LTECH

SN-100-24-G1NF **Non-dimmable**

LED Driver (constant Voltage)

- Ultra-thin, ultra-small. Housing is made from V0 flame retardant PC materials.
- Clamshell style case and wire clamping structure for convenient wire connection.
- Change max.brightness, power-on fading time, PWM frequency and other parameters thorough a NFC-enabled phone and driver data can be synced between drivers and the APP.
- With soft-on and fade-in dimming function, enhancing your visual comfort.
- Innovative thermal management technology intelligently protects the life of the LED driver.
- Overheat, over voltage, overload, short circuit protection and automatic recovery.
- Suitable for Class Ⅰ / Ⅱ /Ⅲ indoor light fixtures.
- Suitable for indoor lights such as LED strips and magnetic track lights.
- 5-year warranty (Rubycon capacitor).

Flicker-Free
IEEE 1789

ErP RoHS SELV

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

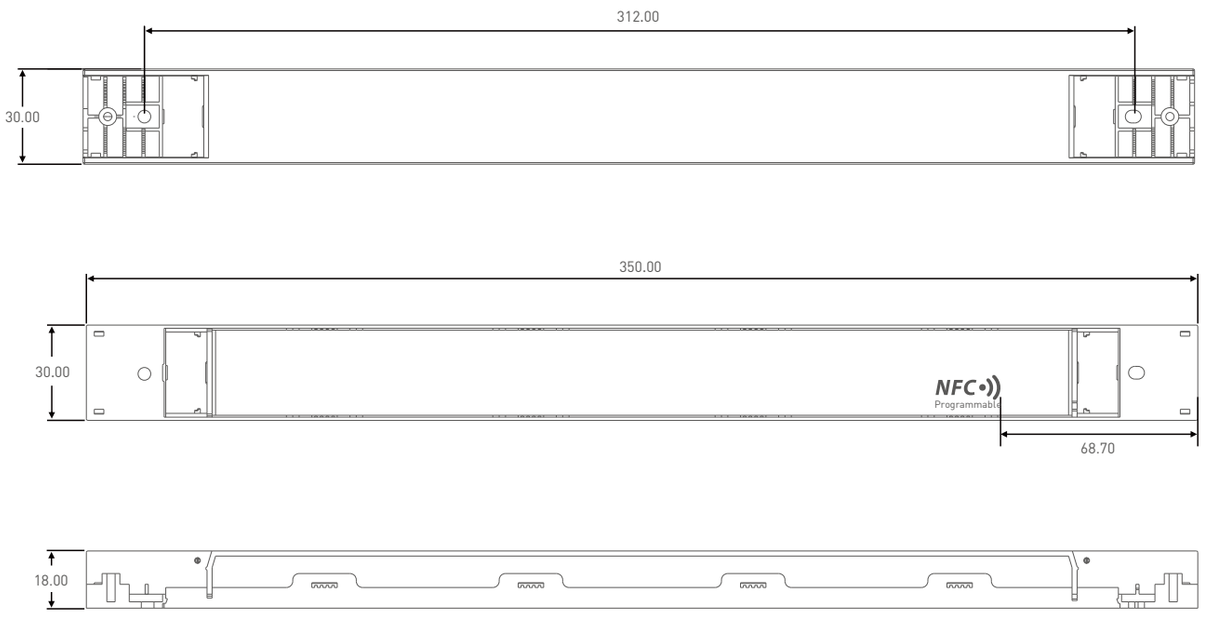
Overheat Protection | Overvoltage protection | OverLoad Protection | Short Circuit Protection

