

LED Driver (Constant Current)

- The housing is made from V0 flame retardant PC materials.
- Ultra-small, thin and light screwless end cap.
- Change the output current, Max Level and other parameters via the APP.
- Adjustable output current with 1mA step.
- Soft-on and fade-in dimming function enhances your visual comfort.
- High performance, high efficiency, low THD.
- Innovative thermal management technologyintelligently protects the life of the LED driver.
- Overheat, overvoltage, overload, short circuit protection and automatic recovery.
- Suitable for ClassI/II/III indoor light fixtures.
- Indoor office lighting, decorative lighting and commercial lighting.
- 5-year warranty.



Flicker-Free
IEEE 1789



The certification icon represents on-going certification applications only, and final certification qualification is subject to actual products.



Multicurrent setting



Overheat Protection



Overvoltage protection



OverLoad Protection



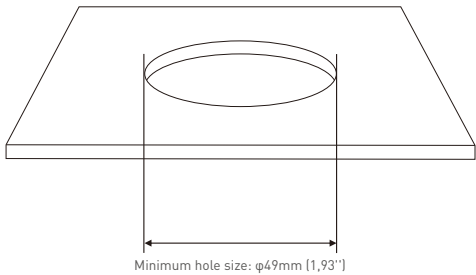
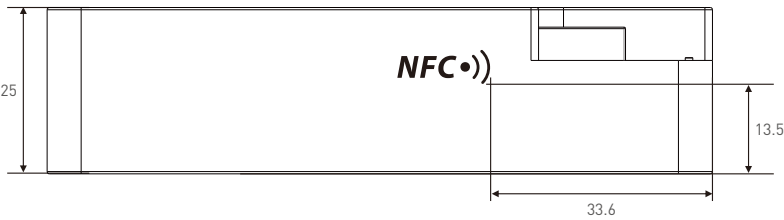
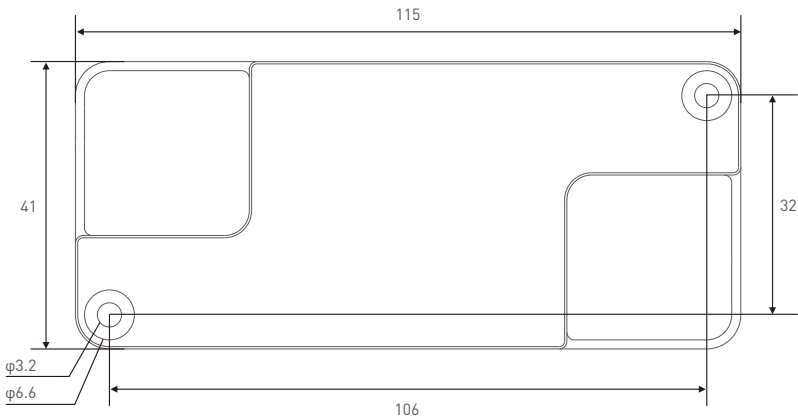
Short Circuit Protection

Technical Specs

Model		SN-45-300-1050-G1NF		
Features	Output Type	Constant Current		
	Output Feature	Isolation		
	Protection Grade	IP20		
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)		
OUTPUT	Output Voltage	9-42Vdc		
	Maximum output voltage	≤55Vdc		
	Output Current Range	300-1050mA		
	Output Power Range	Max.45W		
	Current Accuracy	± 5%		
	Current Ripple	<5% (When outputting maximum current)		
INPUT	DC Voltage Range	220-240Vdc		
	Input Voltage	220-240Vac		
	Frequency	50/60Hz		
	Input Current	≤0.09A		
	Power Factor	PF>0.9at full load)		
	THD	THD<10%(t full load)		
	Efficiency (Typ.)	≥88% at t full load)		
	Inrush Current	Cold start 15A[Test twidth=us tested under 50% Ipeak]/230Vac		
	Anti Surge	L-N: 2KV		
ENVIRONMENT	Leakage Current	Max. 0.5mA		
	Working Temperature	ta: -20~45°Ctc: 90°C		
	Working Humidity	20~95%RH,non-condensing		
	Storage Temperature/Humidity	-40~80°C/10~95%RH		
	Temperature Coefficient	±0.03%/°C(0-50°C)		
PROTECTION	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively		
	Overload Protection	Automatically protect the device when the load exceeds 102% of the rated power. Automatically recover once load is reduced		
	Overheat Protection	Intelligently adjust or turn off the current output if the PCB temperature ≥110°C. automatically recover normal output		
	Overvoltage Protection	Automatically protect the device when voltage exceeds the no-load voltage. It can be recovered automatically		
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Insulation Resistance	I/P-O/P: 1 Insulation Resistance 00MΩ/500VDC/25°C/70%RH		
	Safety Standards	CCC	China	GB19510.1, GB19510.14
		TUV	Germany	EN61347-1, EN61347-2-13, EN62493
		CB	CB Member States	IEC61347-1, IEC61347-2-13
		CE	European Union	EN61347-1, EN61347-2-13, EN62384
		KC	Korea	KC61347-1, KC61347-2-13
		EAC	Russia	IEC61347-1, IEC61347-2-13
		RCM	Australia	AS61347-1, AS61347-2-13
		ENEC	Europe	EN61347-1, EN61347-2-13, EN62384
		UKCA	England	BS EN61347-1,BSEN61347-2-13,BSEN62493
	EMC Emission	BIS	India	IS 15885 (PART 2/SEC 13)
		CCC	China	GB/T17743, GB17625.1
		CE	European Union	EN55015, EN61000-3-2, EN61000-3-3, EN61547
		KC	Korea	KN15, KN61547
		EAC	Russia	IEC62493, IEC61547, EH55015
		RCM	Australia	EN55015, EN61000-3-2, EN61000-3-3, EN61547
	EMC Immunity	UKCA	England	BS EN IEC 55015, BS EN IE C61000-3-2, BS EN 61000-3-3, BS EN 61547
ErP	Power Consumption	No-load power consumption	<0.5W	
	Flicker/Stroboscopic Effect	IEEE1789	Meet IEEE 1789 standard/High frequency exemption level	
		CIE SVM	Pst LM≤1.0, SVM≤0.4	
	DF	Phase factor	DF≥0.9	
OTHERS	Weight[N.W.]	112g±10g		
	Dimensions	115×41×25mm[L×W×H]		

