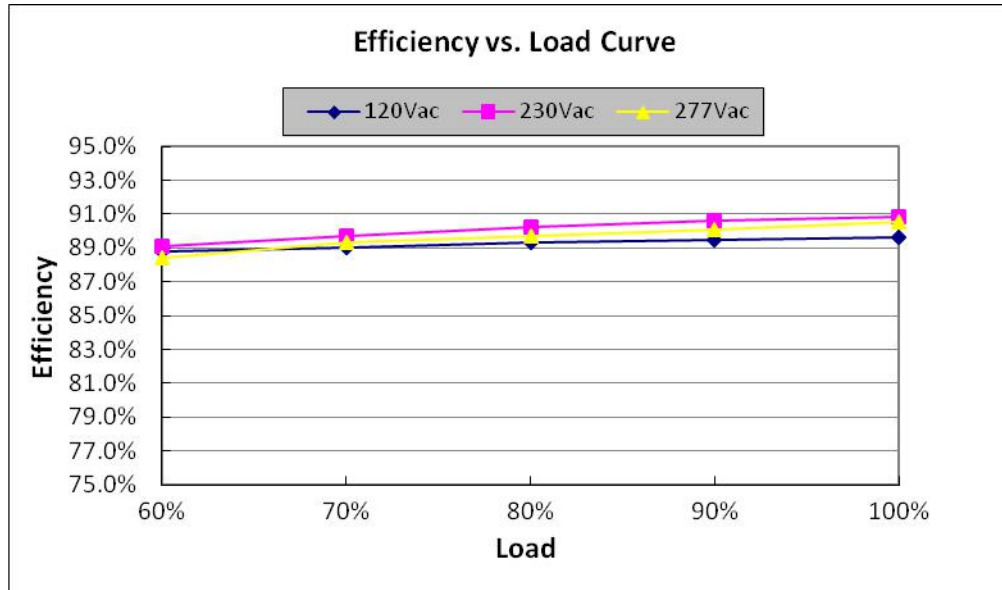


### 1.3.5 Static characteristics/静态特征

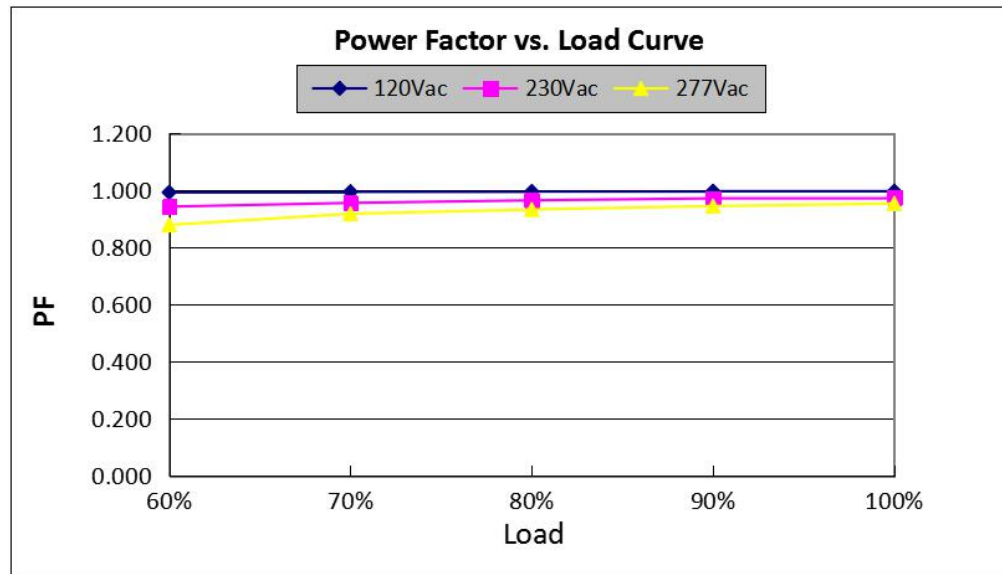
108Vac	120V	220V	240V	277V	305V
100%	100%	100%	100%	100%	100%



