# Lifud 莱福德

# Features

- Zigbee CCT changeable
- Dim to off
- THD <10%
- Flicker free
- IP20
- Suitable for Class II light fixtures (strip light)
- 5-year warranty (please refer to the warranty condition)





# **Applications**

LED strip light · luminous character · light box

#### **Descriptions**

LF-GAZ150A6250-24 is a constant voltage Zigbee tunable white LED driver with the maximum output power of 150W. Its rated input voltage ranges from 198 to 264Vac; output current from 0 to 6.25A. The CCT and luminance of light fixture controlled by this LED driver is adjustable via "Tuya Smart" App. Besides, it has all-round protections, including over voltage protection, over current protection and short circuit protection.

# **Product Model**



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# Electrical Characteristics

Model		LF-GAZ150A6250-24				
Output	Output Voltage	24V				
	Output Current	0-6250mA				
	Flicker Index	IEC-Pst ≤1, CIE SVM ≤0.4 Complies with IEEE Std 1789-2015				
	Voltage Tolerance	$\pm 3\%$				
	Temperature Drift	±5%				
	Start-up Time	<1.2S@230Vac				
	Input Voltage	220-240Vac (voltage limit: 198-264Vac)				
	DC Input Voltage	180-280Vdc				
	Input Frequency	47-63Hz				
	Input Current	1A max.				
	PF	≥0.95				
	THD	<10%				
Input	Efficiency	≥92%				
	Inrush Current	<73A/250uS @230Vac				
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	4	6	6	10
	Leakage Current	<0.7mA				
	Standby Power Consumption	≤2W (dim to off)				
Protections	Over Voltage	<30V				
Protections	Short Circuit No damage (auto-recovery)					
Environment Descriptions	Operating Temperature	-20°C~+50°C				
	Operating Humidity	20-90%RH (without condensation)				
	Storage Temperature/ Humidity	-40°C~+80°C (6 months in Class I environment); 10-90%RH (without condensation)				
	Atmospheric Pressure	86-106kPa				

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# Electrical Characteristics

Safety and EMC	Certifications	ENEC, CE, RCM, CCC		
	Withstanding Voltage	I/P-O/P: 3.75kVac 5mA 60S		
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc		
	Safety Standards	ENEC: EN61347-1:2015, EN61347-2-13: 2014/A1: 2017, EN62384 2016/A1: 2009 CE-LVD: EN61347-2-13: 2014/A1: 2017, EN61347-1: 2015, EN62493: 2015 RCM: AS 61347.2-13: 2018 CCC: GB19510.1-2009, GB19510.14-2009		
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2		
	EMS	CE-EMC/RCM: EN61000-4-2, 3, 4, 5 (lightning strike L-N: 1kV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike L-N: 1kV), 6, 11		
	IP Rating	IP20		
Other	RoHS	RoHS 2.0 (EU) 2015/863		
Parameters	Warranty Condition	5 years (Tc ≤88°C)		
	Noise Level	≤25dB (this data is measured in a soundproof room and the noise collector should be 10CM away from LED driver)		
Testing Equipment	Digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber; Everfine EMS61000-5B: Everfine EMS61000-4A, spectroanalyzer: KH3935, withstanding voltage tester: TH9201B, flicker tester (flicker-free coefficient test) 60N-01, etc.			
Testing Remarks	The above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac without any special remarks.			

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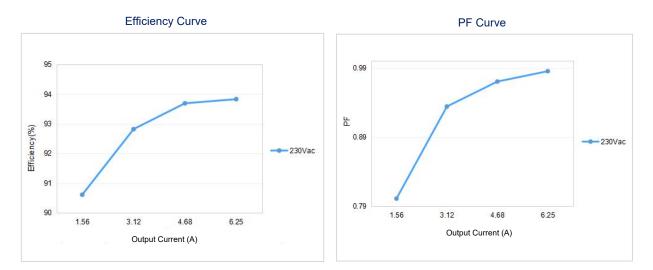
# Electrical Characteristics

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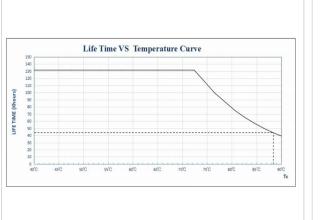
Additional Remarks	<ol> <li>It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.</li> <li>The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.</li> <li>The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current.</li> <li>The above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load, maximum output current and input voltage of 230Vac without any special remarks.</li> <li>Lifud reserves the right to interpret any of the above parameters.</li> </ol>
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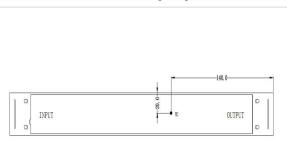
# Product Characteristic Curves





