

<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	V3.1

## 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:	<b>GPE-50W 系列</b>
Rev./版本号	V3.1
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 you 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

No. 1 of Yongyi 3rd Road Henglan Town Zhongshan Guangdong China Post code 528478

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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。

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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	23-45V	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)
	23VDC	-	45VDC	GPE-50W1A35-38 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
	55V	-	60V	GPE-50W1A2-45
	60V	-	70V	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:

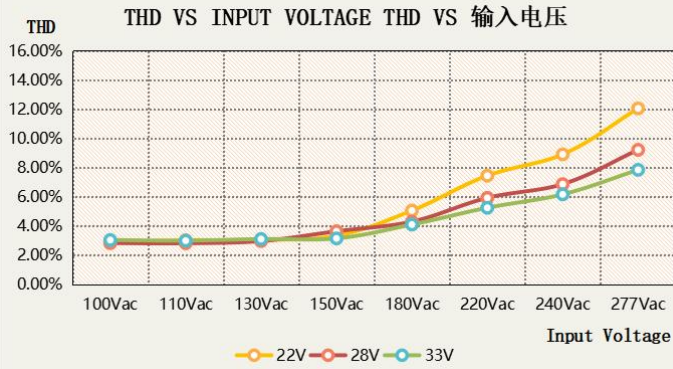
Withstand voltage 耐压	I/P - O/P:1.5KVAC
isolation resistance 绝缘阻抗	$\geq 10M\Omega$ at I/P - FG 500VDC Test
leakage current 漏电流	<0.75mA/277Vac
Earthing resistance 接地电阻	/
Surge 浪涌	L-N +/- 4KV ( 2 ohm )
conducted electromagnetic interference 传导	/
Radiated electromagnetic interference 辐射	/

### NOTE:

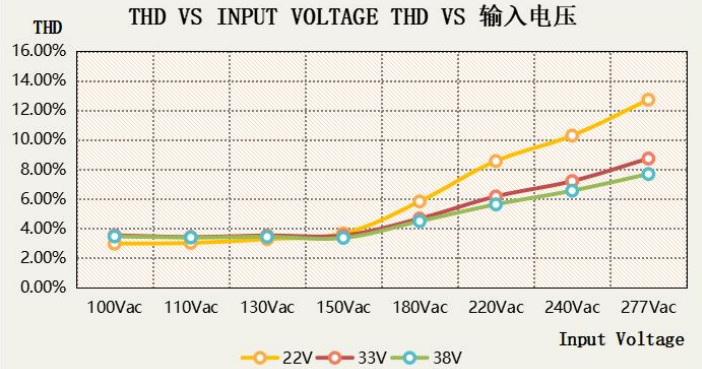
- 1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25°C of ambient temperature.  
如未特别说明, 所有规格参数均在 230Vac (50Hz) 输入, 额定负载, 环境温度 25°C 的条件下进行测量
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.  
误差: 包含设定误差、线性调整率和负载调整率。

