

## 电源产品规格书

### Power supply product specification

产品名称: 200W—LED 驱动条形电源

Product Name: 200W—LED Strip Power Supply

产品型号: AD-EL-2402000

Product Item: AD-EL-2402000

Shanghai Edgelight Industry Co.,Ltd.

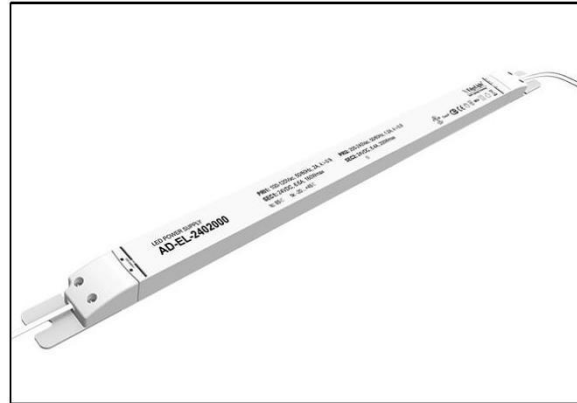
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## 1、产品简介 Product Introductions



**AD-EL-2402000**

- 电气类型：隔离电源

Electrical type: Isolated power supply

- 功能说明：全电压（半电压）无频闪

Function description: Full voltage (half voltage) without stroboscopic

- 产品特性：SELV 全电压范围内工作，高 PF 值、高性能，高效率，可以连接我司 three-in-one 调光控

制器构成 pwm/0-10v/resistor 调光电源

Product features: SELV working in full voltage range, high PF value, high performance, high efficiency, can be connected to our three-in-one dimming controller to form pwm/0-10v/resistor dimming power supply

- 应用领域：LED 照明领域

Application area: LED lighting field

- 质保：参见产品寿命曲线

Warranty: To refer product life curve

- 认证：

Certification:   



**2、电气规格 Electrical specifications**

指标 Index	型号全称 Full name of model	AD-EL-2402000	
输出特性 Output characteristic	输出电压 Output voltage	24V	
	输出电流 Output current	6.66A @100-120Vac	8.33A@200-240Vac
	纹波电压+噪音 (峰峰值) Ripple voltage + noise(peak-to-peak)	400mV (Vp-p)	
	电压精度 Voltage accuracy	±1%	
	启动时间 (最大值) Start time (maximum)	< 500ms	
	温度漂移 Temperature drift	±0.03%/°C (0-60°C)	±0.03%/°C (0-60°C)
	输出线性调整率 Output linear adjustment rate	±2%	
	负载调整率 Load regulation rate	±2%	
	保持时间 Preserve time	100ms	
输入特性 Input characteristics	输入电压 Input voltage	100VAC~240VAC	
	输入频率 Input frequency	50HZ/60HZ	
	输入电流 (最大值) Input current (maximum)	1.9A @ 100Vac	
	漏电流	0.8mA	



	Leakage current	
	总谐波 Total harmonic	< 25%
	功率因数 Power factor	> 0.9
	效率 Efficiency	92%
	浪涌电流 Surge current	冷启动 40A @230Vac Cold start 40A @230Vac
	空载功耗/待机功耗 No-load power consumption / standby power consumption	1W
保护特性 Protection characteristics	过流保护 Over current protection	12A
	短路保护 Short circuit protection	有 yes
环境描述 Environmental description	工作温度 Operating temperature	Tcase = -20°C-50°C
	工作湿度 Working humidity	20-95%RH, 无冷凝
	存储温度-湿度 Storage temperature-hum idity	-20°C-50°C 10-95%RH
	大气压强 Atmospheric pressure	86-106KPa
安全及规范 Safety and regulation	认证 Certification	CE、CB、UL-8750+Class P
	耐压 Pressure resistant	I/P-O/P:3KVAC
	绝缘阻抗 Insulation resistance	I/P-O/P, I/P-FG,O/P-FG:100MΩ/500Vdc/70%RH



