

Product Introduction

JISIM's JD4208A, JD4208, and JD4206B are a series of LED intelligent Tunable White dimmable drivers equipped with ZigBee3.0 modules, designed specifically as wireless products for constant voltage luminaires. Based on the Tuya platform (allowing for quick integration with other proprietary systems by simply replacing the ZigBee module), these drivers enable functions such as 0-100% dimming, 2700-6500K color temperature adjustment, scene switching, timed switching, lamp grouping, and more. The customized dimming curves are designed to enhance comfort for the human eye. Suitable for use with LED light strips, LED flexible strips, LED light films, LED decorative lights, LED magnetic lights, and LED decorative lamps, they are widely applied in high-end settings including smart homes, smart hotels, intelligent commercial lighting, smart offices, smart buildings, and beyond.



Product Features

- Compact SELV independent Dimmable Driver
- Supports ZigBee brightness and color temperature adjustment
- Small Size, Noiseless, Full Power, High Efficiency
- The housing is made from V0 flame retardant PC materials from CHIMEI
- Stable signal, strong networking capability, ultra-long distance control
- Suitable for Class I / II / III indoor light fixtures.
- Protection:OCP,SCP,OLP
- Compatible with various voice platforms including Google, Amazon, and others.
- Smooth dimming,flicker-free,dimming range 0.1-100%
- Up to 50000 hours life time,5-Year Warranty (Long-lasting Capacitor)

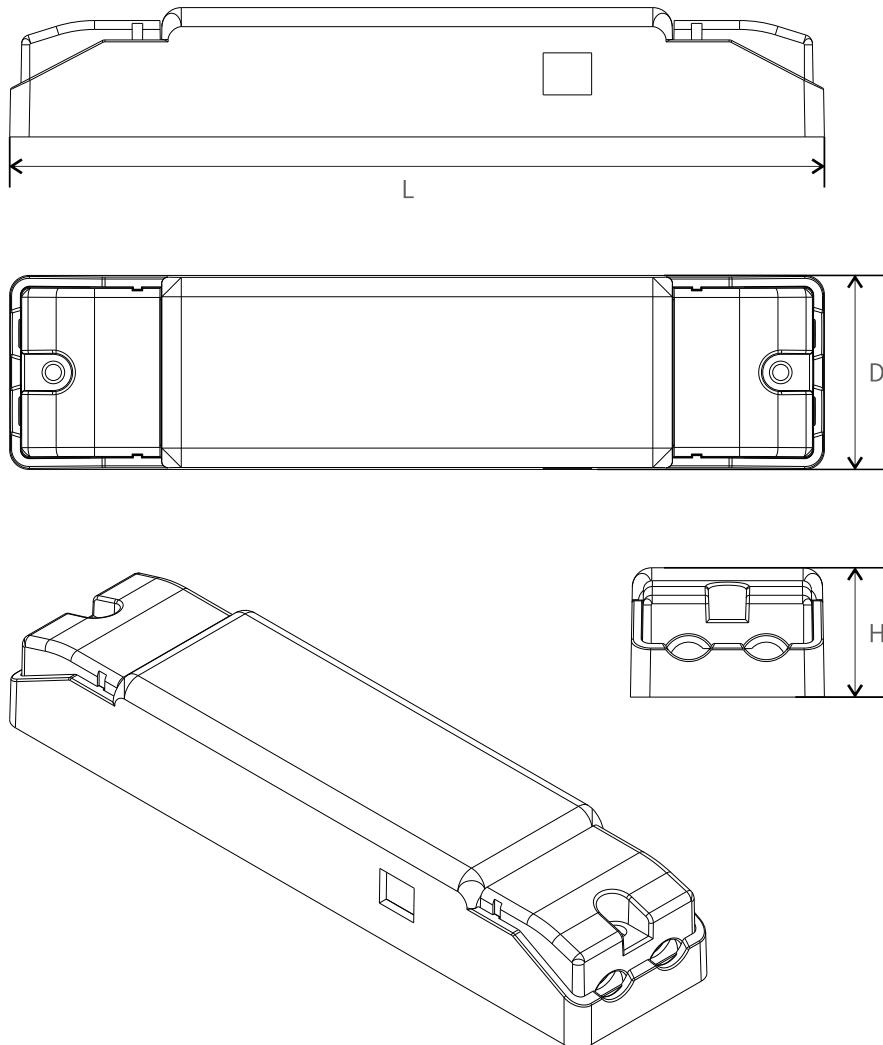
Technical Specifications (All parameters not specially mentioned are measured at 230VAC input, full load and 25°C of ambient temperature)