**THD VS INPUT VOLTAGE THD VS 输入电压**

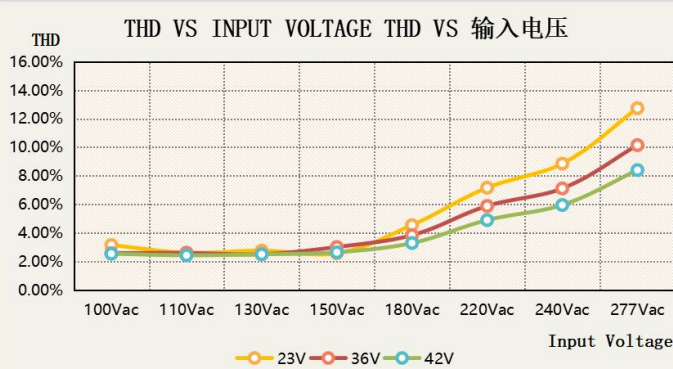
GPE-50W1A5-38



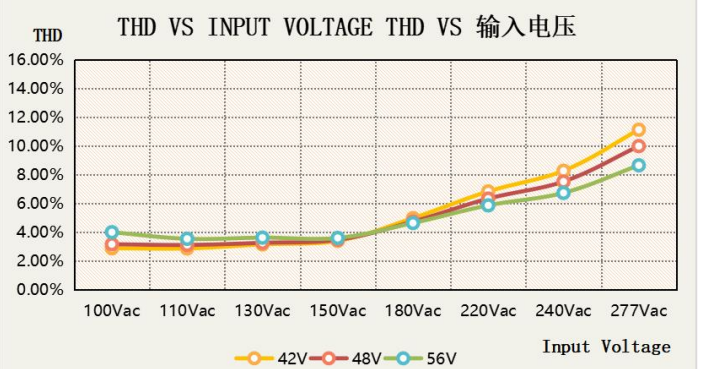
GPE-50W1A35-38



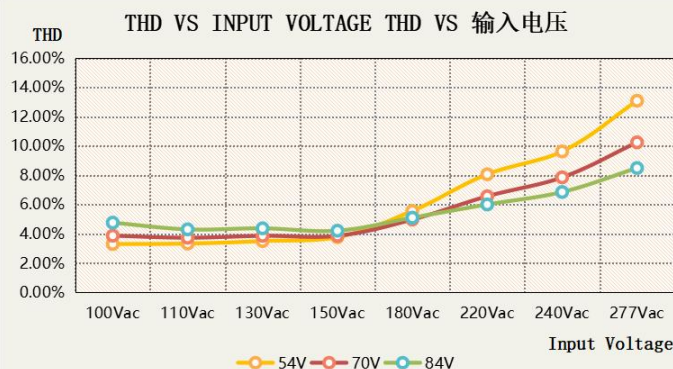
GPE-50W1A2-45



