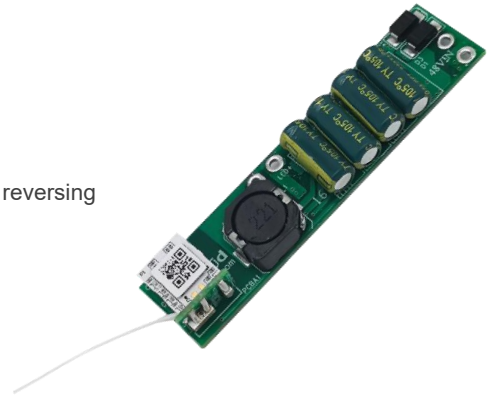


**Features**

- 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**

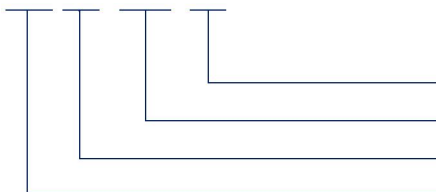
· Indoor office lighting · decorative lighting · commercial lighting · residential lighting

**Descriptions**

LF-BBZ028-0700-42 is a constant current Zigbee dimmable LED driver with the maximum output power of 28W. Its rated input voltage is 48Vdc±5% and maximum output current is 700mA. It features compact size, built-in design (inside the magnetic track box), high efficiency and smooth dimming.

**Product Model**

LF - BBZ 028 - 0700 - 42



- 42: maximum output voltage: 42V
- 0700: maximum output current: 700mA
- 028: rated power: 28W
- BBZ: Zigbee dimmable constant current LED driver series

**Lifud Technology Co., Ltd.**

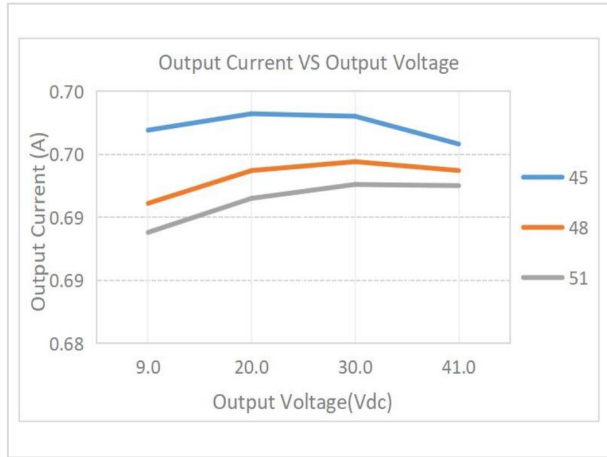
Production Base I (HQ): Building B, Kutto Industrial Park, No.26, Xinhe Road, Bao'an District, Shenzhen City, China.  
 Production Base II: No.4, Block 2, Tengfei Road, Shigao Economic Development Area, Meishan City, Sichuan, China.  
 Website: www.lifud.com Telephone: +86(0)755 8373 9299 Email: sales@lifud.com

## ■ Electrical Characteristics

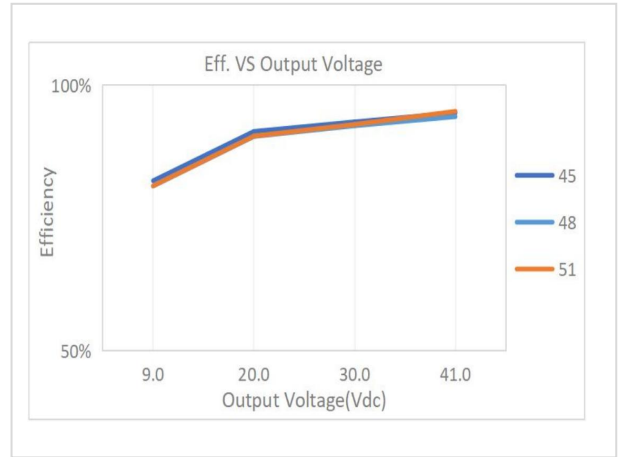
Model		LF-BBZ028-0700-42
<b>Output</b>	Output Voltage	9-42V( $V_{in}-V_o \geq 7V$ )
	Output Current	700mA
	Output Power	29.4W max
	Flicker Index	IEC-Pst $\leq 1$ , CIE SVM $\leq 0.4$ (complies with IEEE Std 1789-2015)
	Current Tolerance	$\pm 6\%$
	Temperature Drift	$\pm 10\%$
<b>Input</b>	Input Voltage	48Vdc $\pm 5\%$ (voltage input is neither positive nor negative)
	Input Current	0.45A max.
	Efficiency	$\geq 93\%$ (full load)
<b>Protections</b>	Short Circuit	Hiccup mode (auto-recovery)
	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 $\leq 59V$ )
	Reversing Protection	Normal output when input is reversed
<b>Environment Descriptions</b>	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
<b>Other Parameters</b>	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty Condition	5 years
<b>Testing Equipment</b>	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.	
<b>Testing Remark</b>	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.	
<b>Additional Remarks</b>	<ol style="list-style-type: none"> <li>1. 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.</li> <li>2. Pay attention to waterproof, moisture-proof and electrostatic proof during the usage.</li> <li>3. Pay attention to the insulation of between PCB boards and metal parts of the shell to avoid abnormalities.</li> </ol>	