Model	JD4208A	JD4208	JD4208B	
Features	Output Type	Constant Voltage	Constant Voltage	
	Communication Method	ZigBee	ZigBee	
	Output Feature	Isolation	Isolation	
	IP Rating	IP20	IP20	
	Insulation Rating	Class II	Class II	
Output	No Load Output Voltage	≤28Vdc	≤28Vdc	
	Output Voltage	24Vdc	24Vdc	
	Output Current	Max.3A	Max.4.2A	
	Output Power	Max.72W	Max.100W	
	Dimming Range	1~100%	1~100%	
	Ripple Current	<5%	<5%	
	Current Accuracy	±5%	±5%	
	PWM Frequency	≤16000Hz	≤16000Hz	
Input	DC Voltage Range	180-264Vdc	180-264Vdc	
	AC Voltage Range	220-240Vac	220-240Vac	
	Rated Voltage	230Vac	230Vac	
	Input Frequency	50/60Hz	50/60Hz	
	Input Current	0.5A/230Vac(满载)	0.9A/230Vac(满载)	
	Input Power	Max.85W	Max.115W	
	Power Factor	PF>0.5/230Vac(满载)	PF>0.5/230Vac(满载)	
	THD			
	Efficiency	≥87%(满载)	≥88%(满载)	
	Inrush Current			
Environment	Anti-Surge	L-N:2KV	L-N:2KV	
	Leakage Current	<0.5mA/230Vac	<0.5mA/230Vac	
	Working Temperature	Ta:-20°C~45°C		
	Working Humidity	20~95%RH(no condensation)		
	Storage Temperature/Humidity	-20~85°C/10~95%RH		
Protection	Case Temperature	Tc:90°C		
	Life Time	>50000h@TC=90°C		
	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)		
Open Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)			
	Short Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)		
Safety & EMC	Withstand Voltage	I/P-O/P:3750Vac,<5 mA,60S		
	Insulation Resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH		
	Safety Standards	CCC	China	GB19510.1, GB19510.14
		CE	European Union	EN61347-1, EN61347-2-13, EN62493
		KC	Korea	KC61347-1, KC61347-2-13
		TUV	Germany	EN61347-1, EN61347-2-13, EN62493
		ENEC	Europe	EN61347-1, EN61347-2-13, EN IEC62384
		CB	CB Member States	IEC61347-1, IEC61347-2-13
		RCM	Australia	AS/NZS61347.1, AS61347.2.13
		BIS	India	IS15885(PART2/SEC13)
		EAC	Russia	IEC61347-1, IEC61347-2-13
	EMC Emission	UKCA	United Kingdom	BS EN61347-1, BS EN IEC61347-2-13, BS EN62493
		CCC	China	
		CE	European Union	
		KC	Korea	
		RCM	Australia	
		UKCA	United Kingdom	
	EMC Immunity	EAC	Russia	
		BIS	India	

ZigBee Tunable White Dimmable LED Driver

2D Diagram

Length (L)	Width (D)	Height (H)	Weight
265mm	42mm	30mm	285±10g



Wiring Diagram



Output connected to dual-color temperature constant voltage lighting fixtures

ZigBee Tunable White Dimmable LED Driver

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	0.5...1.5mm ² (16-20AWG)	5...6mm
	LED-C	Negative electrode output of cold light	0.5...1.5mm ² (16-20AWG)	5...6mm
	LED-W	Negative electrode output of warm light	0.5...1.5mm ² (16-20AWG)	5...6mm

Connection Instructions:

- 1.Rated torque: M2.6, 0.35~0.40N.m
- 2.Output supports hot plugging.
- 3.No secondary switches are allowed(Excluding constant voltage)
- 4.Incorrect wiring can damage the LED

App操作说明:

1.Account Registration

Download and install the Tuya Smart App through HarmonyOS/iOS/Android. After installation, you can proceed with login/registration.

