

Product introduction

JISIM JD4106 is a constant voltage LED intelligent dimming driver. It is a product specially designed for indoor constant voltage lamps. It supports deep dimming functions such as ZigBee dimming. The customized dimming curve section makes the human eye more comfortable; when no external signal is connected, it can be used as a non-dimming driver; It is suitable for LED strips, linear lamps, lamp films, magnetic lamps, decorative lamps. It is widely used in smart homes, smart hotels, smart commercial lighting, smart offices, smart buildings, large public buildings, etc. Places.

Product Features

- Compact SELV independent dimmable driver
- Support ZigBee dimming
- Global certification, SELV equivalent
- Suitable for Class I / II / III indoor light fixtures
- Smooth dimming,flicker-free,dimming range: 1-100%
- Max. output power 48W
- Up to 50000 hours life time,5-Year warranty(Long-lasting Capacitor)
- Small size and light weight,High efficiency
- The housing is made from V0 flame retardant PC materials from CHIMEI

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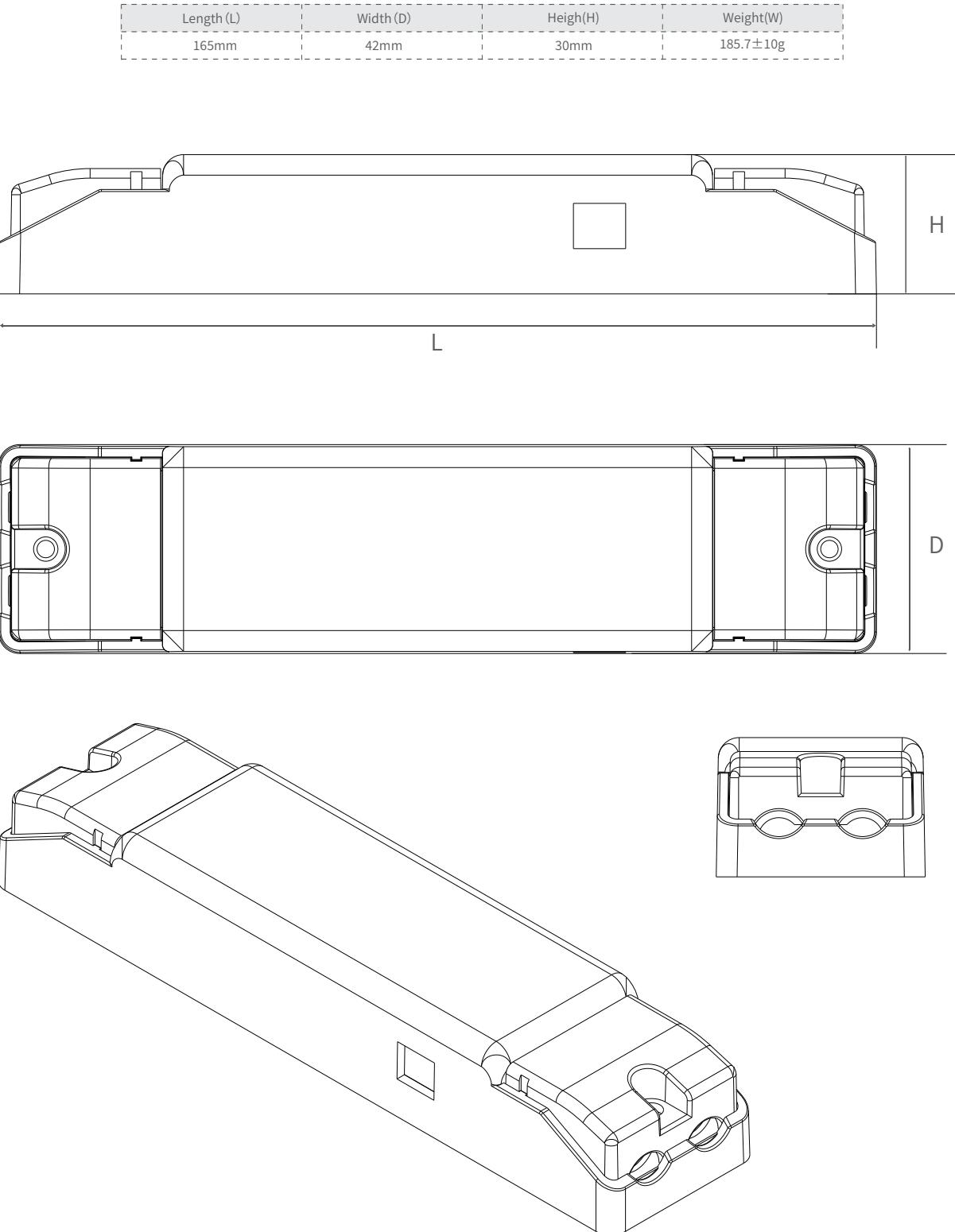


