Mains iot wireless grid controller use manual

MODEL	function
SD-4GWG-GW	gateway
SD-4GWG	terminal

1. Product function characteristics

Wireless grid controller is an ielectric street lamp controller that supports automatic dimming. This module consists of wireless grid gateway and wireless grid terminal. The gateway uses 4G network communication function to communicate with the cloud platform, which can remotely connect to the server in the cloud, and the terminal communicates with the gateway using wireless grid communication mode, which can complete the parameter setting of the controller and view the running status of the controller remotely.

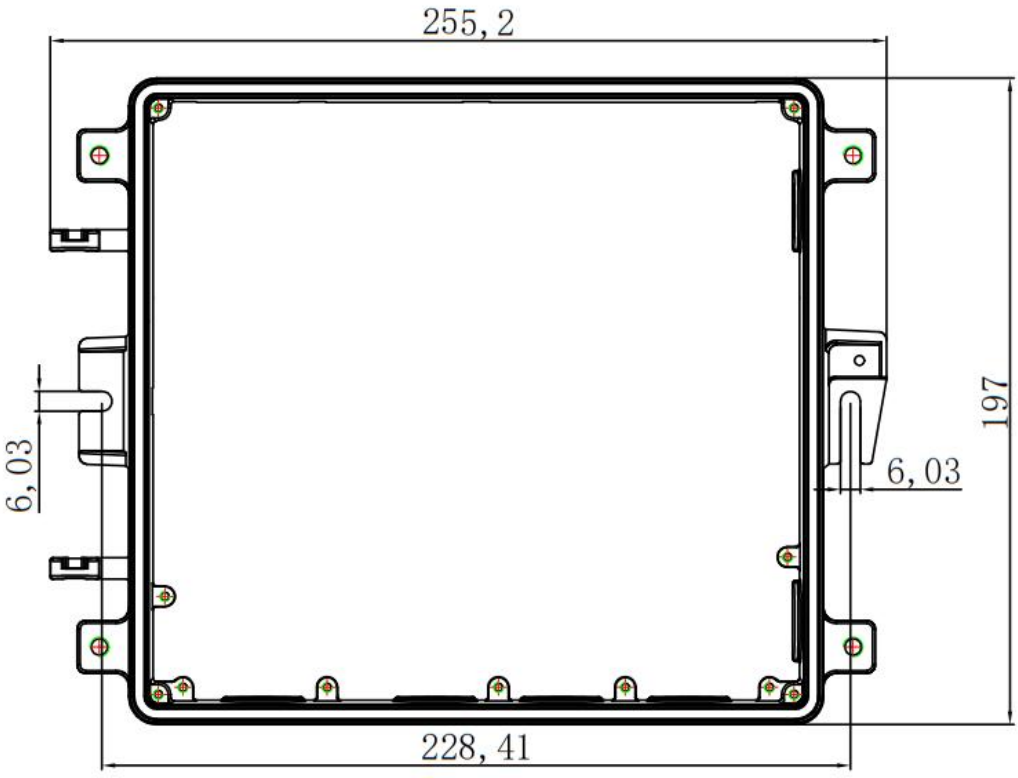
- Based on the wireless grid network, 4G wireless gateway;
- Automatic networking, no need for special routing nodes, no need to set up the power to complete automatic networking communication, support automatic networking, automatic networking recovery;
- Solar gateway (customized mains input), with backup battery (support for 7 days), connect the solar panel, the gateway automatically connects the server and street lamp node wireless networking;
- Gateway ultra-long distance wireless multi-level relay communication, relay coverage up to 10KM;
- Super-large capacity, a single gateway supports up to 500 street lamp nodes;
- Support dimming drive 5%~100% brightness dimming;
- Support the maximum of 1000W load power, support multiple dimming drive parallel use;
- In 5 periods, control and execute the light switch time according to the dark time set by the parameters;
- Support morning time, according to the set dawn time automatically before dawn;
- Support the astronomical clock, and automatically adjust the lighting time according to the GIS geographical location and season;
- Real-time monitoring of current, voltage, power, power factor, electric energy, automatic statistics of daily electricity consumption, total electricity consumption;
- Support single light and group batch switch light control and parameter

setting;

