

Product introduction 

JISIM JD9119 is a 12W constant current LED intelligent dimmable driver specifically designed for small aperture luminaires. It supports 2.4G RF 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, spotlights, 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 2.4G RF dimming
- Global Certification, SELV equivalent
- Suitable for Class I/ II /III indoor light fixtures
- Smooth dimming, flicker-free, dimming range: 0.5-100%
- DIP switch for multi-current setting, Max. output power 12W
- 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
- 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           | JD5119C                          |                                                              |                                                       | Features                                          | Output Type                                           | Constant Current          |          |
|-----------------|----------------------------------|--------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|---------------------------|----------|
| Input           | DC Voltage Range                 | 100-300V                                                     |                                                       |                                                   | Communication mode                                    | 2.4G RF                   |          |
|                 | AC Voltage Range                 | 100-240V                                                     |                                                       |                                                   | Output Feature                                        | Isolation                 |          |
|                 | Rated Voltage                    | 120Vac/230Vac                                                |                                                       |                                                   | IP Rating                                             | IP20                      |          |
|                 | Input Frequency                  | 50/60Hz                                                      |                                                       | Insulation Rating                                 | Class II (Suitable for class I II III light fixtures) |                           |          |
|                 | Input Current                    | ≤0.2A/100Vac(at full load)    ≤0.08A/230Vac(at full load)    |                                                       | No Load Output Voltage                            | Max.59V                                               |                           |          |
|                 | Input Power                      | Max.15W                                                      |                                                       | Output Voltage Range                              | 9-40Vdc                                               |                           |          |
|                 | Power Factor                     | PF>0.95C/100Vac(at full load)   PF>0.9C/230Vac(at full load) |                                                       | Output Current Range                              | 150-500mA                                             |                           |          |
|                 | THD                              | THD<10%/230Vac(at full load)                                 |                                                       | Output Power Range                                | 1.3-12W                                               |                           |          |
|                 | Efficiency                       | ≥82%(at full load)                                           |                                                       | Dimming Range                                     | 0.5~100%                                              |                           |          |
|                 | 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                                            |                                                       |                           |          |
| Protection      | Overload Protection              | Hiccup Mode (Auto-Recovery after Elimination)                |                                                       |                                                   | Working Temperature                                   | ta:-20°C~45°C             |          |
|                 | Open Circuit Protection          | ≤59Vdc                                                       |                                                       |                                                   | Working Humidity                                      | 20~90%RH(No Condensation) |          |
|                 | Stort Circuit Protection         | Hiccup Mode (Auto-Recovery after Elimination)                |                                                       |                                                   | Storage Temperature/Humidity                          | -40~85°C/5~95%RH          |          |
|                 |                                  |                                                              |                                                       |                                                   | Case Temperature                                      | tc:75°C                   |          |
|                 |                                  |                                                              |                                                       |                                                   | Life Time                                             | > 50000h@tc=75°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             | 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                   |          |

Bluetooth Dimmable LED Driver

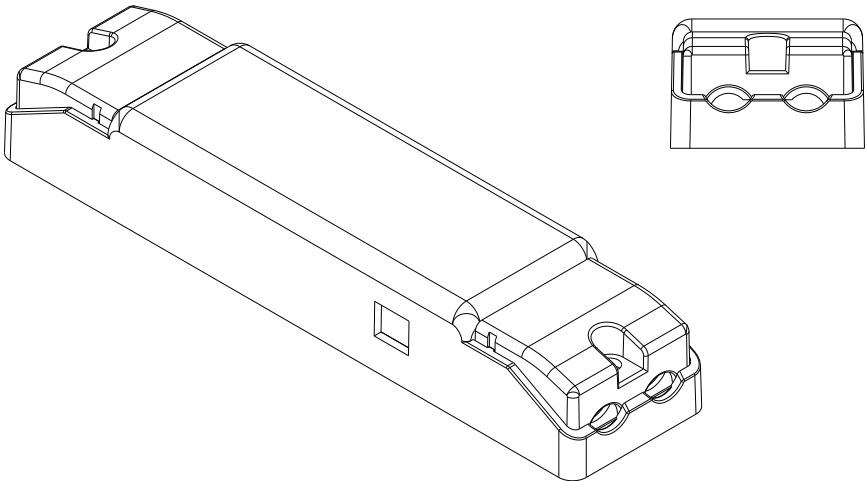
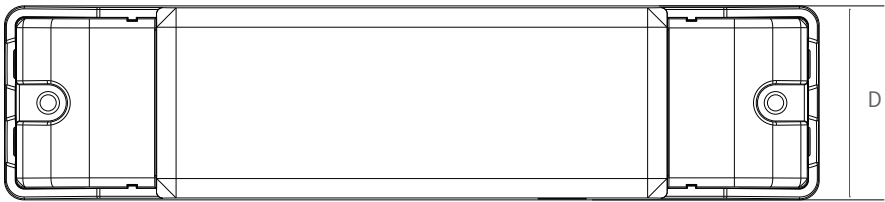
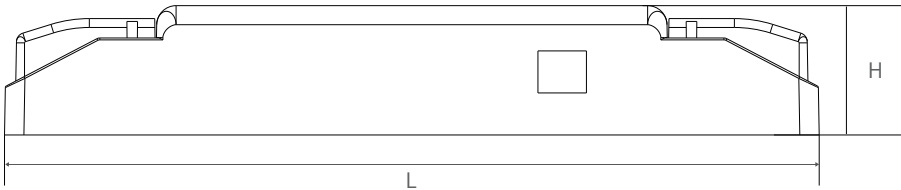
LED Current Settings >>>