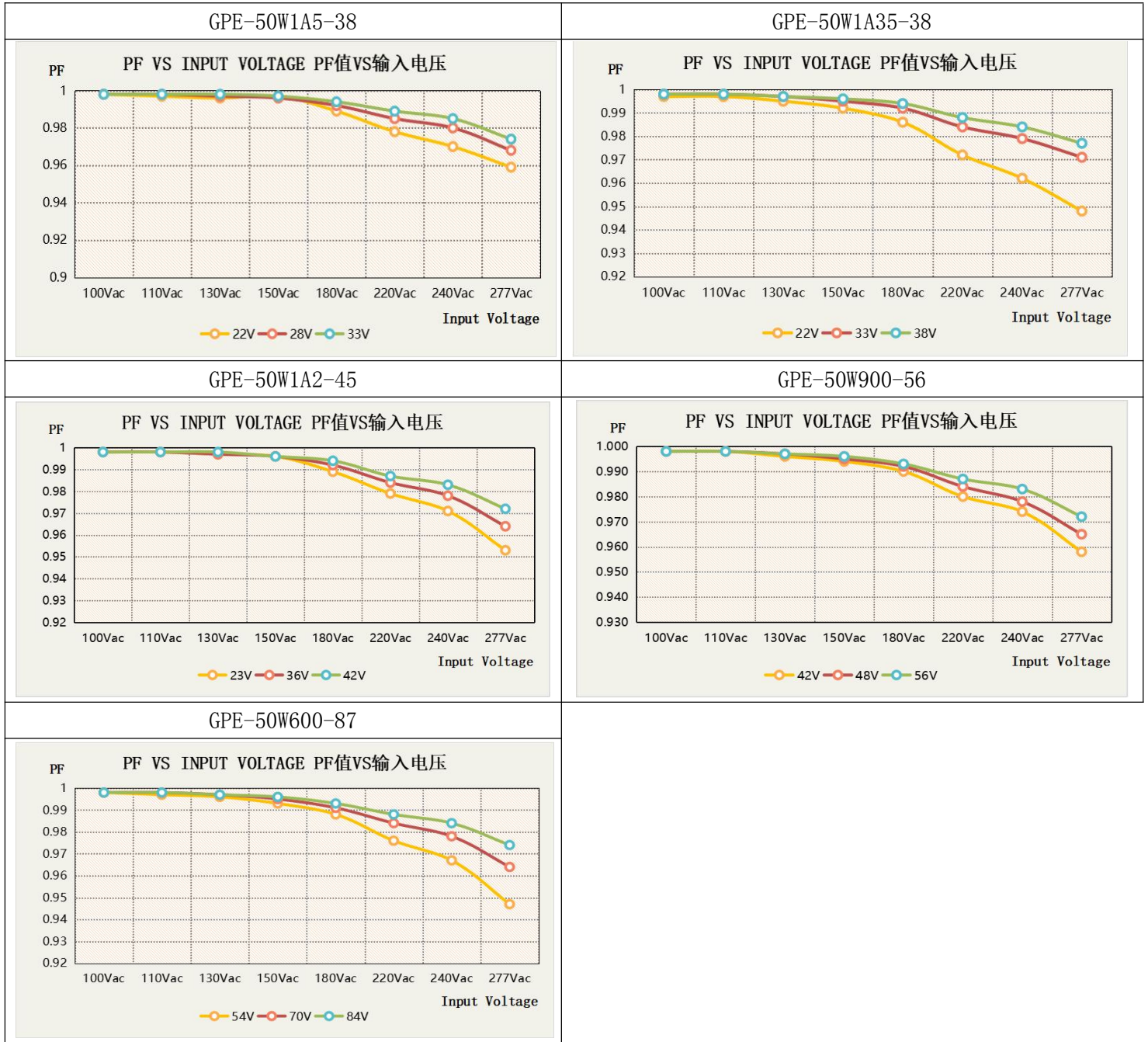
GPE-50W900-56



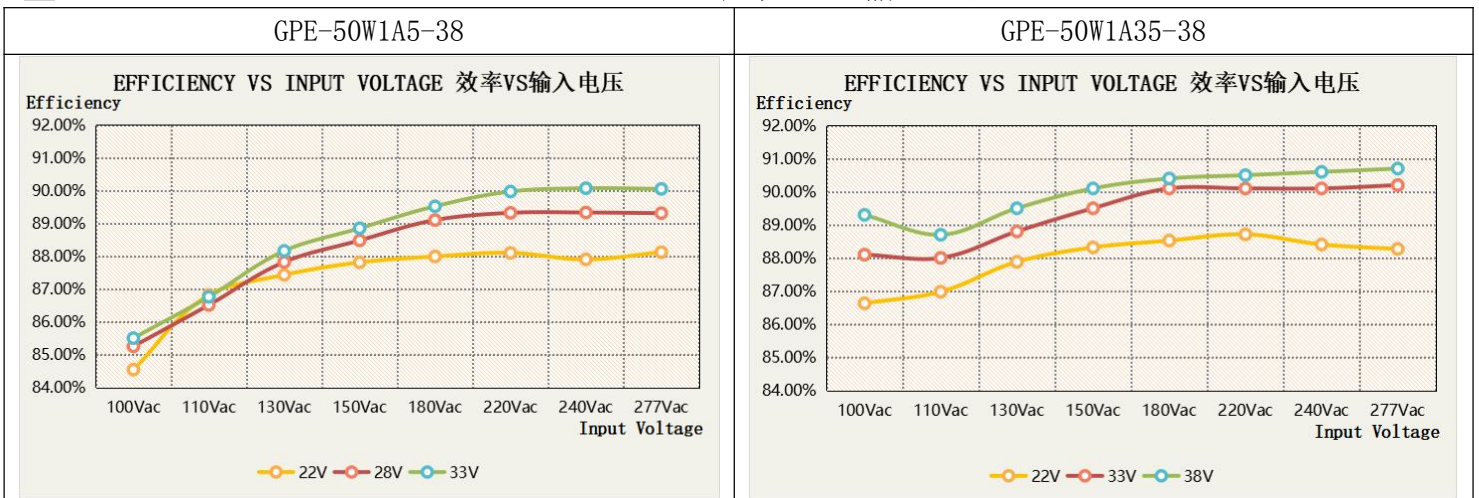
GPE-50W600-87



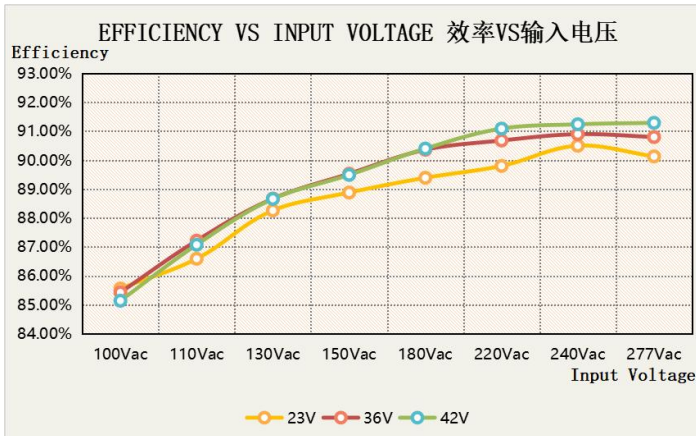
**PF VS INPUT VOLTAGE PF 值 VS 输入电压**



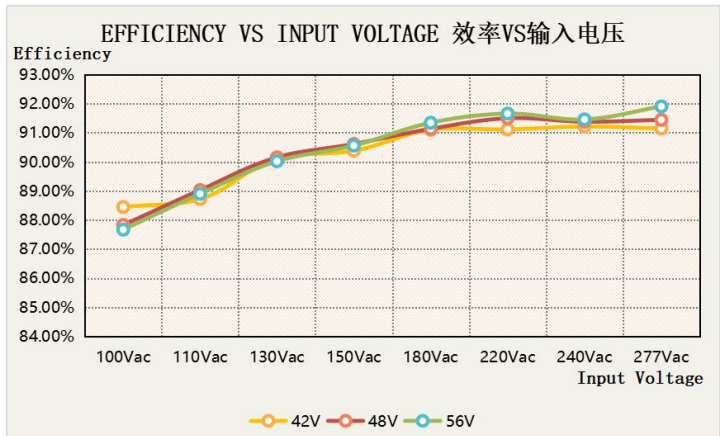
