

**广东新创电源科技有限公司****客户承认书****SPECIFICATION FOR APPROVAL**

CUSTOMER/客户名:	
MODEL NO. /产品型号:	GPE-50W 系列
Rev. /版本号	V3. 0
SAMPLE DATE/送样日期:	

**客户确认栏**

TESTED BY 检查	CHECKED BY 审核	APPROVED BY 批准
客户备注		

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with your approved signature. /客户确认签章后请回传一份承认书给我公司.

**新创确认栏**

TESTED BY 检查	CHECKED BY 审核	APPROVED BY 批准

Guangdong Suncom Power Technology Co., Ltd.

广东新创电源科技有限公司

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<b>SUNCOM 新创电源</b>	产品类型	LED 驱动电源	LED INTEGRATED SPECIAL DRIVER
	产品系列	GPE-50W系列	REV V3.0

## ■ CHANGE HISTORY 变更履历

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## ◆ Features 产品特性:

- Input Voltage: 100-277Vac 50Hz/60Hz

输入电压:100-277Vac 50Hz/60Hz

- Isolation, Constant current mode output

隔离, 恒流模式输出

- Ultra high efficiency (up to 90%)

效率高达90%

- Surge Protection: L-N :4KV

防雷保护: 线对线4KV

- Input over / under-voltage protection

输入过压/欠压保护

- Over temperature drop current

过温降电流

- THD<10%

## ◆ Applications 产品应用:

Application: Street light、High bay lighting 、Track light 、Wash wall lamp or other lighting lamps

应用于: 路灯、工矿灯、导轨灯、洗墙灯等照明灯具

## ◆ Description 产品描述:

This product is a constant current drive power supply, Specially designed for LED, With low harmonic (< 10%), High power factor. Built-in Surge protection, input over / under voltage protection,Over temperature drop current function, Over temperature drop current function,Output Open-circuit、Short-circuit Protection, Greatly improve the safety and reliability of the product.

本产品为恒流驱动电源, 专为LED设计, 具有低谐波(<10%)、高功率因数。内置防雷保护, 输入过压/欠压保护, 过温降电流功能, 输出开路、短路保护, 极大的提高了产品的安全可靠性。

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## ■ MODEL LIST 型号列表

Model 型号	Rated Power 额定功率	Input Voltage 输入电压	Output Voltage 输出电压范围	Output Current 输出电流	THD. (Typ)	PF. (Typ)
GPE-50W1A5-38	50W	100–277Vac	22–38V	1500mA	6.2%	0.98
GPE-50W1A35-38	50W	100–277Vac	22–38V	1350mA	5.9%	0.98
GPE-50W1A2-45	50W	100–277Vac	30–45V	1200mA	5.9%	0.98
GPE-50W900-56	50W	100–277Vac	34–56V	900mA	6.7%	0.98
GPE-50W600-87	50W	100–277Vac	54–87V	600mA	5.9%	0.98

NOTE: All parameters NOT special mentioned are measured at 230Vac input, rated load and 25°C of ambient temperature ; 如未特殊注明 , 所有参数均在 230Vac 输入、额定负载、25°C 环境温度下测量

## ■ ELECTRICAL SPECIFICATION 电气规格

### ◆ 输入性能 Input performance:

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Voltage Range 电压范围	100Vac	120–277Vac	305Vac	–
Frequency Range 频率范围	47Hz	50/60Hz	63Hz	–
AC Current 交流电流	–	–	0.68A	–
Inrush Current 浪涌电流	–	–	30A	At 230Vac input, 25°C cold start 环温 25°C, 230Vac 冷机启动
PF. 功率因数	0.95	0.98	–	At 230Vac input, full load 满载, 输入 230Vac 下测量
THD. 总谐波失真	–	6.7%	10%	