| Number | Output          |                  |                                       |              | Switch Position |    |    |
|--------|-----------------|------------------|---------------------------------------|--------------|-----------------|----|----|
|        | Current<br>(mA) | Voltage<br>(VDC) | NO Load<br>Outout<br>Voltage<br>(VDC) | Power<br>(W) | 1               | 2  | 3  |
| •1     | 150             | 9-40             | 59                                    | 6            | /               | /  | /  |
| 2      | 200             | 9-40             |                                       | 8            | ON              | /  | /  |
| 3      | 250             | 9-40             |                                       | 10           | /               | ON | /  |
| 4      | 300             | 9-40             |                                       | 12           | ON              | ON | /  |
| 5      | 350             | 9-34             |                                       | 11.9         | /               | /  | ON |
| 6      | 400             | 9-30             |                                       | 12           | ON              | /  | ON |
| 7      | 450             | 9-27             |                                       | 12.15        | /               | ON | ON |
| 8      | 500             | 9-24             |                                       | 12           | ON              | ON | ON |

- ◀ \* Factory default.
1. 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 12W.

2D Diagram >>>

| Length (L) | Width (D) | Heigh(H) | Weight(W) |
|------------|-----------|----------|-----------|
| 126mm      | 30mm      | 20mm     | 67±10g    |



