

Bluetooth Tunable White Dimmable LED Driver 🖔 @ 🚳 CB C E SELV ErP RoHS

Product introduction

JISIM JD5224C is a 30W constant current LED intelligent tunable white dimmable driver specifically designed for $small\ aperture\ luminaires.\ lt\ supports\ Blue to oth\ tunable\ white\ dimming\ functions. The\ customized\ dimming\ curve$ provides a more comfortable viewing experience for the human eye. When not connected to an external signal, it can be used as a non-dimmable driver and supports a gradual start-up effect. It is suitable for small aperture downlights,LED spotlights and LED linear lights.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.

>>>

Product Features

- Compact SELV independent Dimmable Driver
- Support Bluetooth tunable white dimming
- Global Certification, SELV equivalent
- Suitable for Class I/ II / III indoor light fixtures
- DIP switch for multi-current setting, Max. output power 30W
- Up to 50000 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
- Smooth dimming, flicker-free, dimming range: 0.1-100% 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	JD5224C					Output Type	Constant Curr	ent	
	DC Voltage Range 100-240V				1	Communication mode	Bluetooth		
Input	AC Voltage Range	100-240V			Features	Output Feature	Isolation		
	Rated Voltage	110Vac/230Vac				IP Rating	IP20		
	Input Frequency	50/60Hz				Insulation Rating	Class II (Suitable	for class I II III light fixture	
	Input Current	≤0.45A/110Vac(at full load) ≤0.19A/230Vac(at full load)				No Load Output Voltage	Max.59V		
	Input Power	Max.35W				Output Voltage Range	15-40Vdc		
	Power Factor	PF>0.95C/100Vac(at full load) PF>0.9C/230Vac(at full load)				Output Current Range	550-900mA		
	THD	THD<10%/	230Vac(at full load)			Output Power Range	8.2-30W		
	Efficiency	≥85%(at full load)			Output	Dimming Range	0.1~100%		
	Inrush Current	Cold start 15A(Test twidth=102us under 50% Ipeak@230Vac)				Ripple Current	<5%		
	Anti-Surge	L-N:1KV				Current Accuracy	±5%		
	Leakage Current	<0.5mA/230Vac				PWM Frequency	4000Hz		
	Overload	Hiccup Mode (Auto-Recovery after Elimination)			1	Working Temperature	ta:-20°C~45°C		
	Protection	піссир мос	ie (Auto-Recovery ai	ter Etimination)		Working Humidity		Condensation)	
Protection	Open Circuit ≤59Vdc				Environment	Storage Temperature/Hur			
Totection	Protection					Case Temperature	tc:90°C		
	Stort Circuit Protection	Hiccup Mod	le (Auto-Recovery af	ter Elimination)		Life Time	>50000h@tc=	:90°C	
	Withstand Voltage	I/P-O/P:375	50Vac, 5mA,60s						
	Insulation Resistance			0%RH					
		/P-O/P:100MΩ/500VDC/25°C/70%RH CCC China GB19510.1, GB19510.14							
		CE	European Union	EN61347-1, EN61347-2-13, EN62493					
	Safety Standards -	KC	Korea	KC61347-1, KC61347-2-13					
		TUV	Germany	EN61347-1, EN61347-2-13, EN62493					
		ENEC	Europe	EN61347-1, EN61347-2-13, EN IEC62384					
		СВ	CB Member States	IEC61347-1, IEC61347-2-13					
		RCM	Australia	AS/NZS61347.1, AS61347.2.13					
		BIS	India	IS15885(PART2/SEC13)					
Safety		EAC	Russia	IEC61347-1, IEC61347-2-13					
&		UKCA	United Kingdom	BS EN61347-1, BS EN IEC61347-2-13, BS EN62493					
EMC	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,EN615	47					
	Power Consumption	Stanby Power Consumption <0.5W (PWM Off)							
	Flicker/	IEEE1789		Meet IEEE Std1789-2015					
ErP	Stroboscopic Effect	CIESVM		Pst≤1, SVM≤0.4					
	DF	Phase Factor		DF≥0.9					
		AC Source		PS-61005	Withstand Vo	oltage Tester	TH9302D	0.1	
Test Equipment		DC Electronic Load		IT8512A+	Thermostatio	Humidity Chamber	HT-H-802	Other	
		Spectrum Analyzer		KH3932	Ntelligent Ele	ectrical Parameter Meter	PF9800	LED Load	
		Surge Generator		SUG61005TB(7.5KV)-2216	Oscilloscope		TBS1102B		
		Stroboscope						_	

版本:20241206-1.0 www.jisim-tech.com



LED Current Settings

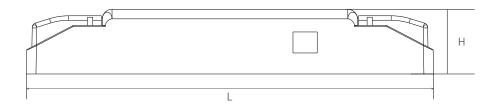
....

