

Product introduction

JISIM JD9109 is a constant voltage LED intelligent dimming driver. It is a product specially designed for indoor constant voltage lamps. It supports 2.4G RF dimming function. 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 2.4G RF dimming
- Globally certified, SELV equivalent
- Suitable for class I II III luminaires
- Output power up to 120W
- Up to 50000 hours life time, 5-Year Warranty (Long-lasting Capacitor)
- Smooth dimming, no stroboscopic, no noise, dimming range: 0.1-100%
- Small size and light weight, High power factor, High Efficiency, Low THD
- The housing is made from Vo 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)

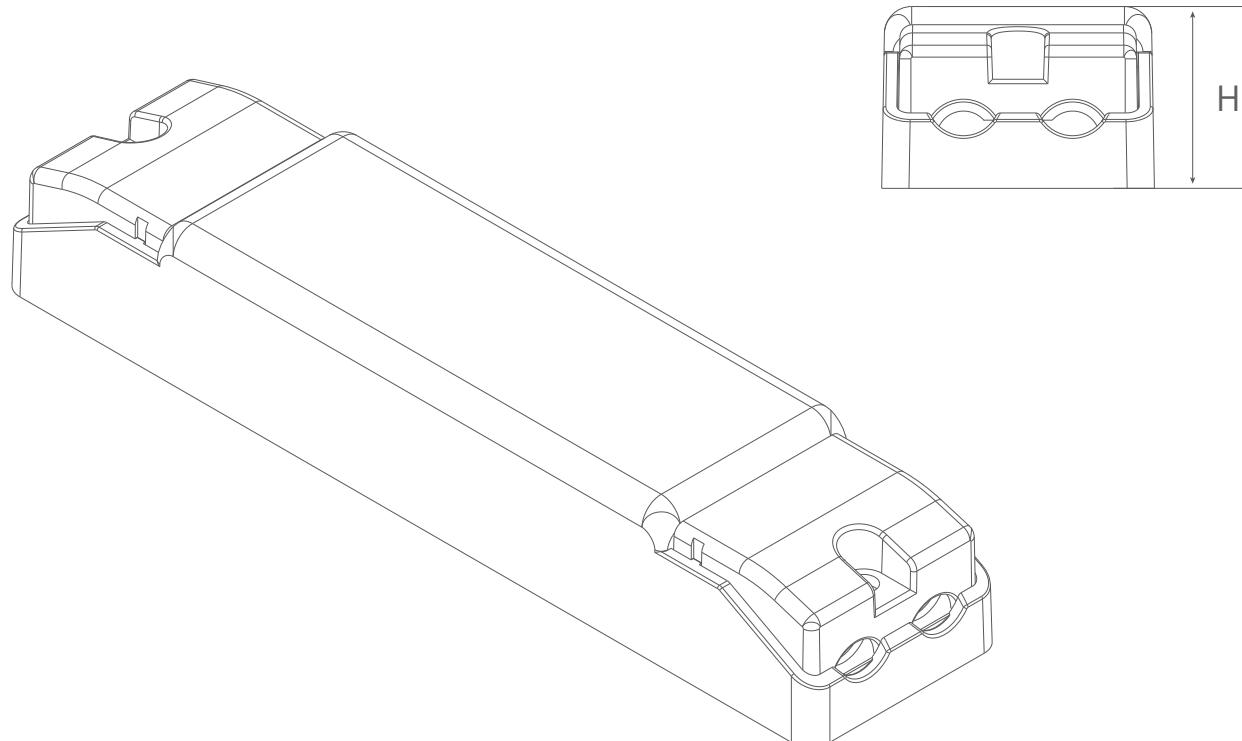
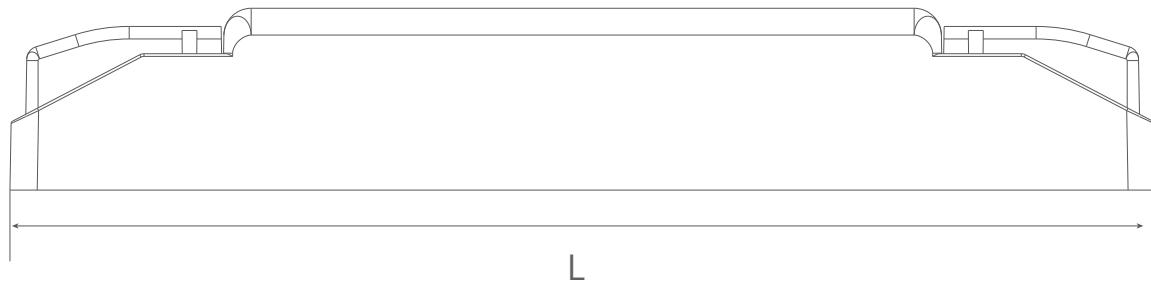
Model	JD9109			Features	Output Type	Constant Voltage	
Input	DC Voltage Range	220-240V	Communication mode		2.4G RF		
	AC Voltage Range	220-240V	Output Feature		Isolation		
	Rated Voltage	220Vac/230Vac/240Vac	IP Rating		IP20		
	Input Frequency	0/50/60Hz	Insulation Rating		Class II (Suitable for class I II III light fixtures)		
	Input Current	≤0.75A/230Vac(at full load)	No Load Output Voltage		≤25Vdc		
	Input Power	Max.135W	Rated Voltage		24Vdc		
	Power Factor	PF>0.95C/230Vac(at full load)	Output Current Range		Max.5A		
	THD	THD<8%/230Vac(at full load)	Output Power Range		120W		
	Efficiency	≥90%(at full load)	Dimming Range		0.1~100%		
Protection	Inrush Current	<75A&230uS@230Vac	Output		Ripple	Max.240mV	