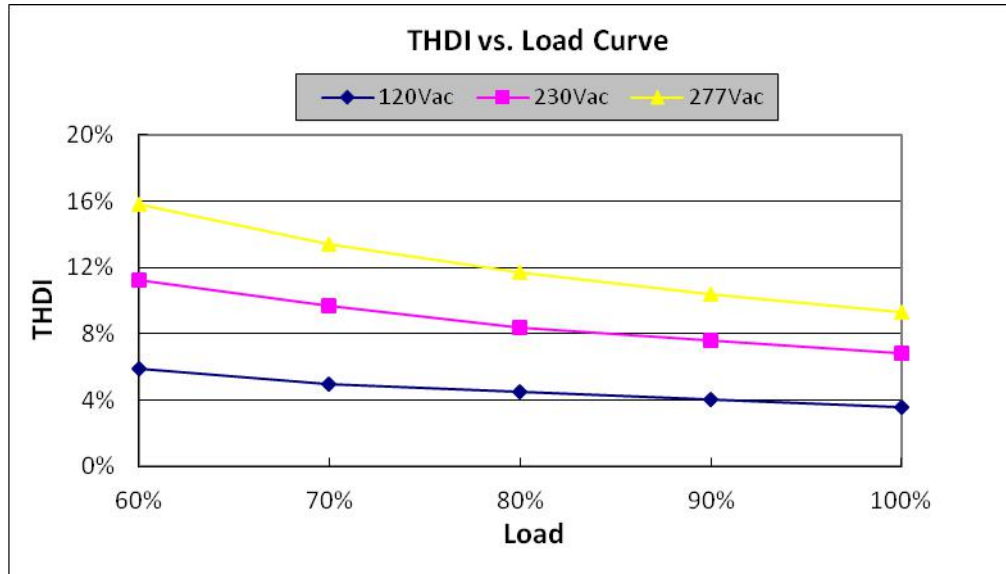
### 1.3.6 Efficiency VS Load Curve/效率-负载曲线



### 1.3.7 Power Factor vs. Load Curve/功率因素-负载曲线



### 1.3.8 THDI vs. Load Curve/总谐波失真-负载曲线

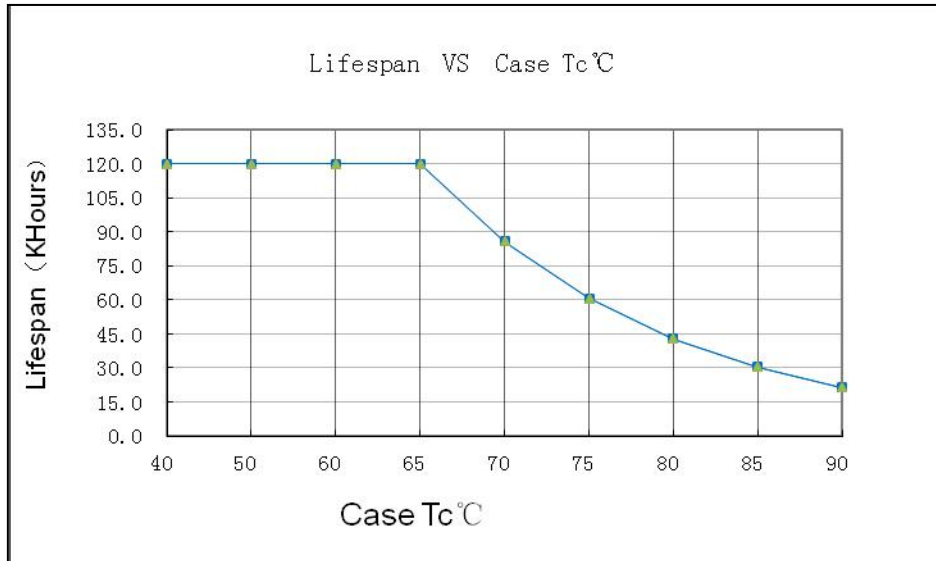


### 1.4 Environmental/环境系数

Classification/类别	Subject of entry/项目	
Safety&EMC 安规和电磁兼容	Safety Standards / 安规标准	UL8750/CAN/CSA-C22.2 NO. 250.13
	EMC / 电磁兼容	EN55015 and FCC part 15 class B.
Hi-Pot / 耐压	I/P-O/P/输入-输出	1.6KVac,5mA,60S;
	I/P-FG/输入-地	1.5KVac,5mA,60S;
	O/P-FG/输出-地	1.5KVac,5mA,60S;
lightning surge 雷击浪涌	ICE61000-4-5	L-N :4KV L&N-PE:6KV
Insulation Resistance 绝缘阻抗	I/P-O/P; O/P-FG; I/P-FG	100Mohm/500Vdc
Leakage current 漏电流	277Vac input / 277V交流输入漏电流	<1.6mA
Environmental 环境系数	MTBF / 平均间隔故障时间	200,000 hours at 25°C ambient temperature
	Operation temperature / 工作温度	-40 °C to 60 °C
	Humidity / 湿度	10% to 90%
	Storage temperature / 储存温度	-40°C to 85°C
	Protection Class/防护等级	IP65
	Environment rating/环保标准	RoHS
	Case Size/外壳尺寸(L*W*H)mm	L*W*H: 240*43.2*30mm

