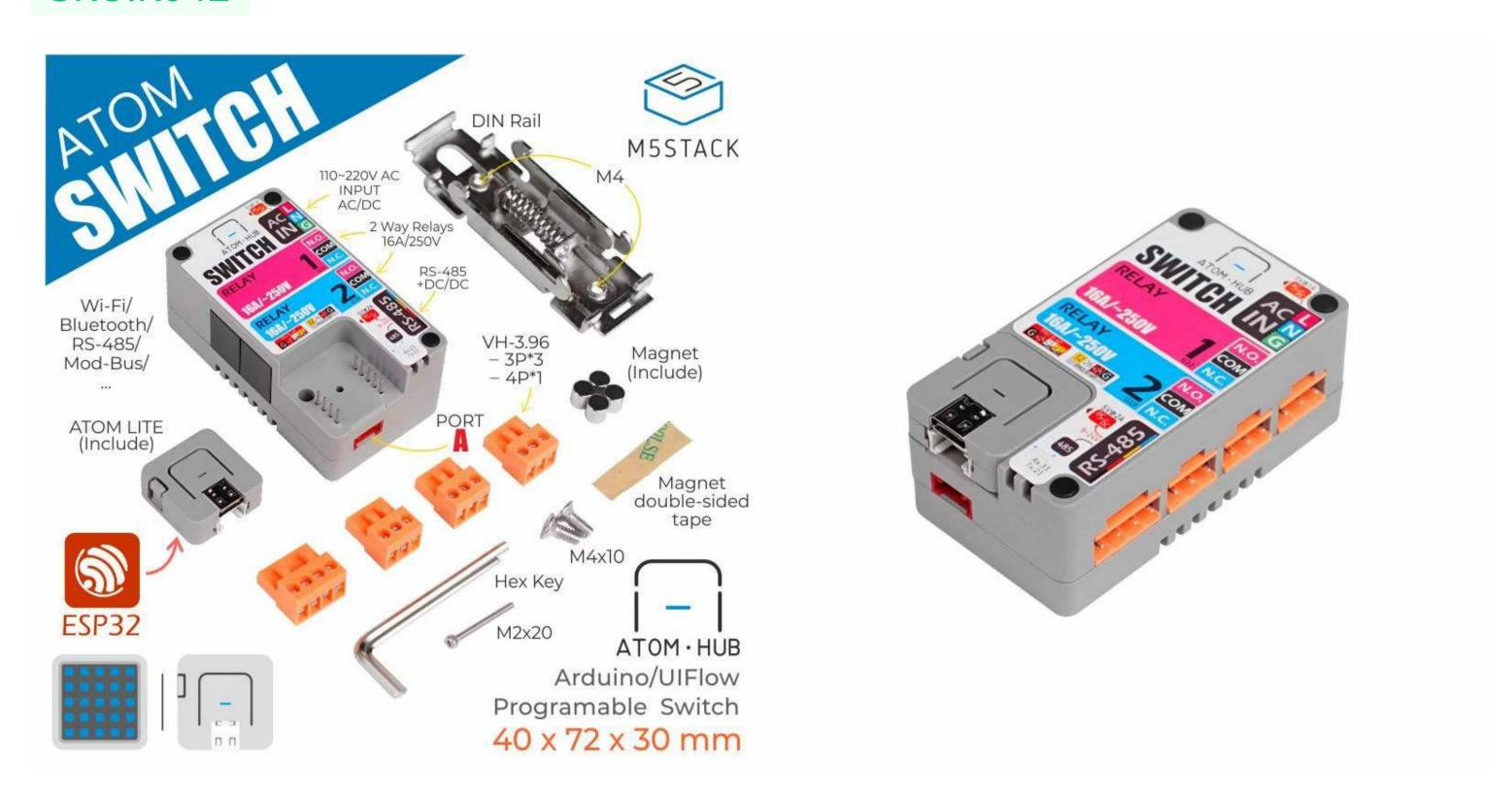
# ATOM SWITCH Kit

#### SKU:K042



#### Description

**ATOM SWITCH** is a bi-directional control programable switch for the M5ATOM. It can be connected to bi-directional AC circuits for simultaneous on-off control. The on-board relay can support up to 250V / 10A AC(Instantaneous current 16A). Built in step-down module can provide 5V / 1A DC power supply for ATOM. In order to ensure safe use, its DC circuit has overheating and short circuit protection functions. In order to facilitate the use of users in industrial scenarios, an SP485EE level-conversion IC is built in. There are also a set of RS485 interfaces provided for the user to connect RS485 equipment.RS485 has the ability to supply power to ATOM, the support voltage is 9-24V. In addition, a set of HY2.0 interfaces is also provided for connecting I2C peripheral equipment or general I/O equipment. With the Bluetooth and WiFi functions of M5ATOM, you can easily setup a remote control switch. If you have multiple M5ATOM HUB SWITCH modules, you can set them up in parallel through the RS485 interface.

