



深圳市莱福德光电有限公司  
SHENZHEN LEDFRIEND OPTOELECTRONICS CO.,LTD.

# 产品承认书

## SPECIFICATION FOR APPROVAL

客户名称 Customer : \_\_\_\_\_

客户品名 Customer No: \_\_\_\_\_

产品名称 Description: LED Driver

产品型号 Model No: LF-FTU030NA

规格 Specifications: AC220-240V DC100-130V 150mA

版本号 Version: V1.0

产品生产商 Vender: 深圳市莱福德光电有限公司

### 客户确认 Customer Approval

检查 TESTED BY	审核 CHECKED BY	批准 APPROVED BY

### 莱福德确认 Ledfriend Approval

拟定 WORKED BY	审核 CHECKED BY	批准 APPROVED BY
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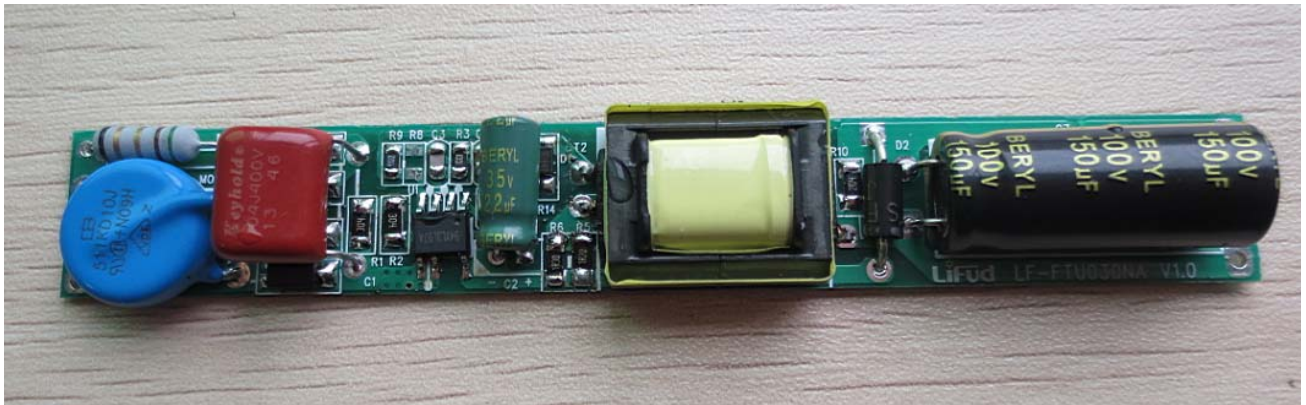
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## 一. 描述 Description

- 1.1 本产品适用于 T8,T10LED 内置日光灯。This product is suitable for T8, T10LED built-in fluorescent lamp
- 1.2 本产品拥有独特的单级 PFC 控制, 及高功率因数和高效率及良好的谐波控制. This product has a unique single-stage PFC control, and high power factor and high efficiency and good harmonic control

## 二. 产品图片 Product picture



## 三. 输入特性 Input Characteristics

名称 Name	最小值 Min. Load	额定值 Rated Load	最大值 Max. Load	单位 Units	备注 Remark
输入电压 Input Voltage	180	220	265	Vac	
输入频率 Input Frequency	47	50/60	63	HZ	
输入电流 Input Current	--	--	0.3	A	180Vac 满载 180Vac Full load
浪涌电流(冷启动) Inrush Current(cold start)	--	--	20	A	220Vac 满载 220Vac Full load

## 四. 负载特性 Load Characteristics

名称 Name	最小值 Min. Load	最大值 Max. Load	单位 Units	备注 Remark
开机延迟时间 Start-up Delay Time	--	$\leq 1.5$	S	180Vac 满载 180Vac Full load
	--	$\leq 1.0$	S	220Vac 满载 220Vac Full load
输入线性调整率 Input Line Regulation	--	$\leq 5$	%	150Vdc满载 150Vdc Full load
输出线性调整率 Output Line Regulation	--	$\leq 5$	%	130Vdc轻载 130Vdc Light load

空载功耗 No-load power consumption	--	1	W	180Vac 输入 180Vac Input
	--	1	W	220Vac 输入 220Vac Input
温度漂移 Temperature Drift	--	≤10	%	220Vac 满载 220Vac Full load

## 五. 产品电性能综合描述 Electrical Performance

### 5.1. 系列参数表 Parameter Table

输出电压范围	输出电流范围	输出功率	输入电压	功率因数	效率	电流谐波	输出纹波	电流精度
Output Voltage range	Output Current range	Output power	Input voltage	Power factor	Efficiency	Current harmonics	Output ripple	Current accuracy
(单位: Vdc)	(单位: mA)	(单位: W)	(单位: Vac)	(单位: 100%)	(单位: %)	(单位: %)	(单位: Vac)	
100-130	150	20W	180	0.90	90	>30	--	±5%
			220	0.92	90	>30	--	±5%
			265	0.92	90	>30	--	±5%

备注:

1. 以上系列参数均是在满载条件下测试的结果。The parameters above are obtained under the testing condition of full load.

