

WxS885C-9112xx_(xx:11~23)

LoRaWan Power Switch Panel

WxS885C-9112xx is a standard LoRaWAN[®]. The standard 86 wireless intelligent switch of the protocol can be compatible with standard LoRaWAN[®]. The protocol gateway enables bidirectional communication and enables wireless networking of switches. Adopting a zero live wire power supply design, it supports remote switch control, local button switch control, timed reporting of switch status, and other functions. Supports Bluetooth function, and can quickly configure communication frequency and other related parameters using WeChat mini programs or dedicated apps.

Adopting the IoT specific narrowband communication technology LoRa, it has the characteristics of long communication distance, strong penetration, anti-interference, and low power consumption. Suitable for various IoT application scenarios such as smart parks, smart buildings, industrial IoT, smart factories, environmental protection and energy conservation.

Product Highlights

- ❖ Dedicated wireless technology LoRa[®], Long communication distance, strong penetration, spread spectrum anti-interference, ultra-low power consumption;
- ❖ International standard protocol LoRaWAN[®], The network topology is simple, the number of gateways in the solution is small, and the maintenance cost is low;
- ❖ Key switch control, lightly touch the self popping button, green LED indicator, synchronous feedback and reporting of button actions;
- ❖ Wireless remote control, controlled by LoRa downlink commands, providing feedback on switch status data;
- ❖ Regularly report status, and the reporting frequency can be customized;
- ❖ Three switch outputs, Single channel maximum load 2000W (WxS885C-911211, WxS885C-911212, WxS885C-911213); Single load current range of 0.1~10A (WxS885C-911221, WxS885C-911222, WxS885C-911223);
- ❖ Neutral wire live wire power supply, 190~240VAC 50/60Hz;
- ❖ Bluetooth on-site configuration, configuring device communication parameters and application parameters through WeChat mini program or dedicated APP;
- ❖ Equipped with a hardware watchdog to ensure stable operation of the device 24/7;
- ❖ Fireproof and flame-retardant shell, rated V0 fire-resistant.

Specifications

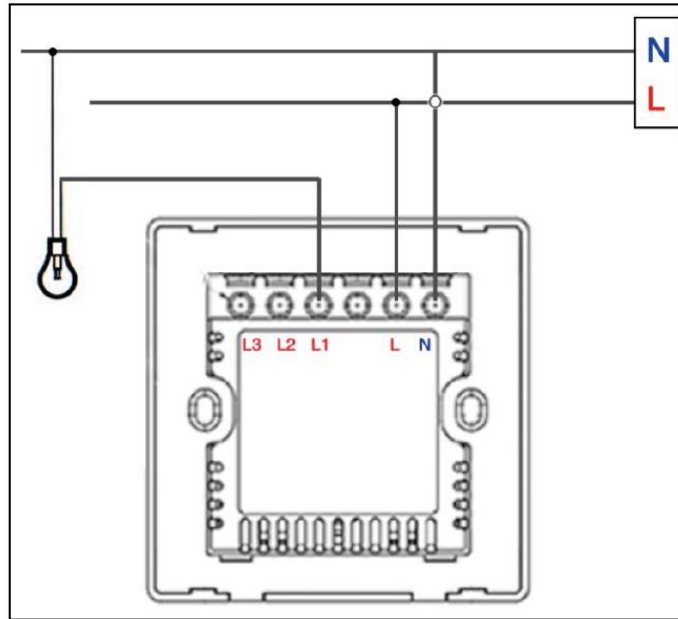
Parameters						
Product Number	WxS885C-911211	WxS885C-911212	WxS885C-911213	WxS885C-911221	WxS885C-911222	WxS885C-911223

Product picture						
Output channels	1	2	3	1	2	3
Key control	lightly touch the self-popping button, lightly touch the on or off button, and turn on the green light when the output is turned on					
Wireless control	Control the on/off of switches through LoRa gateway downlink commands					
Output load	2000W per channel			Single current range 0.1~10A		
Bluetooth configuration	WeChat mini program or APP to configure the communication and application parameters of the device					
Power on parameter frame	One data sent after powering on or restarting, including communication parameters and application parameters					
Status heartbeat frame	One device status data frame that is periodically reported					
Instruction feedback frame	A feedback data frame in which the device receives a downlink instruction					
New firmware upgrade	Bluetooth OTA upgrade					
Wireless						
Wireless Standard	LoRaWAN1.0.2					
Operating Frequency Band	CN470/EU868/US915/AU915/AS923					
Communication mode	Class C (instant downlink communication)					
Transmit Power	≤17dBm					
Receive Sensitivity	-138dBm (Min.) @ BW=125KHz, SF=12					
Material						
Size	86 * 86 * 36.5mm					
Working temperature	-10~+60 ℃					
Working humidity	5%~90% RH (non-condensing)					
Installation method	Standard 86 box					
Power						
Working power supply	190~240VAC 50/60Hz (neutral wire)			190~240VAC 50/60Hz (single live wire)		

Installation

The following are installation instructions for WxS885C-911211~WxS885C-911213:

Attention: The neutral and live wires cannot be reversed.



