JD4115

JISIM 仟思盟®

Zigbee Dimmable LED Driver

Product introduction

JISIM JD4115 is a 15W constant current LED intelligent dimmable driver specifically designed for built in driver luminaires. it supports Zigbee dimming functions.The customized dimming curve provides a more comfortable viewing experience for the human eye.When not connected to anexternal signal,it can be used as a non-dimmable driver and supports a gradual start-up effect.It is suitable for LED Track light, LED surface-mounted downlights,LED wall lamps.Paired with various intelligent control systems,it is widely used in smart homes, smart hotels,intelligent commercial spaces,smart offices,smart buildings,and other facilities.

Powered by tuya Intelligence Inside

Product Features

- Compact SELV built in Dimmable Driver
- Support Zigbee dimming
- Ipex external antenna, Glue filling process, Global Certification
- Suitable for Class Ⅰ/Ⅱ/Ⅲ indoor light fixtures
- Smooth dimming,flicker-free,dimming range:1-100%
- DIP switch for multi-current setting,Max. output power 15W
- Up to 30000 hours life time,5-Year Warranty(Long-lasting Capacitor)
- Small size and light weight,High power factor,High Efficiency,Low THD
- The housing is made from V0 flame retardant PC materials from CHIMEI
- Standby power consumption <0.5 W,meets ErP energy efficiency certification

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

Model	JD4115					
Input	DC Voltage Range	198-264V		Features	Output Type	Constant Current
	AC Voltage Range	198-264V			Communication mode	Zigbee
	Rated Voltage	220Vac/230Vac/240Vac			Output Feature	Isolation
	Input Frequency	0/50/60Hz			IP Rating	IP20
	Input Current	≤0.1A/230Vac(at full load)			Insulation Rating	Class Ⅱ (Suitable for class Ⅰ Ⅱ Ⅲ light fixtures)
	Input Power	Max.20W		Output	No Load Output Voltage	≤59Vdc
	Power Factor	PF＞0.9C/230Vac(at full load)			Output Voltage Range	9-40Vdc
	THD	THD<9%/230Vac(at full load)			Output Current Range	150-500mA
	Efficiency	≥81%(at full load)			Output Power Range	2-15W
	Inrush Current	Cold start 15A(Test twidth=102us under 50% Ipeak@230Vac)			Dimming Range	1~100%
	Anti-Surge	L-N:1KV			Ripple Current	＜5%
	Leakage Current	<0.5mA/230Vac			Current Accuracy	±5%
Protection	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)			PWM Frequency	1000Hz
	Open Circuit Protection	≤59Vdc		Environment	Working Temperature	ta:-20°C~60°C
	Stort Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)			Working Humidity	20~95%RH(No Condensation)
					Storage Temperature/Humidity	-20~85°C/10~95%RH
					Case Temperature	tc:90°C
					Life Time	＞30000h@tc=90°C
Safety & EMC	Withstand Voltage	I/P-O/P:3750Vac, 5mA,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		
		UKCA	United Kingdom	BS EN61347-1，BS EN IEC61347-2-13，BS EN62493		
	EMC Emission	CCC	China	GB/T17743, GB17625.1		
		CE	European Union	EN IEC55015，EN IEC61000-3-2，EN61000-3-3		
		KC	Korea	KSC9815, KSC9547		
		RCM	Australia	EN IEC55015，EN IEC61000-3-2，EN61000-3-3		
		UKCA	United Kingdom	BS EN IEC55015，BS EN IEC6100-3-2，BS EN61000-3-3		
		EAC	Russia	IEC62493.IEC61547，EN55015.IEC61000-3-2，IEC61000-3-3		
		BIS	India	IS15885(PART2/SEC13)		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11,EN61547				
ErP	Power Consumption	Stanby Power Consumption	＜0.5W (PWM Off)			
	Flicker/ Stroboscopic Effect	IEEE1789	Meet IEEE Std1789-2015			
		CIESVM	Pst≤1，SVM≤0.4			
	DF	Phase Factor	DF≥0.9			