2. 以上系列参数均是代表本产品为标准品上演变的参数, 如果客户对电性能有特别的要求可以视情重新调试研发。The parameters table above includes all variants based on standard model, if special parameters are required, R&D will do evaluation first before deciding modification.

3. 以上数据均在环境温度25°C, 湿度50%条件下进行。The data above are obtained under ambient temperature of 25°C and 50% RH.

## 六. 保护要求 Protection Requirements

功能保护项 Protections	功能指标 Specs	备注Remark
开路保护 Output open circuit protection	输出电压≤160Vdc Output voltage≤160Vdc	
短路保护 Output short circuit protection	短路输出时的输入功率≤3W Short circuit output when the input power ≤3W	

## 七. 环境要求 Environment Requirements

名称 Name	最小值 Min. Load	额定值 Rated Load	最大值 Max. Load	单位 Units	备注 Remark
工作温度 Operating Temperature	-30	25	65	°C	
工作湿度 Operating Humidity	10	--	90	%RH	

储存温度 Storage Temperature	-30	40	65	℃	
大气压力 Pressure	70	--	106	KPa	

## 八. 可靠性要求 Reliability Requirements

产品100%要在至少 $40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 的环境及满载条件下老化4小时/100% of products The power supply shall under go a minimum of 4 Hours burn-in test at  $40^{\circ}\text{C} \pm 5^{\circ}\text{C}$  under full load condition.

## 九. 认证标准 Certification Standards

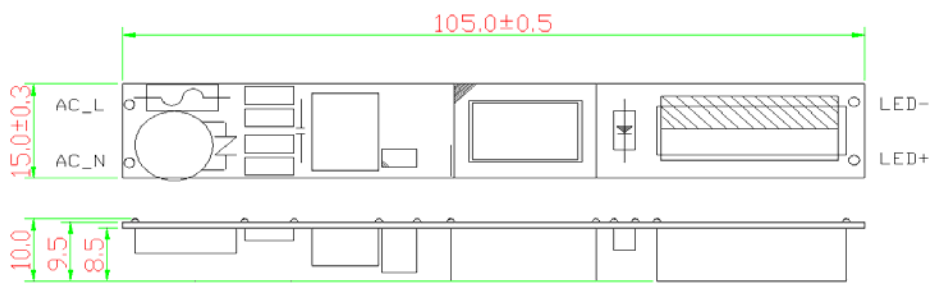
雷击可过1KV  
1 KV surge protection

## 十. 外观尺寸 Outline Drawing

### 10.1. 重量 Weight

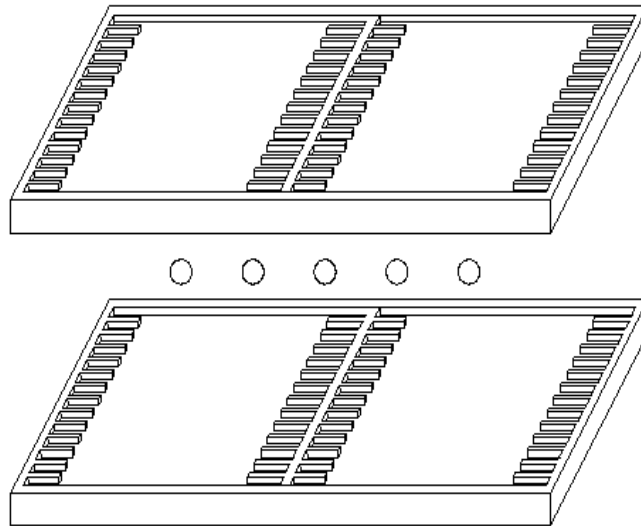
Weight: 165g/PCS

### 10.2. 尺寸示意图 Size



## 十一. 包装图 Package Drawing

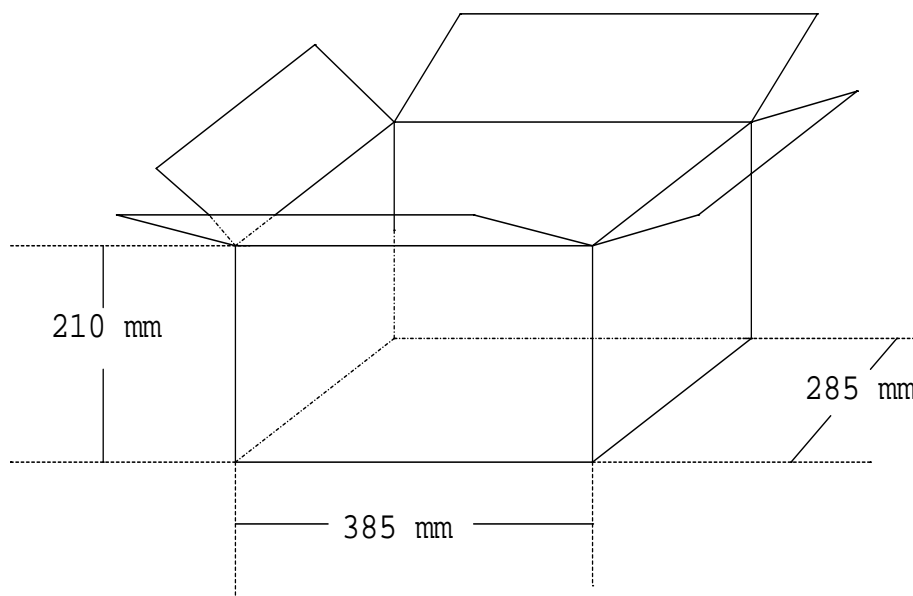
### 11.1. 带电源罩内包装 Open frame LED driver with insulating cover inner package



