

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.
- Through the NFC mobile APP, you can change the maximum brightness value, power transition time, PWM frequency and other parameters.
- Support corridor dimming function
- With soft start lighting function, let the human eye more comfortable vision
- $\bullet\,$ Innovative thermal management technology intelligently protects $\mbox{the life of the LED driver.}$
- Overheat, overload, short circuit protection and automatic recovery.
- Suitable for Class I / II / III indoor light fixtures.
- Indoor office lighting, decorative lighting and commercial lighting.
- 5-year warranty (Rubycon capacitor).











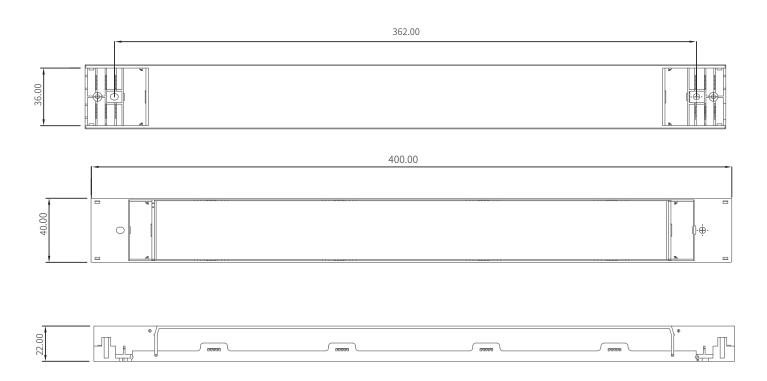
Technical Specs

Model		SN-240	-24-G1NF				
	Output Type	Constant Voltage					
Features	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. 10A					
	Output Power	Max. 240W					
	Output Power Range	0-240W					
	Overload Power Limitation	≥102%					
	Ripple & Noise	Ripples900mV, Noises900mV					
	PWM frequency	The NFC Settings range from 300 Hz to 2200 Hz					
	DC Voltage Range	220-240Vdc					
	Input Voltage	220-240Vac					
	Frequency	0/50/60Hz					
	Input Current	Max. 1.2A/230Vac					
	Power Factor	PF>0.97 (at full load)					
INPUT	THD	THD<8% (at full load)					
	Maximum input power	Max. 256W					
	Efficiency (Typ.)	93.5%					
	Inrush Current	Cold start 45A(Test twidth=350us tested under 50% peak)/230Vac					
	Anti Surge	L-N: 2K	V				
	Leakage Current	Max. 0.5mA					
	Working Temperature	ta: -20 ~ 45°C tc: 90°C					
	Working Humidity	20 ~ 95%RH, non-condensing					
ENVIRONMENT	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					
	Overload Protection	Shut down the output when current load>102%, auto recovers.					
PROTECTION	Overheat Protection	Intelligently adjusting or turning off the output current if the PCB temperature >110°C, auto recovers					
TROTECTION	Overvoltage protection	Shut down the output when non-load voltage ≥28V, re-power on to recover after fault condition is removed					
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.					
	Withstand Voltage	I/P-0/P: 3750Vac					
	Insulation Resistance	I/P-0/P	: 100MΩ/500VDC/25°C	70%RF	4/		
	Safety Standards	CCC	China	GB195	510.1, GB19510.14		
		TUV	Germany	EN613	347-1, EN61347-2-13, EN62493		
		СВ	CB Member States	IEC61	347-1, IEC61347-2-13		
		CE	European Union	EN613	347-1, EN61347-2-13, EN62384		
		KC	Korea	KC613	847-1, KC61347-2-13		
		EAC	Russia	IEC61347-1, IEC61347-2-13			
SAFETY		RCM	Australia	AS 61347-1, AS 61347-2-13			
&		ENEC	Europe	EN613	347-1, EN61347-2-13, EN62384		
EMC		UKCA	Britain	BS EN	N 61347-1, BS EN 61347-2-13, BS EN 62493		
		BIS	India	IS 15885 (PART 2/SEC 13)			
	EMC Emission	CCC	China	GB/T1	7743, GB17625.1		
		CE	European Union	EN550	015, EN61000-3-2, EN61000-3-3, EN61547		
		KC	Korea	_	, KN61547		
		EAC	Russia	_	493, IEC61547, EH55015		
		RCM	Australia	_	015, EN61000-3-2, EN61000-3-3, EN61547		
					N 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					
	Power Consumption	No-load power consumption			<0.5W (When the lamp is not connected)		
		IEEE 1789					
ErP	Flicker/Stroboscopic Effect	Network standby power consumption		mption	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.)	450g±10g					
OTHERS	Dimensions	/nn × /n	\times 22mm(L \times W \times H)				

