

Product introduction

JISIM JD5109M is a constant voltage LED intelligent dimming driver. It is a product specially designed for indoor constant voltage lamps. It supports Bluetooth 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 Bluetooth 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 V0 flame retardant PC materials from CHIMEI
- Standby power consumption <0.5 W,meets ErP energy efficiency certification



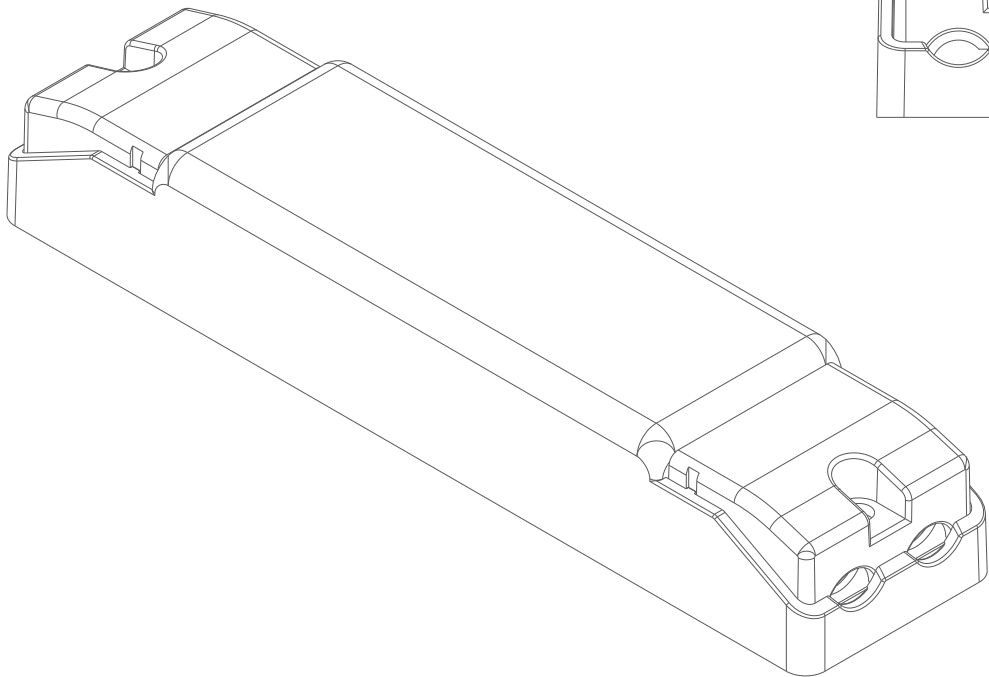
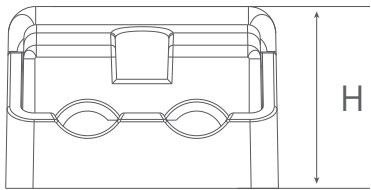
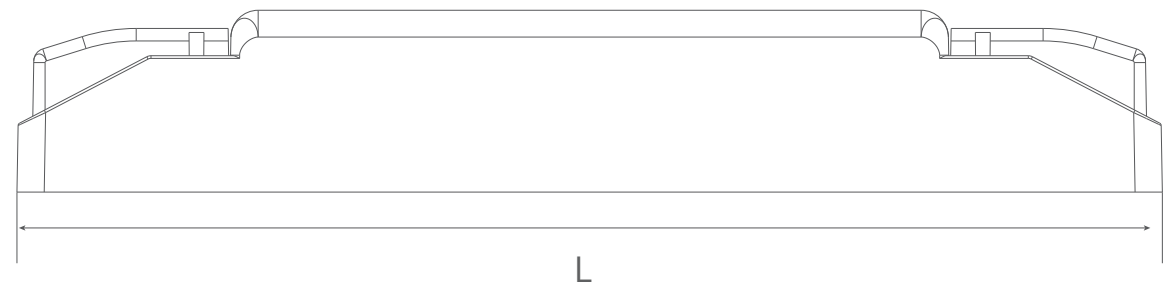
Technical Specifications

