

Product introduction

JISIM JD9217 is a 20W constant voltage LED intelligent tunable white dimmable driver specifically designed for built in driver luminaires. it supports 2.4G RF 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 modern decorative luminaires such as wall sconces, table lamps, pendant lights, and more. 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 built in dimmable driver
- Support 2.4G RF tunable white dimming
- Ipex external antenna, Glue filling process, Global certification
- Suitable for Class I / II / III indoor light fixtures
- Smooth dimming, flicker-free, dimming range: 0.1~100%
- Output constant voltage 24V design, Max. output power 20W
- 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

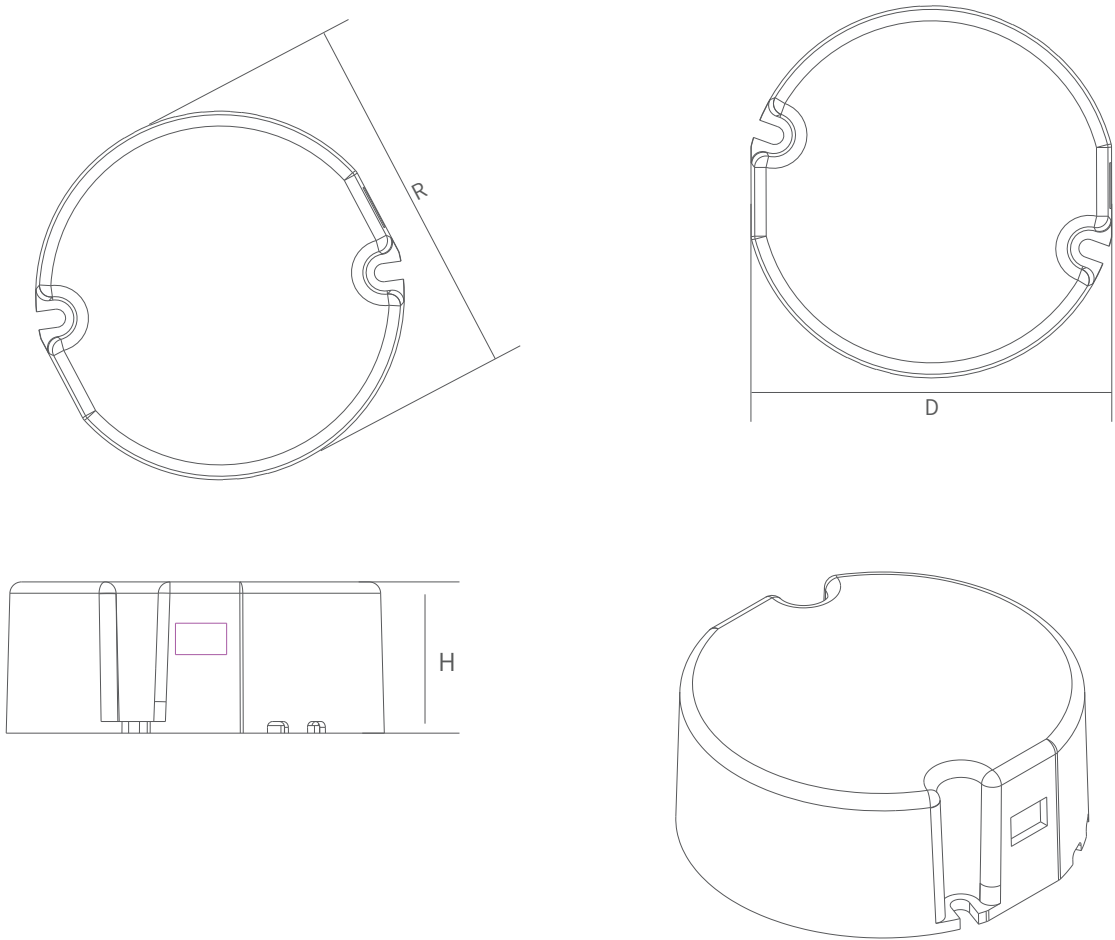
(All parameters not specially mentioned are measured at 230VAC input, full load and 25°C of ambient temperature)

