

SZ10-NEMA Single-lamp Controller

Product Manual

Description

SZ10-ENMA controller is newly developed by Shuncom in favor of foreign market requirement. It is an important part of street lamp control system. The core chip of SZ10-ENMA controller adopts self-developed ZIGBEE wireless communication module. Together with professional hardware and software design, SZ10-ENMA controller offers powerful functions, easy implementation, wiring free, reliable operation and easy-maintenance. With all these advantages, SZ10-ENMA controller is a high performance and energy saving product, specialized for intelligent street lighting.

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I. Product Description

SZ10-ENMA controller conforms to IEEE802.15.4 protocol of ZIGBEE communication standard. It has the advantages of remote communication, 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. Standard ANSI C136.41-2013 of TE Connectivity is adopted for the interface, and dimmable socket and shrapnel contact are adopted to provide mechanical and electrical interconnection between light control unit and lamps. Solid twistlock contact is used for reliable power interconnection. Thus it is ideal for outdoor commercial and public lighting.

SZ10-ENMA single-lamp controller consists of a current and voltage measurement 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-ENMA single-lamp controller:

- Input power: AC 85~350V 50/60Hz
- Output power: AC 85~350V 50/60Hz
- Measuring current, voltage, temperature, active power and reactive

power

- One way switch and 0~10V dimming signal output
- Over-current protection, lamps condition detection and default lights
- Switch and the dimming suitable for lamps, such as LED lamp, high voltage sodium lamp and metal halide lamp etc.

- Overload protection design based on security
- Radio frequency: global free frequency band of 2.4G ISM
- Number of wireless channel: 16
- Single network capacity: 65535 nodes
- Thorough communication protocol of ZIGBEE wireless networking
- Industrial operating temperature range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Easy and simple installation, being installed within a few seconds

II. Product Appearance





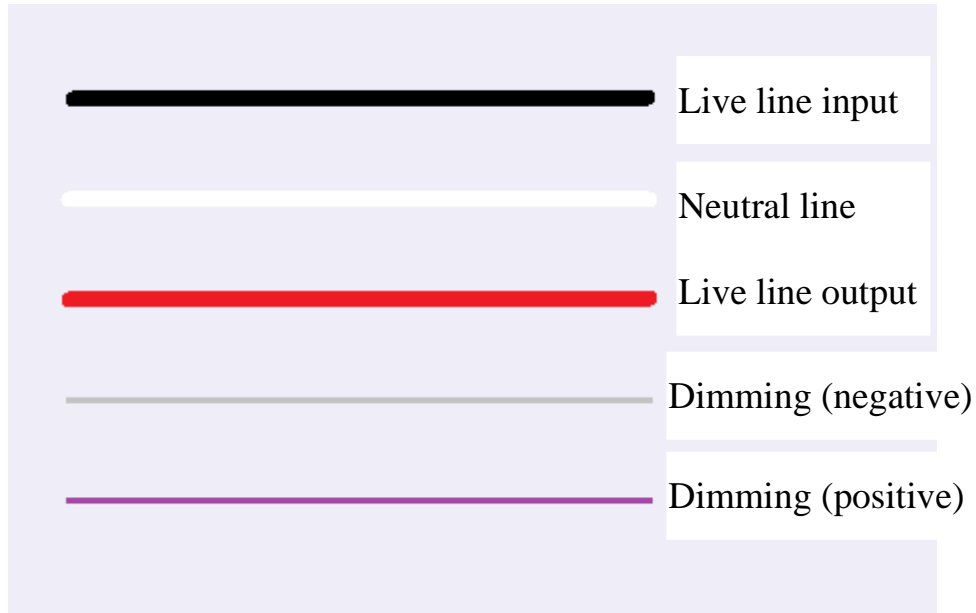
III. Technical Parameters

	Parameters	Parameter Values	Remarks
1	Dimension	85Dia.x65 (mm)	
2	IP Grade	IP65	
3	Rated Output Current	2A Max	
4	Wireless Frequency	2.4G	
5	Dimming Control Type	0-10V	
6	Transmission Distance	800 meters (between the nodes in the regular road environment)	
7	Product Output	single phase alternating current	
8	Data Collection	U,I,P,Q,COSΦ	
9	Antenna Frequency Band	2.4G	
10	Antenna Gain	3DB	
11	Antenna Standing Wave	《2.0	
12	Antenna Type	built-in	

VI. Installation Requirements

Direct sunlight, moisture and rain 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. Single-lamp controller shall be installed fixed, with the scratch and insulation damage of the line avoided.

V. Wiring Method



Black: live line input

Red: live line output

Purple: dimming
(positive)

White: Neutral line

Gray: dimming
(negative)

VI. 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.

VII. Technical Support

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

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