

Products Specification

2835 Double-sided lighting LED strip

CONTENTS

01

Specification Parameters

1. 1 Product Size	01
1.2 Technical parameters	02
1.3 Photoelectric Parameter Table	02

03

Installation Method

3.1 Installation steps	06
------------------------	----

05

Supplement

5.1 Installation precautions and others	07
5.2 Common Problems and Settle Methods	07

02

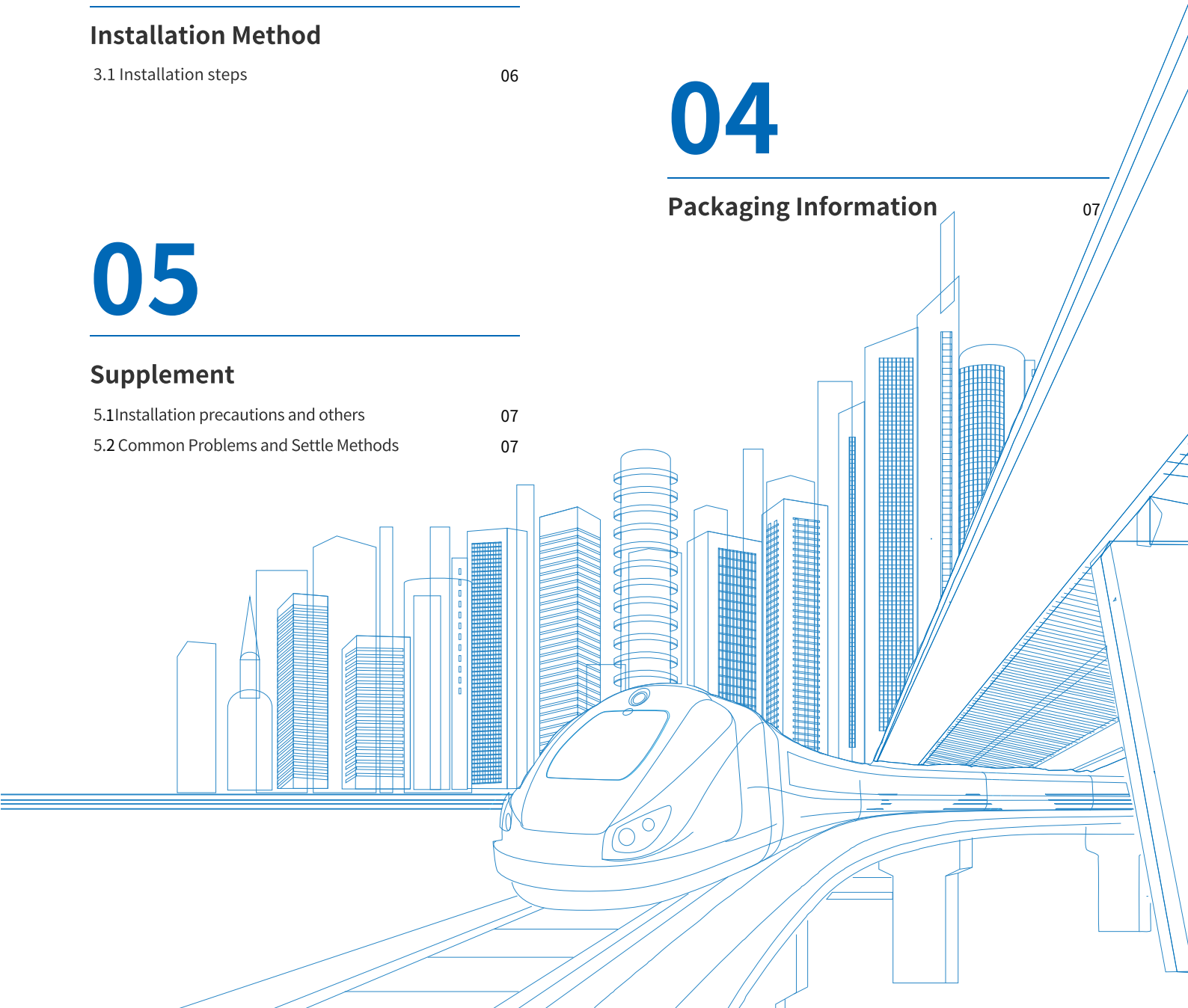
Functions&Features

2.1 Reliability test	03
2.2 laboratory	04
2.3 Warning signs	04

04

Packaging Information

07