Technical Specifications (All parameters not specially mentioned are measured at 230VAC input, full load and 25°C of ambient temperature)

Model	JD4106			Features	Output Type	constant voltage	
Input	DC Voltage Range	220-240V	Communication mode		ZigBee		
	AC Voltage Range	220-240V	Output Feature		Isolation		
	Rated Voltage	220Vac/230Vac/240Vac	IP Rating		IP20		
	Input Frequency	50/60Hz	Insulation Rating		Class II (Suitable for class I II III light fixtures)		
	Input Current	≤0.4A/230Vac(at full load)	No Load Output Voltage		≤25Vdc		
	Input Power	Max.55.5W	Rated voltage		24Vdc		
	Efficiency	≥88%(at full load)	Output Current		Max.2A		
	Inrush Current	Cold start 15A/Test twidht=102us under 50% Ipeak@230Vac)	Output power		Max.48W		
	Anti-Surge	L-N:4KV	Dimming Range		1~100%		
Protection	Leakage Current	<0.5mA/230Vac	Output	Ripple	Max.240mV		
	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)		Voltage Accuracy	±5%		
	Open Circuit Protection	≤25Vdc		PWM Frequency	16000Hz		
Stort Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)	Environment		Working Temperature	ta:-20°C~45°C		
				Working Humidity	20~90%RH(No Condensation)		
				Storage Temperature/Humidity	-40~85°C/5~95%RH		
Safety & EMC	Withstand Voltage	I/P-O/P:3750Vac, 5mA,60s	Environment	Case Temperature	tc:90°C		
	Insulation Resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH		Life Time	>50000h@tc=90°C		
	Safety Standards	CCC	China	Working Temperature	ta:-20°C~45°C		
		CE	European Union	Working Humidity	20~90%RH(No Condensation)		
		KC	Korea	Storage Temperature/Humidity	-40~85°C/5~95%RH		
		TUV	Germany	Case Temperature	tc:90°C		
		ENEC	Europe	Life Time	>50000h@tc=90°C		
		CB	CB Member States	Working Temperature	ta:-20°C~45°C		
		RCM	Australia	Working Humidity	20~90%RH(No Condensation)		
		BIS	India	Storage Temperature/Humidity	-40~85°C/5~95%RH		
		EAC	Russia	Case Temperature	tc:90°C		
		UKCA	United Kingdom	Life Time	>50000h@tc=90°C		
ErP	Flicker/Stroboscopic Effect	IEEE1789	Meet IEEE Std1789-2015	Test Equipment	Other	LED Load	
		CIESVM	Pst≤1, SVM≤0.4				
	DF	Phase Factor	DF≥0.9				
Test Equipment	AC Source	PS-61005	Withstand Voltage Tester	TH9302D	LED Load		
	DC Electronic Load	IT8512A+	Thermostatic Humidity Chamber	HT-H-802			
	Spectrum Analyzer	KH3932	Intelligent Electrical Parameter Meter	PF9800			
	Surge Generator	SUG61005TB(7.5KV)-2216	Oscilloscope	TBS1102B			
	Stroboscope	LANSHU-201B	Digital Wattmeter	PM2818C			