Product Size

Unit: mm



Wiring Diagram

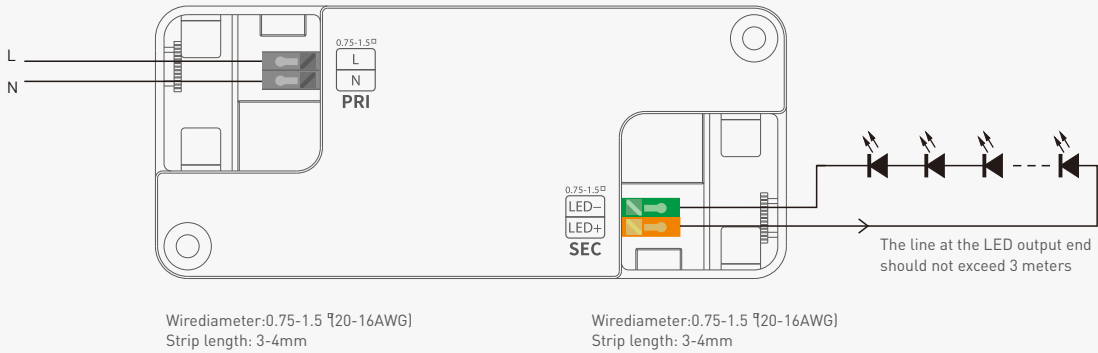
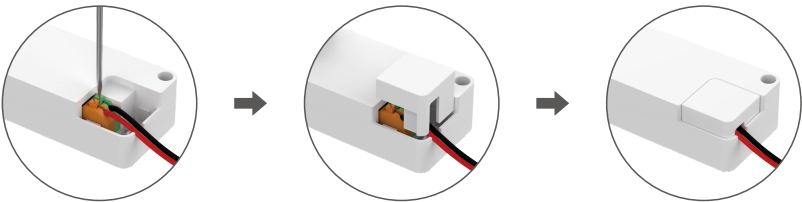


Table of Typical Corresponding Parameters for Current

The typical 16 current data sets below are for reference when selecting LED fixture models. More current levels can be set by NFC using mobile APP with 300-1050mA adjustable in 1mA step								
Output Current	300mA	350mA	400mA	450mA	500mA	550mA	600mA	650mA
Output Voltage	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc
Output Power	2.7-12.6W	3.15-14.7W	3.6-16.8W	4.05-18.9W	4.5-21W	4.95-23.1W	5.4-25.2W	5.85-27.3W
Output Current	700mA	750mA	800mA	850mA	900mA	950mA	1000mA	1050mA
Output Voltage	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc
Output Power	6.3-29.4W	6.75-31.5W	7.2-33.6W	7.65-35.7W	8.1-37.8W	8.55-39.9W	9-42W	9.45-44.1W

Protective Housing Application Diagram

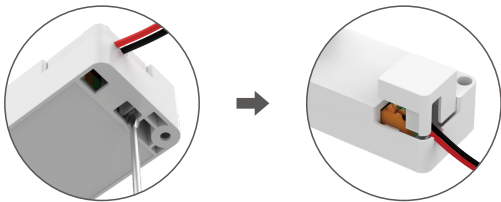
Crimping cover buckle



Use a screwdriver to wire according to the wiring diagram.

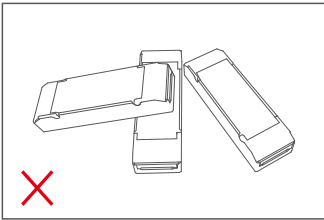
Snap together the terminals on both sides with protective covers, and press down until it is flat with the housing.

Removal of crimping cover

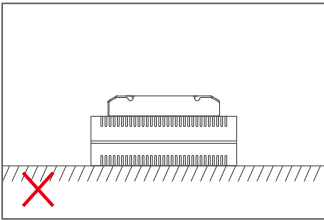
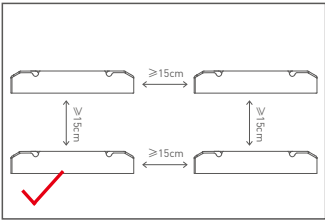


Pry the protective cover at the bottom of the housing left/right with a screwdriver to remove it.