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◆ 输出性能: Output performance

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Voltage Range 电压范围	22VDC	—	38VDC	GPE-50W1A5-38 (1.5A电流最大带载33V) GPE-50W1A35-38
	30VDC	—	45VDC	GPE-50W1A2-45 (1.2A电流最大带载42V)
	34VDC	—	56VDC	GPE-50W900-56
	54VDC	—	87VDC	GPE-50W600-87 (0.6A电流最大带载84V)
Rated Current 额定电流	1420mA	1480mA	1560mA	GPE-50W1A5-38
	1280mA	1340mA	1410mA	GPE-50W1A35-38
	1120mA	1180mA	1250mA	GPE-50W1A2-45
	840mA	880mA	930mA	GPE-50W900-56
	560mA	590mA	620mA	GPE-50W600-87
Rated Power 额定功率	—	50W	—	—
Over Voltage 过载电压	45V	—	50V	GPE-50W1A5-38 GPE-50W1A35-38
	60V	—	70V	GPE-50W1A2-45 GPE-50W900-56
	100V		110V	GPE-50W600-87
Efficiency 效率 Measured at full load and 230Vac input	90%	90.3%	—	GPE-50W1A5-38
	90%	90.5%		GPE-50W1A35-38
	90%	90.5%	—	GPE-50W1A2-45
	90%	91.0%	—	GPE-50W900-56
	91%	92.0%	—	GPE-50W600-87
Current Tolerance 电流精度	-5%	—	+5%	—
Line Regulation 线性调整率	-3%	—	+3%	—
Load Regulation 负载调整率	-3%	—	+3%	—
Current Ripple 纹波电流	—	±65%	<±70%	—
Turn-on Delay Time 启动时间	—	500mS	<1S	Measured at full load and 230Vac input
Short Circuit Protection 短路保护	—	—	1W	Hiccup mode, recovers automatically after fault condition is removed 打嗝模式，故障排除后自动恢复
Over-temperature protection 过温保护	—	90°C	—	Shell Tc point temperature, Drop current mode, the current automatically recovers after over temperature release, 外壳TC点温度，降电流模式，过温解除后，电流自动恢复

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Under Voltage Protection 欠压保护	100Vac	105Vac	108Vac	After the input voltage is reduced to the under voltage point, Reduce output current , resume work after the AC voltage is normal 输入电压降低到欠压点后，降低输出电流，交流电压正常后恢复工作
Over Voltage Protection 过压保护	315Vac	325Vac	335Vac	Turn off the output voltage , resume work after the AC voltage is normal 关断输出电压，交流电压正常后恢复工作

## ■ 环境: Environment

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Working TEMP 工作温度	-40°C	+25°C	+65°C	-
Storage TEMP 储存温度	-40°C	+25°C	+85°C	-
Working Humidity 工作湿度	20% RH	-	90% RH	-
Storage Humidity 储存湿度	10% RH	-	90% RH	-
Maximum shell TEMP 最大壳温	-	-	+90°C	-