	Anti-Surge	L-N:1kV			Voltage Accuracy	±5%	
	Leakage Current	<0.5mA/230Vac			PWM Frequency	16000Hz	
Protection	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)	Environment		Working Temperature	ta: -20°C~45°C	
	Open Circuit Protection	≤25Vdc			Working Humidity	20~95%RH (No Condensation)	
	Short Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)			Storage Temperature/Humidity	-20~85°C/10~95%RH	
Safety & EMC	Withstand Voltage	I/P-O/P:3750Vac, 5mA, 60s			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	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)			
Safety & EMC	EMC Emission	EAC	Russia	IEC61347-1, IEC61347-2-13			
		UKCA	United Kingdom	BS EN61347-1, BS EN IEC61347-2-13, BS EN62493			
		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 IEC61000-3-2, BS EN61000-3-3			
		EAC	Russia	IEC62493.IEC61547, EN55015.IEC61000-3-2, IEC61000-3-3			
	EMC Immunity	BIS	India	IS15885(PART2/SEC13)			
		EN61000-4-2,3,4,5,6,8,11,EN61547					
ErP	Flicker/ Stroboscopic Effect	IEEE1789	Meet IEEE Std1789-2015				
		CIESVM	Pst≤1, SVM≤0.4				
	DF	Phase Factor	DF≥0.9				
Test Equipment	Test Equipment	AC Source	PS-61005	Withstand Voltage Tester	TH9302D	Other	
		DC Electronic Load	IT8512A+	Thermostatic Humidity Chamber	HT-H-802		
		Spectrum Analyzer	KH3932	Intelligent Electrical Parameter Meter	PF9800	LED Load	
		Surge Generator	SUG61005TB(7.5KV)-2216	Oscilloscope	TBS1102B		
		Stroboscope	LANSHU-201B	Digital Wattmeter	PM2818C		