Test Equipment				
AC Source	PS-61005	Withstand Voltage Tester	TH9302D	Other
DC Electronic Load	IT8512A+	Thermostatic Humidity Chamber	HT-H-802	
Spectrum Analyzer	KH3932	Ntelligent Electrical Parameter Meter	PF9800	LED Load
Surge Generator	SUG61005TB(7.5KV)-2216	Oscilloscope	TBS1102B	
Stroboscope	LANSHU-201B	Digital Wattmeter	PM2818C	

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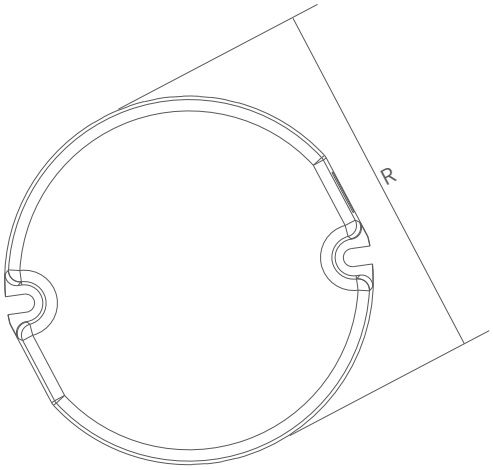
LED Current Settings

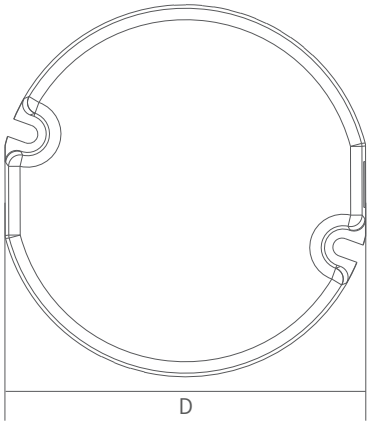
Number	Output				Switch Position		
	Current (mA)	Voltage (VDC)	NO Load Outout Voltage (VDC)	Power (W)	1	2	3
*1	150	9-40	59	6	/	/	/
2	200	9-40		8	ON	/	/
3	250	9-40		10	/	ON	/
4	300	9-40		12	ON	ON	/
5	350	9-40		14	/	/	ON
6	400	9-40		14.4	ON	/	ON
7	450	9-38		14.85	/	ON	ON
8	500	9-36		15	ON	ON	ON

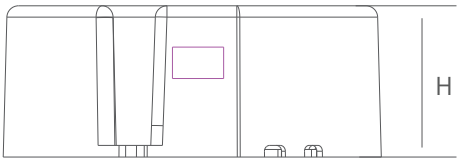
- * Factory default.
- 1. Please disconnect the AC input before adjusting the output current via the DIP switch, If not,it may damage the lighting fixture.
- 2. No Overload, The output power should be less than or equal to 15W.