2.Adding Devices

After creating a new account, navigate to "My" → "Home Management" → "Create Home" to set up your home location and name the rooms within. Then, click on the "My Home" interface to "Add Device". By quickly turning the power on and off 5 times, the light will enter a breathing state. Select "Auto Discovery" from the add device list to automatically search for the device. The "CCT dimming linear lamp" device will be automatically discovered. Follow the prompts to complete the device addition (please ensure that the device to be added is in the breathing state after being powered on or reset, and that a ZigBee gateway has already been added).

3.Function Settings

After successfully adding the device, click on the device to enter the specific lighting control interface. Here, you can freely control the device's on/off status, dimming, color temperature adjustment, grouping, timing, and more functions.

4.Scenes and Automation

Based on your individual needs, you can customize scenes and automations, with access to features such as a lighting scenario library, lighting music library, and circadian rhythm lighting.

5.Resetting the Device

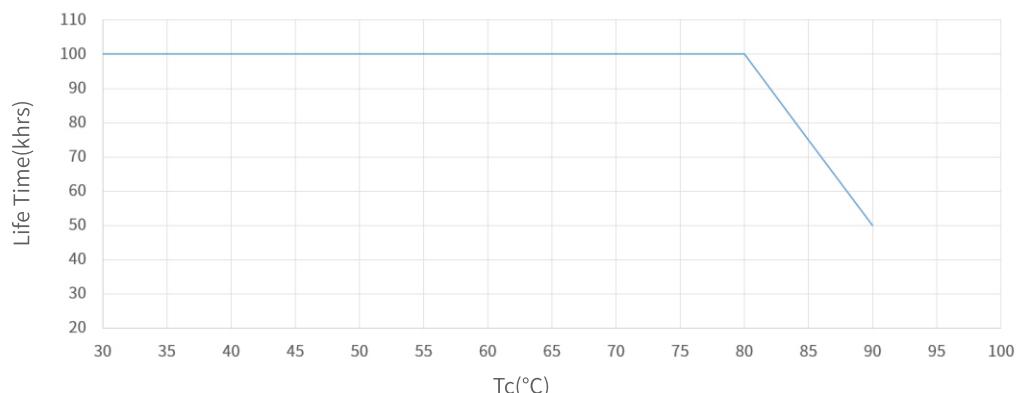
By quickly turning the power on and off 7 times, the connected light fixture will enter a breathing state, indicating that the device has been successfully reset and is ready for network configuration.

6.Voice Control

The device supports voice control through platforms such as Amazon Alexa, Google Assistant, SmartThings, Yandex Alice, Tmall Genie, Baidu Duer, Xiaomi XiaoAI, XiaoZhi Butler, Tencent WeChat Mini Programs, Tencent DingDang, and JD DingDong.

Product Characteristic Curves

Lifetime VS Temperature



The life-time of the LED driver is shown in the figure abovecalculated based on the 90%6 survival rate).

The relation of tc to ta temperature depends also on the luminaire design.

ZigBee Tunable White Dimmable LED Driver

Packaging Image



Inner Packaging Box



Large Carton Packaging



Small Carton Packaging

Packaging details	Carton size	Packing units	Weight
Inner Packaging Box	269 x 47 x 34mm	1pcs	285±10g
Small Carton Packaging	350 x 197 x 167mm	13pcs	3.7kg
Large Carton Packaging	420 x 360 x 365mm	52pcs	15.57kg

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 within 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.

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 release in written form shall prevail.

