# JD5217A

## JISIM 仟思盟®

## Bluetooth Tunable White Dimmable LED Driver

UKCA  CCC  CB  CE  SELV  ErP  RoHS

## Product introduction ▶▶▶▶ - - - - - - - - - - - - - - - - - - - - - - - - ▶▶▶▶

JISIM JD5217A is a 20W constant voltage LED intelligent tunable white dimmable driver specifically designed for built in driver luminaires. it supports bluetooth tunable white 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.lt is suitable 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 bluetooth 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
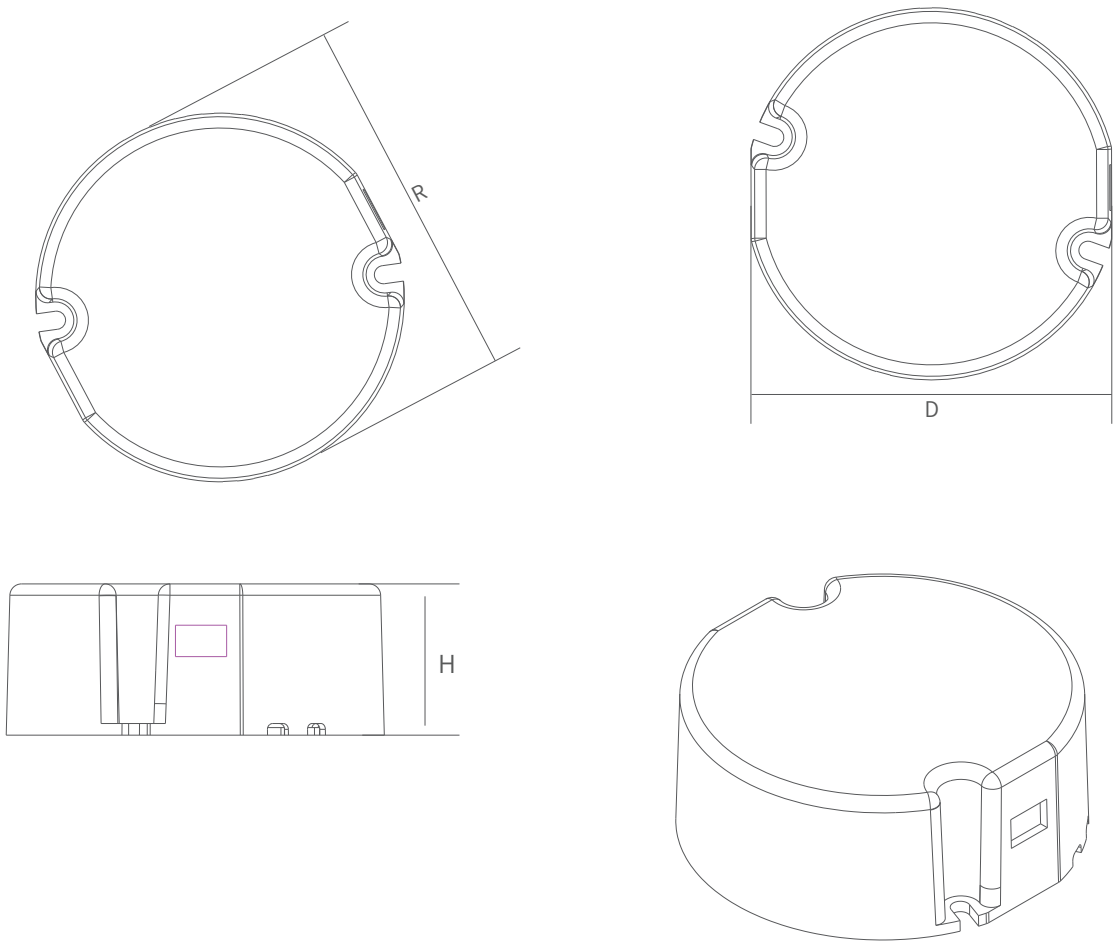- Standby power consumption <0.5 W,meets ErP energy efficiency certification