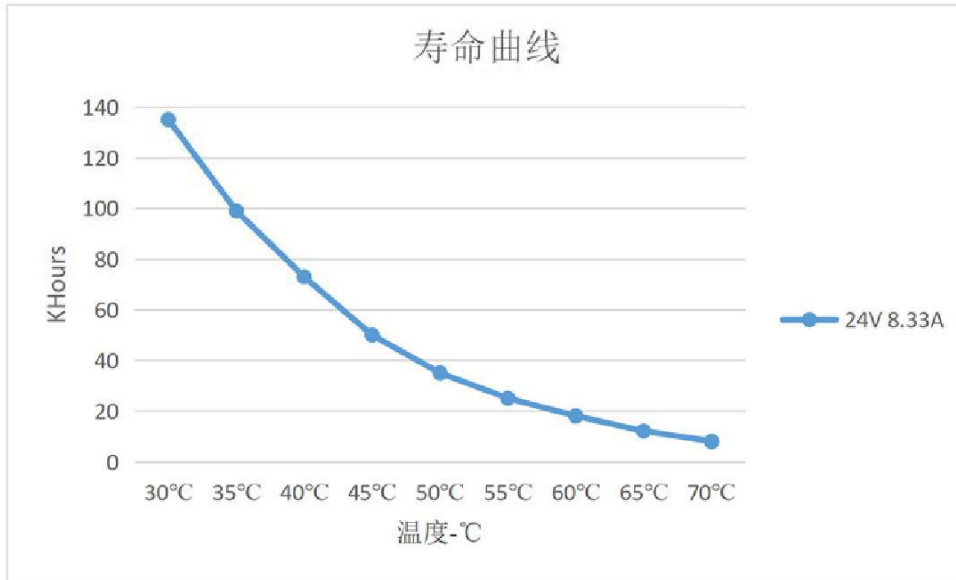
	电磁兼容干扰 Electromagnetic compatibility interference	符合 EN55015、EN61000-3-2、EN61000-3-3, EN61547 标准要求 Meets EN55015, EN61000-3-2, EN61000-3-3, EN61547 requirements	
	电磁兼容抗干扰 Electromagnetic compatibility anti-jamming	EN61000-3-2, EN61000-3-3, EN61547 标准要求 EN61000-3-2, EN61000-3-3, EN61547 standard requirements	
其他 others	包装 Package	净重量约 261g, 包装: 330g*60pcs, 19.8kg The net weight is about 261g, packaging: 330g*60pcs, 19.8kg	净重量 261g, 包装: 330g*60pcs, 19.8kg Net weight 261g, packaging: 330g*60pcs, 19.8kg
	尺寸 size	500*30*17mm	
	IP 等级说明 IP Level description	IP20	
	质保说明 Warranty description	≥2 年, 参见寿命曲线 ≥ 2 years, refer to life curve	≥2 年, 参见寿命曲线 ≥ 2 years, refer to life curve
	测试设备 Test Equipment	LCR METER: TH2830, fluke 数字万用表, 电子负载: PEL-3041, 交流源: 远方 PPS1010、功率分析仪: Ainuo, 数字示波器: SDS3034E, 传导分析仪: 远方 LS-3、FFT3030, 接地电阻测试仪: MS2520C 型, 耐压测试仪: TH9320, 烤箱, 电脑监控老化测试系统。 LCR METER: TH2830, fluke digital multimeter, electronic load: PEL-3041, AC source: remote PPS1010, power analyzer: Ainuo, digital oscilloscope: SDS3034E, conduction analyzer: remote LS-3, FFT3030, ground resistance tester: MS2520C Type, withstand voltage tester: TH9320, oven, computer monitoring aging test system.	
测试说明 Test instruction	纹波电压测试方法: 示波器探头设置 AC, 带宽设置 20M, 在输出端并接 10uF 电解电容/100nF 贴片电容。除温升测试项目外, 其余测试温度均在 25°C, 230Vac 条件下。 Ripple voltage test method: The oscilloscope probe is set to AC, the bandwidth is set to 20M, and 10uF electrolytic capacitor/100nF chip capacitor is connected at the output end. Except for the temperature rise test project, the rest of the test temperature is at 25°C, 230 Vac.		



