



NJ-iot301

Product use manual of Municipal electric  
single-lamp controller

Xiamen Nengjia New Energy Technology Co., LTD

[www.xmnengjia.com](http://www.xmnengjia.com)

Updated time: 20210816

# I. Product function and features

The NJ-IoT-301 street lamp controller is built in a cellular network and consumes only about 180KHz. It is directly deployed on UMTS networks to reduce deployment costs and achieve smooth upgrades. NB-IoT is a new technology in the field of IoT. It supports low power devices and cellular data connection with the characteristics of wide coverage, many connection, low rate, low cost, low power consumption and excellent architecture.

NJ-IoT-301 street lamp controller realizes wireless communication, collects and reports input and output current / voltage, active power, apparent power, power, frequency, power factor, temperature, switch status and data; main performance characteristics of the controller:

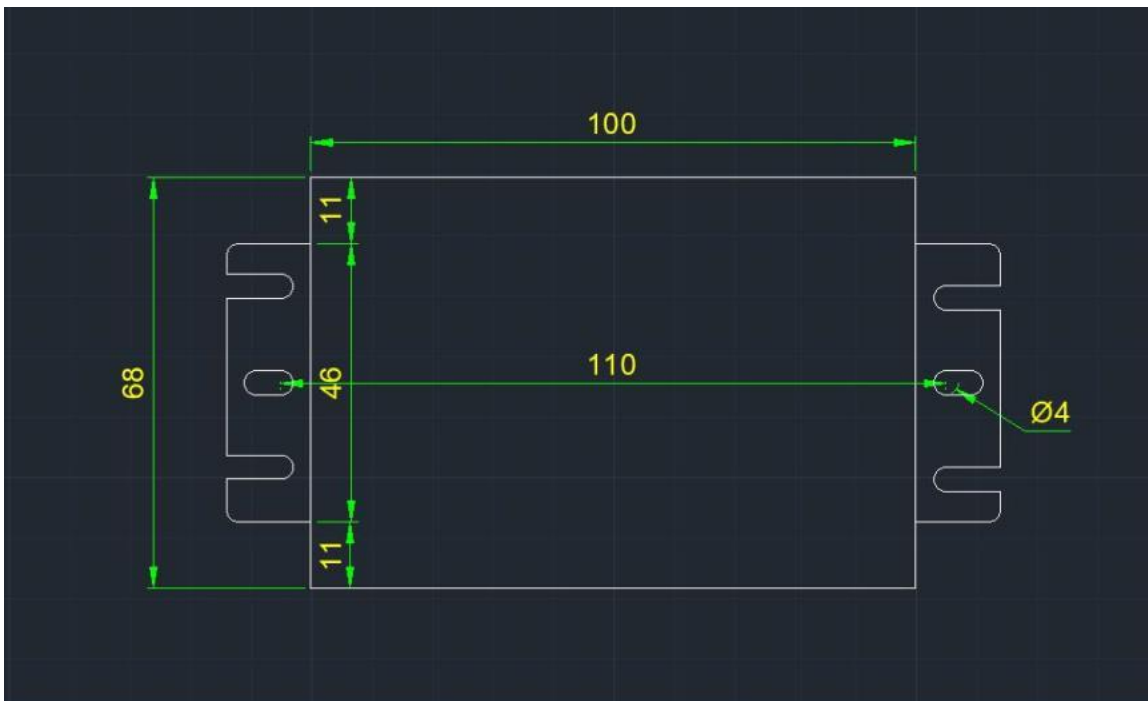
- The I NB-IOT wireless communication mode;
- Both I has 0-10V and PWM dimming output;
- I External antenna, transmit power of  $23 \pm 2\text{dBm}$ , accept the sensitivity of  $-129 \pm 1\text{dBm}$ , through huawei compatible certification;
- I The success rate of primary network connection is above 99.9%;
- I Realize current / voltage, active power, apparent power, power, frequency, power factor and other multi-function detection;

- I High-precision data acquisition scheme, to meet the national electricity meter metering standard;
- Function of I 1 road 0%~100% arbitrary proportion 1-10V / PWM infinite dimming output;
- I Overcurrent / overload / undervoltage, overload protection, lamp condition and line detection, and default lighting
- Light and other functions;
- I Actively report various faults; including lights, drives, line faults, etc.;
- I Supports various custom network analysis data collection functions;
- I Loads lightweight system RTOS, supports data concurrent fault tolerance function, cell reselection, different frequency networking, remote upgrade...
- I Suitable for switching and dimming of various power LED lights and lamps; supporting multiple lights off modes for power drive and line input relay;
- I Safety-based overload protection design;
- I Edge computing, support local policy; network exception / network state local automatic cloud configuration policy;
- I Support time switch, time control mode;
- The I-frequency band: B5 / B8 / B3;

- Plug and I, plug and play, support scanning convenient installation registration;
- I Industrial grade working temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ;
- I IP66 waterproof grade;
- I High lightning protection level  $\pm 6\text{KV}$  (line to line);
- I External antenna; simple, convenient and beautiful installation;
- Response to the instructions sent by the center within I 3 seconds;

## II. Appearance size

Length, width and height =100mm \* 68mm \* 40mm





### III. Technical parameter

communication mode	NB-iot
service voltage	AC: 96~264V
Maximum load current	4A
power	≤400W
The dimming mode	0-10V/PWM
No load power consumption	<1.5W
Carrier operator	Default move

working temperature	-35°C~65°C
Antenna type	outlay
levels of protection	IP67
size (mm)	72mmx66mmx21mm

## IV. installation instructions

For safety, you must operate in case of power failure.

\* Antenna should be avoided from directly touching with metal (including shielded items) Raw, can not be placed in a completely closed iron container. In addition, the installation should be fixed firmly, and avoided Free from line scratches and insulation damage.

A) Connect the drive power supply

Power supply support 0-10V dimming or PWM dimming. The output of the single-lamp controller is connected to the input of the drive power supply. The dimming of the single-light controller is connected to the dimming of the driving power supply.

b) connected load

The output end of the drive power supply is connected to the light source, and the power supply output is DC current.

For c) Access to mains power

If steps A and B are completed, the input terminal of the single lamp controller is connected to the market, The lamps are turned on by default.

\* In addition, the installation should be fixed firmly, and avoid the line scratches and insulation damage.



## V. Wiring mode



## VI. Technical support



[www.xmnengjia.com](http://www.xmnengjia.com)