

SZ10-R1A-M Single-lamp Controller

Product Manual

V1.1

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Instruction

SZ10-R1A-M single lamp controller is a newly designed controller by Shuncom in order to meet the market demand. It is an important part of street lighting control system. The core chip of SZ10-R1A-M controller adopts self-developed ZigBee wireless communication module. Together with professional hardware and software design, SZ10-R1A-M controller offers powerful functions, small size, easy implementation, no need of wiring, reliable operation and easy-maintenance. With all these advantages, SZ10-R1A-M controller is a high performance and energy saving product, specialized for intelligent street lighting.

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1. Product Description

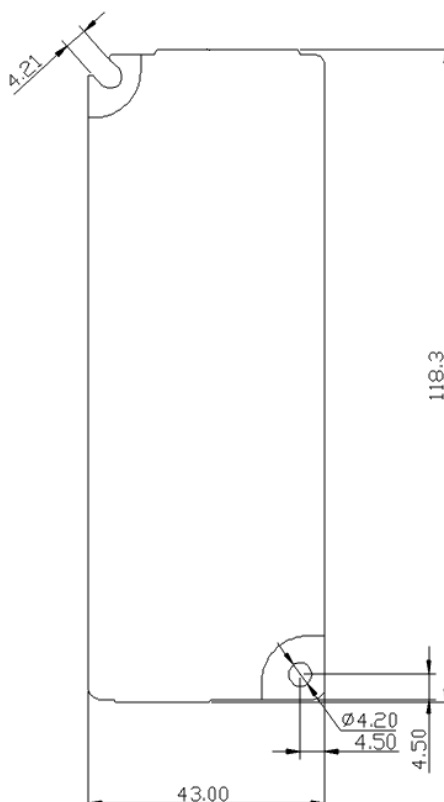
SZ10-R1A-M controller is compliant with IEEE802.15.4 protocol of ZIGBEE communication standard. It has the advantages of far communication distance, strong anti-interference capability and flexible networking, realizing peer-to-peer and peer-to-multi peer transparent data transmission among devices, and constructing star network or mesh network topology.

SZ10-R1A-M single-lamp controller consists of current, voltage and electric energy metering circuit which collect real-time load performance and power consumption of single-lamp controller. It helps to largely reduce work load of street lamp management department, and improve working efficiency, therefore significantly improve energy-saving benefit of all society.

Main Performance Features of SZ10-R1A-M single-lamp controller:

- Input power/ Output power: AC 85~265V 50/60Hz.
- Using wireless transmission encryption technology, ensure the confidentiality of data transmission.
- With power parameters, electrical parameters, running time and switching times query.
- 1 way switch and 0 ~ 10V or PWM dimming signal output function.
- With over-current, overload protection, lamp failure alarm detection.
- Applicable to LED lights, high pressure sodium lamp, metal halide lamp and other lamps switching and dimming.
- Wireless applicability, 2.4G ISM free global band.
- 16 wireless channels, the theoretical capacity of single-network is 65,535.
- Complete ZigBee wireless networking communication protocol
- Industrial temperature range: -40°C~ +85°C.
- Real-time control, respond to the center in few seconds.

2. Product appearance and dimensions



Length: 118.3mm

Width: 43mm

Height: 30mm

Mounting holes: Ø4.2mm

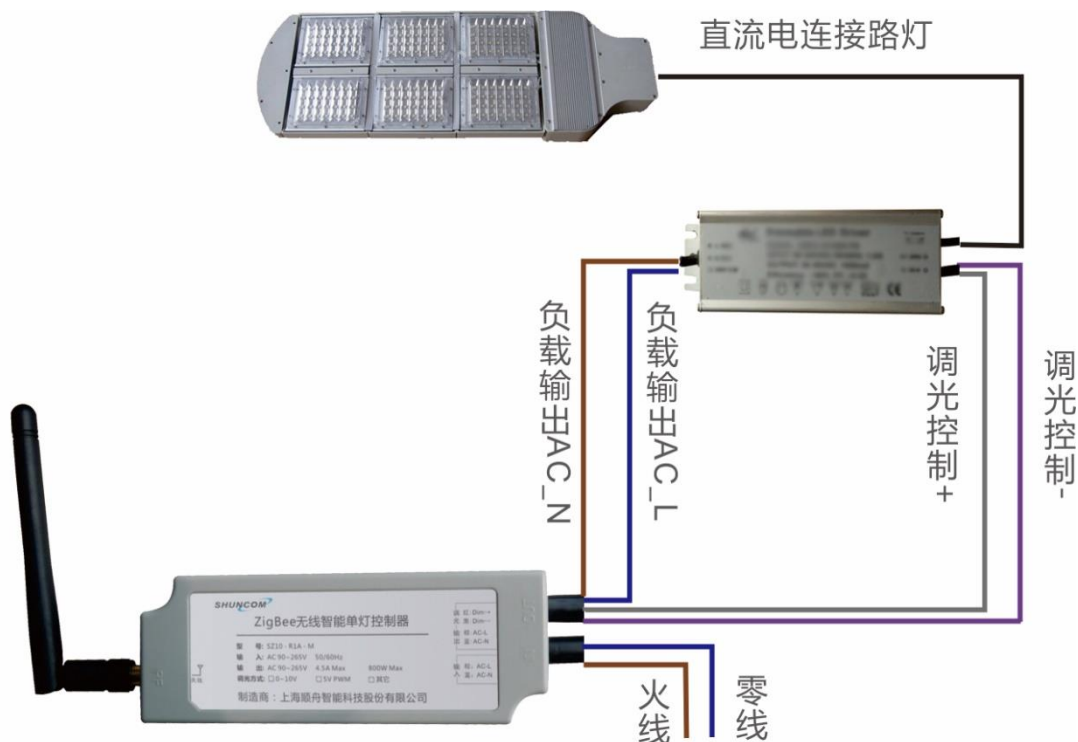
3. Technical Parameters

	Parameters	Value	Remarks
1	Dimensions	118.3×43×30 (mm)	
2	Protection class	IP65	
3	Output rated current	2A Max	
4	Radio frequency	2.4G	
5	Dimming Control Type	0-10V/PWM	Optional
6	Transmission distance	400 M	Between nodes in a conventional road environment
7	Product output	Single-phase AC	
8	Data collection	U,I,P.Q.W.COS Φ	
9	Antenna band	2.4G	
10	Antenna gain	3DB	
11	Antenna VSWR	《2.0	
12	Antenna type	External	

4. Installation requirements

Direct sunlight, moisture and rain, positive pole and negative pole connected in a contrary way shall be avoided for the installation and placement of single-lamp controller. Breakage, falling off and connection in contact with street lamp pole shall be avoided for the antenna. SZ10 series Single-lamp controller shall be installed fixed, with the scratch and insulation damage of the line avoided.

5. Wiring Method



Input : Two-core cable (brown, blue)

220V input L

220V input N

Output : four-core cable (red, black, brown, blue)

Output control L

Output control N

Output dimming +

Output dimming -

6. Disclaimer

Shunzhou shall take no responsibility for not working properly or wrong installation due to violation of this manual or repair and maintenance services provided by non-designated personnel.

Quality guarantee shall be invalid on the day when the enclosure of controller is opened.

7. Technical Support

Please contact the technical engineer of our Company in time for any technical and application problems.

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