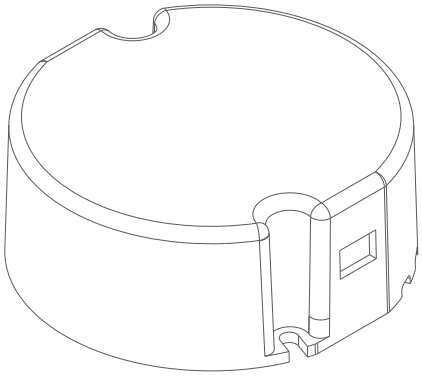
2D Diagram

Diameter (R)	Width (D)	Heigh(H)	Weight(W)
55mm	53mm	23mm	82.4±10g



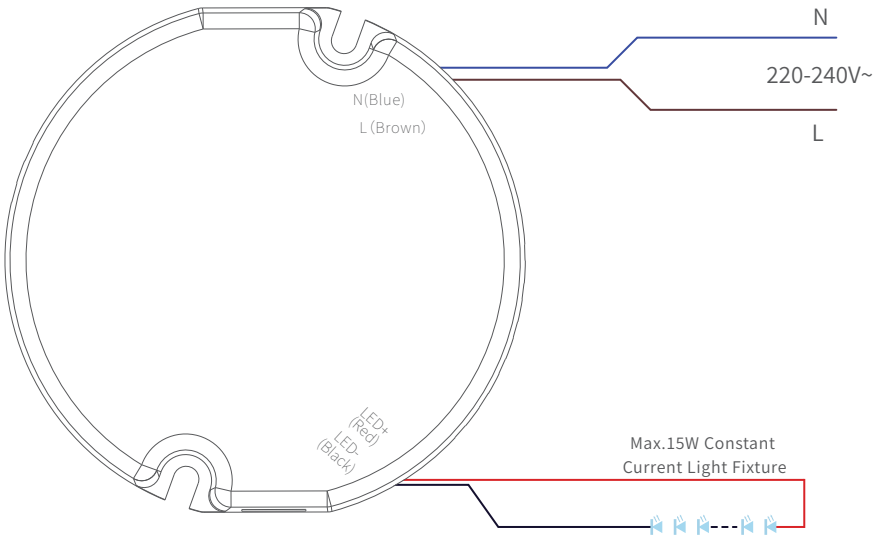






Zigbee Dimmable LED Driver

Wiring Diagram



Installation Instructions

Interface	Marking	Description
Input	N	Input terminal of AC neutral wire
	L	Input terminal of AC live wire
Output	LED+	Positive electrode output of the driver
	LED-	Negative electrode output of the driver
Antennae	ANT	Do not attach the end of the antenna to the metal material

Connection instructions

1.Check the color of the interface and cable carefully before wiring.
2.All connections must be as short as possible to ensure good EMI performance.
3.No secondary switches are allowed.
4.The driver output does not support hot swap
5.Incorrect wiring can damage the LED.

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 Dim CC Ipex" 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 ZigBee 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, adjust color temperature, 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.

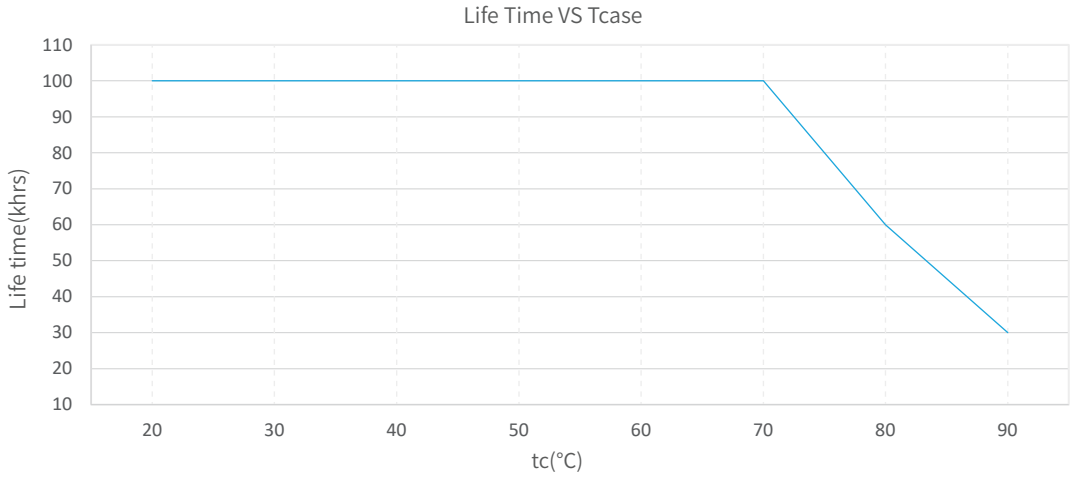
5.Resetting Devices

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.