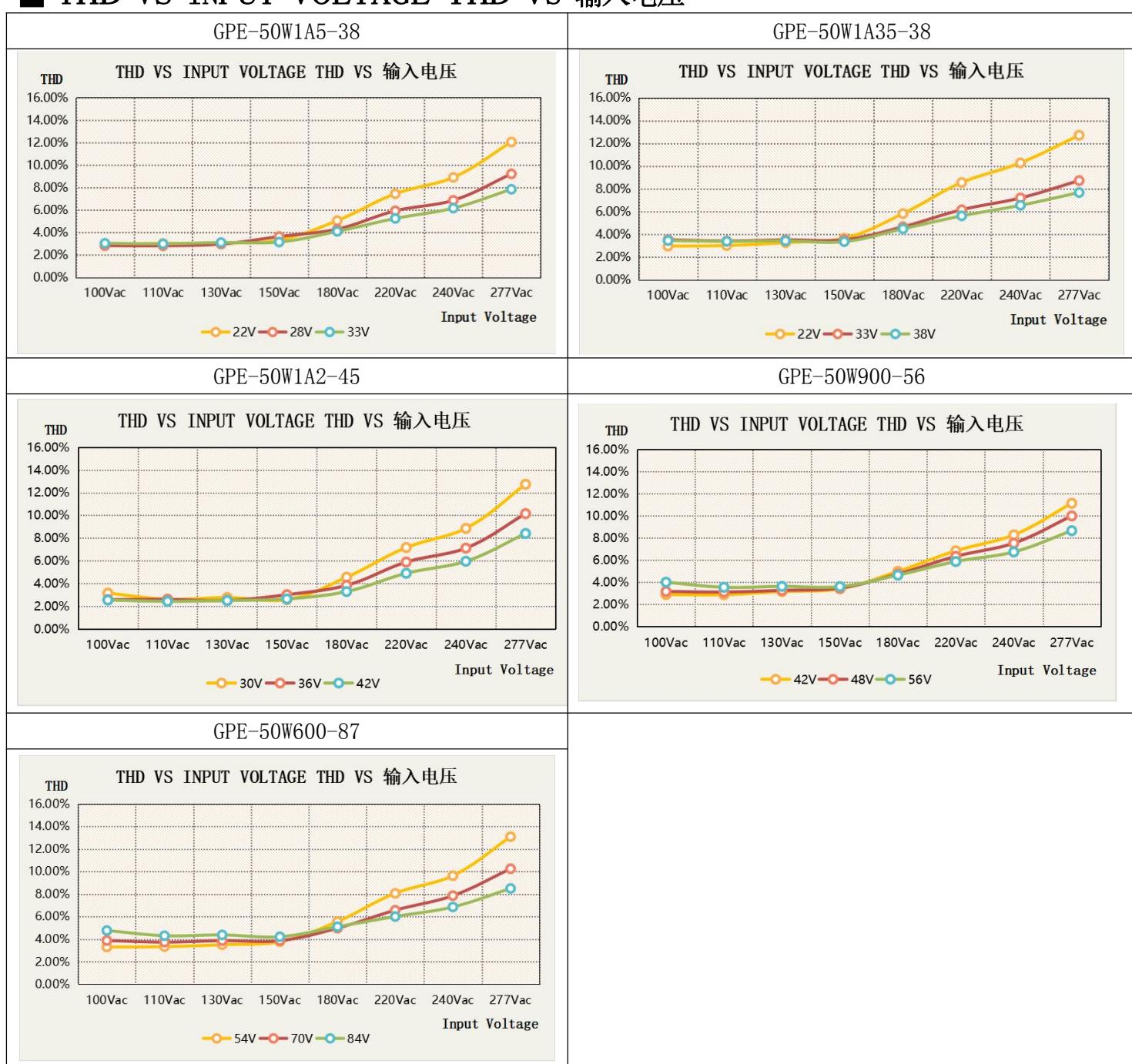
## ■ 安规和电磁兼容:

Withstand voltage 耐压	I/P - O/P:1.5KVAC
isolation resistance 绝缘阻抗	$\geq 10M\Omega$ at I/P - FG 500VDC Test
leakage current 漏电流	<0.75mA/277Vac
Earthing resistance 接地电阻	/
Surge 浪涌	L-N +/- 4KV ( 2 ohm )
conducted electromagnetic interference 传导	/
Radiated electromagnetic interference 辐射	/

### NOTE:

- 1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25°C of ambient temperature.  
如未特别说明，所有规格参数均在 230Vac (50Hz) 输入，额定负载，环境温度 25°C 的条件下进行测量
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.  
误差：包含设定误差、线性调整率和负载调整率。