Xiaomi HyperOS Connect    works with Xiaomi Home
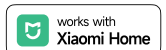
## Technical Specifications (All parameters not specially mentioned are measured at 230VAC input,full load and 25°C of ambient temperature) - - - - - - - - - - ▶▶▶
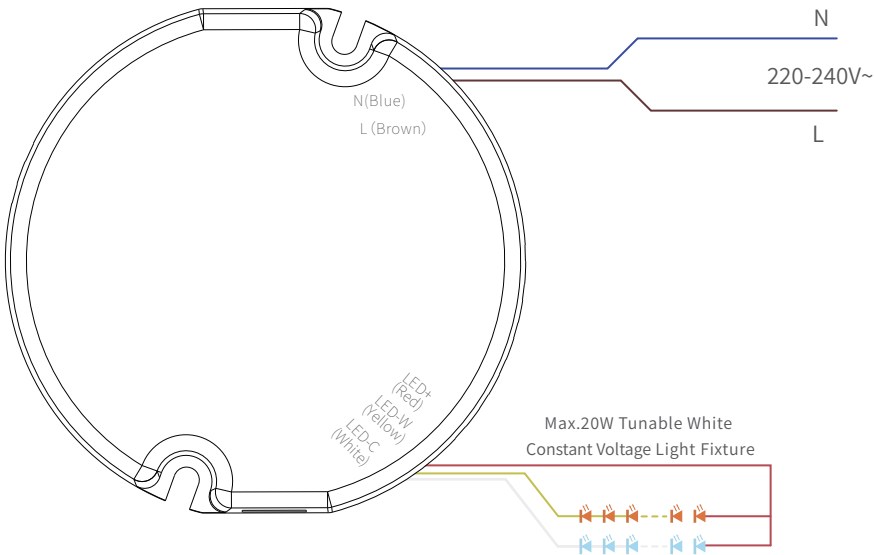
| Model | JD5217A | | | Output Type | Constant Voltage |
|---|---|---|---|---|---|
| **Input** | DC Voltage Range | 220-240V | **Features** | Communication mode | Bluetooth |
| | AC Voltage Range | 220-240V | | Output Feature | Isolation |
| | Rated Voltage | 220Vac/230Vac/240Vac | | IP Rating | IP20 |
| | Input Frequency | 0/50/60Hz | | Insulation Rating | Class II (Suitable for class I II III light fixtures) |
| | Input Current | ≤0.15A/230Vac(at full load) | **Output** | No Load Output Voltage | ≤25Vdc |
| | Input Power | Max.25W | | Rated Voltage | 24Vdc |
| | Power Factor | PF＞0.9C/230Vac(at full load) | | Output Current Range | Max.0.84A |
| | THD | THD<10%/230Vac(at full load) | | Output Power Range | 20W |
| | Efficiency | ≥80%(at full load) | | Dimming Range | 0.1~100% |
| | Inrush Current | Cold start 15A(Test twidth=102us under 50% Ipeak@230Vac) | | Ripple | Max.240mV |
| | Anti-Surge | L-N:2KV | | 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~60°C |
| | Open Circuit Protection | ≤25Vdc | | Working Humidity | 20~95%RH(No Condensation) |
| | | | | Storage Temperature/Humidity | -20~85°C/10~95%RH |
| | Stort Circuit Protection | Hiccup Mode (Auto-Recovery after Elimination) | | 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 | |
| | Surge Generator | SUG61005TB(7.5KV)-2216 | Oscilloscope | TBS1102B | **LED Load** |
| | Stroboscope | LANSHU-201B | Digital Wattmeter | PM2818C | |

# JD5217A

## Bluetooth Tunable White Dimmable LED Driver

## 2D Diagram

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

R

D

H

## Wiring Diagram

N

220-240V~

L

N(Blue)

L (Brown)

LED+ (Red)
LED-W (Yellow)
LED-C (White)

Max.20W Tunable White
Constant Voltage Light Fixture

## Bluetooth 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.

## App operation Instructions ▶▶▶▶

### 1.Account Registration

Download and install the Mi Home App via HarmonyOS/IOS/Android. Once installed, you can proceed with login/registration.

### 2.Adding Devices

After creating a family in "My" - "Family Management" - "Create Family" as a new user, manage the family location and naming of rooms within the family. Tap the "Mi Home" interface to "Add Devices". Select "Auto Discover" in the device addition list to automatically search for devices. The Devices can be automatically discovered. Follow the prompts to complete device addition (ensure that already added devices are powered on or reset with the light in breathing mode. For remote control, a Bluetooth gateway should be paired).

### 3.Function Settings

After successfully adding the device, tap the device to enter the specific light control interface, where you can freely control the device's on/off status, lighting level, color temperature, grouping, scene timing, and more features.

### 4.Scenes and Automation

Users can customize scenes and automation based on their needs, with features such as lighting scene libraries and circadian rhythm lighting.

### 5.Resetting the Device

Turn the power switch on and off consecutively 8 times，After the 9th power-on, the lamp will breathe bright to dark 5 times, indicating successful resetting. The lamp defaults to neutral light at 100%,signifying that the device has been successfully reset and entered the network configuration state.

### 6.Voice Control

The device supports voice control within the Mi Home ecosystem.

## Product Characteristic Curves ▶▶▶▶



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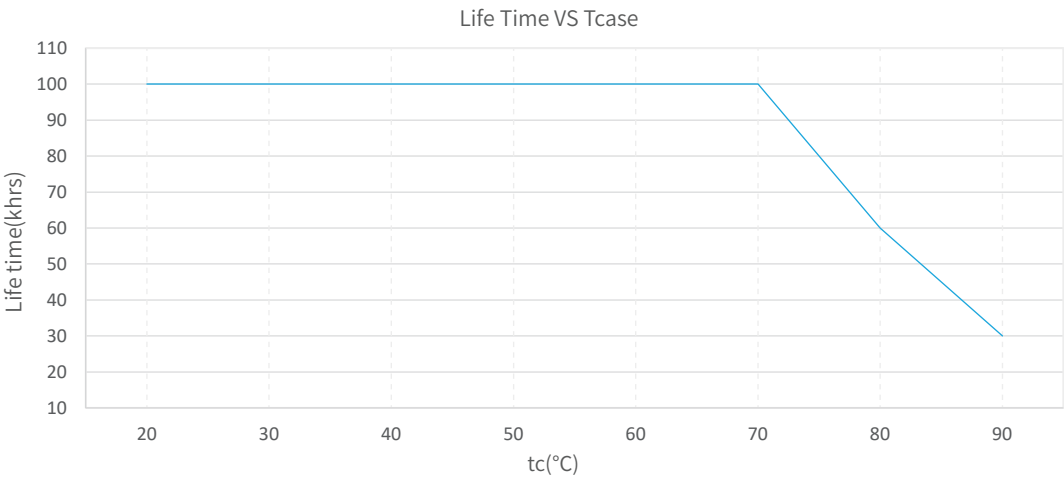
The life-time of the LED driver is shown in the figure above calculated (based on the 90% survival rate).
The relation of tc to ta temperature depends also on the luminaire design.

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## Bluetooth Tunable White Dimmable LED Driver

### Packaging Image

Inner Packaging Box

Small Carton Packaging

Large Carton Packaging

### 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 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℃. 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.

## Bluetooth Tunable White 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.