

# Intelligent LED Driver (Constant Voltage)

- Ultra-thin, ultra-small. Housing is made from VO flame retardant PC materials.
- Clamshell twist screw integrated wire structure, wide opening Angle, an auxiliary buckle on the closure
- The maximum brightness value, power transition time and other parameters can be changed through the mobile APP to achieve the driver data interaction function.
  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 ClassI/II/IIIindoor light fixtures.
- Suitable for indoor LED strip lights and magnetic track lights.
- 5-year warranty (Rubycon capacitor).

# an ion. Flicker-Free IEEE 1789

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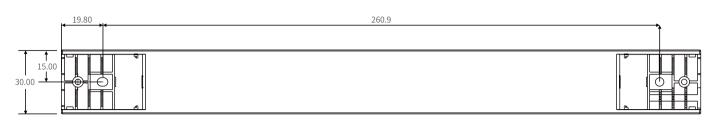
## Technical Specs

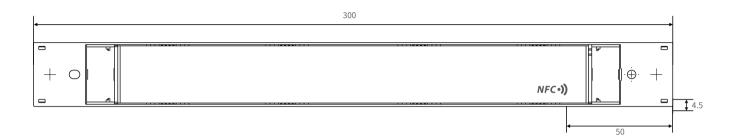
Martil	1	CN 20	24 G1NE			
Model	Outrut Ture		24-G1NF			
	Output Type		nt voltage			
Features	Output Feature	Isolation				
	Protection Grade	IP20				
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)				
OUTPUT	Output Voltage	24Vdc				
	Output Voltage Range	24Vdc±0.5Vdc				
	Output Current	Max. 1.25A				
	Output Power	Max. 30W				
	Output power range	0-30W				
	Ripple and Noise	250mVp-p				
	PWM frequency	NFC set up 300-22000Hz				
	DC Voltage Range	220-240Vdc				
	Input Voltage	220-240Vac				
	Frequency	50/60Hz				
	Input Current	Max. 0.18A/230Vac				
	Power Factor	PF>0.95(atfulload)				
INPUT	THD Maximum Input Dawar	THD<10%(atfullload)				
	Maximum Input Power	Max. 38W				
	Efficiency (Typ.)					
	Inrush Current	Cold start 30A(Test twidth=162us tested under 50% Ipeak)/230Vac				
	Anti Surge	L-N: 2KV				
	Leakage Current	Max. 0.				
	Working Temperature	ta: -20-45°Ctc: 80°C				
ENW/DONN/ENT	Working Humidity	20~95%RH,non-condensing				
ENVIRONMENT	Storage Temperature/Humidity		°C/10~95%RH			
	Temperature Coefficient		±0.03%/°C(0-50°C)			
	Vibration	10-500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively				
	Overload Protection	Shut down the output when rated power>102%, auto recovers				
PROTECTION	Overheat Protection	Intelligently adjust or turn off the output current if the PCB temperature >110°C, and recover automatically				
	Overvoltage Protection Short Circuit Protection		Shut down the output when voltage>28V, and recover automatically			
	Withstand Voltage	Enter hiccup mode if short circuit occurs, and recover automatically				
	Insulation Resistance	I/P-0/P: 3750Vac I/P-0/P: 100MΩ/500VDC/25°C/70%RH				
		CCC	China	GB19510.1,GB19510.14		
	Safety Standards	TUV	Germany	EN61347-1,EN61347-2-13,EN62493		
		CB	CB Member States	EK01347-1,EK01347-2-13, EK02473		
		CE	European Union	EN61347-1,EN61347-2-13, EN62384		
		KC	Korea	KC61347-1,KC61347-2-13		
		EAC	Russia	IEC61347-1,IEC61347-2-13		
SAFETY		RCM	Australia	AS 61347-1,AS 61347-2-13		
&		ENEC	Europe	EN61347-1,EN61347-2-13, EN62384		
EMC		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		0-4-2,3,4,5,6,8,11, EN6	I		
	Power Consumption	No-load power consumption		<0.5W (When the lamp is not connected)		
		IFEE1789		Meet IEEE 1789 standard/High frequency exemption level		
ErP	Flicker/Stroboscopic Effect	CIE SVM		Pst LM≤1.0, SVM≤0.4		
	DF	Phase factor		DF≥0.9		
	Weight(N.W.)	190g±10g		1		
OTHERS	Dimensions	300×30×17mm(L×W×H)				
L	1		. /			