■ **Product Characteristic Curves**

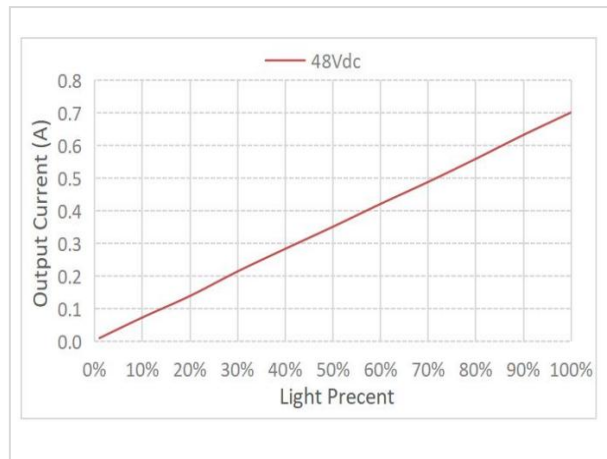
Output Current & Voltage Curve



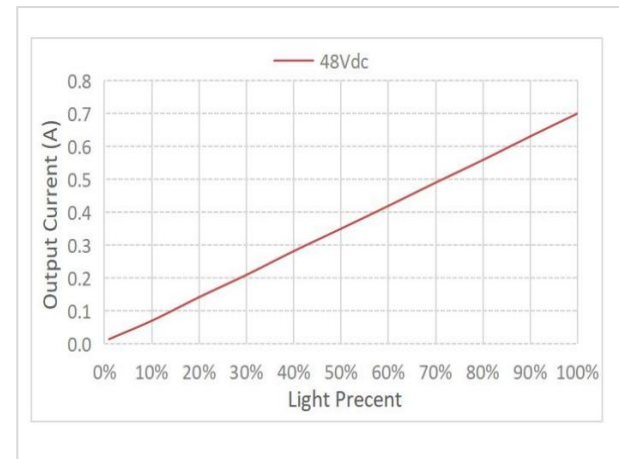
Efficiency Curve



■ **Dimming Curves**



Remark: Input:48Vdc; output: 42VDC/700mA  
(The chart is for reference only)



Remark: Input:48Vdc; output: 9VDC/700mA  
(The chart is for reference only)

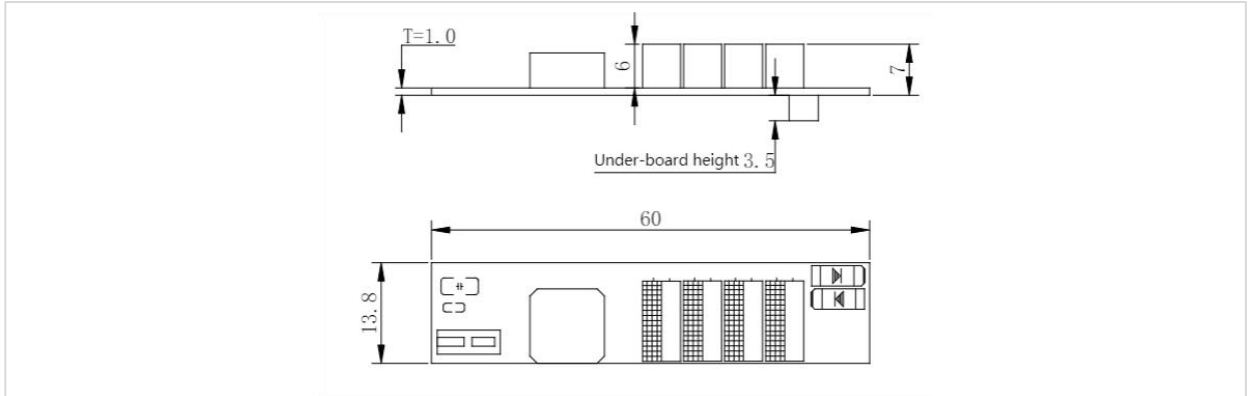
■ **Product Definitions**

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

■ **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 wireless 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.

■ **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: 14mA-700mA (taking 700mA as an example)

■ **Packaging Specifications**

Model	LF-BBZ028-0700-42
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**

<ul style="list-style-type: none"> <li>• Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.</li> <li>• Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.</li> <li>• Man-made damage is beyond the scope of Lifud warranty service.</li> </ul>
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Remark: Lifud Technology Co., Ltd. reserves the right to interpret any contents of this specification.