每个吸塑盘放置28个LF-FTU030NA

There are 28 pieces of LF-FTU030NA on each blister packing plate.

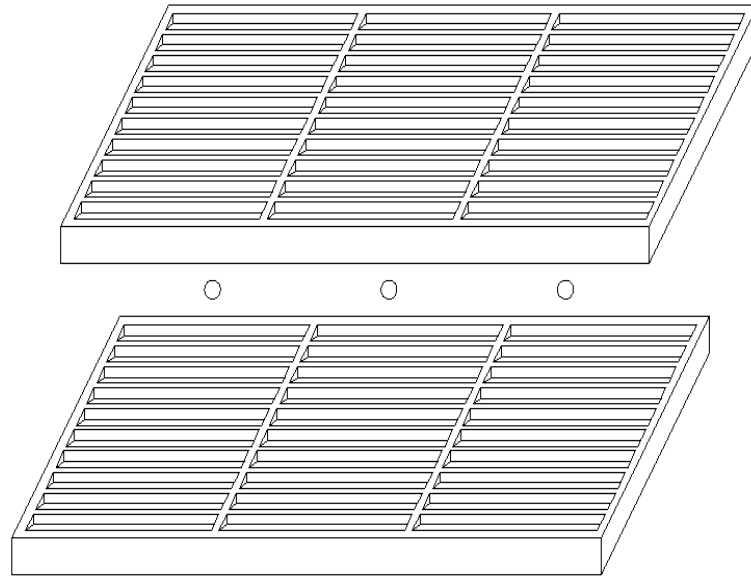
### 11.2. 带电源罩外包装盒 Open frame LED driver with insulating cover outside package



每个包装箱内放置10层吸塑盘，总计280个产品。

Twelve tiers are in each packaging box, and then in total there are 280 pcs LF-FTU030NA (28pcs x 10tiers)

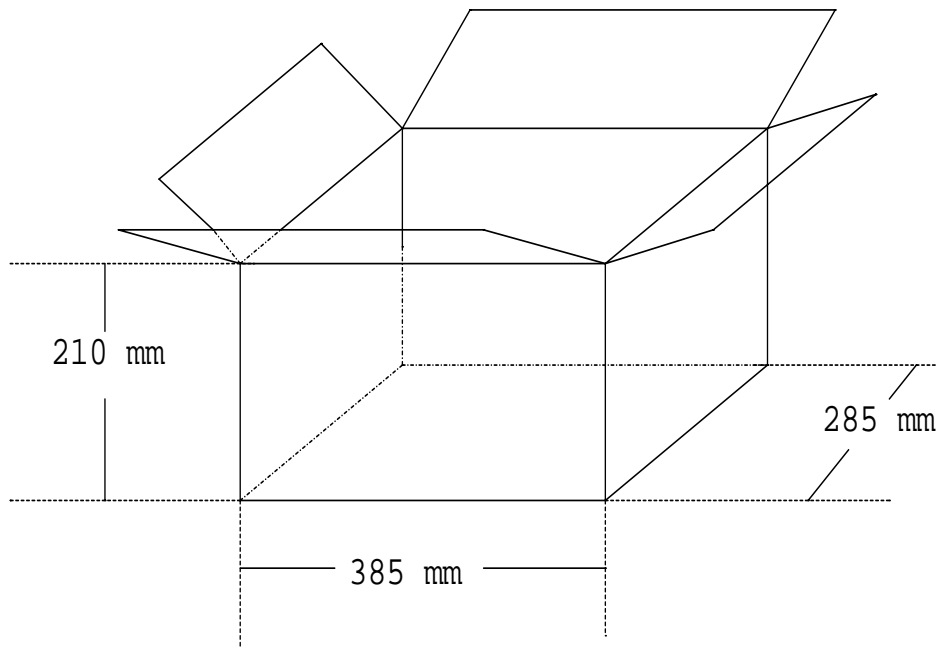
### 11.3. 裸板内包装 Open frame LED driver inner package



每个吸塑盘放置放置30块LF-FTU030NA

There are 30 pieces of LF-FTU030NA on each blister packing plate.

### 11.4. 裸板外包装 Open frame LED driver outside package



每个包装箱内放置16层吸塑盘，总计480个产品。

Sixteen tiers are in each packaging box, and then in total there are 480 pcs LF-FTU030NA  
(30pcs x 16 tiers)