## Product Size

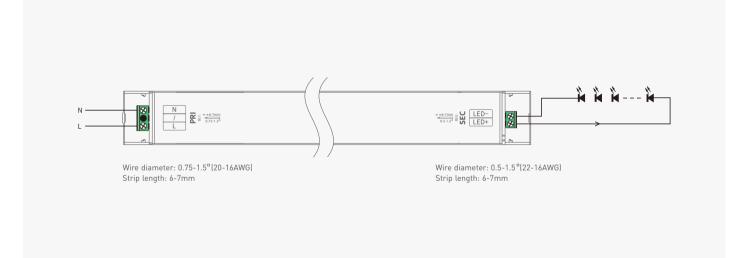
Unit: mm



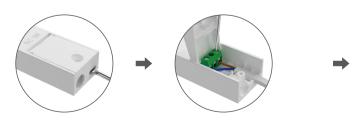




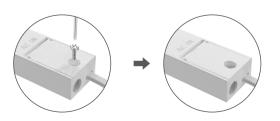
## Wiring Diagram



## Protective Housing Application Diagram



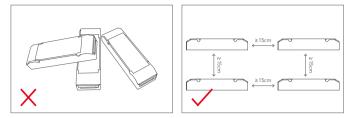
1.Put the head of the screwdriver at the cable entry to pry up the protective cover, then connect the wires as the wiring diagram shown.



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  $\geq 15$ cm 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.

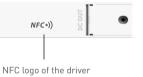
#### Read/Write the LED driver

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 Management] to edit the maximum brightness value, power transition time, PWM frequency and other parameters.

#### 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.



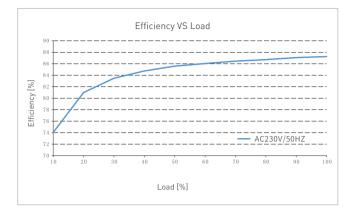


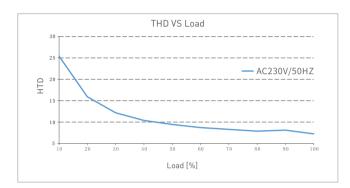
17:43		al 🕈 🗊
÷	Parameters Settings	Write
SN-30-	-24-G1NF Charge me	odel
Paramete	irs	
Max Level		100%
• —		-••
Power-on I	Fading Time	0.0S >
PWM Frequ	iency	Default >
Reset a	Il parameters to factory	settings

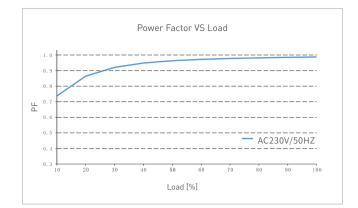




## **Relationship Diagrams**

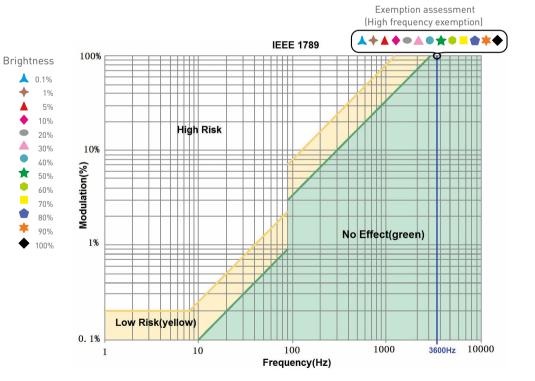






## Flicker Test Form

	IEEE 1789					
Limit of Modulation in low risk area						
	limit (%)					
<i>f</i> ≤ 8Hz	0.2					
8Hz < <i>f</i> ≤ 90Hz	0.025 × f					
90Hz < <i>f</i> ≤ 1250Hz	0.08 × f					
f > 1250Hz	Exemption assessment					
Limit of Modulation in no effect area						
	limit (%)					
<i>f</i> ≤ 10Hz	0.1					
10Hz < f ≤ 90Hz	0.01 × f					
90Hz < <i>f</i> ≤ 3125Hz	[0.08/2.5] × f					
f > 3125Hz	Exemption assessment (High frequency exemption)					





## 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.
- 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 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.

#### 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
AO	20231027	Original version	Yang Weiling