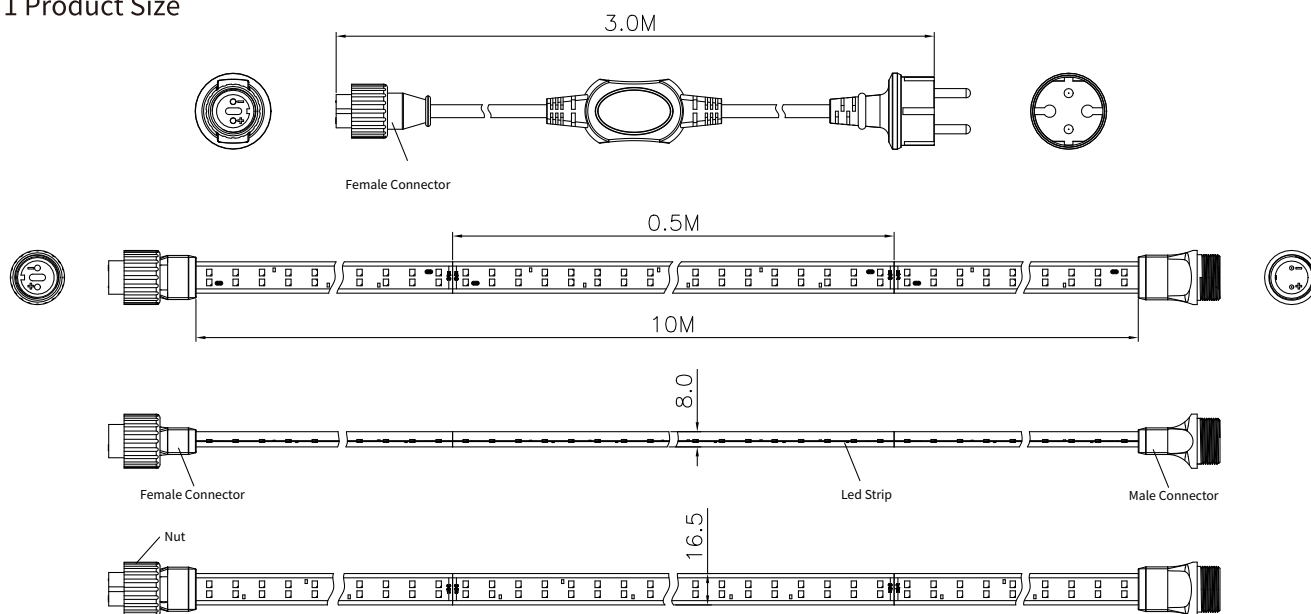


2835 Double-sided lighting LED strip

Specifications



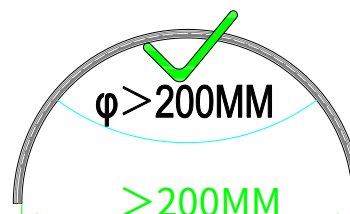
1. 1 Product Size



• KC Power cord



• Bending diameter



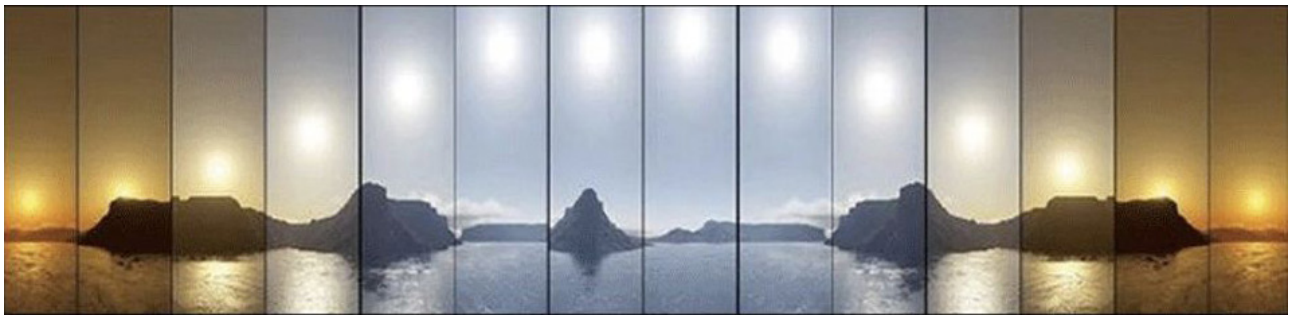
1.2 Technical parameters

Article No.	2835 Double-sided lighting LED strip
Working Voltage	AC220V
Rated Power / mtr	12.5W
LED Qty/ mtr	144P+144P
CCT	6500K
LM/W	100Lm/W
PCB size	12mm
Min. Cutting Length	0.5m
Continuous Length	50m
Storing Temp.	-40~80°C
Working Temp.	-20~40°C
IPRating	IP65
Warranty	2-year