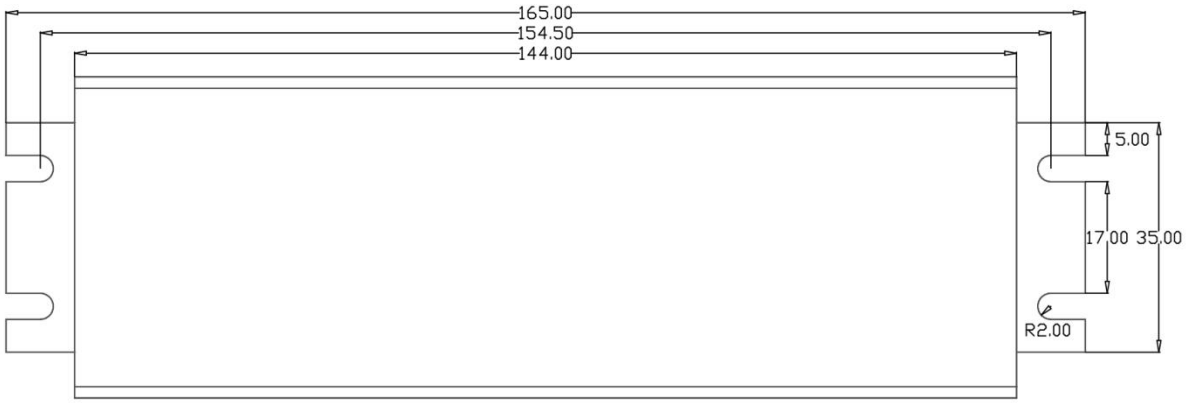
- Cloud platform centralized network control, support mobile phone and computer operation at the same time.

2. Appearance size

a. Gateway size



b. Controller dimension



3. Product Parameter

a. Gateway

Work consumption	150MA
power supply mode	5V solar power supply
communication mode	4G network
carrieroperator	Full netcom (mobile)
working temperature	-40℃ ~ 80℃
Antenna type	outlay
Terminal capacity	500
levels of protection	IP67
Support solar panels	20~30W
size (mm)	255mmx197mmx96mm

b. Terminal

Input and output voltage	220V
Tune output voltage	0~10V
Support for the maximum load power	1000W
communication mode	Wireless grid

working temperature	-40℃ ~80℃
Antenna type	outlay
levels of protection	IP67
size (mm)	143*49*40MM

4. State instructions

a. Gateway

Indicator light	status	function
Outer Green Light	Flushing	Running
Outer Red Light	light up	SIM card OK
Outer Red Light	Flushing	Try Linking
Outer Blue Light	Flushing	Connected
Inner Red Light	light up	Power On
Inner Green Light	light up	Power Charging

5. mode of connection

a. Gateway

* The antenna is divided into 4G antenna (long) and wireless antenna (terminal), which should be connected according to the logo. There is no shielding around the antenna.

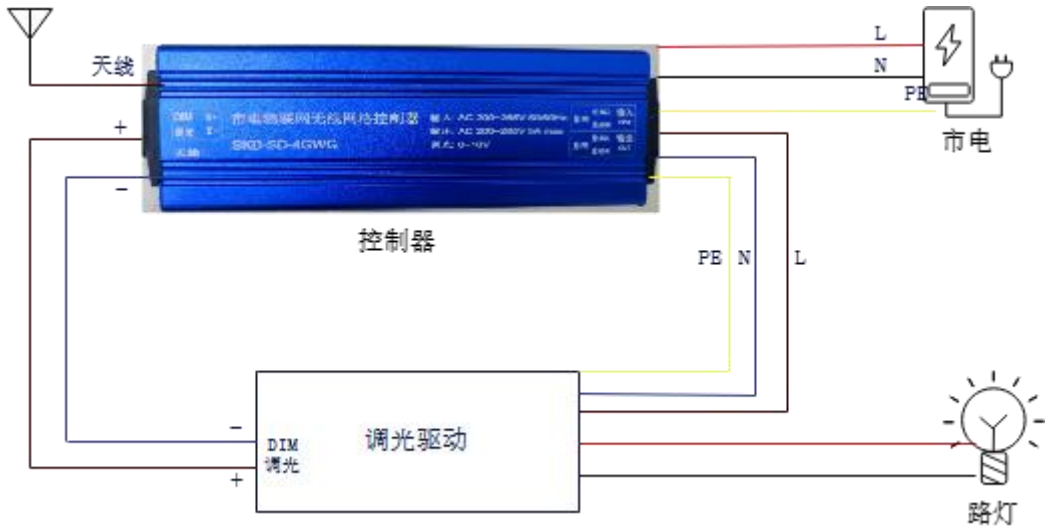
* Connect the solar panel and then plug the pair wiring.