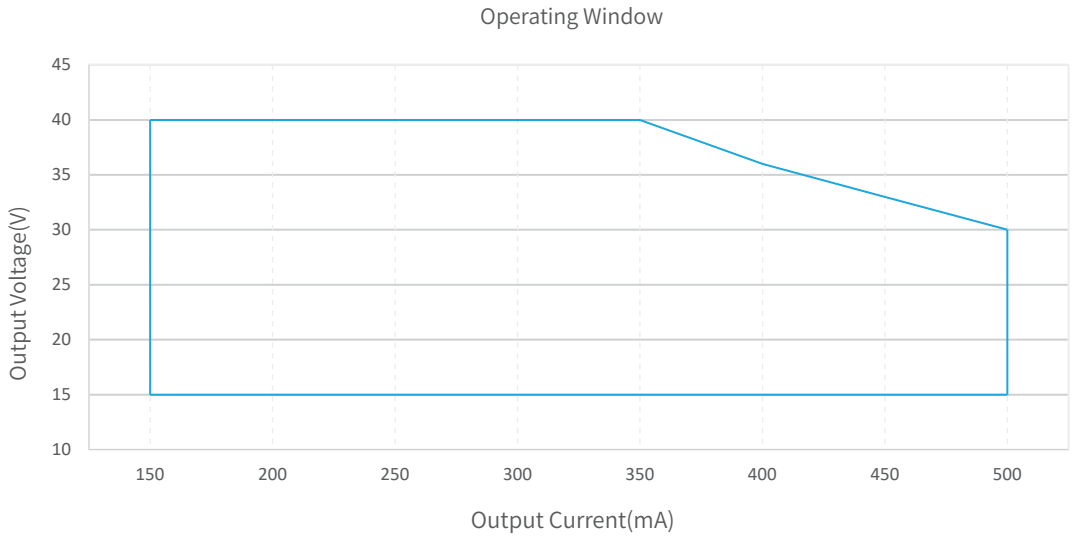
6.Voice Control

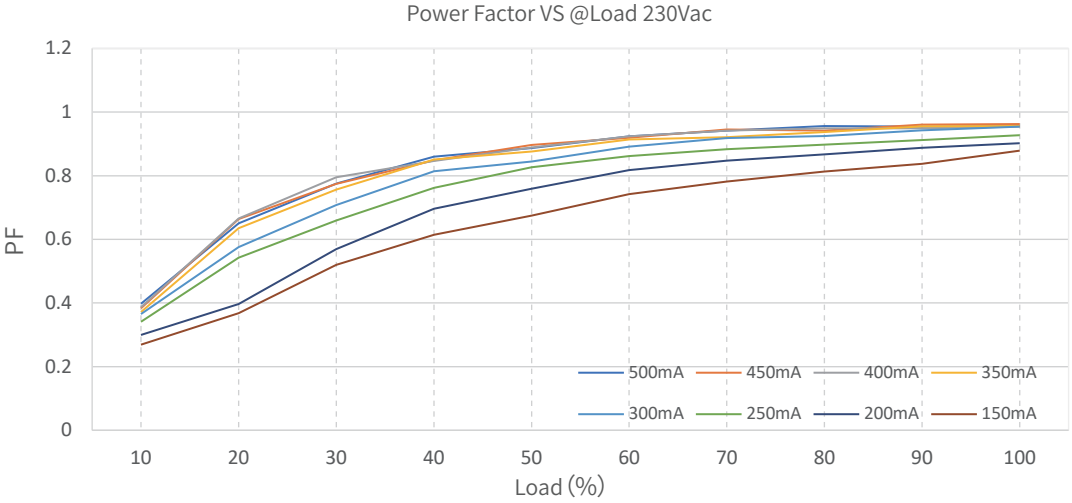
The device supports control via Amazon Alexa, Google Assistant, SmartThings, Yandex Alice, Tmall Genie, Baidu Duer, Xiaomi XiaoAI, XiaoZhi Guanjia, Tencent WeChat Mini Programs, Tencent Dingdang, JD DingDong, and other voice assistants.