Model	JD9217							
Input	DC Voltage Range	220-240V		Features	Output Type	Constant Voltage		
	AC Voltage Range	220-240V			Communication mode	2.4G RF		
	Rated Voltage	220Vac/230Vac/240Vac			Output Feature	Isolation		
	Input Frequency	0/50/60Hz			IP Rating	IP20		
	Input Current	≤0.15A/230Vac(at full load)			Insulation Rating	Class II (Suitable for class I II III light fixtures)		
	Input Power	Max.25W		Output	No Load Output Voltage	≤25Vdc		
	Power Factor	PF>0.9C/230Vac(at full load)			Rated Voltage	24Vdc		
	THD	THD<10%/230Vac(at full load)			Output Current Range	Max.0.84A		
	Efficiency	≥80%(at full load)			Output Power Range	20W		
	Inrush Current	Cold start 15A(Test twidth=102us under 50% Ipeak@230Vac)			Dimming Range	0.1~100%		
	Anti-Surge	L-N:2KV			Ripple	Max.240mV		
	Leakage Current	<0.5mA/230Vac			Voltage Accuracy	±5%		
			PWM Frequency	16000Hz				
Protection	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)			Environment	Working Temperature	ta:-20°C~60°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	>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	

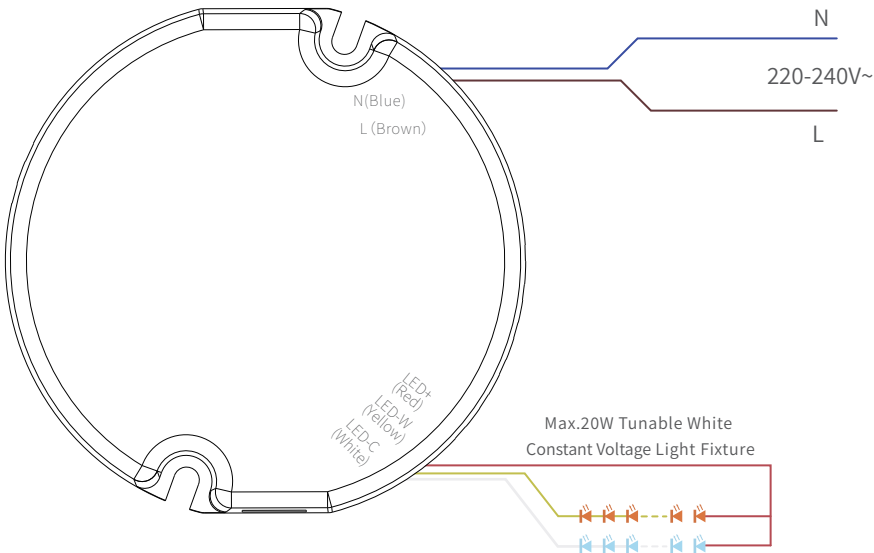
2.4G RF Tunable White Dimmable LED Driver

2D Diagram

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



Wiring Diagram



2.4G RF Tunable White Dimmable LED Driver

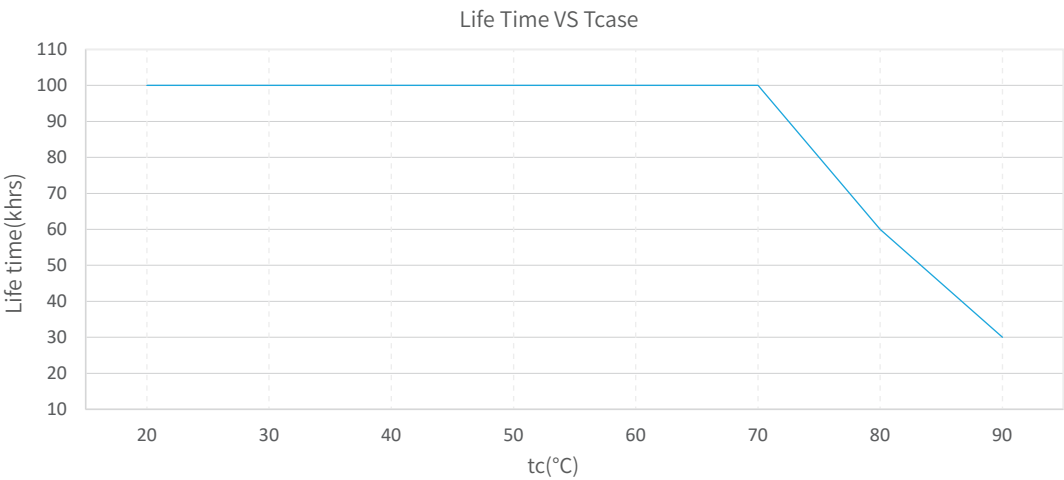
Installation Instructions

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-W	Negative electrode output of warm light
	LED-C	Negative electrode output of cold light
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.

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



2.4G RF Tunable White Dimmable LED Driver

Packaging Size

Packaging Details	Carton Size	Packing Units	Weight
Inner Packaging Box	69 x 65 x 30.5mm	1pcs	95.1±10g
Small Carton Packaging	350 x 197 x 167mm	64pcs	6.39kg
Large Carton Packaging	420 x 360 x 365mm	256pcs	26.45kg

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 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 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. 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.



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.