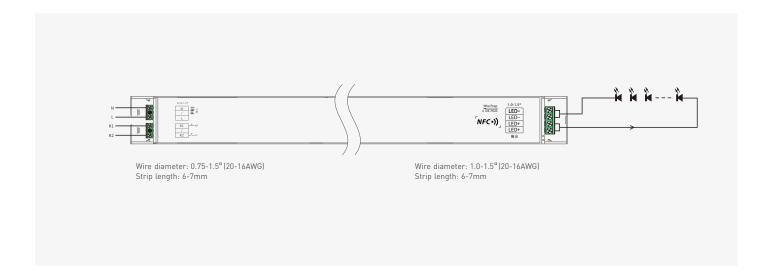


Product Size

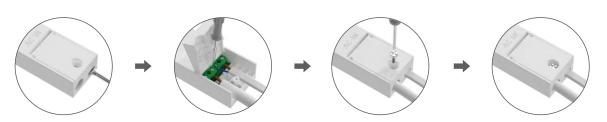
Unit: mm



Wiring Diagram



Application Diagram of Protective Cover



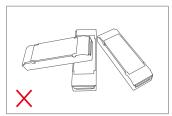
1.Put the head of the screwdriver at the cable entry to pry up the protective cover, then connect the wires as the wiring diagram shown

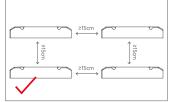
2. After closing the protective cover, tighten the protective cover with the PA screws



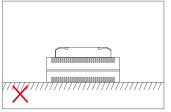


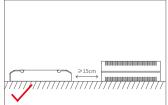
Installation Precautions



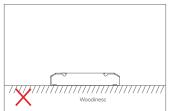


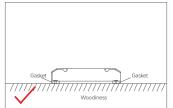
Please do not stack the products. The distance between two products should be ≥15cm so as not to asect heat dissipation or the lifetime of the products.





Please not place the products on power supplies. The distance between the product and the power supplies should be \geqslant 15cm so as not to asect heat dissipation or shorten the lifetime of the products.





Do not fix the product screws tightly against the wooden board. Instead, add a washer with a thickness of \geqslant 7mm under the fixing screws. Leaving some gaps can effectively dissipate heat, preventing any impact on the product's heat dissipation performance and service life.

Use with NFC Lighting APP

Scan the QR code below with your mobile phone and install the APP as prompted. Due to performance requirements, phone model Apple: iPhone 8 or later and operating system iOS13 or later. Android: NFC enabled models)



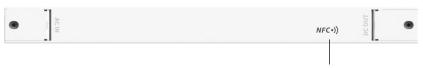
 $\textcolor{red}{\bigstar} \hspace{0.2cm} \text{When setting drive parameters, you must perform this operation when the drive is powered off.}$

Read/write smart power supply

Using the mobile phone, the drive information is read through NFC, and after setting parameters according to the requirements, the drive can be directly written.

1. Read the drive

Click [Read/write smart power Supply] on the "Home page" of the APP, place the sensing area of the phone near the NFC identification point of the drive, and read the parameters of the drive.



Drive NFC identification point

2. Edit parameters

Click [Parameter Management] to edit the max level, power-on fading time, PWM frequency and corridor DIM.