#### Product Features

- Compatible ATOM Matrix/ATOM Lite
- Built-in AC-DC circuit
- 2-way relay
- Built-in RS485 level-conversion, supporting Modbus
- HY2.0 port extend
- Short circuit protection
- Remote control via Bluetooth, WiFi and RS485

### Include

- 1x ATOM SWITCH
- 1x ATOM Lite
- 4x Magnet
- 1x double-side tape
- 1x DIN Rail
- 1x 3.96\*4P plug

- 3x 3.96\*3P plug
- 1x M4 Hex Key
- 1x M2 Hex Key
- 2x M4\*10mm Hexagon countersunk screw
- 1x M2\*20mm Hexagon socket cup head machine screw

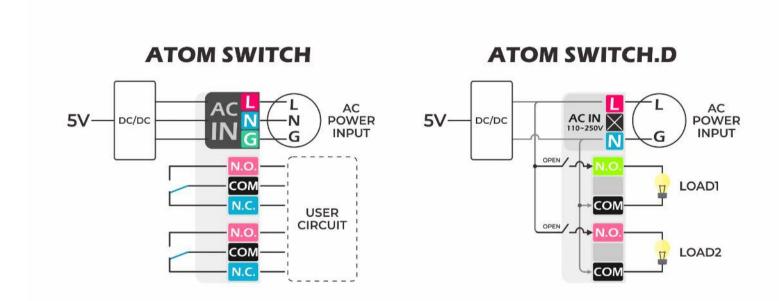
## Applications

Intelligent switch

# Switch & Switch-D Compared

/	Switch	Switch-D			
Relay Current	AC 250V/10A	AC 250V/5A			
Power Input	HT3.96R 2P	HT3.96R 3P			
Relay Interface	(NO,NC,COM) x2	(NO(connect to the AC power L line), COM(connect to the AC power N line)) x2			

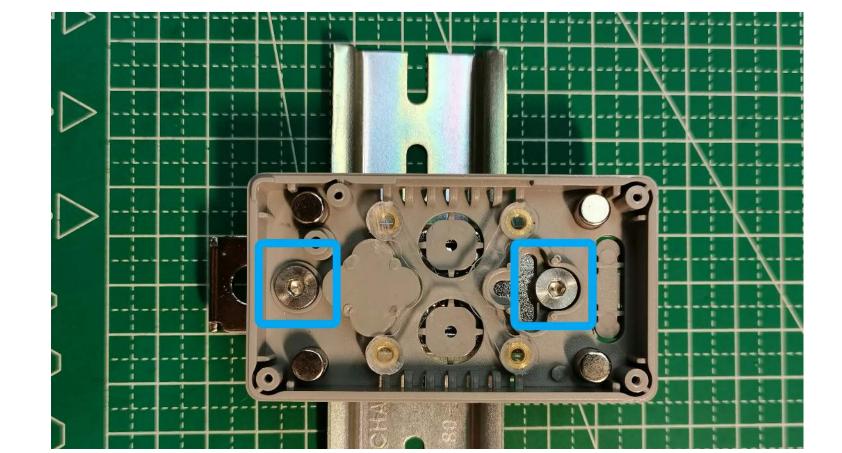
#### Please refer to the figure below for details

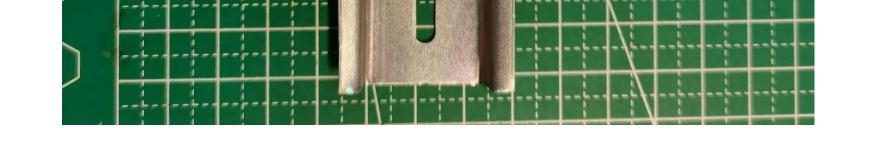


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The kit is equipped with a guide rail firmware fixture, please refer to the following figure for the specific installation method:







# Specification

Resources	Parameter Parame			
Relay	AC 250V/10A(Instantaneous current 16A), DC 5V/1A			
Switch power supply(AC-DC)	AC 250V-DC 5V			
RS485 supply voltage	9V-24V			
Interface	1x HY2.0(PORT A), 1x HT3.96R 4P(RS485), 2x HT3.96R 3P(Relay), 1x HT3.96R 3P(AC/DC IN)			
Net weight	134g			
Gross weight	158g			
Product Size	72*40*30mm			
Package Size	104*77*35mm			
Case material	Plastic ( PC )			

## EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

Download Windows Version Easyloader

Download MacOS Version Easyloader



#### **Description:**

Press the key to control the switch. The status of breathing light indicates the relay serial number and switch status. When the red light or green light is on, press the key to switch the status

#### Related Link

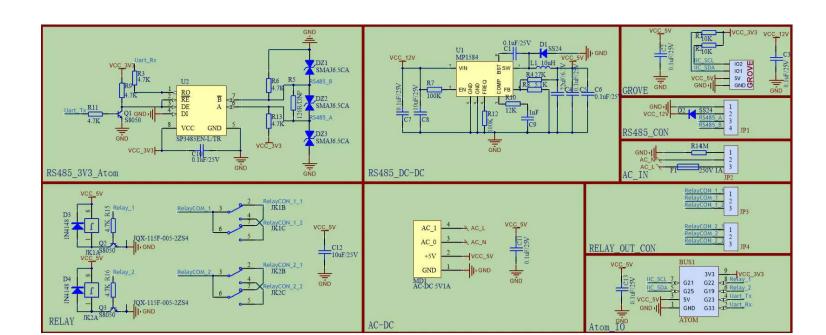
Datasheet

• **SP485EE** 

#### Pin Map

ATOM	22	19	33	23	25	21
ATOM HUB SWITCH	Relay1	Relay2	RX	TX	SDA	SCL

### Schematic



# Example

#### Arduino

Click here to download the Arduino example

#### **UIFlow**

Click here to download the UIFlow example

```
向引脚 19 数字写入 0
A wasDoublePress
                          赋值 Num2 为 1 - Num2 ¬
 ② 如果 Num マ =マ 1
                           Ø 如果 Num2▼
                           执行 向引脚 22 数字写入 1
    等待 200 ms
                          否则 向引脚 22 数字写入 0
    等待 200 ms

 如果  Num2  ■▼ 1
                           按钮 A wasPressed wasPressed was
                           赋值 Num > 为 【 1 - Num >
    等待 200 ms

 如果 Num ▼

    等待 200 ms
 等待 500 ms
```