**EFFICIENCY VS INPUT VOLTAGE 效率 VS 输入电压**



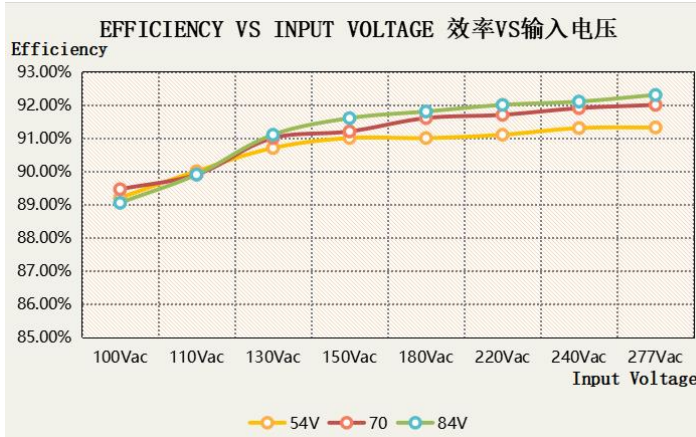
GPE-50W1A2-45



GPE-50W900-56

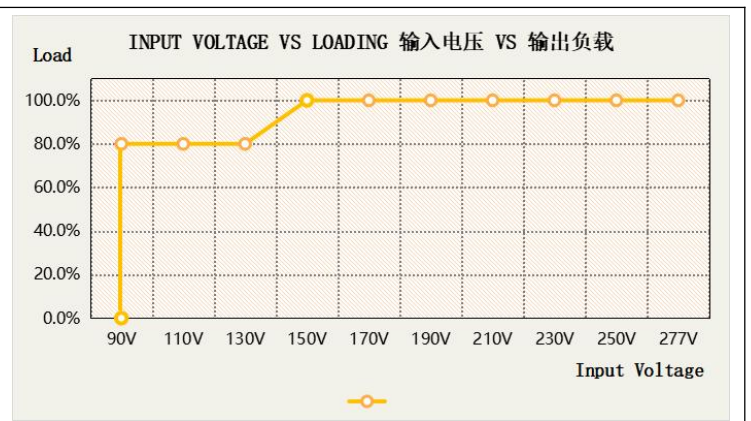
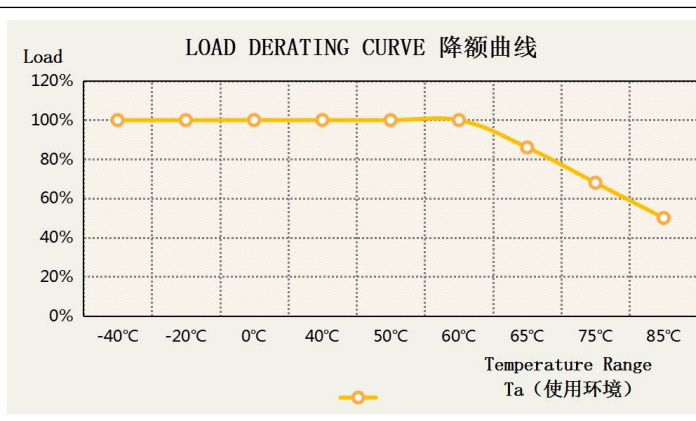