### 3、产品寿命 Product life span

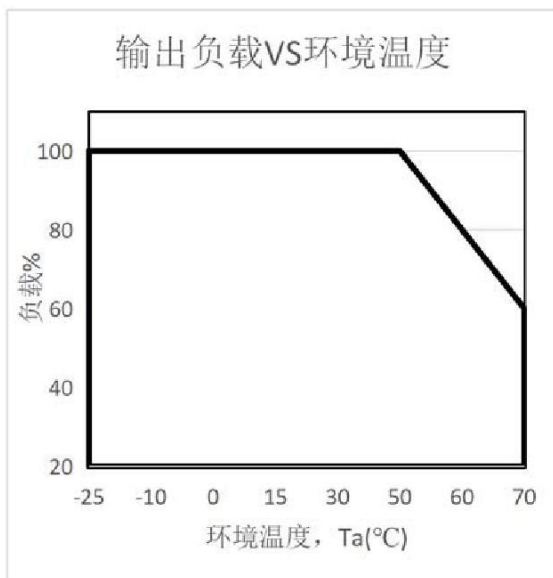
在一个密闭空间内，当环境温度达到 30°C, 40°C, 50°C, 60°C, 70°C时，计算产品使用寿命

In a confined space, when the ambient temperature reaches 30 ° C, 40 ° C, 50 ° C, 60 ° C, 70 ° C, Calculate product life