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

Model	JD5109M				Features	Output Type	Constant Voltage	
Input	DC Voltage Range	220-240V				Communication mode	Bluetooth	
	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)			Output	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%	
	Inrush Current	<75A&230uS@230Vac				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)	
	Stort Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)				Storage Temperature/Humidity	-20~85°C/10~95%RH	
						Case Temperature	tc:90°C	
					Life Time	>50000h@tc=90°C		
Safety & EMC	Withstand Voltage	I/P-O/P:3750Vac, 5mA,60s						
	Insulation Resistance	I/P-O/P:100MQ/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	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		

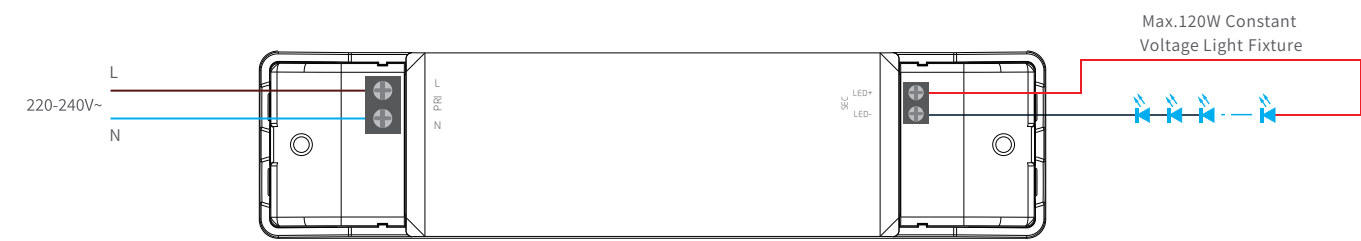
2D Diagram >>>----->>>

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



Bluetooth Dimmable LED Driver

Wiring Diagram



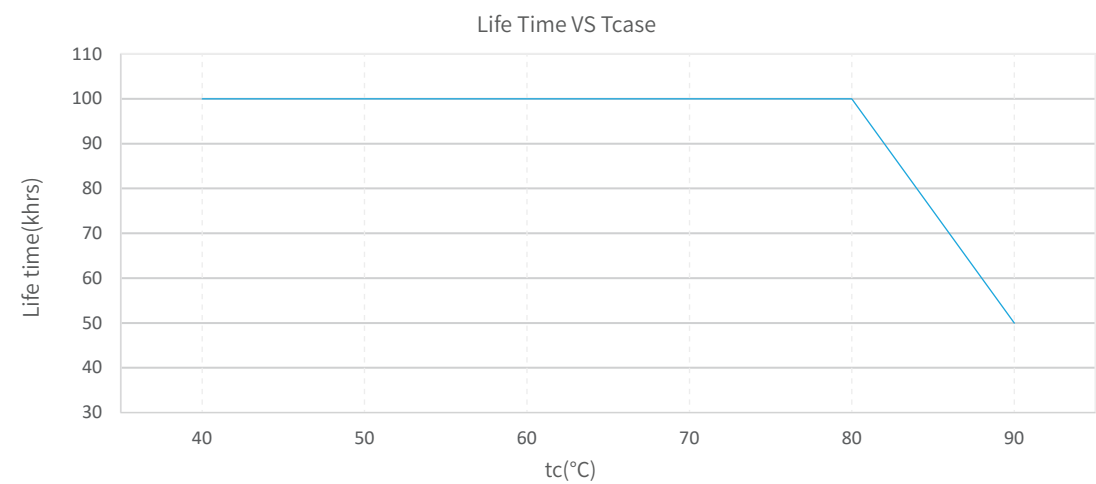
Installation Instructions

Interface	Marking	Description	Wire cross section	Wire Stripping length
Input	N	Input terminal of AC neutral wire	0.75...1.5mm²(16-18AWG)	5...6mm
	L	Input terminal of AC live wire	0.75...1.5mm²(16-18AWG)	5...6mm
Output	LED+	Positive electrode output of the driver	0.75...2.5mm²(14-18AWG)	5...6mm
	LED-	Negative electrode output of the driver	0.75...2.5mm²(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 tc to ta temperature depends also on the luminaire design.

Bluetooth Dimmable LED Driver

Packaging Image



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 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 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.

Bluetooth 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.