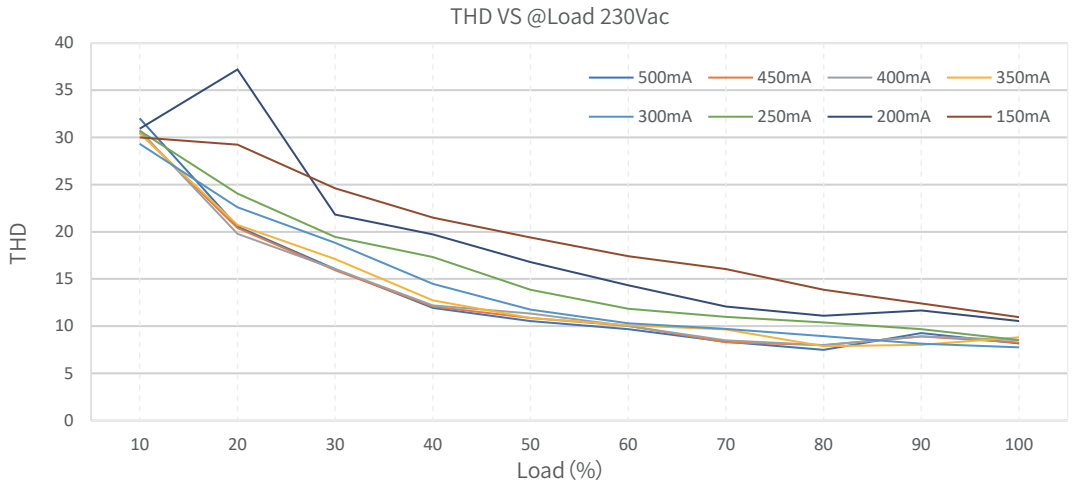
Product Characteristic Curves

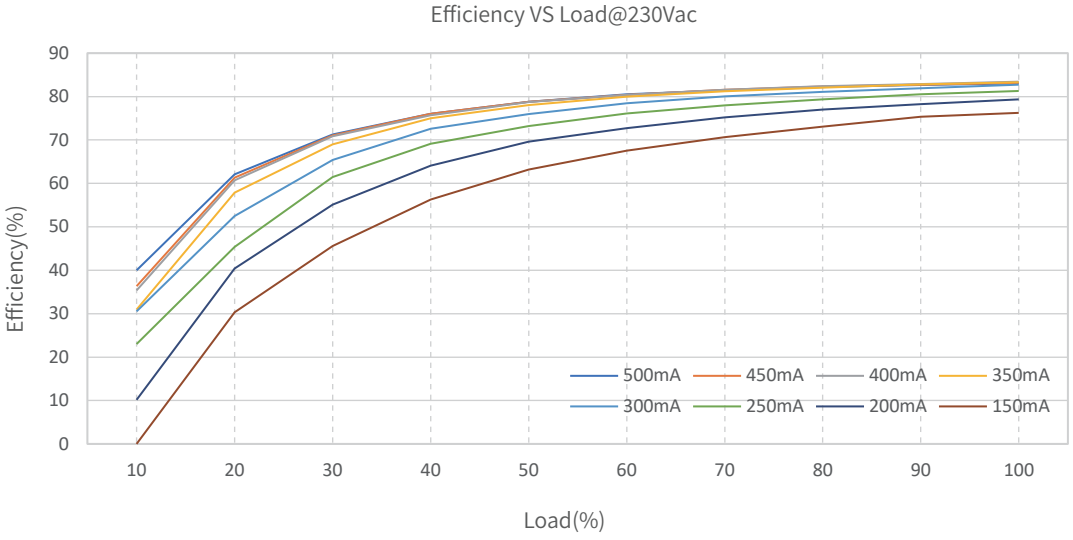


The life-time of the LED driver is shown in the figure above calculated (based on the 90% survival rate). The relation of tc to ta temperature depends also on the luminaire design.









Packaging Image

Inner Packaging Box

Large Carton Packaging

Small Carton Packaging

Packaging Size

Packaging Details	Carton Size	Packing Units	Weight
Inner Packaging Box	69 x 65 x 30.5mm	1pcs	94.1±10g
Small Carton Packaging	350 x 197 x 167mm	64pcs	6.32kg
Large Carton Packaging	420 x 360 x 365mm	256pcs	26.19kg

Packaging instructions:
Each large carton packaging contains 4 small carton packagings,Each small carton packaging contains 64 inner packaging boxes.

Cautions

- This product is used as a componentin 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 carefuly before installation.
- This product can be installed inside the luminaire for use, but the internal temperature of the luminaire must be strictly controlled to not exceed 60°C. Exceeding this temperature may adversely affect the service life of the luminaire.
- This product is not waterproof and should be avoided from direct sunlight and rain. fit 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 ofthe 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 ofthis warranty,and release in written form shall prevail.