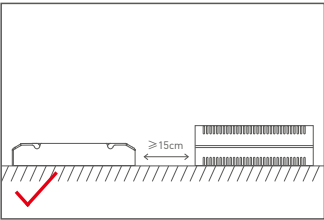
Installation Precautions



Please do not stack the products. The distance between two products should be ≥15cm so as not to affect heat dissipation and the lifespan of the products.



Please not place the products on LED drivers. The distance between the product and the driver should be ≥15cm so as not to affect heat dissipation and shorten the lifespan of the products.



Note: The temperature within the installation area should be within the working temperature range of the products. Please do not install products inside LED fixtures to avoid temperature exceeding the working temperature that may affect the product lifetime.

Use the NFC Lighting APP

Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iphone 8 and later that are compatible with iOS 13 or higher).



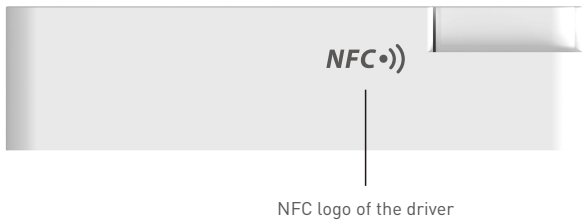
✱ Before you begin setting the parameters of the driver, please make sure the driver is powered off.

Read/Write the LED driver

Use your NFC-capable phone to read LED driver data, then edit the parameters and they can be directly written to the driver.

1.Read the LED driver

On the APP home page, click【 Read/Write LED driver】 , then keep the programmer’s sensing area close to the NFC logo of the driver to read the driver parameters.

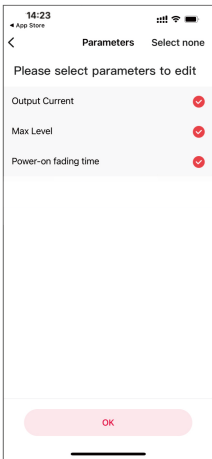
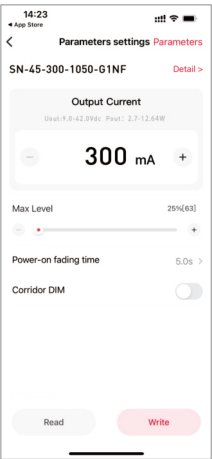
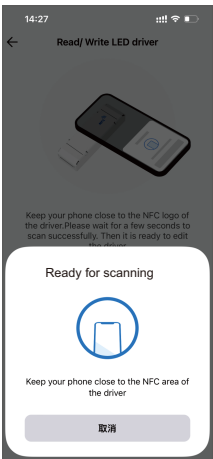


2.Edit the parameters

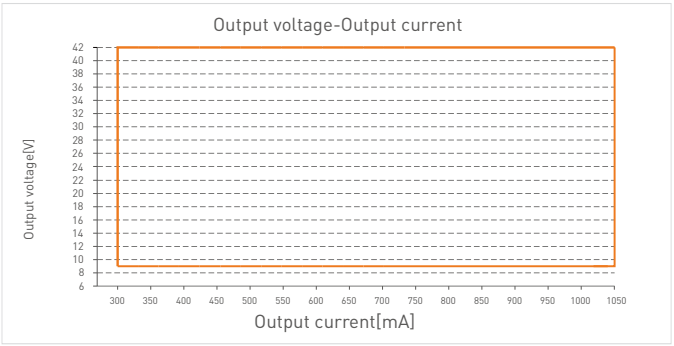
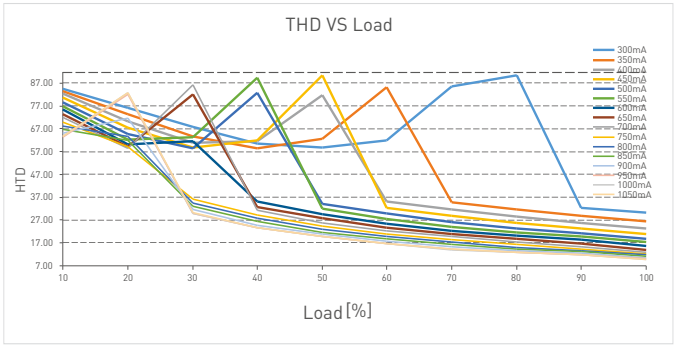
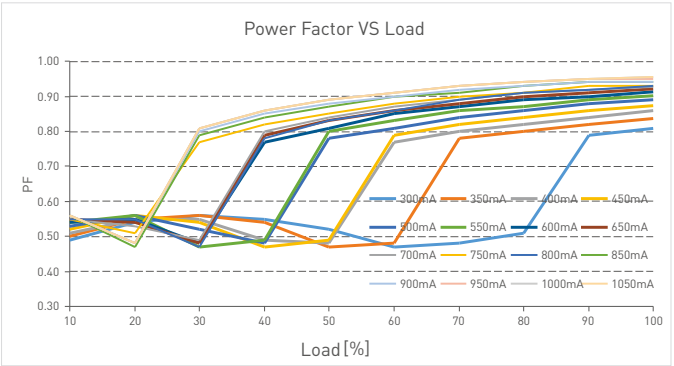
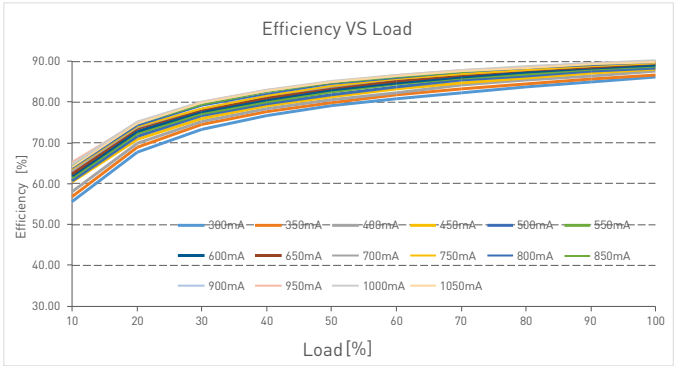
Click【Parameter settings】 to edit the advanced parameters, like output current, Max Level, power-on fading time, etc.