Bluetooth Dimmable LED Driver

Wiring Diagram



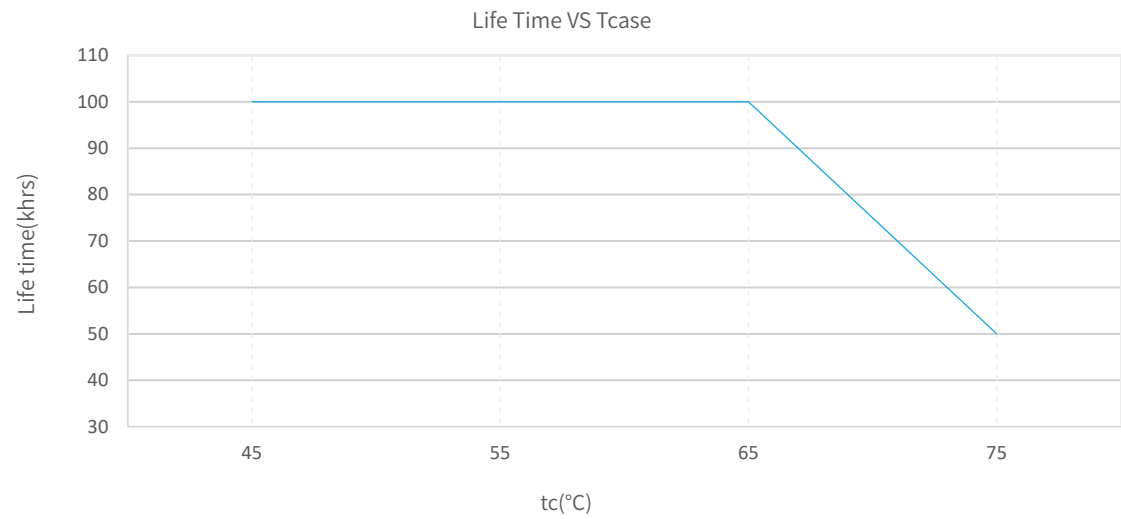
Installation Instructions

| Interface | Marking | Description                             | wire cross Section                   | wire Stripping Length |
|-----------|---------|-----------------------------------------|--------------------------------------|-----------------------|
| Input     | N       | Input terminal of AC neutral wire       | 0.75...1.5mm <sup>2</sup> (16-18AWG) | 5...6mm               |
|           | L       | Input terminal of AC live wire          | 0.75...1.5mm <sup>2</sup> (16-18AWG) | 5...6mm               |
| Output    | LED+    | Positive electrode output of the driver | 0.5...1.0mm <sup>2</sup> (16-20AWG)  | 5...6mm               |
|           | LED-    | Negative electrode output of the driver | 0.5...1.0mm <sup>2</sup> (16-20AWG)  | 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.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)

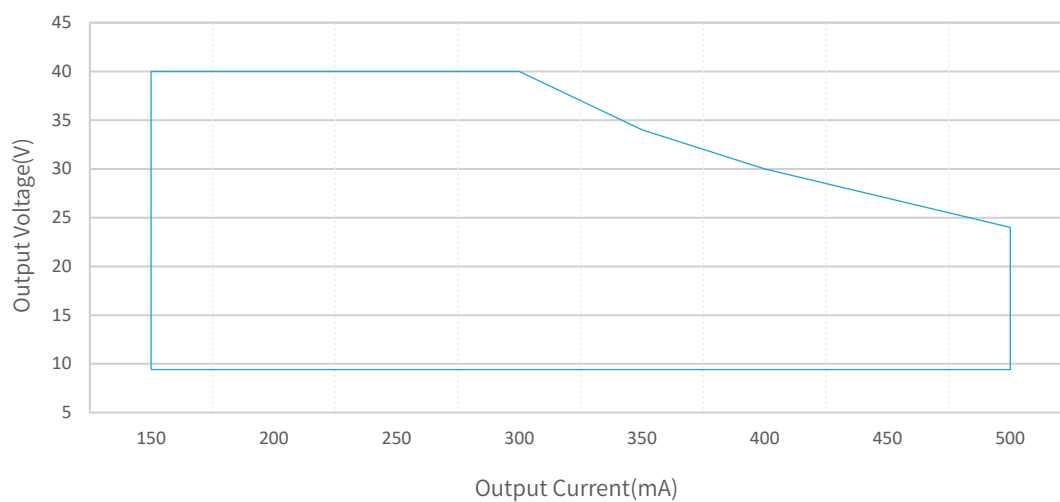
Product Characteristic Curves



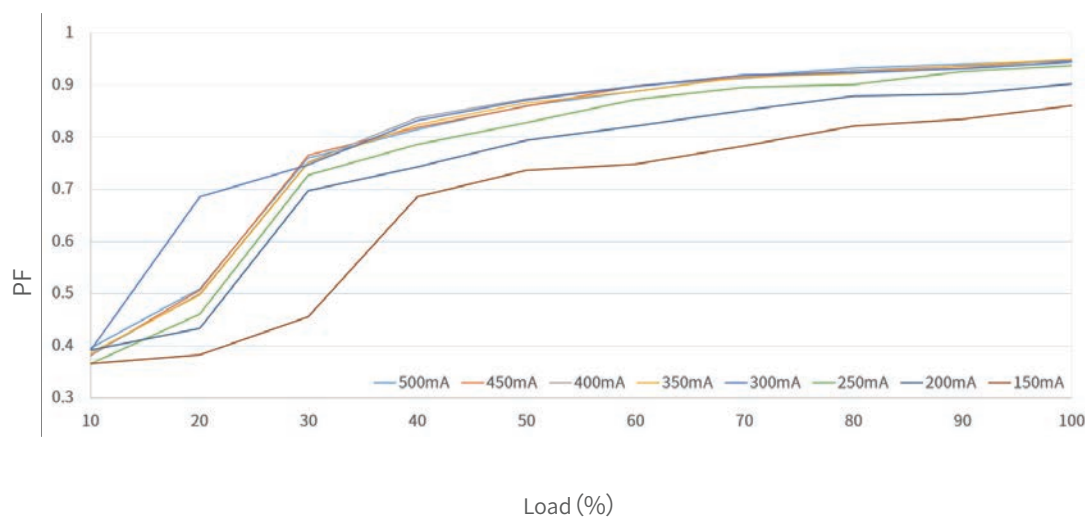
The life-time of the LED driver is shown in the figure above calculated (based on the 75% survival rate).  
The relation of tc to ta temperature depends also on the luminaire design.