## 2. Product life reference diagram/产品寿命参考示图

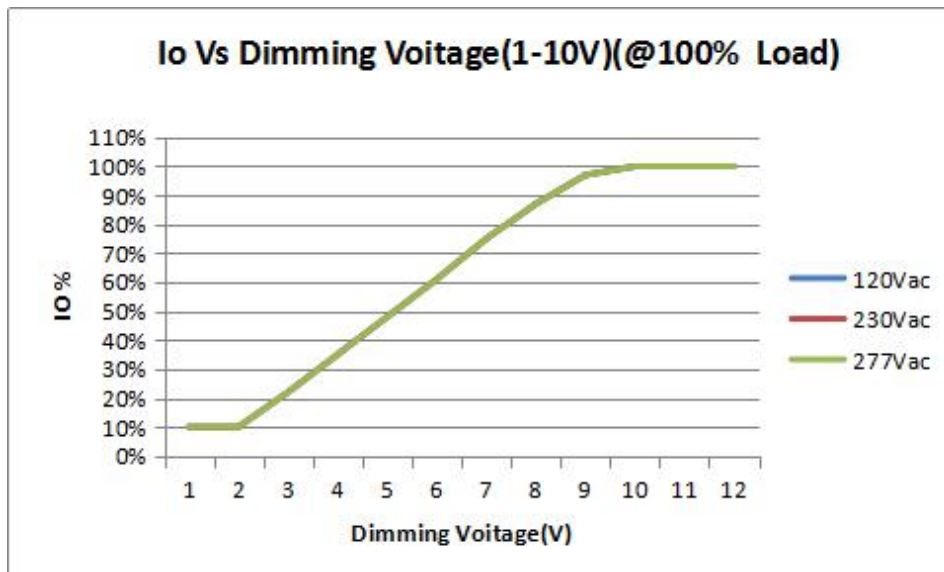
Case Temperature 外壳温度 (tc)	50°C	60°C	65°C	70°C	75°C	80°C	85°C	90°C
Lifespan/寿命 (KHours)	120	120	120	85.7	60.6	42.8	30.3	21.4



## 3. Dimming function/调光功能

1-10V Dimming/1-10V 调光; 10-100% dimming scope/调光范围 10-100%

Dimming Voltage 调光电压 (V)	0	1	2	3	4	5	6	7	8	9	10	OPEN
Percentage of rated current 额定电流百分比	10%	10%	20%	33%	46%	58%	71%	84%	97%	100%	100%	95%-105%