1.3 Photoelectric Parameter Table

• Colour Temperature Chart



2200K

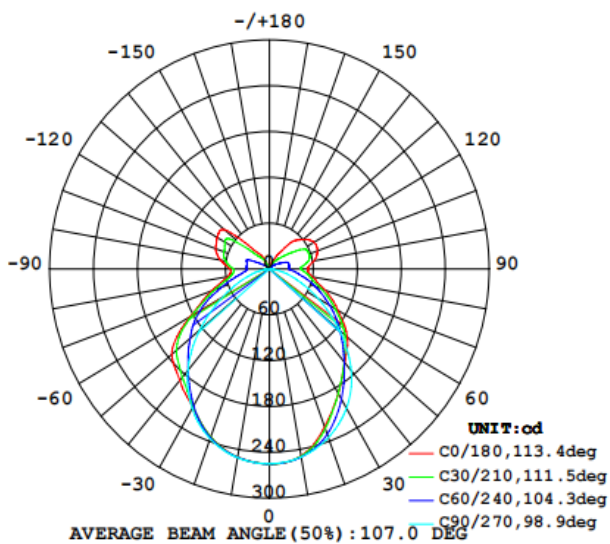
4000K

6500K

4000K

2200K

• Luminous Intensity Distribution Diagram



2.1 Reliability Test

	Testing Items	Testing Standard	Testing Environment	Result Judgment	Testing Result
Optical Parameter Test	Integrating sphere test	GB/T 24824-2009 IES LM-79-08 GB/T 24908-2014	25°C±1°C, RH≤65%	Subject to the actual report	PASS
	Light distribution test	GB/T 24824-2009 GB/T 24908-2014 GB/T 9468-2008 IES LM79	25°C±1°C, RH≤65%	Subject to the actual report	PASS
	Long Time Continuous Aging Test	GB/T 33721 IES LM84&IES TM28	40°C±2°C, RH≤65%	1000h, Luminous flux maintenance up to 93%	PASS
	Low temperature storage test	GB/T 2424.5-2006	25°C±1°C, RH≤65%	-40°C Storage 168H, (GB/T 9468-2008) Luminous flux maintenance up to 90%	PASS
	High temperature storage test	GB/T 2424.5-2006	25°C±1°C, RH≤65%	85°C Storage 168h, (GB/T 9468-2008) Luminous Flux Maintenance up to 90%	PASS
Electrical Safety Test	Withstand Voltage Test	GB 7000.1 (IEC 60598-1) ; UL2108, UL1598	25°C±1°C, RH≤65%	The low-voltage should pass the withstand voltage test upto 500V. he high-voltage should pass the withstand voltage test upto 3000V.The test lasts for 60s. There is no LED bead or trace phenomenon during the test. After the test, the led strip can work normally	PASS
Temperature test	Temperature rise test	GB 7000.1 (IEC 60598-1) UL2108, UL1598	Ta:25°C+/-3°C (Relative temperature): Less Than 65%; (Pressure):86Kpa-106Kpa	The test time is 3-4 hours, the temperature change within one hour is not more than 1 degree, the temperature of test lamp foot, lamp plate and shell is less than <75 degrees, and the relevant temperature rise results of special materials are defined according to the material specifications	PASS
	High temperature and humidity test	UL1598&UL2388& IEC60598-1& IEC60598-2-21	Ta:25°C+/-3°C, RH:30-75%.	Working state: steady state operation under rated electrical stress conditions, power supply: 15 seconds on, 15 seconds off; Temperature and humidity: temperature 70 °C, relative humidity 85%; Test time: 264 H	PASS
	High and low temperature test	GB/T 2423.22-2012	Ta:25°C+/-3°C, RH:30-75%	At minus -40-65 °C, light the lamp for low temperature test for 30 minutes, high temperature test for 60 minutes, and test for 10 cycles. The label of the sample shall be free from cracking, curling or falling off, and the sample shall be free from obvious damage. The change of the measured luminous flux relative to the initial luminous flux shall not exceed 10%.	PASS
Current impulse test	Switch On & Off	GB/T 33721	Ta:25°C+/-3°C, RH:30-75%	1. 30S Switch On, 30S Switch off. Test 1000 cycles 2. the product shall be free of abnormal phenomena such as damage and light failure; 3. the luminous flux of integrating sphere test shall be kept above 95%	PASS
	Cold & Thermal Test	GB/T 2423.22-2002	Ta:25°C+/-3°C (Relative temperature): Less Than 65%; (Pressure):86Kpa-106Kpa.	Without lighting, -40-85 degrees (cycle test: 20 times outdoors, 10 times indoors), 1.36w-13.6w for 2h, w ≥ 13.6 for 4H	PASS
Use environment test	Heat resistance test	UL94	Ta:25°C+/-3°C, RH:30-75%	According to UL94 standard	PASS
	UV exposure test	ASTMG154,ISO4892-3, UVA@340nm	Ta:25°C+/-3°C, RH:30-75%	1.38 w/m at 60 °C ² No yellowing after 96 hours of UV irradiation	PASS