Technical Specs

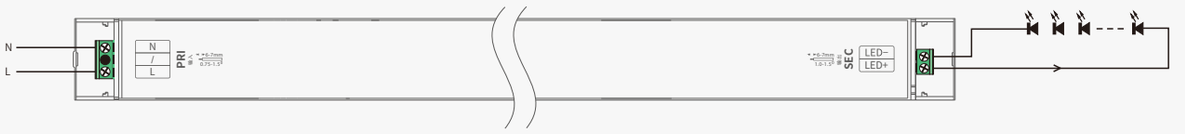
Model		SN-100-24-G1NF		
Features	Output Type	Constant Voltage		
	Output Feature	Isolation		
	Protection Grade	IP20		
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)		
OUTPUT	Output Voltage	24Vdc		
	Output Voltage Range	24Vdc±0.5Vdc		
	Output Current	Max. 4.17A		
	Output Power	Max. 100W		
	Output Power Range	0-100W		
	Dimming Range	0~100%, down to 0.1%		
	Overload Power Limitation	≥102%		
	Ripple & Noise	Ripple≤500mV, Noise≤500mV		
	PWM frequency	NFC set up 300-22000Hz		
INPUT	DC Voltage Range	220-240Vdc		
	Input Voltage	220-240Vac		
	Frequency	0/50/60Hz		
	Input Current	Max. 0.5A/230Vac		
	Power Factor	PF>0.96 (at full load)		
	THD	THD<10% (at full load)		
	Maximum input power	Max. 110W		
	Efficiency (Typ.)	93%		
	Inrush Current	Cold start 40A(Test twidth=338us tested under 50% Ipeak)/230Vac		
	Anti Surge	L-N: 2KV		
	Leakage Current	Max. 0.5mA		
ENVIRONMENT	Working Temperature	ta: -20 ~ 45°C tc: 90°C		
	Working Humidity	20 ~ 95%RH, non-condensing		
	Storage Temperature/Humidity	-40 ~ 80°C/10~95%RH		
	Temperature Coefficient	±0.03%/°C(0-45°C)		
	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively		
PROTECTION	Overload Protection	Shut down the output when current load≥102%, auto recovers.		
	Overheat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers		
	Overvoltage protection	Shut down the output when non-load voltage ≥30V, re-power on to recover after fault condition is removed		
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Insulation Resistance	I/P-O/P: 100MΩ/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	AS 61347-1, AS 61347-2-13
		ENEC	Europe	EN61347-1, EN61347-2-13, EN62384
		UKCA	Britain	BS EN 61347-1, BS EN 61347-2-13, BS EN 62493
		BIS	India	IS 15885 (PART 2/SEC 13)
	EMC Emission	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
		UKCA	Britain	BS EN IEC 55015, BS EN IEC 61000-3-2, BS EN 61000-3-3, BS EN 61547
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547		
ErP	Power Consumption	Standby power consumption		<0.5W (It is powered on after a command)
		No-load power consumption		<0.5W (When the lamp is not connected)
	Flicker/Stroboscopic Effect	IEEE 1789		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.)	211g±10g		
	Dimensions	350×30×18mm(L×W×H)		

Product Size

Unit: mm



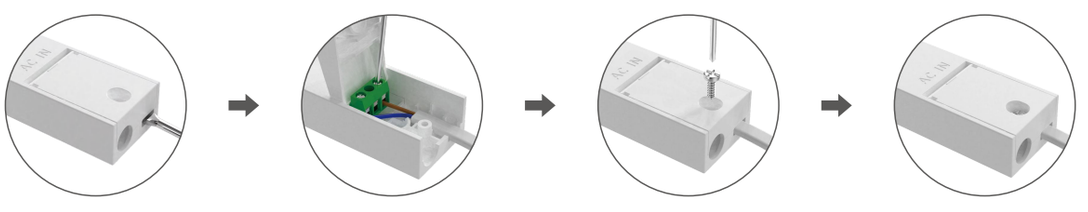
Wiring Diagram



Wire diameter: 0.75-1.5㎟ (20-16AWG)
Strip length: 6-7mm

Wire diameter: 1.0-1.5㎟ (20-16AWG)
Strip length: 6-7mm

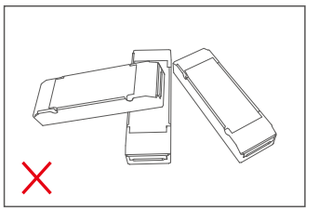
Application Diagram of Protective Cover



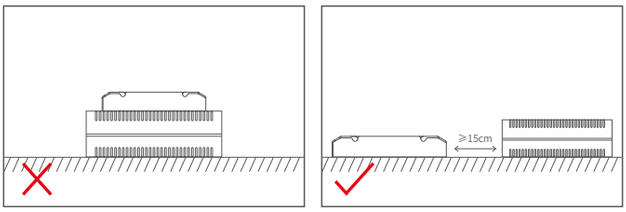
1.Put the head of the screwdriver at the cable entry to pry up the protective cover, then connect the wires as the wiring diagram shown

2. After closing the protective cover, tighten the protective cover with the PA screws

Installation Precautions



Please do not stack the products. The distance between two products should be ⩾15cm so as not to affect heat dissipation or the lifetime of the products.