b. Terminal

* Pay attention to the input and output line of mains, input and output can not work normally, pay attention to high voltage against electric shock.

* Because wireless signals can penetrate metal poorly, the antenna needs to be installed outside.

* Terminal antenna hole diameter: 6MM.



6. access mode

web page:http://www.skd-lamp.com

Download the mobile APP: The Android system can scan the QR code of the home page to download the mobile APP.

Need to contact the salesman to create an account

7. platform structure

Street lamps use wireless grid network communication, and use the cloud platform on the 4G mobile network after converging to the gateway.

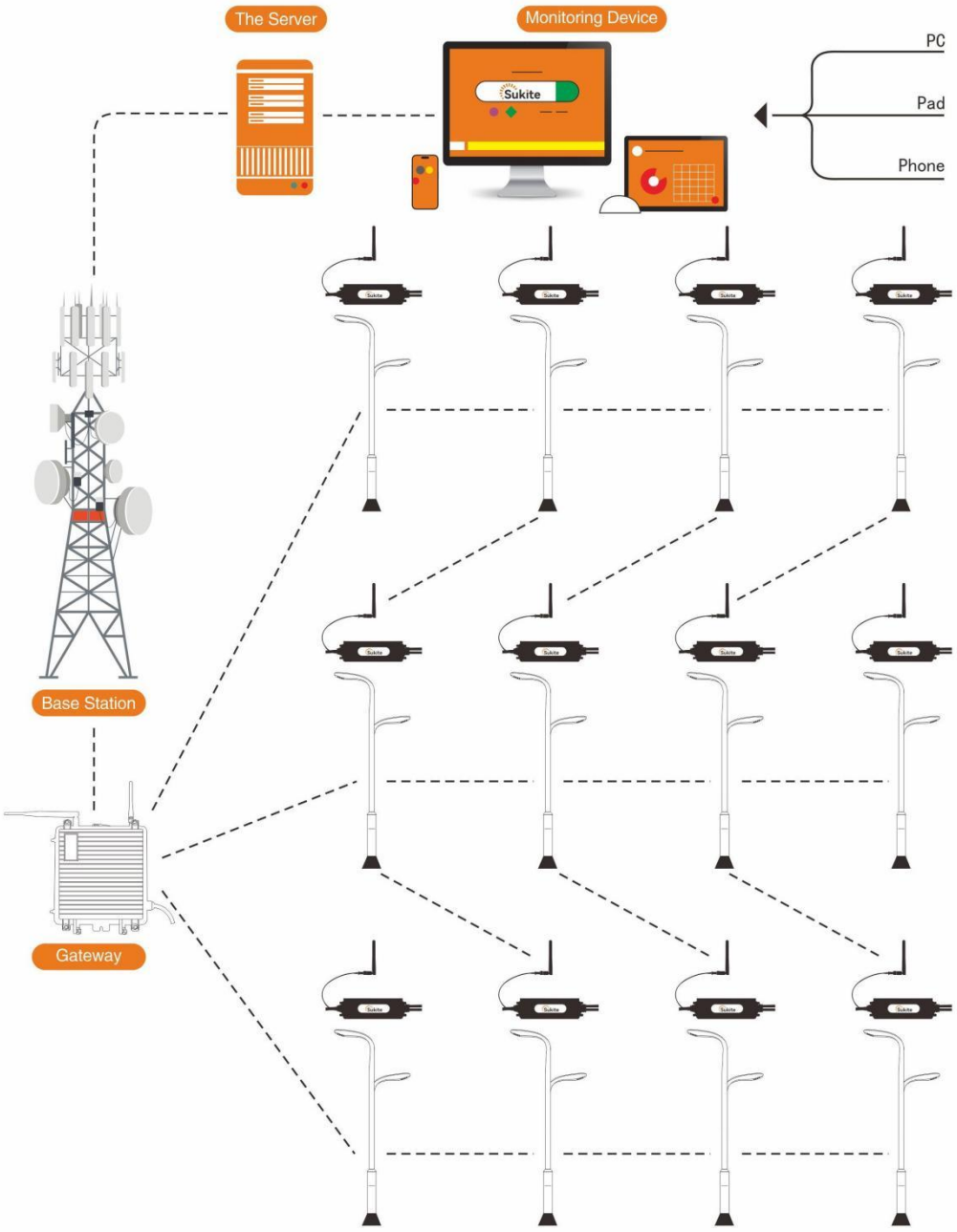
Wireless grid network (wireless Mesh network) is also known as "multi-hop" network. In the mesh network, any device node can act as a router and a terminal. Each node in the network can send and receive signals, and each node can communicate with one or more nodes.