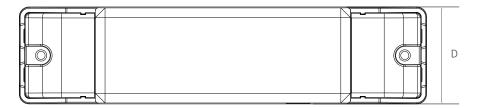
	Output				Switch Position		
Number	Current	Voltage	NO Load Outout Voltage	Power	1	2	3
	(mA)	(VDC)	(VDC)	(W)	! 		
* 1	550	15-40		22	/	/	/
2	600	15-40		24	ON	/	/
3	650	15-40		26	/	ON	/
4	700	15-40	59	28 - 28	ON	ON	/
5	750	15-40	, 33 ,	30	/		ON
6	800	15-37		30	ON	/	ON
7	850	15-35		30	/	ON	ON
8	900	15-33	! 	30	ON	ON	ON

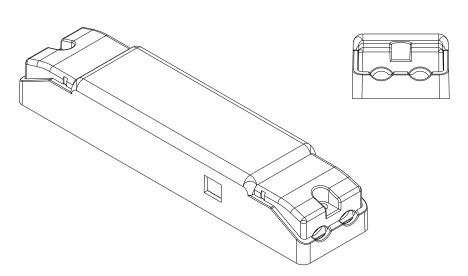
- ★ * Factory default.
 - Please disconnect the AC input before adjusting the output current via the DIP switch, If not, it may damage the lighting fixture.
 - 2. No Overload, The output power should be less than or equal to 30W.

2D Diagram











Wiring Diagram





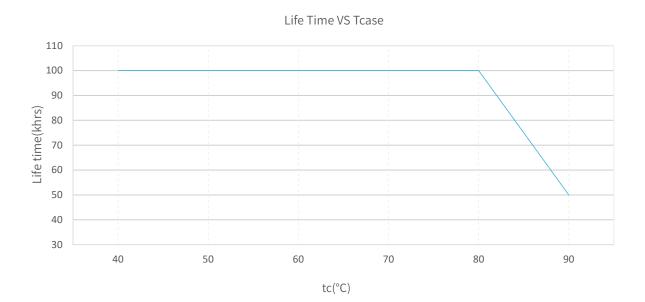
Installation Instructions

Interface	Marking	Description	Wire cross Section	Wire Stripping Length	
Input	L	Input terminal of AC live wire	0.751.5mm² (16-18AWG)	56mm	
i input	N	Input terminal of AC neutral wire	0.751.5mm² (16-18AWG)	56mm	
	LED-W	Negative electrode output of warm light	0.51.0mm² (16-20AWG)	56mm	
Output	LED-C	Negative electrode output of cold light	0.51.0mm² (16-20AWG)	56mm	
 	LED+	Positive electrode output of the driver	0.51.0mm² (16-20AWG)	56mm	

Connection instructions

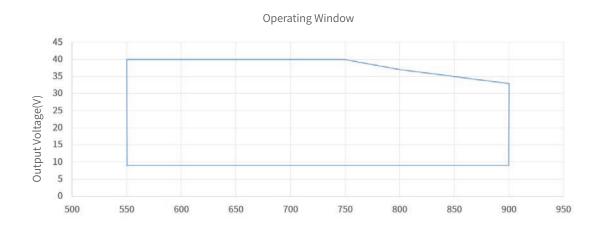
- 1.Rated torque: M2.6,0.35~0.40N.m
- 2. All connections must be as short as possible to ensure good EMI performance.
- 3.No secondary switches are allowed.
- 4. The driver output does not support hot swap
- 5.Incorrect wiring can damage the LED.
- 6.The power cable should be kept at a certain distance from the driver and other connecting cables (5-10cm recommended)

Product Characteristic Curves



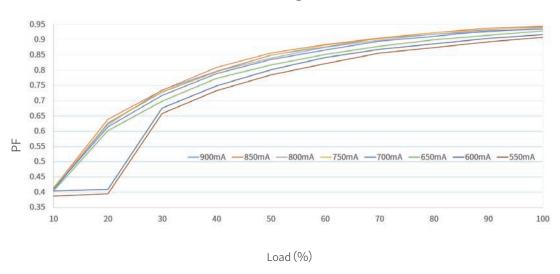
The life-time of the LED driver is shown in the figure above calculated (based on the 90% survival rate). The relation of tc to ta temperature depends also on the luminaire design.

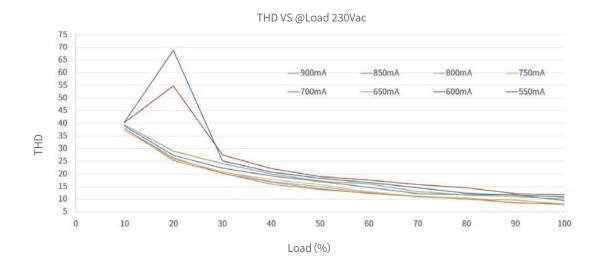




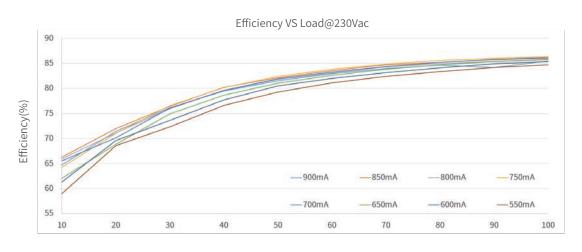
Output Current(mA)

Power Factor VS @Load 230Vac









Load(%)

Packaging Image



Packaging Size

	Packaging Details	Carton Size	Packing Units	Weight	
-	Inner Packaging Box	168x47x34mm	1pcs	208±10g	
	Small Carton Packaging	350 x 197 x 167mm	30pcs	6.54kg	
	Large Carton Packaging	420 x 360 x 365mm	120pcs	27.1kg	

Packaging instructions:

 $Each \ large\ carton\ packaging\ contains\ 4\ small\ carton\ packaging\ spaces, Each\ small\ carton\ packaging\ contains\ 30\ inner\ packaging\ boxes.$



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 only be used outside the light body, Cannot be used inside ofthe ight, and it mustbe used within the specifed working environment.
- > 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 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.