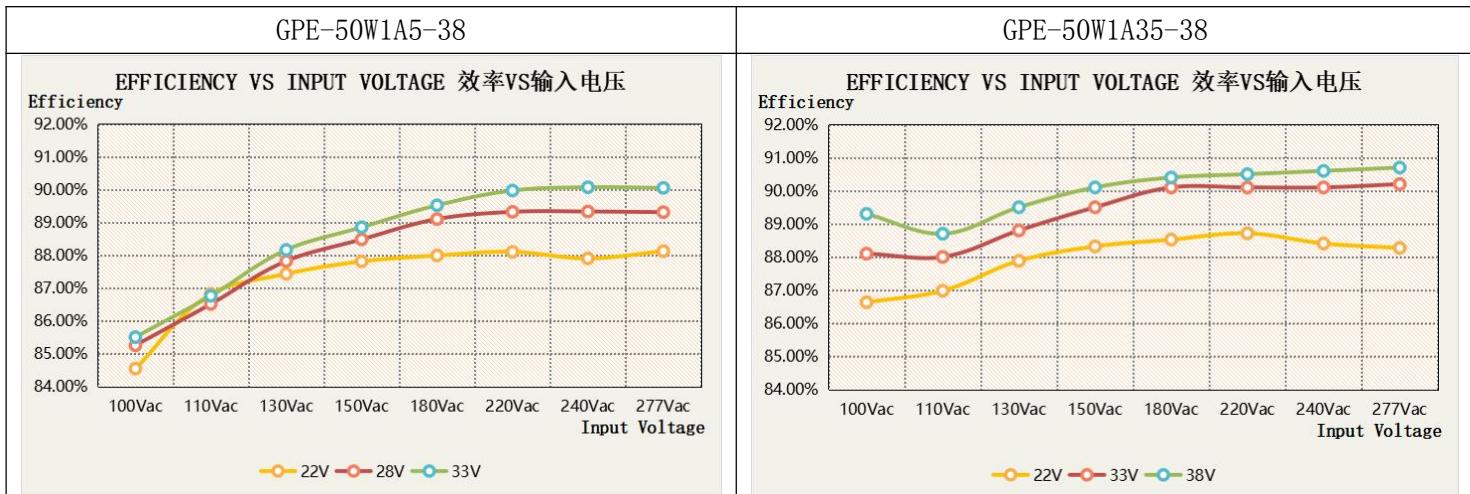
## ■ THD VS INPUT VOLTAGE THD VS 输入电压



## ■ PF VS INPUT VOLTAGE PF 值 VS 输入电压

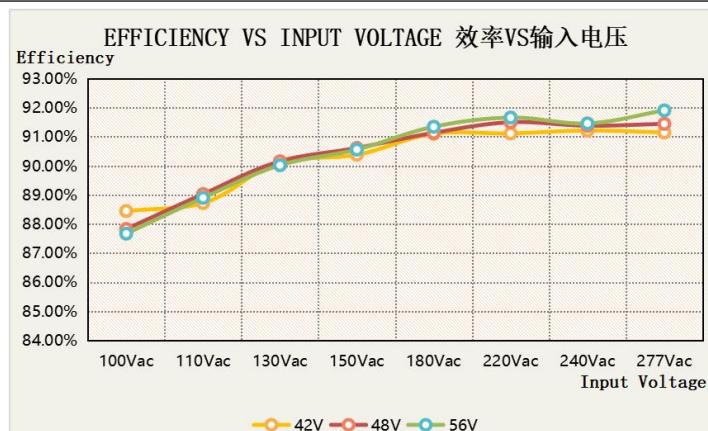
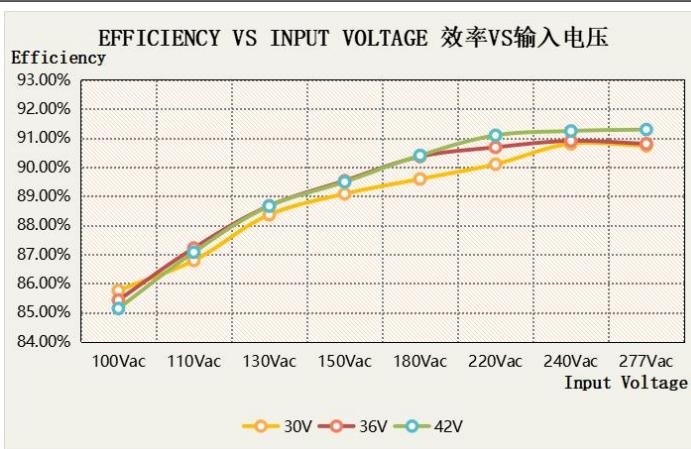