## Bluetooth Dimmable LED Driver

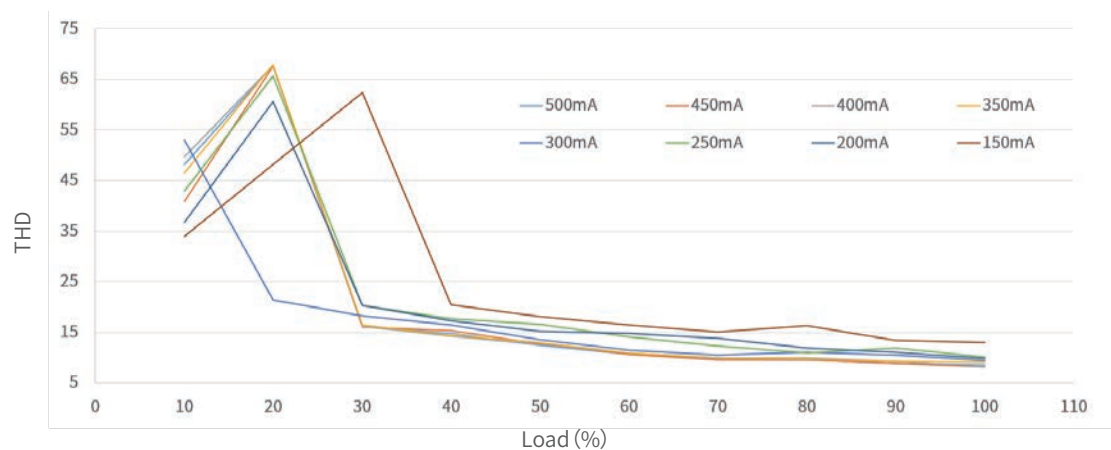
Operating Window



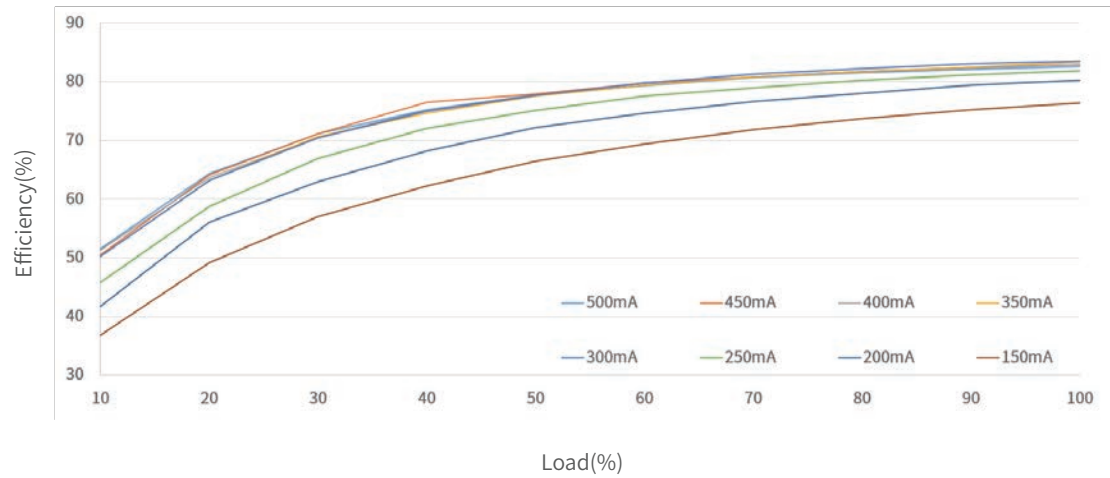
Power Factor VS @Load 230Vac



THD VS @Load 230Vac



Efficiency VS Load@230Vac



Packaging Image



Packaging Size

| Packaging Details      | Carton Size       | Packing Units | Weight   |
|------------------------|-------------------|---------------|----------|
| Inner Packaging Box    | 140x33x23mm       | 1pcs          | 78.2±10g |
| Small Carton Packaging | 350 x 197 x 167mm | 80pcs         | 6.56kg   |
| Large Carton Packaging | 420 x 360 x 365mm | 320pcs        | 27.1kg   |

Packaging instructions:  
Each large carton packaging contains 4 small carton packagings,Each small carton packaging contains 80 inner packaging boxes.

## Bluetooth Dimmable LED Driver

## 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 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](mailto: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.