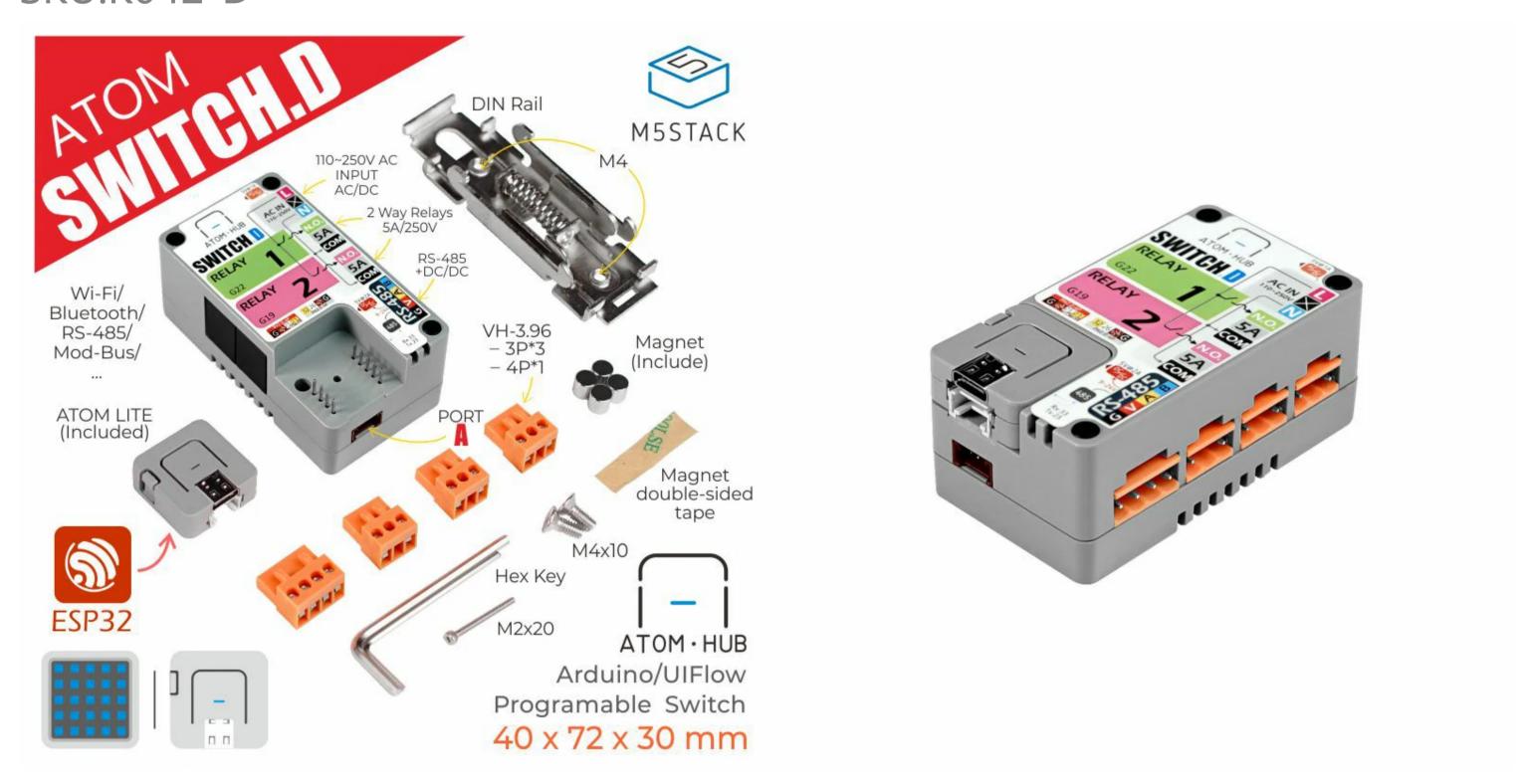
# ATOM HUB SWITCH D

SKU:K042-D



### Description

Atom Hub Switch D is a dual relay expansion kit. The D in the name stands for "Direct" since the power supply is directly connected to the relays. The AC power supply flows to the NO(Normally Open) contacts of the two relays and can be controlled via the M5Atom. When in use, the user only needs to connect the electrical load to the relay, and there is no need to connect the power line separately. Compared with the previous relay control scheme, this module will be more concise and efficient in controlling the electric load. In addition to the power supply for the relay, the input power supply will also provide 5V/1A DC power supply for the ATOM through the built-in step-down module. In order to ensure the safety of use, the power input circuit has overheating and short-circuit protection, when the current is too high or a short circuit occurs It can effectively disconnect the circuit to prevent damage to the components. A built-in SP485EE level conversion chip, provides an RS485 communication interface to support multi-device communication. It also integrates a 9-24V step-down 5V circuit to adapt to the power demand in industrial scenarios, and expand power supply capabilities.

A pair of HY2.0-4P ports are included to connect to I2C peripherals or general I/O devices. Combined with ATOM's built-in Bluetooth and WIFI functions, ATOM HUB SWITCH D can quickly build remote device switch applications.

#### **Product Features**

- Compatible ATOM Matrix/ATOM Lite
- Built-in AC-DC circuit
- 2-way relay
- Built-in RS485 level-conversion, supporting Modbus
- HY2.0-4P port extend
- Short circuit protection
- Remote control via Bluetooth, WiFi and RS485

### Include

- 1x ATOM SWITCH D
- 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

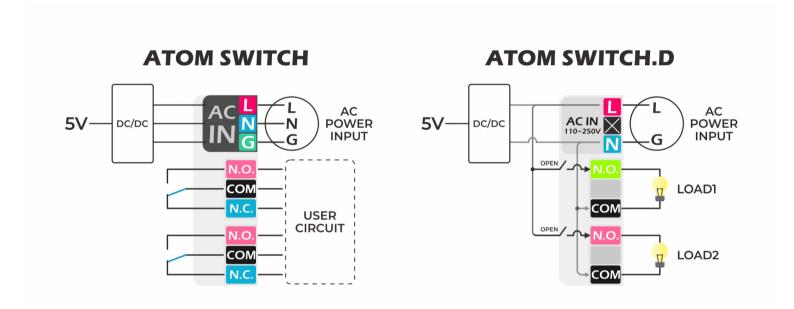
### Applications

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



# 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. Please install the corresponding driver according to the device type. M5Core host Please click here to view the CP210X driver installation tutorial, M5StickC/V/T/ATOM series can be used without driver)

Windows

FactoryTest

#### Related Link

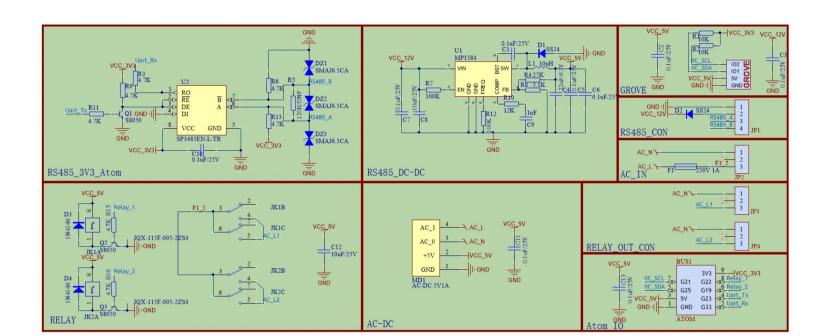
Datasheet

○ **SP485EE** 

### Pin Map

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

### Schematic



### Example

#### 1. Arduino

Click here to download the Arduino example

#### 2. UIFlow

Click here to download the UIFlow example