3.Write to the driver

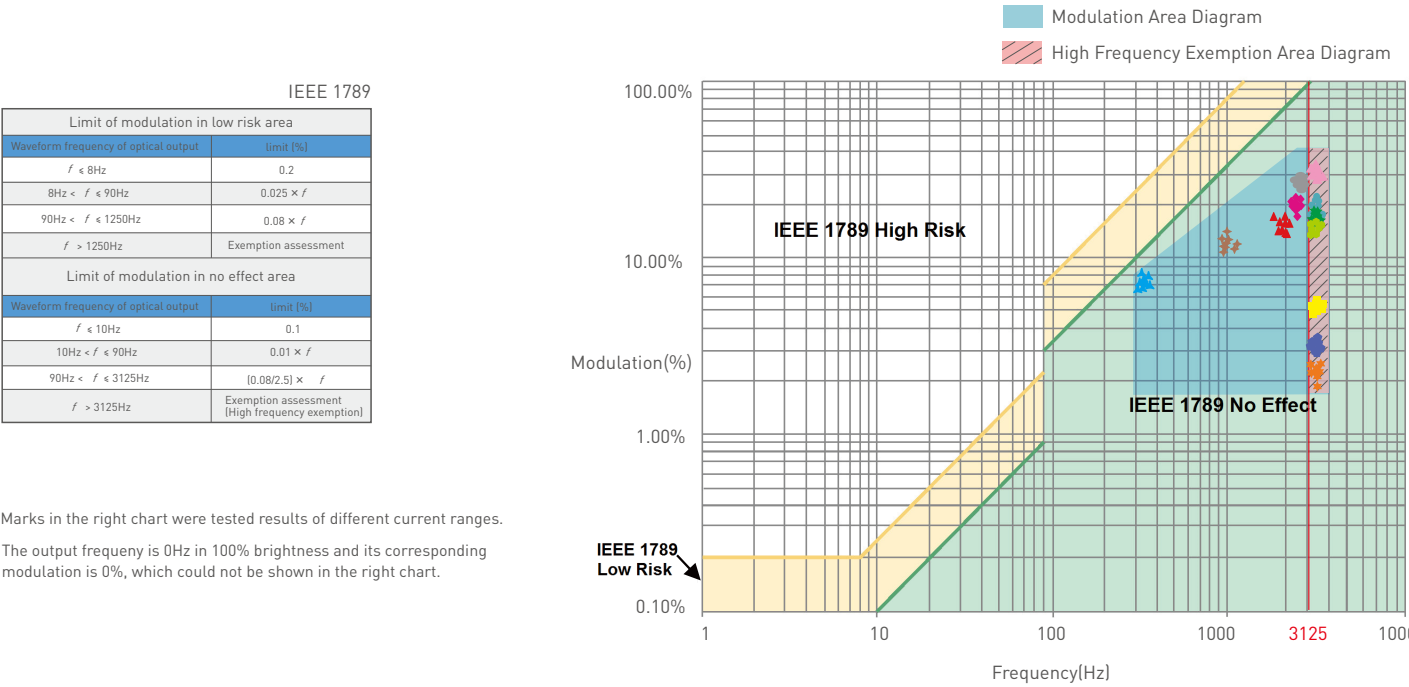
After completing the parameter settings, click 【Write】 in the upper right corner, and keep the programmer’s sensing area close to the NFC logo of the driver, so the parameters can be written to the driver.



Relationship Diagrams



Flicker Test Sheet



Packaging Specifications

Model	SN-45-300-1050-G1NF
Carton Dimensions	480×230×170mm(L×W×H)
Quantity	20 PCS/Layer；4 Layers/Carton； 80 PCS/Carton
Weight	0.112 kg/PCS；9.76 kg/Carton

Packaging Image



Carton Packaging

Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

Attentions

- This product must be installed and adjusted by a qualified professional.
- This product is non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the life the product. Please install the product in a environment with good ventilation.
- When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.
- Please keep the product away from a intense magnetic field, a high pressure area or a place where lightning is easy to occur.
- Please check whether the working voltage used complies with the parameter requirements of the product.
- Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
- If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.

