

NJ-iot305S

Sigfox NEMA Light Controller Product Manual



I.Product Functional Characteristic

NJ-iot305S utility street light controller is constructed in cellular network and adopts Sigfox wireless communication method, with high real-time online rate of single light. It is reduce deployment cost. Sigfox is a wireless technology, which has the features of wide coverage, multiple connections, low cost, low power consumption and excellent architecture.

NJ-iot305S street light controller realises wireless communication, collects and reports input/output current/voltage, active power, apparent power, power, frequency, power factor, temperature, switching status and data;

- The main performance characteristics of this controller:
- Sigfox wireless communication;
- Nema interface;
- With RTC function;
- With GPS position function;
- With Tilt & Movement Detection function;
- With battery;
- Support global frequency bands, such as Southeast Asia/Europe/Africa/America, etc;
- Operating voltage: global universal voltage, AC 90-265V, 50-60Hz;
- 1 function of 0%~100% arbitrary ratio 0-10V/PWM infinitely dimmable output;
- Simultaneous 0-10V, PWM dimming output;
- Single output safety load current is 4.5A, internal relay load current is 10A;
- Achieves multi-functional detection of current/voltage, active power, apparent power, power, frequency, power factor, etc;
- Supports timer switch on/off, time control method;
- Supports customised terminal self-running, lamp post tilt, lamp post leakage and other detection alarms as well as positioning functions;
- With over-current/over-voltage/under-voltage, overload protection, lamps and lanterns condition and line detection, and default light on;
- All kinds of fault active reporting; including lamps, drivers, line faults and so on;
- Supports single and dual lamp control and detection, suitable for LED lamps, high pressure sodium lamps, metal halide lamps and energy-saving lamps and other lamp types;
- NJ-iot305S is suitable for all kinds of power LED lights, lamps and lanterns switching and dimming use; support power supply driver and line input relay a variety of light off mode;
- Band support full network pass, support for mobile, linkage, telecom, the series of products also has a foreign version, support for global frequency bands
- Plug and play, support scanning convenient installation and
- registration;
- Industrial grade operating temperature: -35 °C ~ +65 °C;
- Waterproof grade IP65;

II. Appearance size

The NJ-iot305S series single and dual lamp controls are housed in a protective

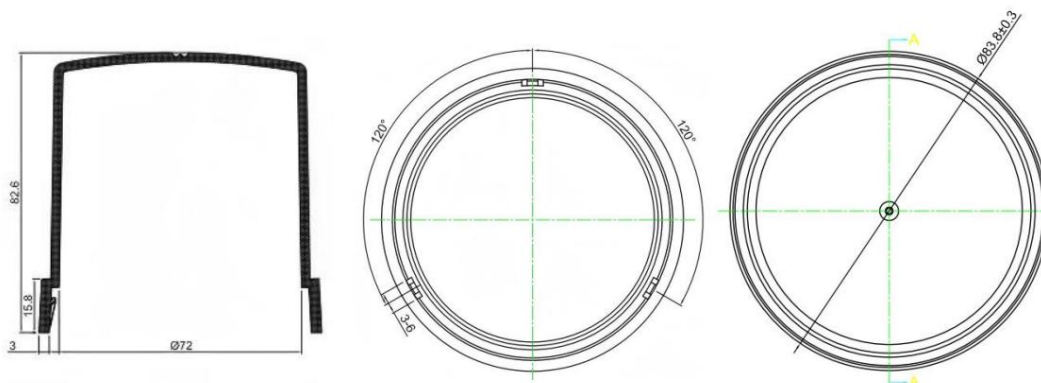
plastic enclosure to protect the internal circuits and components from damage caused by the external environment. Choose a suitable location to mount the NEMA interface light control to ensure that the mounting location is easy to connect power and signal wires, usually on a lamp post or control box. The light control contains a 5-wire/7-wire (single/double) base.

The specific shape and mounting dimensions are shown in the figure below:

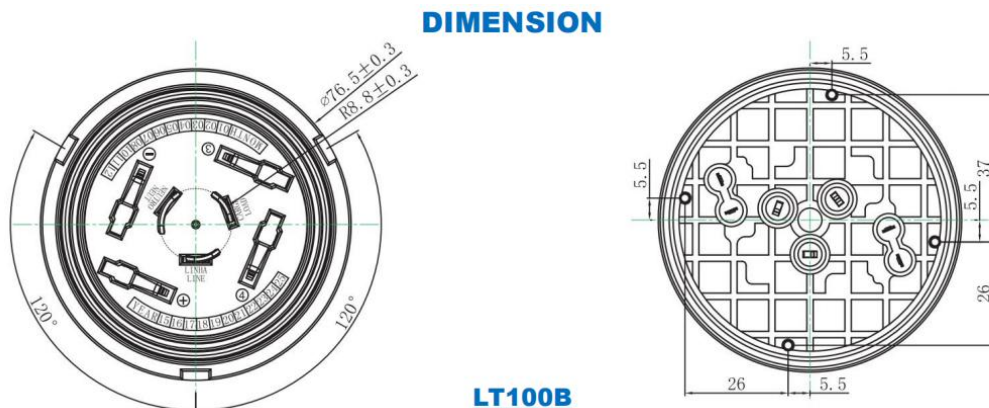


Product physical size: 84mm*83mm (W*H)

Detailed installation dimensions of NJ-iot305S are shown below:

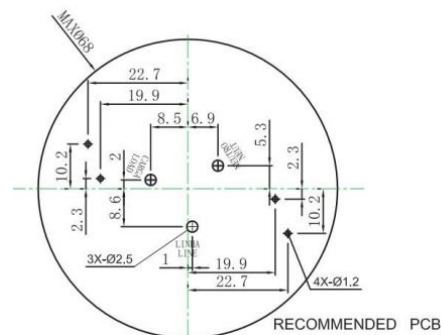
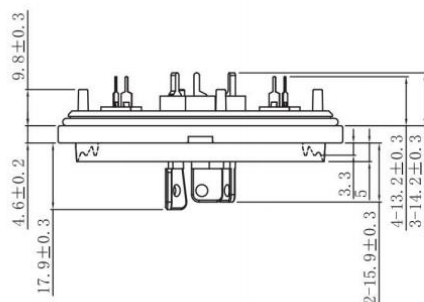


Product base size: 76mm*37mm (W*H)



DIMENSION

LT100B



III. Light controller technical parameters

Communication method	Sigfox
Supply Voltage	AC: 90-265V
Maximum load current	4.5A
Wattage	≤1000W
Dimming mode	0-10V/PWM
No-load power consumption	<2W
Working Temperature	-35° C ~ 65° C
Protection Grade	IP65
Product Size	84mm*83mm(W*H)

IV. Model description

Example of order marking

NJ-iot305S

default version:

NJ-iot305S Single Light Controller Version

Sim card: default SIM small card insertion, support for guest card

V. Installation instructions



For safety, be sure to operate with the power off.

a) Connect the driver power supply

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

b) Connecting Load

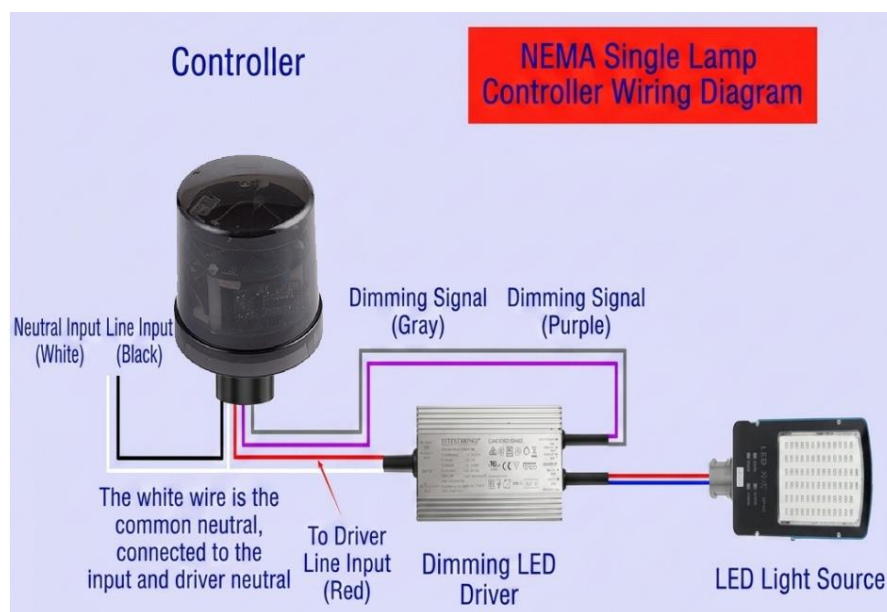
The output of the driving power supply is connected to the light source, and the power output is DC.

c) Connect to the mains

Ensure that the input of the single-lamp controller is connected to the mains when steps A and B are completed. Lamps are switched on by default

*Additionally the installation should be fixed securely and avoid scratches and insulation damage to the wiring

VI. Connections



NEMA Light Controller Wiring Diagram

VII. Technical support

Amber IoT (Pty) Ltd