Please not place the products on power supplies. The distance between the product and the power supplies should be ⩾15cm so as not to affect heat dissipation or shorten the lifetime 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).

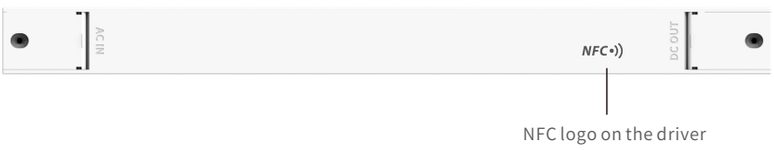
∗ Before you start to set driver parameters, please power off the driver first.

Read/Write LED driver

Read the driver information with your phone and modify parameters depending on your need. The modified parameters can be directly written to the driver.

1. Read LED driver

On the APP home page, click【Read/Write LED driver】, then keep your phone close to the NFC logo on the driver to read the driver parameters.

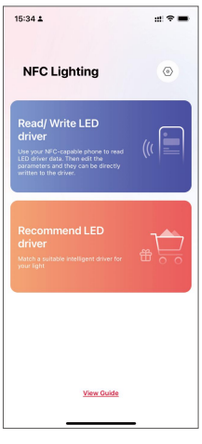


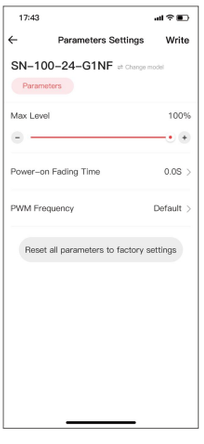
2. Edit parameters

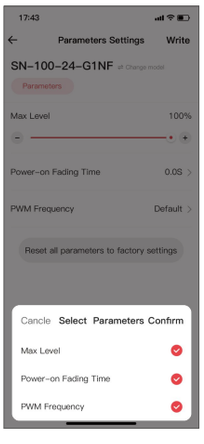
Click[Parameters] to edit max. brightness, power-on fading time, PWM frequency, and other parameters.

3. Write to the driver

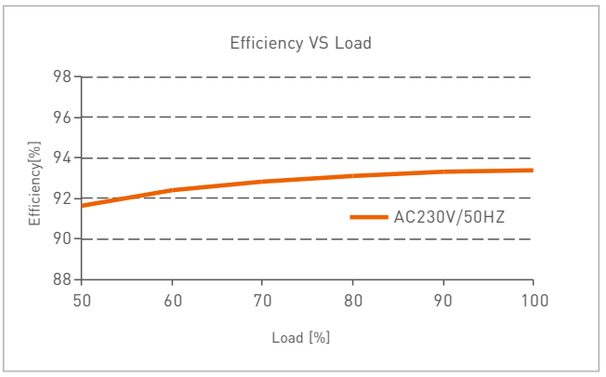
After parameter settings are completed, click 【Write】 at the top right and keep your phone close to the NFC logo on the driver. Then the parameters will be successfully modified and written to the driver.