3. Write data to the drive

After parameter setting is complete, click [Write] in the upper right corner, and place the sensing area of the phone near the NFC identifier of the drive, and then write the parameters to the drive successfully.





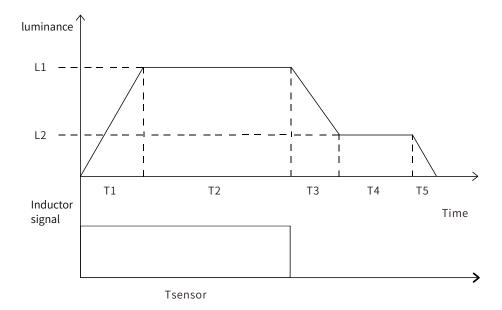






Corridor light function working process

Using the mobile phone, the drive information is read through NFC, and after setting parameters according to the requirements, the drive can be directly written.

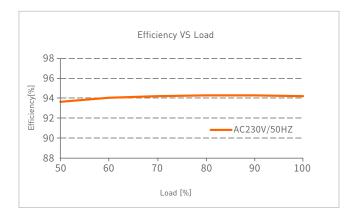


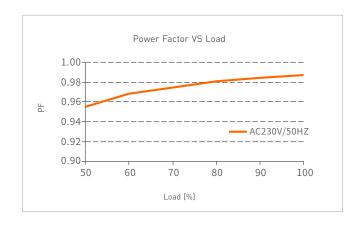
Symbol	Name	Default value	Configurable range	
T1	Turn on gradient time	3s	0-99s	
T1+T2	Induction (brightness) retention time	Sensor determined	Sensor determined	
Т3	Fade out induction time	5s	-	
T4	Unattended time	30s	0-1800s or permanent	
T5	Fade out the closing time	5s	-	
L1	Starting brightness	100%	25 - 100%	
L2	Unattended brightness	50% (50% of L1)	10 - 50%	

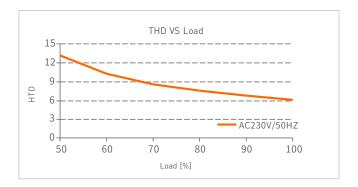
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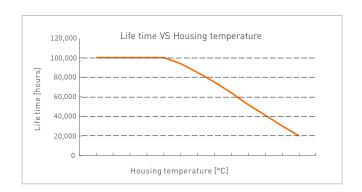


Relationship Diagrams







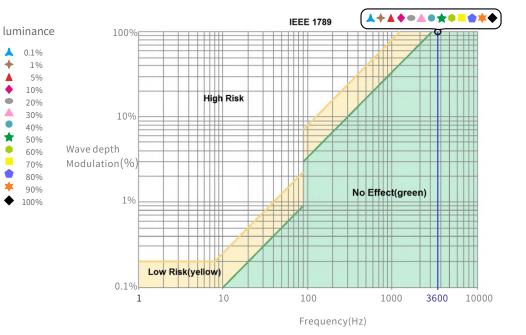


Stroboscopic test list

IEEE 1789

Modulation (depth of fluctuation) limits for low-risk areas						
Optical output waveform frequency f	Limit value (%)					
f ≤ 8Hz	0.2					
8Hz < f ≤ 90Hz	0.025 × f					
90Hz < f ≤ 1250Hz	0.08 × f					
f > 1250Hz	Exemption from examination					
The depth of Modulation (Modulation) limit for the no-effect zone						
	Limit value (%)					
f ≤ 10Hz	0.1					
10Hz < f ≤ 90Hz	0.01 × f					
90Hz < f ≤ 3125Hz	(0.08/2.5) × f					
f > 3125Hz	Test exemption (high frequency exemption)					

Test exemption (high frequency exemption)



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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

- Product installation and commissioning should be done by a qualified professional.
- 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

- \bullet $\;$ 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.



Update Log

Version	Updated Time	Update Content	Updated by
Α0	2023.12.19	Original version	Pan YeXian