※ This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warrantyexclusionsbelow:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Update Log

Version	Updated Time	Update Content	Updated by
A0	2023.11.28	Original version	Li siyu

LED驱动器(恒流型)

- 外壳采用PC阻燃V0级原料
- 超小体积、轻薄、免螺丝端盖设计
- 通过手机APP可更改输出电流、最大亮度值等参数，实现驱动器数据交互功能
- 电流步进值低至1mA, 兼容性更高更精细
- 带软启动渐亮功能, 让人眼视觉更舒服
- 高性能、高效率、低THD
- 创新的热管理技术,智能保护电源寿命
- 过温、过载、短路保护,可自动恢复
- 适合室内Ⅰ、Ⅱ、Ⅲ类灯具应用
- 室内办公照明、装饰照明、商业照明
- 5年保修期



无频闪
IEEE1789

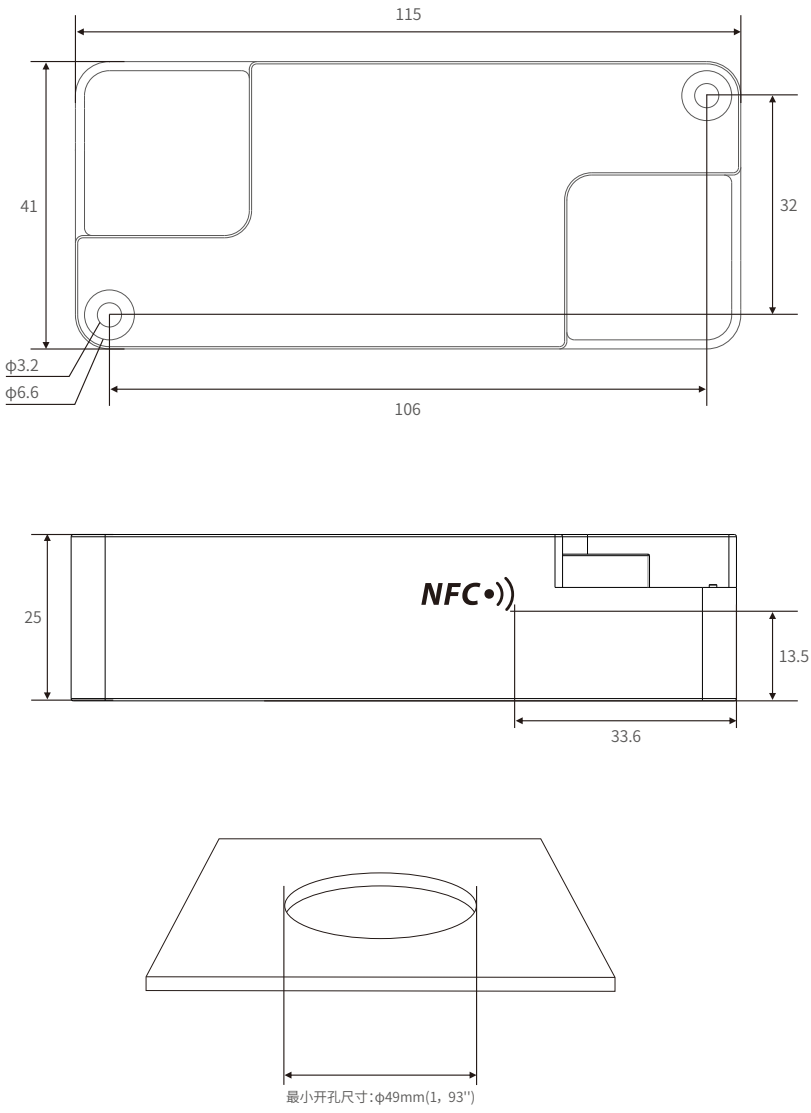


技术参数

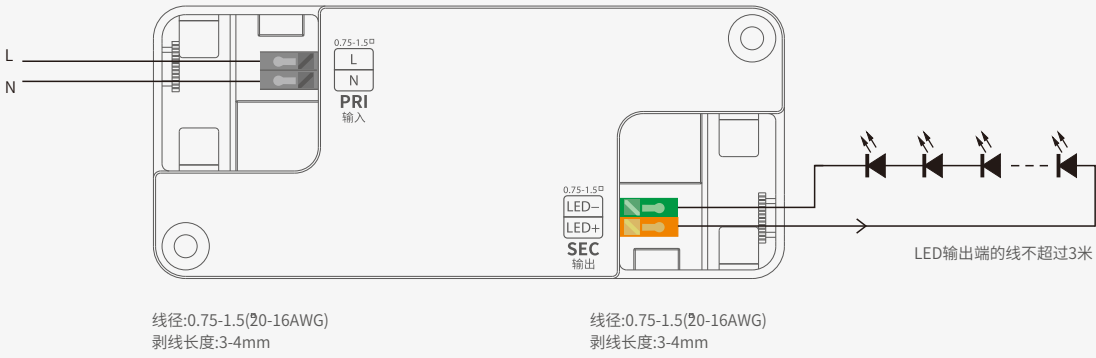
型号		SN-45-300-1050-G1NF			
特征	输出类型	恒流			
	输出特征	隔离			
	防护等级	IP20			
	绝缘等级	II类(适用于室内Ⅰ、Ⅱ、Ⅲ类灯具)			
输出	输出电压	9-42Vdc			
	最大输出电压(空载)	≤55Vdc			
	工作电流范围	300-1050mA			
	负载功率范围	Max.45W			
	电流精度	±5%			
	电流纹波	<5%(输出最大电流时)			
输入	直流电压范围	220-240Vdc			
	输入电压	220-240Vac			
	频率范围	50/60Hz			
	输入电流	≤0.09A			
	功率因数	PF>0.9(满载)			
	谐波THD	THD<10%(满载)			
	效率(Typ.)	≥88%(满载)			
	浪涌电流	冷启动15A(在50%Ipeak下测试twidth=112us)/230Vac			
	抗浪涌	L-N:2KV			
环境	漏电流	Max.0.5mA			
	工作温度	ta:-20~45°Ctc:90°C			
	工作湿度	20~95%RH,无冷凝			
	储存温度/湿度	-40~80°C/10~95%RH			
	温度系数	±0.03%/°C(0-50°C)			
保护	耐振动	10-500HZ,2G12分钟/周期,X,Y,Z轴各72分钟			
	过载保护	负载超过额定功率≥1.02倍时自动保护,减轻负载自动恢复			
	过温保护	根据PCB温度超标情况(≥110°C),智能调节电流输出或关闭,可自动恢复			
	过压保护	超过空载电压值进入保护,可自行恢复			
	短路保护	输出线路短路关闭输出,可自动恢复			
安规和电磁规格	耐压	输入对输出: 3750Vac			
	绝缘阻抗	输入对输出: 100MΩ/500VDC/25°C/70%RH			
	安全规范	CCC	中国	GB19510.1, GB19510.14	
		TUV	德国	EN61347-1, EN61347-2-13, EN62493	
		CB	CB成员国	IEC61347-1, IEC61347-2-13	