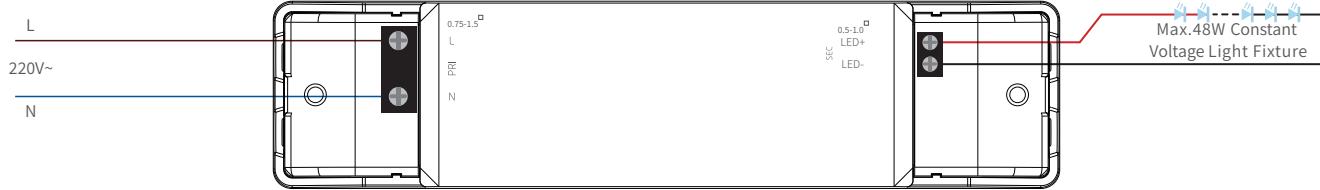
ZigBee Dimmable LED Driver

2D Diagram



ZigBee Dimmable LED Driver

Wiring Diagram



Installation Instructions

Interface	Marking	Description	wire cross Section	wire Stripping Length
Input	L	Input terminal of AC live wire	0.75...1.5mm ² (16-18AWG)	5..6mm
	N	Input terminal of AC neutral wire	0.75...1.5mm ² (16-18AWG)	5..6mm
Output	LED+	Positive electrode output of the driver	0.75...2.5mm ² (13-18AWG)	5..6mm
	LED-	Negative electrode output of the driver	0.75...2.5mm ² (13-18AWG)	5..6mm

Connection instructions

- 1.Rated torque: M2.6,0.35~0.40N.m
- 2.All connections must be as short as possible to ensure good EMI performance.
- 3.Driver output support hot swap.
- 4.Incorrect wiring can damage the LED.
- 5.The power cable should be kept at a certain distance from the driver and other connecting cables (5-10cm recommended)

App operation Instructions

1.Account Registration

Download and install the Tuya Smart App on IOS/Android. Once installed, you can proceed with login/registration.

2.Adding Devices

After new users navigate to "My" > "Family Management" > "Create Family" to set up family location and manage room names, they can click on the "My Home" interface to "Add Device". When the device is powered on, the light will enter a breathing state. In the add device list, select "Auto-Discover" to automatically search for devices. The "1Ch Driver CW CVV" can be automatically discovered. Follow the prompts to complete device addition (ensure the device is powered on or reset and in breathing mode, and that a Bluetooth gateway has been added).

3.Function Settings

After the device is successfully added, click on it to enter the specific lighting control interface, where you can freely control the device to turn on/off, adjust brightness, create groups, set schedules, and access more functions.

4.Scenes and Automation

Based on individual needs, users can customize scenes and automations, with features such as a lighting scenario library, lighting music library, and biorhythmic lighting.

5.Resetting Devices

To reset a device, quickly toggle the power on and off seven times. When the light enters breathing mode, it indicates that the device has been successfully reset and is ready for network configuration.