characteristic:

1. Node interconnection: All the nodes in the LAN are connected together, and there are multiple connection channels between any two nodes, which show an obvious trend of decentralization;

2. AD hoc network: wireless Mesh network has the ability of automatic networking and centralized management, simplifying the management and maintenance of the network, automatic networking between street lamps, and centralized management through the gateway;

3. Self-healing: wireless Mesh network has automatic discovery and added routing connections, eliminates the impact of single point of fault on business, and provides redundant paths.



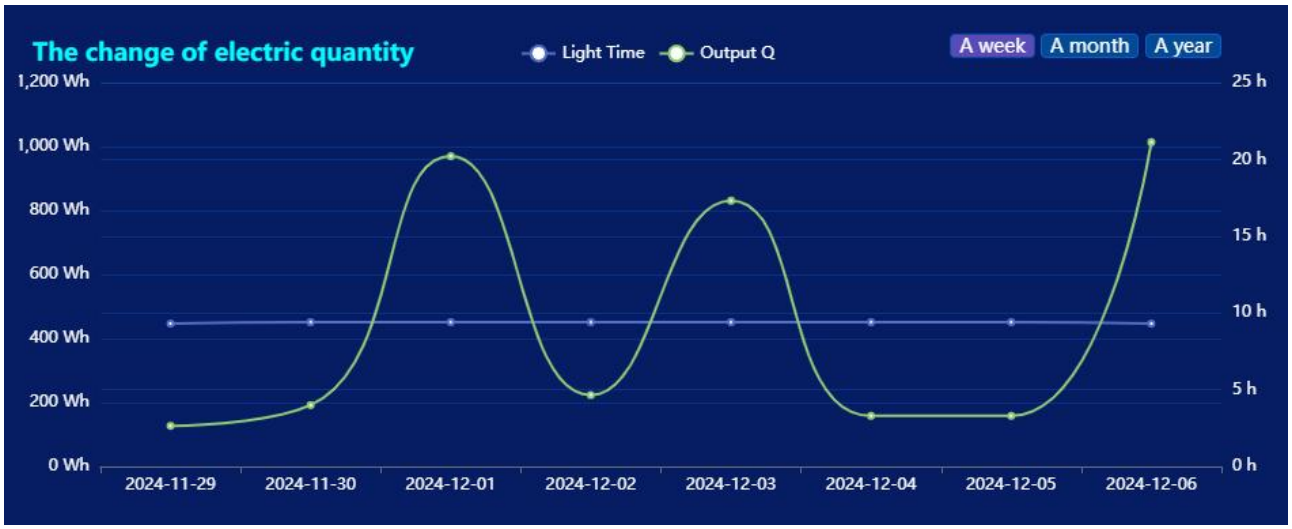
8. latform interface

Real-time monitoring of current, voltage, power, power factor, electric energy, automatic statistics of daily electricity consumption, total electricity consumption;

Display light curve;

Display light power curve;

Support single light and group batch switching light control and parameter setting.



9. Gateway card replacement installation process

1. Release the screw and open the shell

2. Move the card slot in the direction of the arrow

3. Open the card slot

4, install the SIM card, suitable for nano card

5. Cover the card slot and dial the card slot with the arrow direction to lock the card

6. Cover the shell and tighten the screws