		CE	欧盟	EN61347-1, EN61347-2-13, EN62384	
		KC	韩国	KC61347-1, KC61347-2-13	
		EAC	俄罗斯	IEC61347-1, IEC61347-2-13	
		RCM	澳洲	AS61347-1, AS61347-2-13	
		ENEC	欧洲	EN61347-1, EN61347-2-13, EN62384	
		UKCA	英国	BSEN61347-1, BSEN61347-2-13, BSEN62493	
	BIS	印度	IS15885(PART2/SEC13)		
	电磁兼容发射	CCC	中国	GB/T17743, GB17625.1	
		CE	欧盟	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
		KC	韩国	KN15, KN61547	
		EAC	俄罗斯	IEC62493, IEC61547, EH55015	
		RCM	澳洲	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
		UKCA	英国	BSENIEC55015, BSENIEC61000-3-2, BSEN61000-3-3, BSEN61547	
	电磁兼容抗扰度	EN61000-4-2,3,4,5,6,8,11,EN61547			
ErP	功耗	空载功耗		<0.5W (不接灯具时)	
	频闪/频闪效应	IEEE1789		满足无影响/高频豁免考核级别	
		CIESVM		PstLM≤1.0, SVM≤0.4	
	DF	相位因素		DF≥0.9	
其他	产品重量	112g±10g			
	产品尺寸	115×41×25mm(L×W×H)			

尺寸图

单位:mm



连接应用图

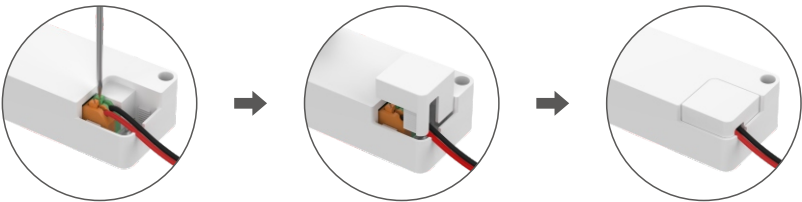


典型电流对应参数表

下图典型16组电流数据供选型参考, 均可通过手机APPNFC设置更多电流, 可设置范围在300-1050mA, 电流步进值低至1mA								
输出电流	300mA	350mA	400mA	450mA	500mA	550mA	600mA	650mA
输出电压	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc
输出功率	2.7-12.6W	3.15-14.7W	3.6-16.8W	4.05-18.9W	4.5-21W	4.95-23.1W	5.4-25.2W	5.85-27.3W
输出电流	700mA	750mA	800mA	850mA	900mA	950mA	1000mA	1050mA
输出电压	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc
输出功率	6.3-29.4W	6.75-31.5W	7.2-33.6W	7.65-35.7W	8.1-37.8W	8.55-39.9W	9-42W	9.45-44.1W

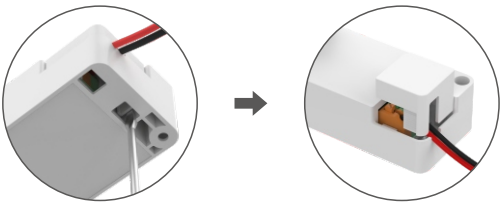
保护盖应用图

压线盖扣合



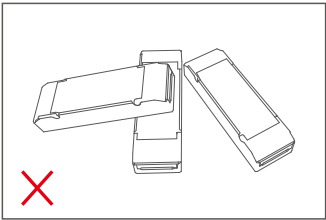
使用螺丝批按照接线图接线。
在两边端子处用保护盖扣合, 向下按压直至与壳体保持平整。