2.4G RF Dimmable LED Driver

2D Diagram

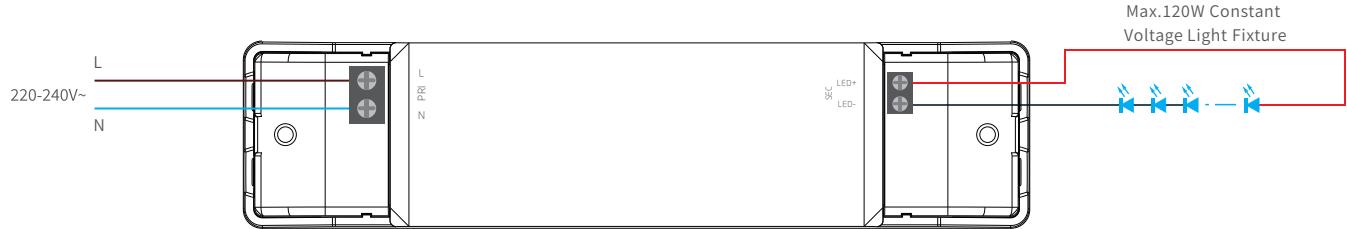


Length (L)	Width (D)	Heigh(H)	Weight(W)
325mm	44mm	30mm	363.1±10g



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Wiring Diagram



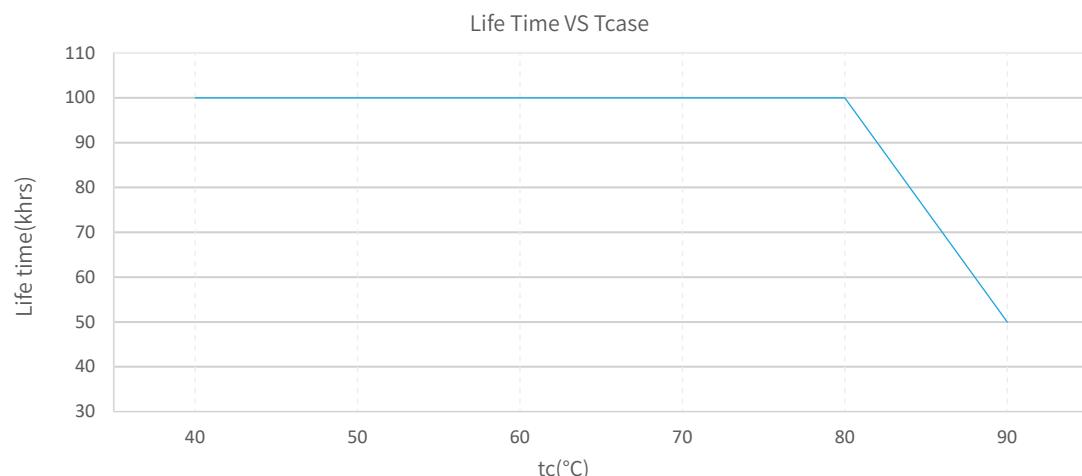
Installation Instructions

Interface	Marking	Description	Wire cross section	Wire Stripping length
Input	N	Input terminal of AC neutral wire	0.75...1.5mm ² (16-18AWG)	5...6mm
	L	Input terminal of AC live wire	0.75...1.5mm ² (16-18AWG)	5...6mm
Output	LED+	Positive electrode output of the driver	0.75...2.5mm ² (14-18AWG)	5...6mm
	LED-	Negative electrode output of the driver	0.75...2.5mm ² (14-18AWG)	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)

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 t_c to t_a temperature depends also on the luminaire design.

2.4G RF Dimmable LED Driver

Packaging Image



Inner Packaging Box ▲



◀ Large Carton Packaging



◀ Small Carton Packaging

Packaging Size



Packaging Details	Carton Size	Packing Units	Weight
Inner Packaging Box	329x 49 x 34mm	1pcs	403.2±10g
Small Carton Packaging	350 x 197 x 167mm	13pcs	5.55kg
Large Carton Packaging	420 x 360 x 365mm	52pcs	23.1kg

Packaging instructions:

Each large carton packaging contains 4 small carton packagings, Each small carton packaging contains 13 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 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.

2.4G RF Dimmable LED Driver

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 release in written form shall prevail.