6.Voice Control

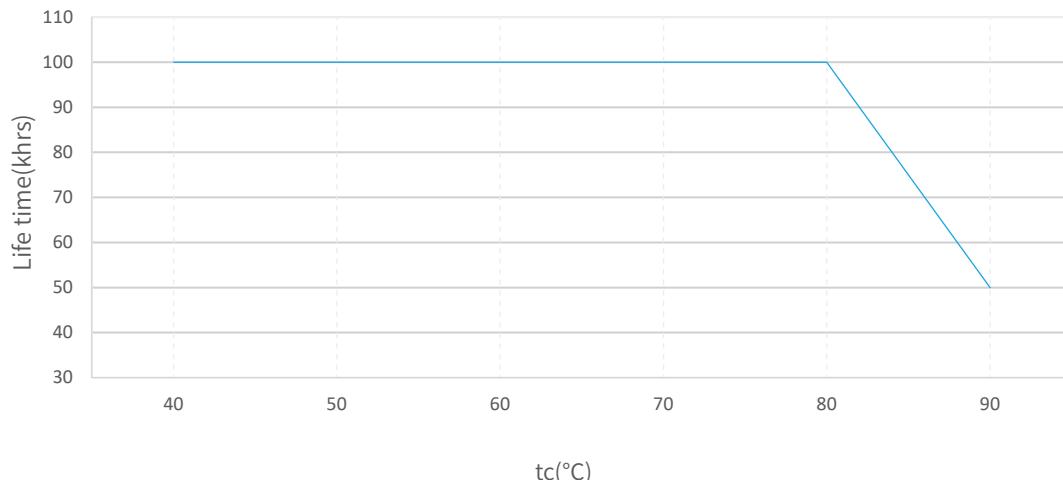
The device supports control via Amazon Alexa, Google Assistant, SmartThings, Yandex Alice, Tmall Genie, Baidu Duer, Xiaomi XiaoAI, XiaoZhi Guanjia, Tencent WeChat Mini Programs, Tencent Dingding, JD DingDong, and other voice assistants.

ZigBee Dimmable LED Driver

Product Characteristic Curves



Life Time VS Tcase



The life-time of the LED driver is shown in the figure above calculated (based on the 90% survival rate). The relation of t_c to t_a temperature depends also on the luminaire design.

Packaging Image



Inner Packaging Box



Small Carton Packaging



Large Carton Packaging

ZigBee Dimmable LED Driver

Packaging Size

Packaging Details	Carton Size	Packing Units	Weight
Inner Packaging Box	168x47x34mm	1pcs	202±10g
Small Carton Packaging	350 x 197 x 167mm	30pcs	6.36kg
Large Carton Packaging	420 x 360 x 365mm	120pcs	26.3kg

Packaging instructions:

Each large carton packaging contains 4 small carton packagings, Each small carton packaging contains 30 inner packaging boxes.

Cautions

- This product is used as a component in conjunction with a lighting fixture. Due to the influence of EMC from the lighting fixture and wiring, customers should perform EMC testing to confirm the entire product set.
- No operation with power on. Installation and debugging should be performed by qualified professionals. Please read the product manual carefully before installation.
- This product can only be used outside the light body, Cannot be used inside of the light, and it must be used with in the specified working environment.
- This product is not waterproof and should be avoided from direct sunlight and rain. If it is installed outdoors, please use a waterproof case.
- Good heat dissipation conditions are beneficial to the product's lifetime. Please install the product in a suitable environment, and strictly prohibit using double-sided tape to attach the casing or circuit board.
- Please check the parameters of the LED driver to ensure they meet the application requirements of the lighting fixture.
- Please install according to the standard wire gauge specified in the manual to avoid malfunctions caused by inappropriate wiring.
- Before powering on, please ensure that the wiring is correct to prevent damage to the driver or lighting fixture caused by incorrect wiring.
- If a malfunction occurs, please do not attempt to repair it yourself, if you have any questions, please contact the manufacturer.
- The manual is for reference only. Please refer to the actual product. Any changes to this product will not be notified separately.
- For more information, please send an email to fei.l@jisim-tech.com.

Warranty Terms

- The product is warranted for 5 years. (The life and MTBF of the product are for reference only, and do not represent a warranty statement.)
- During the warranty period, if any quality issues arise, JISIM will provide free repair or replacement services.

Non-Warranty Terms

The following situations are not covered by the free warranty or replacement service:

- The warranty period has expired.
- Damage caused by human factors such as overvoltage, overload, or improper operation.
- Deformation or damage to the exterior appearance.
- Damage caused by natural disasters or other irresistible human factors.
- The warranty label has been torn off or removed.
- No contract or invoice proof is provided.



Notice:

1. Repair or replacement provided is the only remedy for customers. JISIM is not liable for any incidental or consequential damage unless it is within the law.
2. JISIM has the right to amend or adjust the terms of this warranty, and any release in written form shall prevail.