压线盖拆卸

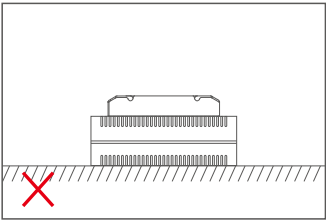
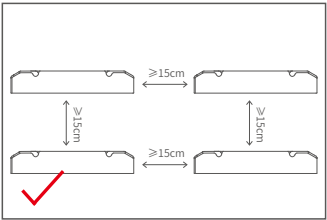


在外壳的底部保护盖处用螺丝批左/右撬开, 即可将保护盖拆下。

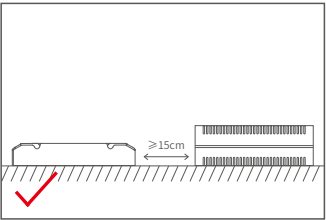
安装注意事项



请勿将产品堆叠摆放, 产品与产品间隔距离应≥15cm, 避免影响产品散热和使用寿命。



请勿将产品置于电源上方, 与电源间隔距离应≥15cm, 避免影响产品散热而减少使用寿命。



注: 安装需符合产品的环境工作温度, 切勿安装到灯具内部, 以免超出产品环境工作温度影响产品寿命。

搭配NFCLightingAPP使用

通过手机扫描下方二维码，按提示完成APP安装。(因性能需求，要求手机型号苹果: iPhone8及以上、且操作系统iOS13及以上; 安卓: 具备NFC功能机型)



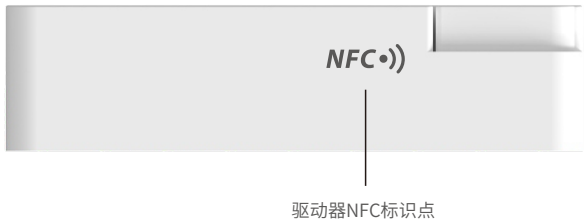
* 设置驱动器参数时，必须在驱动器断电情况下进行操作。

读/写智能电源

使用手机，通过NFC读取驱动器信息， 根据需求设置参数后， 可直接写入驱动器。

1.读取驱动器

在APP“ 首页” 点击【 读/写智能电源】， 将手机感应区域靠近驱动器NFC标识点， 读取驱动器参数。



2.编辑参数

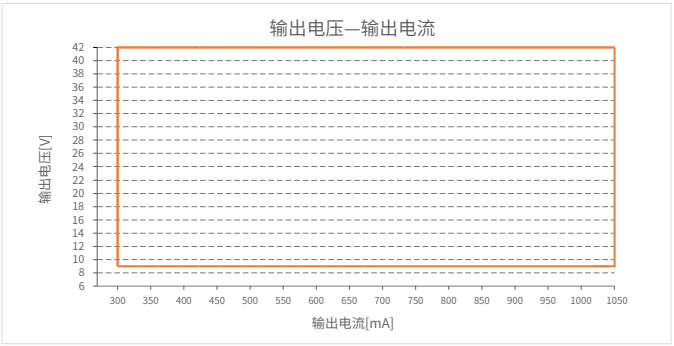
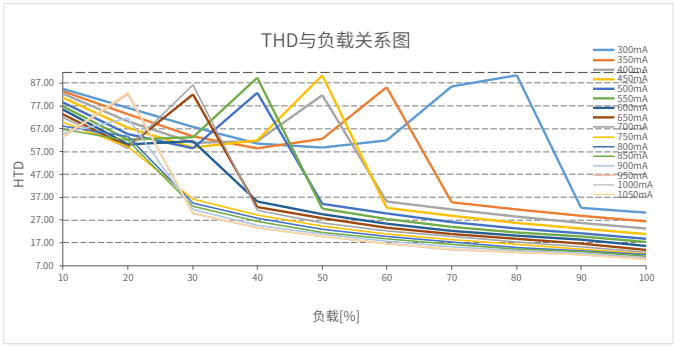
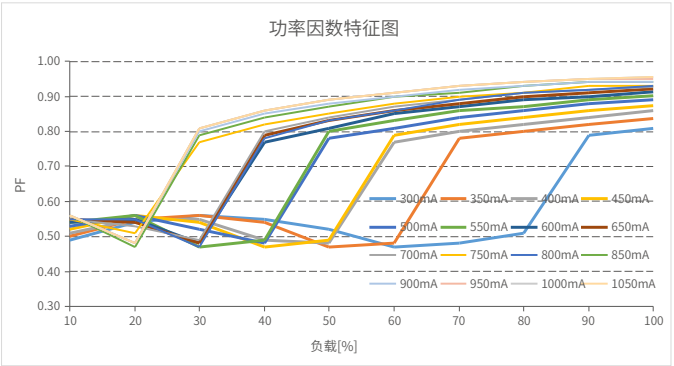
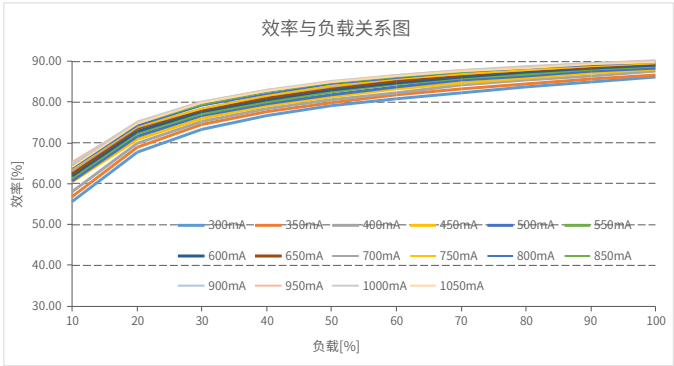
点击【参数管理】可编辑输出电流、最大亮度值、通电渐变时间等参数。