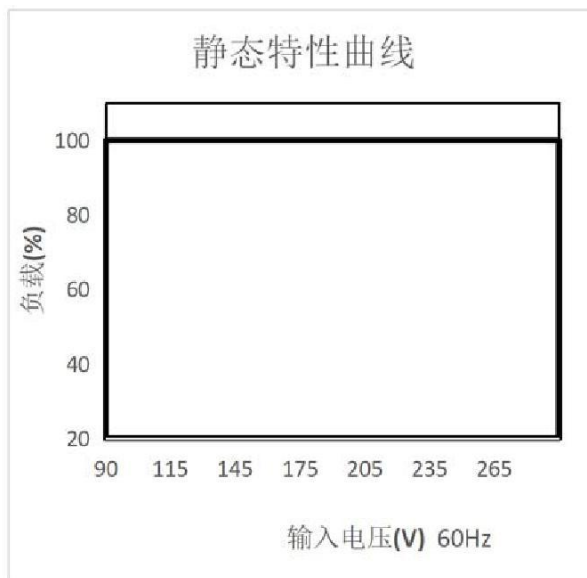
### 4、输出负载 VS 环境温度

Output load VS ambient temperature



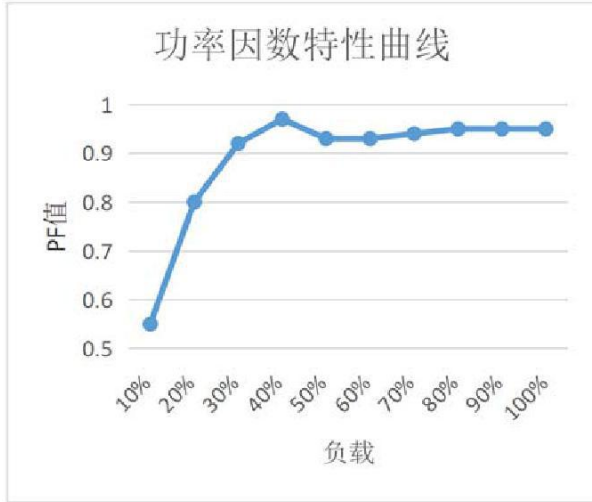
### 5、静态特性曲线

Static characteristic curve



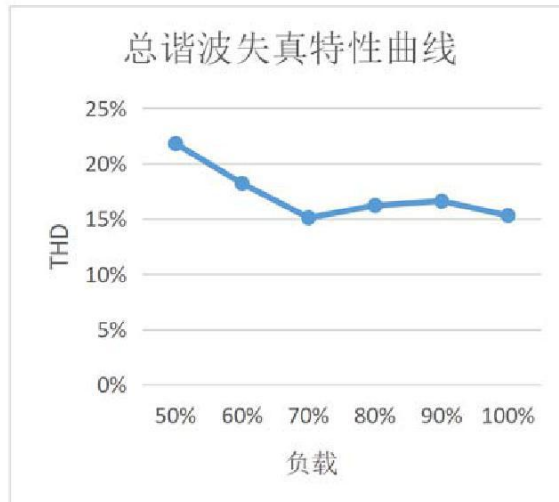
### 6、功率因素特性曲线

Power factor characteristic curve



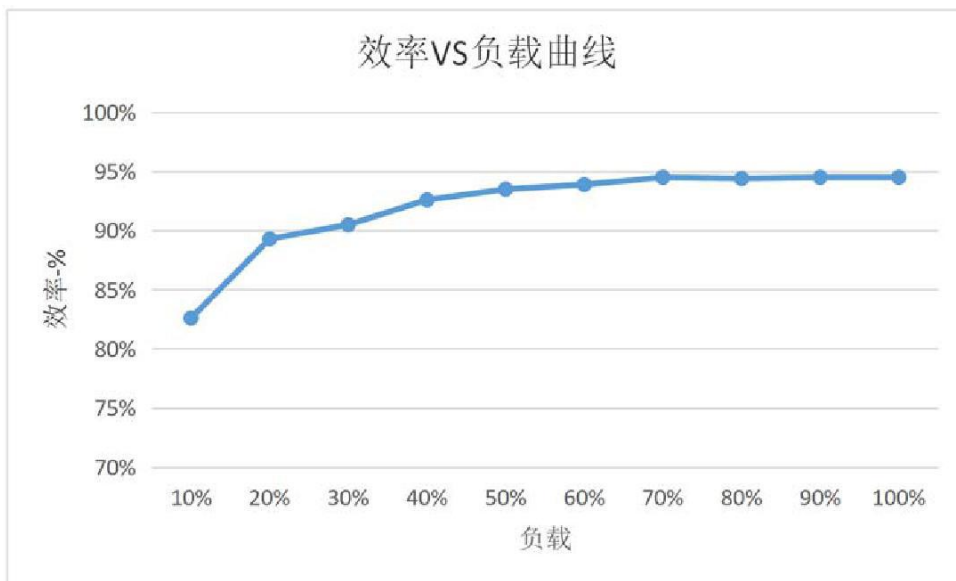
### 7、总谐波失真特性曲线

Total harmonic distortion characteristic curve



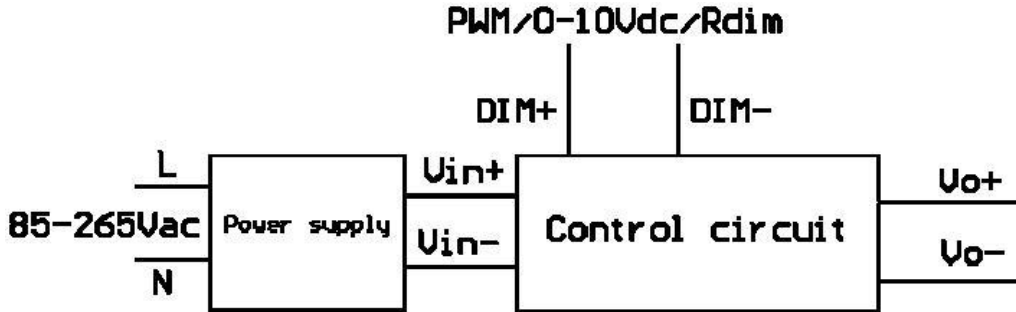
### 8、效率 VS 负载

Efficiency vs load



## 9、结合调光器使用连接图

Use the connection diagram with the dimmer



三合一调光功能:

在 DIM+和 DIM-间连接一个电阻或连接 0-10V 直流电压或 PWM 信号，即可调整输出恒电流的数值。  
Vo+和 Vo-之间直接连接 12V 或者 24V 的 LED 灯条或灯带。

Three-in-one dimming function:

The output constant current value can be adjusted by connecting a resistor or connecting a 0-10V DC voltage or PWM signal between DIM+ and DIM-.

A 12V or 24V LED strip or strip is directly connected between Vo+ and Vo-.

实物图连接如下:

The material is connected in the picture as follows:



调光功能说明:

Dimming function description:





1.0-10V 调光: 调光范围 0%-100%  
0-10V light modulator: light modulator range 0%-100%

调光电压 Dimming voltage	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
额定电流百分比 Rated current percentage	关 断	12.5 %	17%	30%	40%	49%	61%	73%	80%	83%	91%	95%-1 05%

2.电阻调光: 调光范围 10%-100%, 电阻阻值范围: 2KΩ-20kΩ Resistance  
dimming: Dimming range 10%-100%, resistance range: 2KΩ-20kΩ

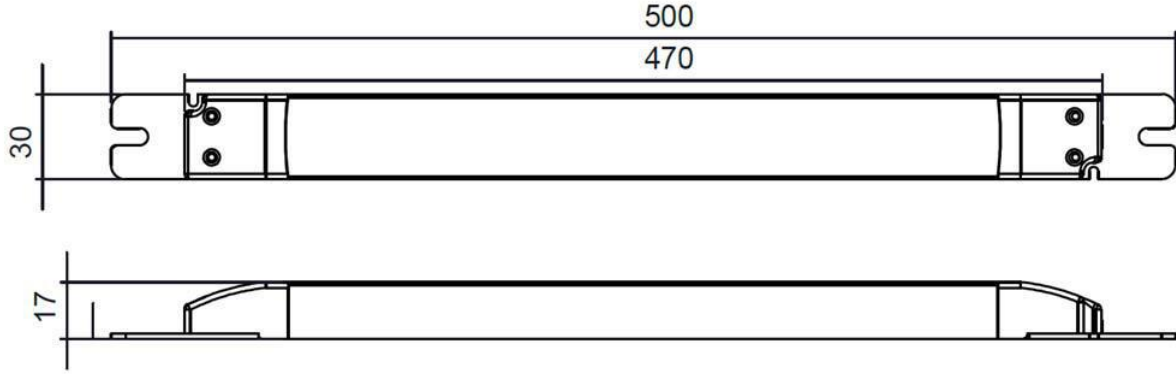
调光电阻阻值 Light modulator resistance	2kΩ	4kΩ	6kΩ	8kΩ	10k Ω	12k Ω	14k Ω	16kΩ	18k Ω	20kΩ	OPEN
额定电流百分比 Rated current percentage	6%	17%	26%	37%	46%	57%	68%	79%	95%	99.5 %	95%-1 05%

3.PWM 调光: 调光范围 10%-100%, 采用幅值为 10V, 频率为 500Hz-5KHz 的 PWM 信号调节  
PWM dimming: dimming range 10%-100%, PWM signal adjustment with amplitude of 10V and frequency  
of 500Hz-5KHz

PWM 信号占 空比 PWM signal duty cycle	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
额定电流百分 比 Rated current percentage	5%	17%	30%	40%	50%	60%	70%	80%	90%	100%	95%-10 5%



## 8、外观尺寸 Exterior dimension



## 9、铭牌 Label