	Salt spray test	GB/T 2423.17-2008 EC60068-2-11	Temperature: 25 °C ± 5 °C, relative temperature: no more than 65%; Air pressure 86kpa-10686kpa Salt concentration: 5%, ph:6.5-7.2, laboratory temperature: 35 °C, saturated air barrel temperature: 47 °C, spray pressure: 1kg/cm ² , Spray volume 1-2 ml/cm2/h	1. check the sample appearance before and after the test (no crack / discoloration / damage) 2. remove the corrosive substances on the surface. The appearance of the product is not corroded. The distribution of pitting corrosion, cracks and bubbles does not affect the normal function of the product (protection) 3. the PCB pad is not corroded and there is no copper rust or little copper; 4. the luminous flux of integrating sphere test shall be kept above 95%.	PASS
	Waterproof test	GB 4208-2008 GB 7000.1-2015 IEC60529	Ta:25°C+/-3°C, RH:30-75%	The waterproof test shall test the product IP level according to the strip standard. After the test is completed, the LED strip shall not be flooded, and the strip shall not have dead light or flicker.	PASS

2.2 Reliability Test

	Testing Items	Testing Standard	Testing Environment	Result Judgment	Testing Result
Physical test	IK Testing	IEC 62262	Ta:25°C+/-3°C, RH:30-75%	Impact the surface of strip without bead, dead lamp and other damage	PASS
	Twist test		Ta:25°C+/-3°C, RH:30-75%	Twist 360 °in 2 turns (positive 720 °, negative 720 °), 1000 cycles and no damaged LEDs	PASS
	Bending Test	UL2388	Ta:25°C+/-3°C, RH:30-75%	180 degrees, positive bending 90 degrees, reverse bending 90 degrees, test frequency 10 cycles per minute, bending 500 times: 1. power on and check that all LEDs can be lit without dead light or flashing; 2. power off and check that the LED, resistance and welding tin point are free of cracks and damages.	PASS
	Swing test	1. from the spliced 1m lamp strip, cut the 0.5m lamp strip sample with the middle strip welded, and fix both ends on the fixed seat of the test equipment. 2. parameter setting: set the speed to 60 rpm (60 times / min) and test 1000 times.	Ta:25°C+/-3°C, RH:30-75%	Power on and check that all LEDs can be lit without dead lights or flashes; After power off inspection, the LED, resistance and welding tin point are free of cracks and damages.	PASS
	Tensile Strength test	IEC 60598	Ta:25°C+/-3°C, RH:30-75%	Test the tensile force of wire rod on PCB welding points and between PCBs: 1. condition setting: straighten the product to be tested, apply the tension at the test speed of 60mm/ min, and keep it for 30s when the tension is 30n. 2. the test tension shall not be less than 4 times the net weight of the product. 3. the solder joint between wire rod and PCB shall not fall off or open welding. 4. the butt welding points between PCBs shall not fall off or open welding.	PASS
	Dropping Test	Gb/t 4857.5-1992 packaging -- drop test method for transport packages	Ta:25°C+/-3°C, RH:30-75%	One corner, three edges and six sides shall be tested: Cargo weight: free fall height: 1-20.99 lb (0.45-9.52kg) 38in (0.965m) 21-40.99 lb (9.53-18.59kg) 32in (0.813m) 41-60.99 lb (18.62-27.66kg) 24in (0.61m) 61-100 lb (27.67-45.36kg) 24in (0.61m) The product shall be free from damage, and the package shall still be able to properly protect the product without obvious deformation, cracking or damage.	PASS
	Transport vibration	GB 7000.1, GB 4208-2008 GB/T 2423.10	Ta:25°C+/-3°C, RH:30-75%	More than 750 cycles, the product shall be free from damage, and the packaging shall still be able to properly protect the product without obvious deformation, cracking or damage.	PASS

