Lifud 辣福德

Features

- Zigbee dimmable with Tuya ZTLC5 module
- Dimming depth 2%
- All-round protection of short circuit, overload, no-load and reversing protection
- Wide application: compact size
- 5-year warranty (please refer to the warranty condition.)



Applications

·Indoor office lighting \cdot decorative lighting \cdot commercial lighting \cdot residential lighting

Descriptions

LF-BBZ016-0400-42 is a constant current Zigbee dimmable LED driver with the maximum output power of 16W. Its rated input voltage is 48Vdc \pm 5% and maximum output current is 400mA. It features compact size, built-in design (inside the magnetic track box), high efficency and smooth dimming.

Product Model



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Electrical Characteristics

Model		LF-BBZ016-0400-42	
Output	Output Voltage	9-42V(Vin-Vo≥7V)	
	Output Current	400mA	
	Output Power	16.8W max	
	Flicker Index	IEC-Pst≤1, CIE SVM≤0.4 (complies with IEEE Std 1789-2015)	
	Current Tolerance	$\pm 6\%$	
	Temperature Drift	±10%	
Input	Input Voltage	48Vdc \pm 5% (voltage input is neither positive nor negative)	
	Input Current	0.45A max.	
	Efficiency	≥93%(full load)	
	Short Circuit	Hiccup mode (auto-recovery)	
Protections	Overload Circuit	When the output voltage is exceeded, the output current drops, and the load is reduced to recover automatically.	
	Noload Circuit	No damage to driver (No-load voltage ≤59V)	
	Reversing Protection	Normal output when input is reversed	
Environment Descriptions	Operating Temperature	-20°C~+60°C	
	Operating Humidity	20-90%RH (without condensation)	
	Storage Temperature/ Humidity	-30°C~+80°C (6 months in Class I environment); 10-90%RH (without condensation)	
	Atmospheric Pressure	86-106kPa	
Other	RoHS	RoHS 2.0 (EU) 2015/863	
Parameters	Warranty Condition	5 years	
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 Remark	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac.		
Additional Remarks	 The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above. Pay attention to waterproof, moisture-proof and electrostatic proof during the usage. Pay attention to the insulation of betweeen PCB boards and metal parts of the shell to avoid abnormalities. 		

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Product Characteristic Curves

Output Current & Voltage Curve



Dimming Curves



Remark: Input:48Vdc; output: 42VDC/400mA (The chart is for reference only)

Product Definitions

INPUT		
48VIN	DC Input (Positive/negative electrode)	
48VIN	DC Input (Positive/negative electrode)	

OUTPUT		
LED+	Positive electrode output of LED driver	
LED-	Negative electrode output of LED driver	

Efficiency Curve

Eff. VS Output Voltage

20.0

30.0

Output Voltage(Vdc)

41.0

45

48

51

100%

Efficiency %05

0%

9.0



Remark: Input:48Vdc; output: 9VDC/400mA (The chart is for reference only)

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Structure and Dimensions (unit: mm)

Appearance and dimensions



Zigbee Dimming Operation Instructions



- The standard of ZigBee 3.0 protocol is used in the design, compatible with Tuya wirless gateway certified by ZigBee Alliance
- Net-in effective distance: with Tuya wireless gateway, the distance is about 40m; with Tuya wired gateway, the distance is about 30m (measured in a barrier-free condition).
- Control distance: with Tuya wireless gateway, the distance is about 50m; with Tuya wired gateway, the distance is about 30m (measured in a barrier-free condition).
- Quantity of LED drivers that a gateway can match for: 20 (with Tuya wireless gateway and measured in a barrier-free condition)
- When a device that has been connected to the network joins a new gateway, the previous network needs to be disconnected
- Net-in & net-out operation: when the AC input terminal of LED driver is continuously on/off 6 times, the luminaire blinks to indicates that net-in operation starts and when it succeeds, it will stop blinking. When a device that has been connected to the network joins a new gateway, the previous network needs to be disconnected from the APP. When it succeeds, the output light will blink again and then you can search for devices in the new gateway.

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Zigbee Net-in & Net-out Operation Instructions

Driver output current adjustable range:

Wireless Dimming Value	Output Current
0%	LED Light Fixture Turned Off
2% ~ 100% (Uo MAX)	Dimming Frequency: 1kHz ; PWM 1%-100% Percentage Change; Output Current Adjustable Range: 8mA-400mA (taking 400mA as an example)

Packaging Specifications

Model	LF-BBZ016-0400-42
Carton Size	385*285*210 mm (L*W*H)
Quantity	50 pcs/layer; 10 layers/ctn; 500 pcs/ctn
Weight	0.007 kg/pc; 4.8 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.

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