GPE-50W600-87



LOAD DERATING CURVE 降额曲线

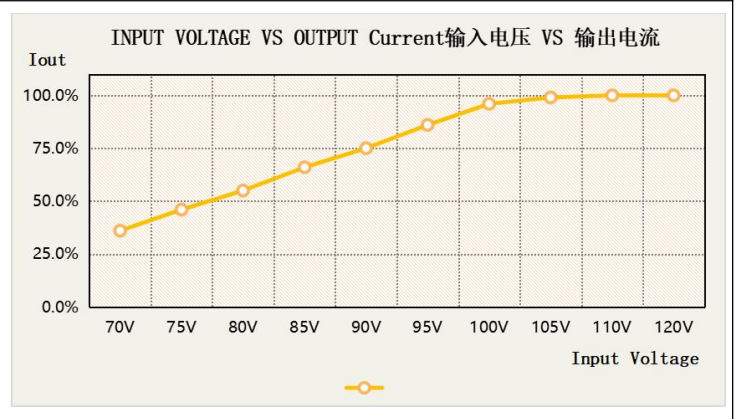
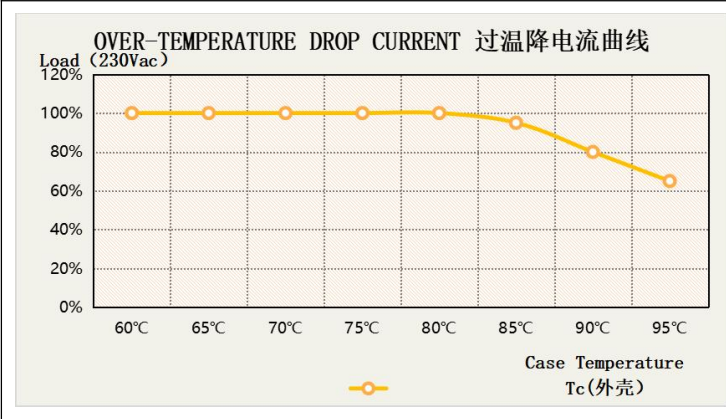
INPUT VOLTAGE VS LOADING 输入电压 VS 输出负载