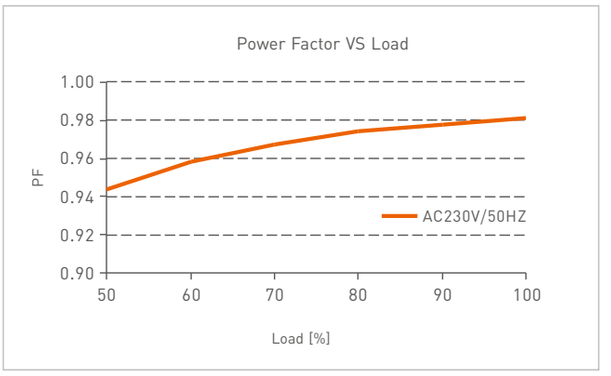


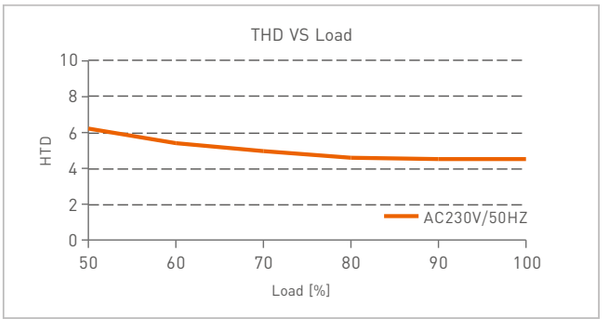


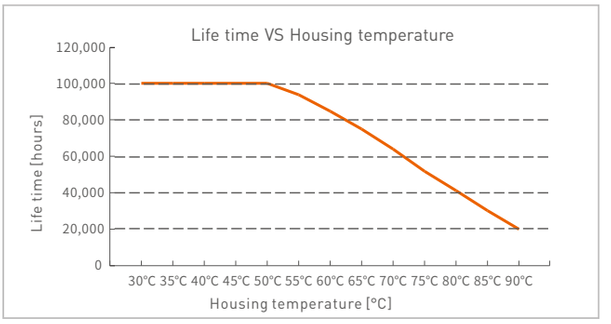


Relationship Diagrams









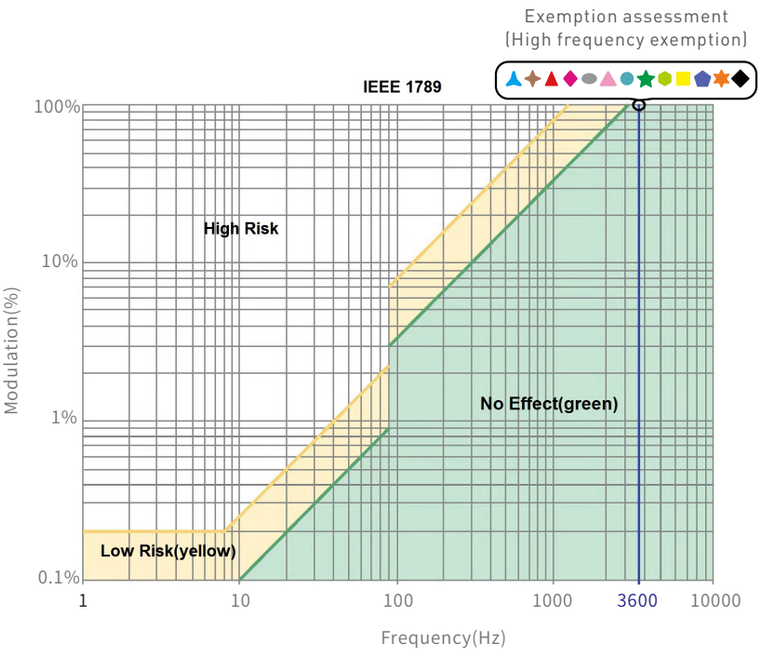
Flicker Test Form

IEEE 1789

Limit of Modulation in low risk area	
Waveform frequency of optical output	limit [%]
$f \leq 8Hz$	0.2
$8Hz < f \leq 90Hz$	$0.025 \times f$
$90Hz < f \leq 1250Hz$	$0.08 \times f$
$f > 1250Hz$	Exemption assessment
Limit of Modulation in no effect area	
Waveform frequency of optical output	limit [%]
$f \leq 10Hz$	0.1
$10Hz < f \leq 90Hz$	$0.01 \times f$
$90Hz < f \leq 3125Hz$	$(0.08/2.5) \times f$
$f > 3125Hz$	Exemption assessment (High frequency exemption)

Brightness

- 0.1 %
- 1%
- 5%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%



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

- Products shall be installed by qualified professionals.
- LTECH products are and not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.
- Good heat dissipation will prolong the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

* 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.

Warranty exclusions below:

- 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.

ZHUHAI LTECH TECHNOLOGY CO., LTD.

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Update Log

Version	Updated Time	Update Content	Updated by
A0	2023.12.20	Original version	Pan YeXian