3.写入驱动器

参数设置完成后，点击右上角【写入】，将手机感应区域靠近驱动器NFC标识点，即可写入驱动器成功修改参数。



关系图表

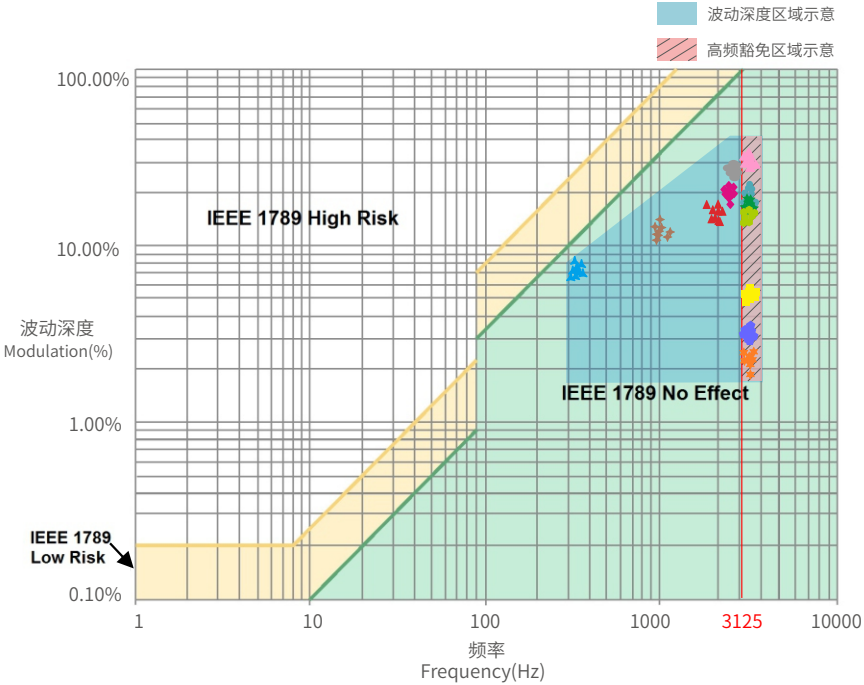


频闪测试表

IEEE1789

低风险区域 (LowRisk)的波动深度 (Modulation) 限值	
光输出波形频率 f	限值 (%)
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	免除考核
无风险区域 (NoEffect)的波动深度 (Modulation) 限值	
光输出波形频率 f	限值 (%)
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$(0.08/2.5) \times f$
$f > 3125\text{Hz}$	免除考核 (高频豁免)

右图标识为不同电流档的测试结果。
100%亮度时输出频率为0Hz, 对应波动深度为0%, 无法在右图中示意。



包装规格

型号	SN-45-300-1050-G1NF
包装箱尺寸	480×230×170mm(L×W×H)
数量	20PCS/层; 4层/箱; 80PCS/箱
重量	0.112kg/PC;9.76kg/箱

包装样式图



整箱包装

运输和贮存

- 1.运输
- 产品适用车、船、飞机交通运输工具运输。
- 在运输中, 应使用遮蓬进行防雨和防晒, 并保持文明装卸, 不应有剧烈振动、撞击等。
- 2.贮存
- 贮存符合I类环境的规定。贮存期限超过6个月的产品建议重新检验, 合格后方可使用。

注意事项

- 请由具有专业资格的人员进行调试安装；
- 雷特产品（专有型号除外）不能防水防雷，需避免日晒雨淋，如安装在户外，请用防水箱和防雷装置；
- 良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境；
- 请检查使用的工作电压是否符合产品的参数要求；
- 使用的电线直径大小必须能够负载连接的LED灯具，并确保接线牢固；
- 通电调试前，应确保所有接线正确，以避免因接线错误而导致灯具损坏；
- 如果发生故障，请勿私自维修；如有疑问，请联系供应商。

※ 本说明书的内容如有变更，恕不另行通知。若内容与您使用的功能有所不同，则以实物为准。如有疑问，欢迎向我司授权的经销商咨询。

保修条例

- 自出厂之日起保修服务期为5年。
- 在保修服务期内出现产品质量问题雷特将给予免费修理或更换服务。

非保修条例:

属下列情况不在免费保修或更换服务范围之内:

- 已经超出保修服务期;
- 过高电压、超负载、操作不当等人为造成的损坏;
- 产品外形严重损坏或变形;
- 自然灾害以及人力不可抗拒原因造成的损坏;
- 产品保修标签和产品唯一条形码损坏;
- 无雷特签订的合同或发票凭证。

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- 2.雷特享有修正或调整本保修条款的权利,并以书面形式发布为准。

更新日志

版本	更改日期	更改内容	更改人
A0	2023.08.29	正稿	刘伟丽