

# **SZ10-LoRa-R1A**

## **Street Light Controller Product Manual**

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## Description

SZ10-LoRa-R1A street lamp controller is a new controller developed by Shuncom to meet the market demand. It is an important part of the street lamp control system. Its core chip adopts self-developed LoRaWAN wireless communication module and cooperates with professional hardware and software design, the product has the advantages of powerful function, small size, easy to implement, free wiring, reliable work, easy to maintain, etc. It is a high performance street lamp energy-saving product specially developed for intelligent street lighting.

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## Contents

1.Product Description.....	5
2. Product Appearance.....	6
3.Technical Parameters.....	6
4.Installation Requirements.....	7
5. Wiring Method.....	8
6.Non-responsibility Commitment.....	9
7.Technical Support.....	9

# 1. Product Description

The SZ10-LoRa-R1A controller complies with the LoRaWAN Specification 1.0.1 ClassC standard issued by the LoRa Alliance for easy and fast access to LoRaWAN networks. It has low power consumption, long transmission distance, strong anti-interference and so on.

SZ10-LoRa-R1A street light controller inside contains current and voltage measurement circuit, which can collect the load status of street light controller in real time, greatly reduce the work pressure of street light management department and improve work efficiency, thereby significantly improving social energy-saving benefits.

SZ10-LoRa-R1A street light controller's main features:

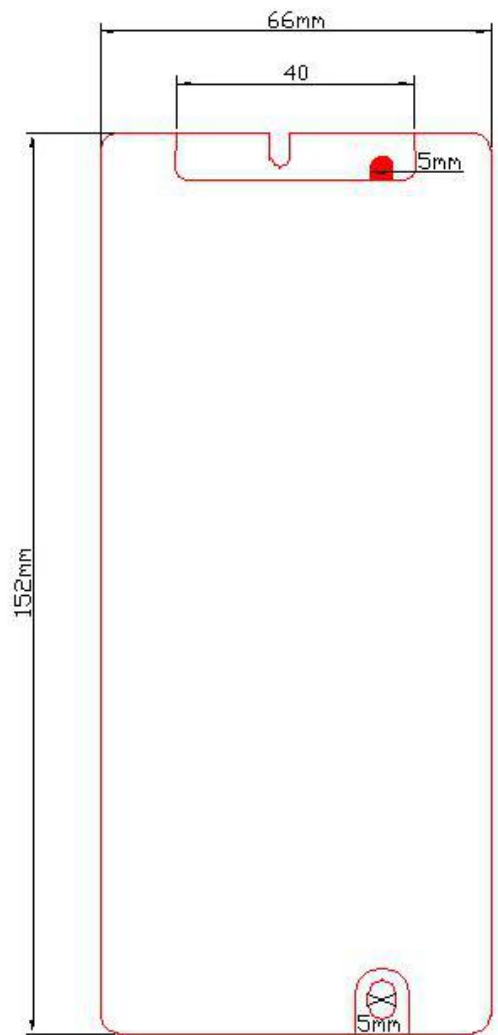
- With current, voltage, Power, electricity, frequency, temperature detection and other functions
- One way switch and 0~10V dimming signal output function.
- Over-current protection, lamps condition detection and default lighting functions
- Switch and the dimming suitable for lamps, such as LED lamp, high voltage sodium lamp and metal halide lamp etc.
- Overload protection design based on Security
- Band: 470-915MHz
- Industrial temperature: -40 °C ~ +85 °C
- Easy and simple installation, can respond to the instructions sent by the

center in seconds.

## 2. Product Appearance



length : 152mm  
 width : 66mm  
 height : 35mm  
 Mounting holes : 5X7mm



### 3. Technical Parameters

	parameter	Parameter value	Remarks
<b>1</b>	Supply voltage	AC85-265V	
<b>2</b>	Dimensions	152×66×36 ( mm )	
<b>3</b>	IP Grade	IP65	
<b>4</b>	Output rated current	5A Max	
<b>5</b>	Dimming type	0-10V/PWM	Optional
<b>6</b>	Product output	Single-phase communication	
<b>7</b>	Data collection	U,I,P.Q.COSΦ	
<b>8</b>	Transmit power	20dBm±1dBm ( max )	
<b>9</b>	Sensitivity	-136dBm±1dBm ( @SF=12 )	
<b>11</b>	Antenna gain	3DB	
<b>12</b>	Antenna standing wave	《2.0	
<b>13</b>	Antenna type	External	

### 4. Installation Requirements

Rain, positive pole and negative pole connected in a contrary way shall be avoided for the installation and placement of SZ10 series single-lamp controller. Antenna should be avoided breakage, loss and contact with the lamppost or lamp shade and so on. SZ10 series street

light 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 +(0-10V/PWM)

 Output dimming -(0-10V/PWM)



## **6. Non-responsibility commitment**

Shuncom 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**

If any technical and application issues, please contact our technical staff.

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