## ■ EFFICIENCY VS INPUT VOLTAGE 效率 VS 输入电压

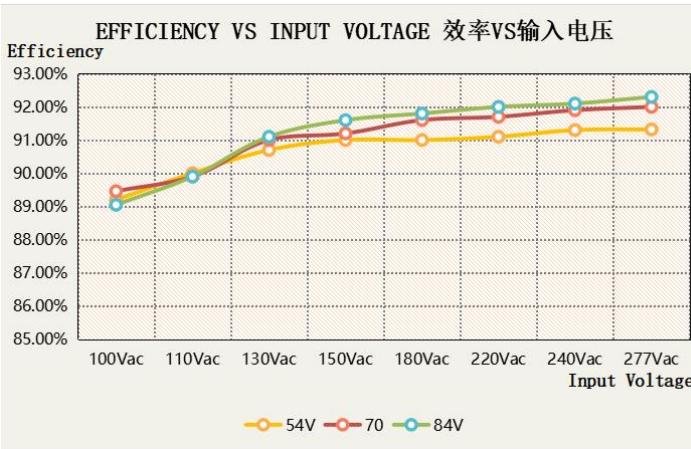


GPE-50W1A2-45

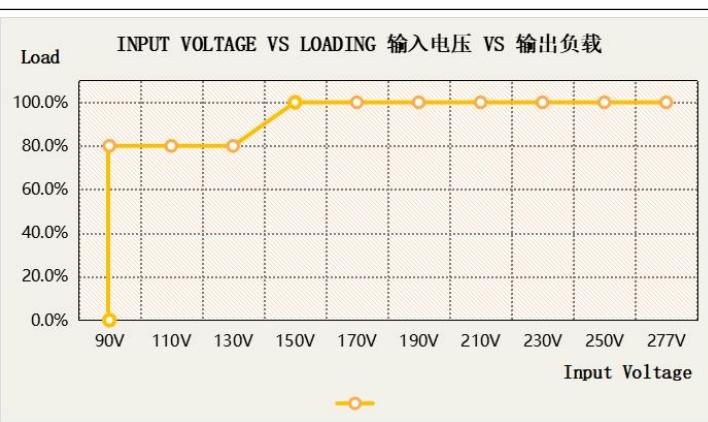
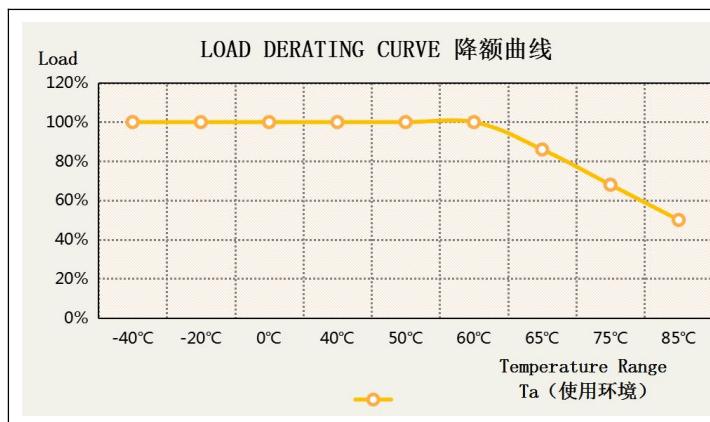
GPE-50W900-56



