Single Switch Module T1 (With Neutral)

Product Specification

1 Product Introduction

1.1 Product Overview

Single Switch Module T1 (With Neutral) is a relay control module based on Zigbee 3.0 wireless communication protocol. This product is mainly used to control the power on/off of lights or fans. Added to a hub, it is capable of remote or timing control, power detection and battery monitoring through the app, and interact with other smart devices by creating automations and scenes.

1.2 Basic Description

Brand	Aqara
English Name	Single Switch Module T1 (With Neutral)
Manufacturer	Shenzhen Lumi United Technology Co., Ltd.
Manufacturer Address	8th Floor, Jinqi Wisdom Valley, No.1 Tangling Road, Liuxian Avenue, Taoyuan Street, Nanshan, District, Shenzhen

1.3 Product Features

Smart interaction： Based on Zigbee 3.0 wireless communication protocol, the "smart interaction" feature can be realized among the devices.

Timing on/off: The "timing on/off" feature can be realized by the app or voice control.

External control switch connection: The "external control switch connection" feature can be realized when network is connected by external switch.

Remote control: The "remote control" feature can be realized by the. app.

Overcurrent and overheat protection: The protective mechanism is built. in the product program. When the temperature and load of the device exceed the limit, the relay will disconnect automatically.

Power monitoring: The "power monitoring" feature can monitor, record. and calculate the power consumption.

2 Product Picture

3 Product Parameters

3.1 Basic Parameters

Product Model	SSM-U01
Product Dimensions	42.9×40×19.9 mm
Product Color	White
Net Weight (kg)	0.03
Gross Weight (kg)	0.05

3.2 Product Electrical Parameters

Category	Description
Input Power	100-250VAC, 50/60Hz, μ
Input Current	MAX 10A (resistive load)

Rated Load	Min 3W, Max 2500W（resistive load）， μ
Please do not overload it. Please make sure that the 10A over-current protection circuit breaker on the front end of this product works normally before it powers on.	

3.3 Product Wireless Parameters

Category	Description
Wireless Connection	Zigbee 3.0
Wireless Standard	IEEE 802.15.4
Wireless Frequency	2.4GHz（2400～2483.5MHz）
Receiver Sensitivity	-102dBm
Effective Communication Distance	30m（indoors）

3.4 Environmental Parameters

Category	Description
Operating Temperature	0℃ ~ 35℃
Operating Humidity	5% ~ 95% RH,non-condensing
Storage Temperature	-10℃ ~ 50℃

4 Product Description

4.1 Indicator Light Description

Indicator Light Status	Status Description

Blue light flashes once	Device power on
Blue light blinks quickly	Zigbee network is connecting
Blue light keeps on	Zigbee network works properly
Red light blinks quickly	High-temperature alarm
Red light blinks slowly	Zigbee network is not connected

* The indicator light blinks quickly: Blinking quickly once means the light

keeps on for 0.1s and off for 0.2s

4.2 Button Feature Description

When the device powers off, the indicator light will not respond after you

press the button.

Button Operation	State Description
Single press	Turn on/off
Long press for 8s	Reset/connect to network
Triple press	Effective range test
Turn on and off external switch five times continuously	Reset/connect to network
Turn on and off external switch three times continuously	Effective range test

5 Product Testing Information

5.1 Reliability Testing and Quality Testing

No.	Testing Type	Testing Item	Component Testing
1	Reliability testing	Falling testing of package（0.5H）	Product (with package)
2		Falling testing of colored box/transport case（0.5H）	Product (with package)
3		Transport vibration testing（3H）	Product (with package)
4		High temperature storage testing of package（72H）	Product (with package)
5		Low temperature storage testing of package（72H）	Product (with package)
6		High temperature stacking testing（73H）	Product (with package)
7		ISTA 3A transport	Product (with package)

5.2 Certification Information

No.	Country/Region	Certification Name	Remark
1	EU	CE-RED	6pcs normal prototypes（each model）
2		CB	

3		RoHS-EU	2pcs whole devices（each model）
4		REACH-201+PAHs	1pc whole device（each model）
5		POPs	1pc whole device（each model）
6		WEEE	1pc whole device（each model）
7		Packaging	20g/material（2pcs/model, colored package）
8	Russia	EAC	2pcs whole devices（each model）
9		FAC	0（reused prototype）
10	Other countries/areas	Zigbee	2pcs normal prototypes（each model）
11		HomeKit	5pcs normal prototype（each model）

6 Installation& Quick Setup

6.1 Installation

Please make sure that the main switch of the power supply is off before installation!