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

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

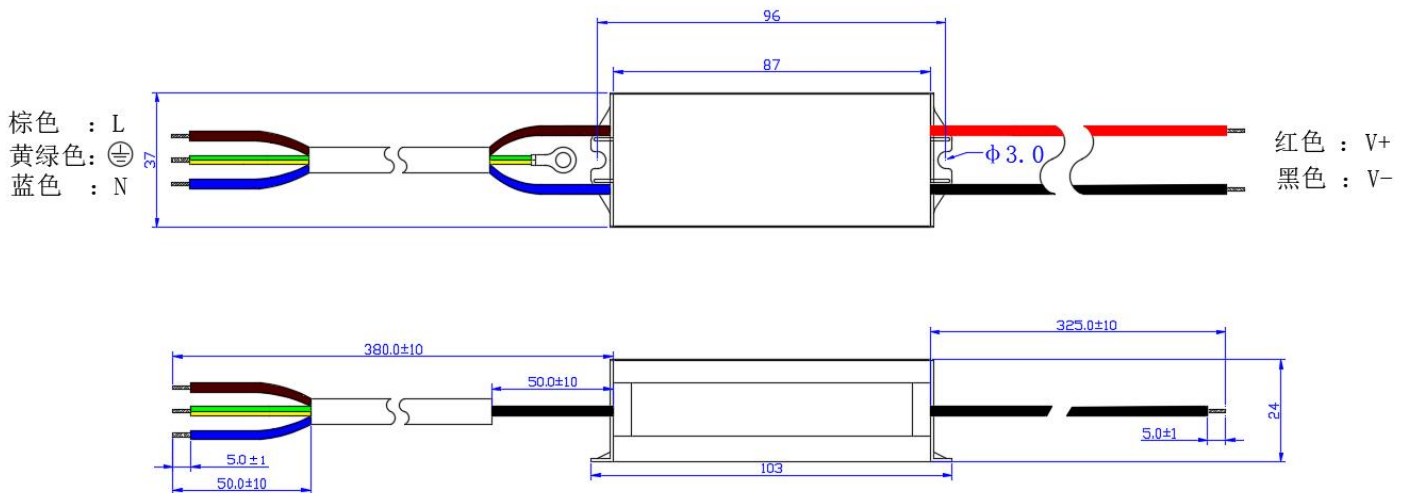


**MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:**

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



## ■ Nameplate 铭牌

尺寸: 85\*29mm 样式: 贴纸

### GPE-50W1A5-38

<b>SUNCOM GPE-50W1A5-38</b> (型号)LED控制装置			
<b>INPUT 输入端</b> <input type="radio"/> ACL(BN绿) <input type="radio"/> ACN(BU蓝)	Vin(输入):100-277V-0.68A 50/60Hz	Vout(输出):22-38V $\approx$ 1500mA $\pm$ 5%	<b>OUTPUT 输出端</b> (RD红)Vo+ $\circ$ (BK黑)Vo- $\circ$
	$\eta$ : $\geq$ 90% PF: $\geq$ 0.95	Max.Uout(最大电压): 50V $\approx$	
	ta:65°C tc:90°C <b>•tc</b>	Rated Power(额定功率):50W	
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO.,LTD	
		<b>SELV IP65</b> 	

### GPE-50W1A35-38

<b>SUNCOM GPE-50W1A35-38</b> (型号)LED控制装置			
<b>INPUT 输入端</b> <input type="radio"/> ACL(BN绿) <input type="radio"/> ACN(BU蓝)	Vin(输入):100-277V-0.68A 50/60Hz	Vout(输出):22-38V $\approx$ 1350mA $\pm$ 5%	<b>OUTPUT 输出端</b> (RD红)Vo+ $\circ$ (BK黑)Vo- $\circ$
	$\eta$ : $\geq$ 90% PF: $\geq$ 0.95	Max.Uout(最大电压): 50V $\approx$	
	ta:65°C tc:90°C <b>•tc</b>	Rated Power(额定功率):50W	
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO.,LTD	
		<b>SELV IP65</b> 	

### GPE-50W1A2-45

<b>SUNCOM GPE-50W1A2-45</b> (型号)LED控制装置			
<b>INPUT 输入端</b> <input type="radio"/> ACL(BN绿) <input type="radio"/> ACN(BU蓝)	Vin(输入):100-277V-0.68A 50/60Hz	Vout(输出):23-45V $\approx$ 1200mA $\pm$ 5%	<b>OUTPUT 输出端</b> (RD红)Vo+ $\circ$ (BK黑)Vo- $\circ$
	$\eta$ : $\geq$ 90% PF: $\geq$ 0.95	Max.Uout(最大电压): 60V $\approx$	
	ta:65°C tc:90°C <b>•tc</b>	Rated Power(额定功率):50W	
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		<b>SELV IP65</b> 	

### GPE-50W900-56

<b>SUNCOM GPE-50W900-56</b> (型号)LED控制装置			
<b>INPUT 输入端</b> <input type="radio"/> ACL(BN绿) <input type="radio"/> ACN(BU蓝)	Vin(输入):100-277V-0.68A 50/60Hz	Vout(输出):34-56V $\approx$ 900mA $\pm$ 5%	<b>OUTPUT 输出端</b> (RD红)Vo+ $\circ$ (BK黑)Vo- $\circ$
	$\eta$ : $\geq$ 90% PF: $\geq$ 0.95	Max.Uout(最大电压): 70V $\approx$	
	ta:65°C tc:90°C <b>•tc</b>	Rated Power(额定功率):50W	
MADE IN CHINA (中国制造)		广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO.,LTD	
		<b>SELV IP65</b> 	

### GPE-50W600-87

<b>SUNCOM GPE-50W600-87</b> (型号)LED控制装置			
<b>INPUT 输入端</b> <input type="radio"/> ACL(BN绿) <input type="radio"/> ACN(BU蓝)	Vin(输入):100-277V-0.68A 50/60Hz	Vout(输出):54-87V $\approx$ 600mA $\pm$ 5%	<b>OUTPUT 输出端</b> (RD红)Vo+ $\circ$ (BK黑)Vo- $\circ$
	$\eta$ : $\geq$ 91% PF: $\geq$ 0.95	Max.Uout(最大电压): 110V $\approx$	
	ta:65°C tc:90°C <b>•tc</b>	Rated Power(额定功率):50W	
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		<b>SELV IP65</b> 	