#### Lifetime Curve





Tc Point Testing Diagram

#### Tc point is at the bottom of LED driver

# Definitions of Product Terminals

INPUT		OUTPUT		
AC-L	Input terminal of AC live wire	LED+	Positive electrode output of LED driver	
NC		WW-	Negative electrode output of driver's warm light	
AC-N	Input terminal of AC neutral wire	CW-	Negative electrode output of driver's cold light	

# Zigbee Net-in & Net-out Operation Instructions

- The standard of Zigbee LE 3.0 protocol is used in the design.
- Net-in effective distance: about 40m (with Tuya wireless gateway); about 30m (with Tuya wired gateway) (measured in a barrier-free condition)
- Control distance: about 50m (with Tuya wireless gateway); about 30m (with Tuya wired gateway) (measured in a barrier-free condition)
- Maximum quantity of LED drivers that a gateway can match for: 30 (with Tuya wireless gateway and measured in a barrier-free condition)
- Net-in operation: a. connect your phone to Wi-Fi -- turn the location service of your phone on -- open the "Tuya Smart" APP.

b. gateway adding operation: click "Add Devices" after entering the APP interface -- click "Gateway Central Control" -- select "Wireless Gateway" -- select "Wi-Fi Network" -- the gateway light flashes quickly -- the APP shows "Gateway Central Control" -- click "Successfully Add Gateway" (e.g. wireless gateway adding operation)

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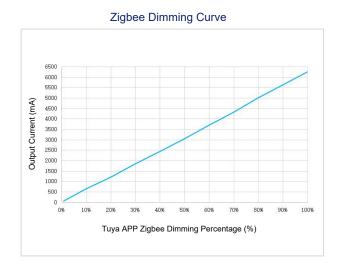
# Zigbee Net-in & Net-out Operation Instructions

c. LED driver adding operation: click "Add Devices" at the APP Gateway Central Control interface -- click "Lighting" -- select "Light Source" -- the luminaire turns on and off alternately 3 times after the AC input terminal of LED driver is continuously on/off 5 times -- the APP shows Zigbee CCT -- click "Add Drivers".

- When a device that has been connected to the network joins a new gateway, the previous network needs to be disconnected.
- 2 ways for successful net-in & net-out operation: a. the AC input terminal of LED driver is continuously on/off 5 times (within 5 sec), the luminaire turns on and off alternately 3 times; b. press the reset button at the output terminal for 5 sec, the luminaire turns on and off alternately 3 times. Both of them indicate that net-in or net-out operation is successful, and you can then search for devices again.

# Zigbee Dimming Operation System Diagram

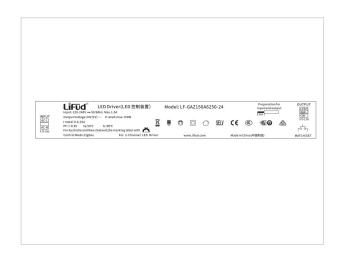




Input: 230Vac; output: 24Vdc/6250mA (the data is obtained from Tuya APP Zigbee dimming test and the chart is for reference only)

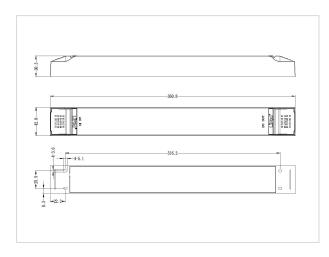
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#### Label



# Structure & Dimensions (unit: mm; tolerance: ±0.5mm)

Model	Overall Appearance Dimension (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Hole
LF-GAZ150A6250-24	360.8*42*30.3 mm	316.2 mm	5.1 mm



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# Packaging Specifications

Model	LF-GAZ150A6250-24	
Carton Size	360.8*42*30.3 mm (L*W*H)	
Quantity	5 pcs/layer; 6 layers/ctn; 30 pcs/ctn	
Weight	0.36 kg/pc; 11.8 kg/ctn	

# Transportation and Storage

#### 1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact of LED driver as much as possible.

#### 2. Storage

• The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

#### Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Tecnology Co., Ltd. reserves the right to interpret any contents of this specification.