2.3 laboratory



Luminosity Distribution Lab



Optical Lab



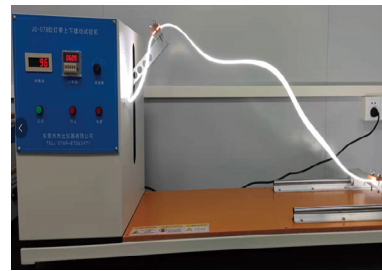
IP Grade Lab



Electrical Lab



Torque Test Equipment



Swing testing device



EMI Lab



EMS Lab

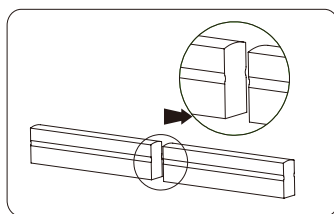


Environmental Reliability Lab

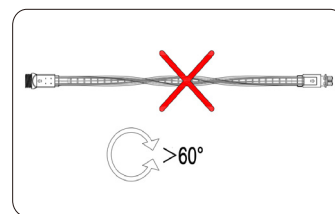
2.4 Warning Signs



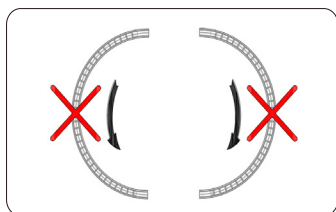
Cutting mark



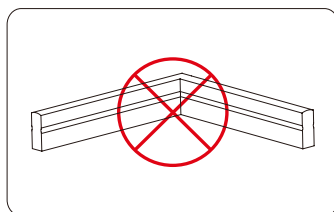
Keep well-cut



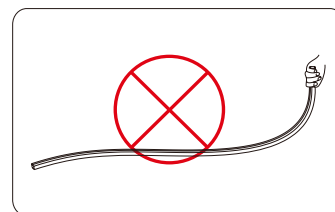
No twisting use



Prohibit repeated bending



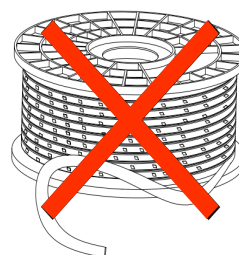
Prohibit bending at right angle



Prohibit to swing and drag while installing

Remarks: ① Note the warnings before installing

② The entire roll lights up for no more than 5 minutes.