GPE-50W600-87

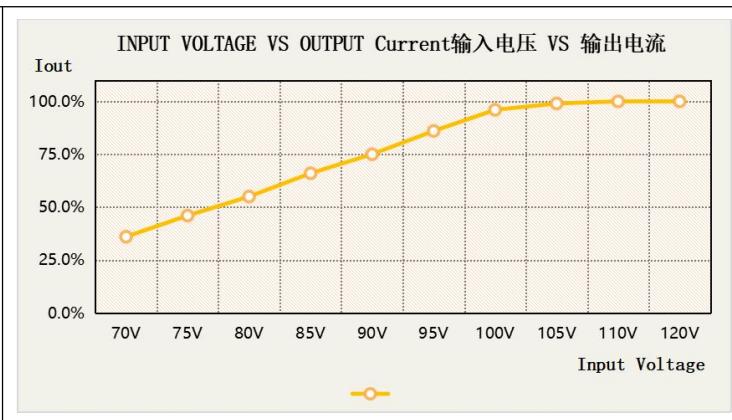
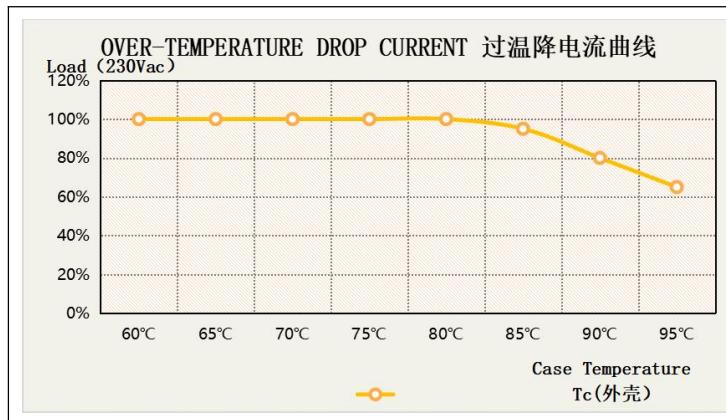


## ■ LOAD DERATING CURVE 降额曲线 ■ INPUT VOLTAGE VS LOADING 输入电压 VS 输出负载



■ OVER-TEMPERATURE DROP CURRENT  
过温降电流曲线

■ Under-voltage DROP CURRENT  
欠压降电流曲线

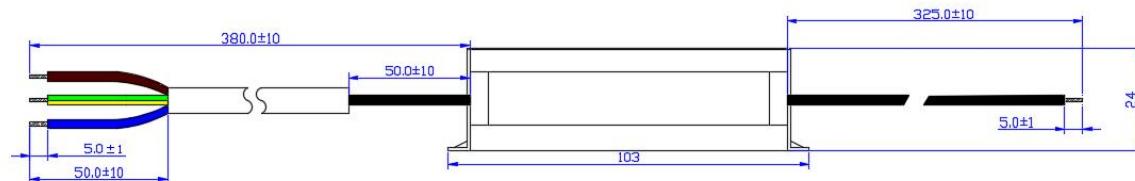
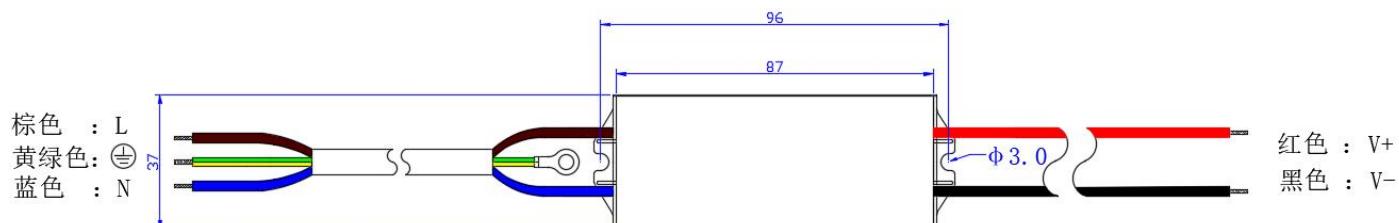


■ MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:

Bare plate dimension 裸板尺寸	70*28.5*20mm (L*W*H)
final dimension 成品尺寸	103*37*24mm
Product Weight 产品重量	160g

Case No. 机壳型号: 50W

Unit 单位:mm

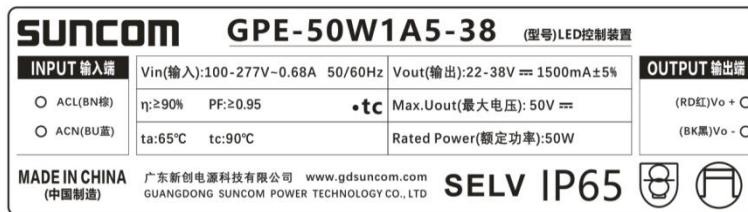


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## ■ Nameplate 铭牌

尺寸: 85\*29mm 样式: 贴纸

GPE-50W1A5-38



GPE-50W1A35-38



GPE-50W1A2-45



GPE-50W900-56



GPE-50W600-87