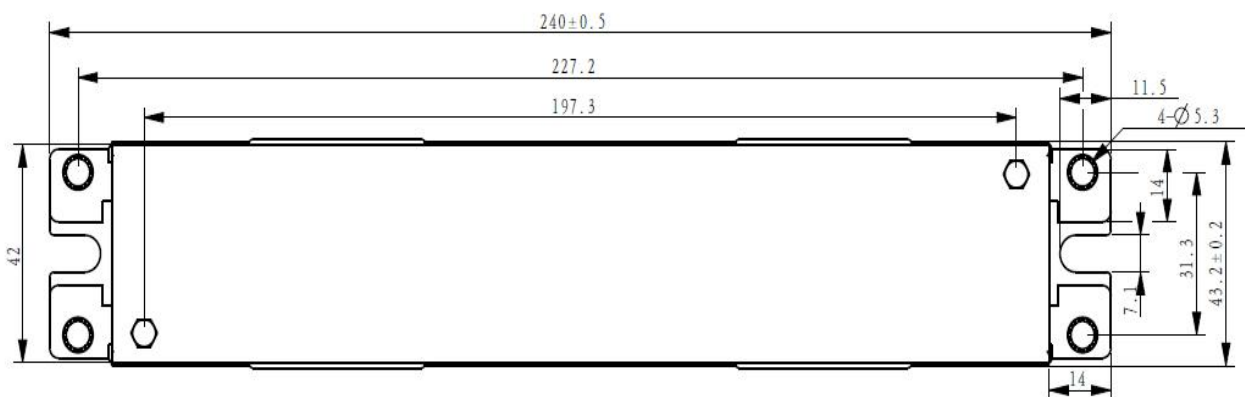




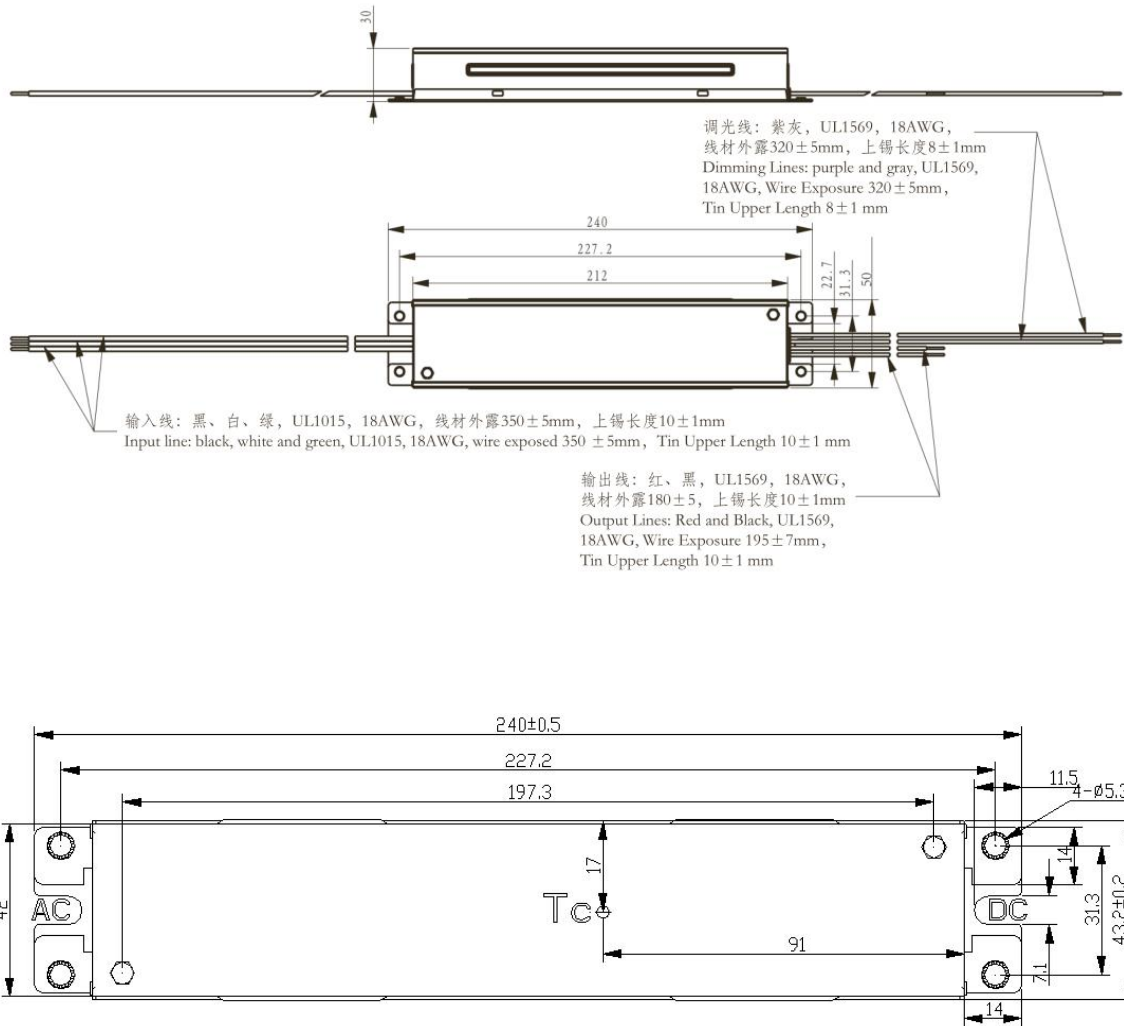
## 4. Enclosure/外观示意图



## 5. Mounting hole size/安装孔尺寸







## 6. Label schematic / 标签示意图



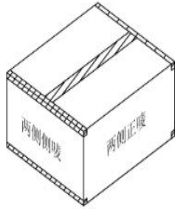
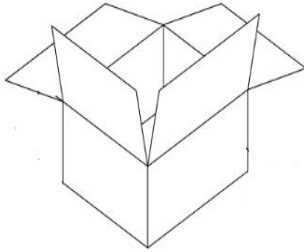
## 7. Packing/包装

Net Weight/净重: 0.56 kgs/0.56千克

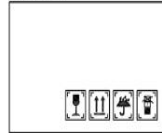
QTY/数量: 32pcs/32个

Carton Dimension/包装尺寸: 420x320x190mm

Net Weight/Gross Weight 净重/毛重: 17.9kgs/19kgs



两侧侧吸



两侧正吸

P/N:	LOT/NO:
QTY: PCS	DATE:
N. W: KG	G. W: KG
SIZE:	

### History/历史

NO. 序号	DATE 日期	REVISION 版本号	REMARK 备注	Changer 修改人
1.	2018.05.09	V0.90	初拟定/ First drafting	吴杨兵/ Yangbing Wu
2.	2018.09.16	V1.0	1、变更产品外观和标签样式/ Update Appearance and Label 2、修改雷击浪涌等级/ Modification of lightning surge	吴杨兵/ Yangbing Wu
3.	2019.07.18	V1.1	更新标签信息, 增加FCC/Update label information and increase FCC	李克站/ Kezhan Li
4.	2019.07.18	V1.2	调光修改为1-10V/Change dimming to 1-10V	李克站/ Kezhan Li