3. Installation Method

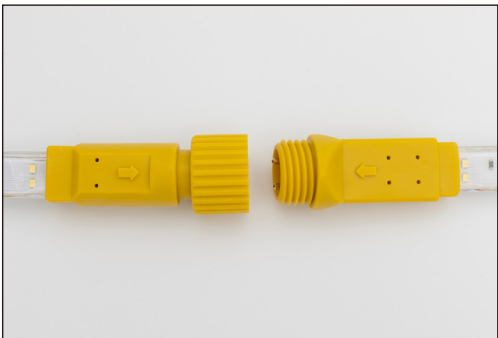
3.1 Installation steps



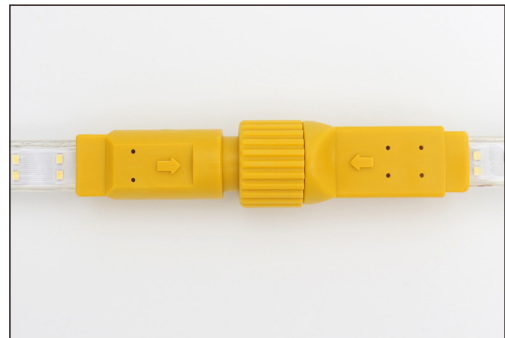
• Male Connector



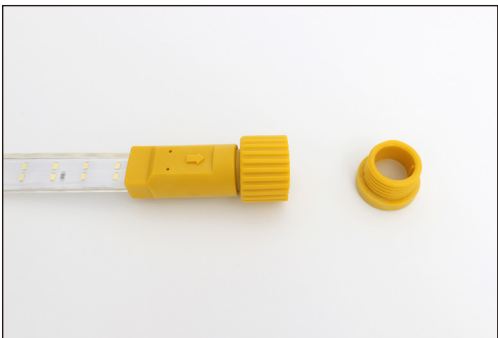
• Female Connector



• Connect the male and female connectors



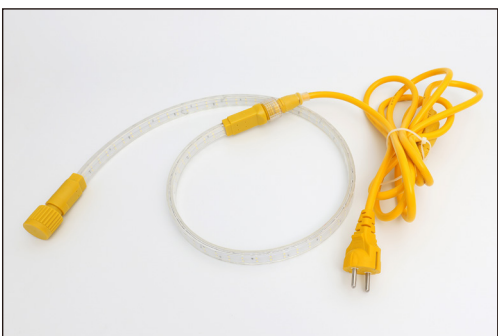
• Connection between 10m and 10m section



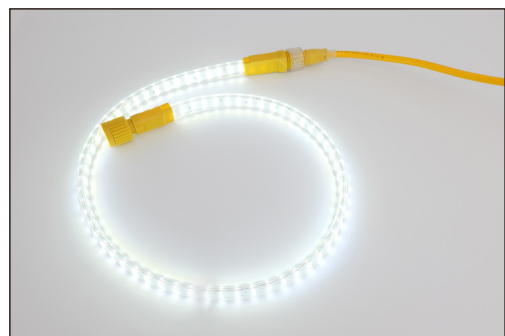
• Female connector and end cap



• Connection completed

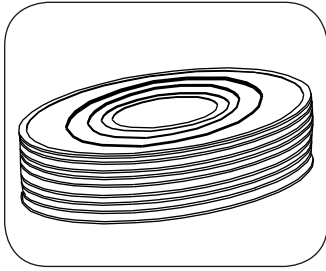


• Connection completed

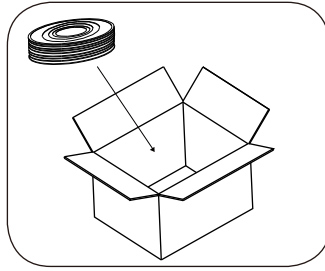


• Power on successfully

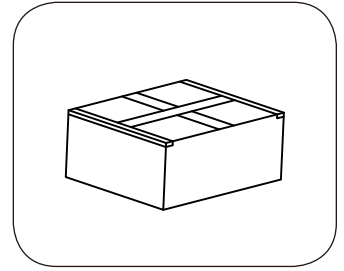
4. Packing Information



① LED strip rolled up, 10M per reel



② Put the led strip into out carton



③ Seal the out carton

Product Code	Product Size	Static Bag	Out Carton Size	Meters/ Reel	Reels/Carton
2835 Double-sided lighting LED strip	16.5*8mm	/	375*315*320mm	10m	10Reels

5. Supplement

5.1 Installation precautions and others

- ① Before installation, please check whether the product parameters are consistent with therequirements (see product specifications (or instructions) or labels for product parameters
- ② The voltage, current and power adapter to be used must be consistent with this product
- ③ Please make correct wiring according to the wiring diagram (connect the load first and then the power supply or power transmission).
Pay attention to avoid short circuit during operation
- ④ The positive and negative between strips and power adapter must be correctly connected, otherwise the strip is not workable.
- ⑤ The wiring terminal must be well-handled with effective waterproof and anti-corrosion treatment

5.2 Common Problems and Settle Methods

- ① Forbid to disassemble the strips and sharp objects keep away from the surface of the strips.
- ② Stay power off when install
- ③ Chemical solvent is not allowed
- ④ Ensure that the power cable can match the workload the strip to avoid adverse consequences caused by overheating.
- ⑤ Before power supply, please confirm whether the power supply voltage meets the requirements and whether the line is installed correctly
- ⑥ Installation, repair and maintenance must be operated by professionals