After the device powers on, all the conductors (including the antenna) of the

device may be connected with strong electricity. Please make sure that the

product is fixedly installed in a protective environment that cannot be reached

by hands, such as switch pattress and protective cover of the bulb.

1. According to the requirements, please connect the wires through any of

the following methods;

Method 1: L1 is connected to the load wire. S0 and S1 are connected to

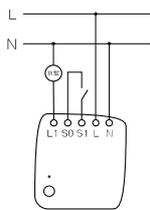the two ends of the external switch respectively. L is connected to the

图1

live wire, and N is connected to the neutral wire (Diagram 1)

Method 2: L1 is connected to the load wire. One end of the external

switch is connected to S0, and the other end is connected to the live

wire. L is connected to the live wire, and N is connected to the neutral

wire (Diagram 2). If the external switch is a dual-control switch, the end

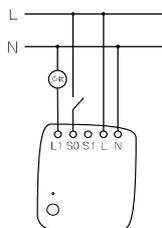of the original switch, which is connected to the load wire, can be
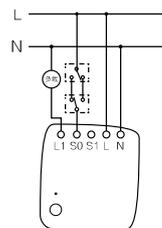

图2
图3

connected to S0 to realize an external dual control (Diagram 3).

* The maximum cross-sectional area of the conductor is 2.5mm2.

* If no external switch is connected, S0 and S1 can be left in idle and the

device can be controlled by automation or the app.

2. The single switch module is fixedly embedded in the device (such as

the pendant lamp and the switch pattress) to avoid the danger of
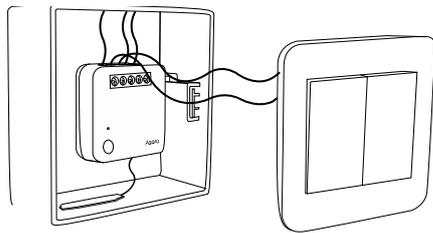
accidental touch;

3. Paste the fixed antenna;

* The inner conductor of the antenna is connected with strong electricity.

Please do not put it in an environment that could be touched in your daily

life; if it is damaged, please do not touch it, and replace or repair it in

time.

* When the control module is installed in the switch pattress, it is

recommended to paste the antenna on the side wall of the plastic

pattress and keep it parallel to the wall; if the switch panel bracket is

made of plastic, it is recommended that the antenna is no more than

10mm away from the wall; if the switch panel bracket is made of metal, it

is recommended that the antenna be more than 15mm away from the wall

(metal bracket).

＊If it is installed in a metal pattress, it is recommended to paste the antenna inside the plastic switch panel, but sufficient space is required for the panel.

＊The pasting position should try to avoid the metal, wire, and module itself; if it is installed on the ceiling or inside the lights, the antenna should avoid too much shielding.

＊Please do not squeeze, bend or pull the antenna with force, otherwise the antenna may be damaged.

4. Turn on the main power switch, and press the button on the module or on the external switch. If you can turn on/off the device normally, this indicates that it works normally.

6.2 Quick Setup

1. Before activating the accessory, please make sure you have the Aqara Home app downloaded and Aqara hub installed.

2. Please open the app, tap "Home" and then tap "+" in the top right corner to enter the "Add Device (Accessory)" page. Select "Single Switch Module T1 (With Neutral)", and add it according to instructions.

＊If the connection fails, please move the Hub closer to the Single Switch Module T1 (With Neutral), in and try again.

Effective Range Test: Quick press the push button on the accessory 3 times. If the Hub makes voice prompts, it indicates that the accessory can communicate effectively with the Hub.