Quick installation:

- 1) Select the reserved junction box position on the wall to install the switch;
- 2) Before installation, cut off the power and use a measuring pen to measure whether the AC power is completely disconnected to ensure personnel safety;
- 3) Insert a flat screwdriver into the small hole at the bottom of the front panel of the switch and open the outer shell of the switch;
- 4) In the event of a power outage, connect the live wire of the AC power to the "L" of the switch, and connect the neutral wire of the AC power to the switch. Connect the "N", "L1~3" light bulbs and fix the switch to the screw hole of the junction box with the standard screws;
- 5) In the event of a power outage, close the socket housing, turn on the power, and check if the indicator light status is normal.

Network debugging:

Ensure that the communication frequency of the device is consistent with that of the gateway, and first register and add device information and keys in the network server.

LoRaWAN terminals have two network access methods: OTAA and ABP, and the manufacturer provides triple information ABP (DevAddr, AppSkey, NwkSkey), OTAA (DevEUI, AppKey, AppEUI), OTAA devices need to be registered on the network server before proceeding.

When powered on, a network access request will be sent, and the network server will only allocate a communication short ground after receiving the request and matching it with the registration information.

Address Devaddr to the terminal.

The device automatically turns on after being powered on,.

If the network access mode is ABP, the button indicator light will light up for 1 second and flash twice before the device works normally.

If the network access mode is OTAA, send a network access request when turned on. After successful network access, the button indicator light flashes twice and works normally; After network access failure, the button indicator light remains on, the device does not work, the button is invalid, and waiting for another network access request to be sent until network access is successful.

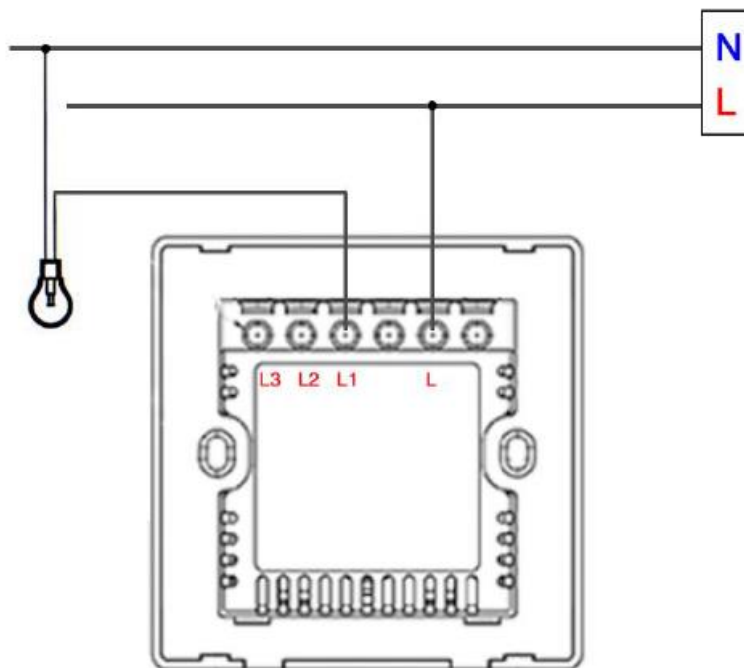
After successful network access, check whether the LoRa network server NS is receiving data normally, or directly check the application server data.

Indicator light status description:

1. Network access indication: OTAA keeps on when network access is unsuccessful, and turns off when network access is successful; ABP lights up for 1 second before turning off when connected to the network.
2. Output indication: After entering the network, the green light for turning on the output is always on, and the green light for turning off the output is off.
3. Communication indication: When receiving a downlink command, the green LED flashes rapidly.

The following are installation instructions for WxS885C-911221~WxS885C-911223:

Attention: The neutral and live wires cannot be reversed.



Quick installation:

- 1) Select the reserved junction box position on the wall to install the switch;
- 2) Before installation, cut off the power and use a measuring pen to measure whether the AC power is completely disconnected to ensure personnel safety;
- 3) Insert a flat screwdriver into the small hole at the bottom of the front panel of the switch and open the outer shell of the switch;

4) In the event of a power outage, connect the live wire of the AC power to the "L" of the switch, and connect the "L1~3" to the light bulb using the standard screw

Secure the switch to the screw hole of the junction box;

5) In the event of a power outage, close the socket housing, turn on the power, and check if the indicator light status is normal.

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Application location

Smart Hotel, Smart Building, Smart Elderly Care, Indoor Parking Lot, Digital Building Park.