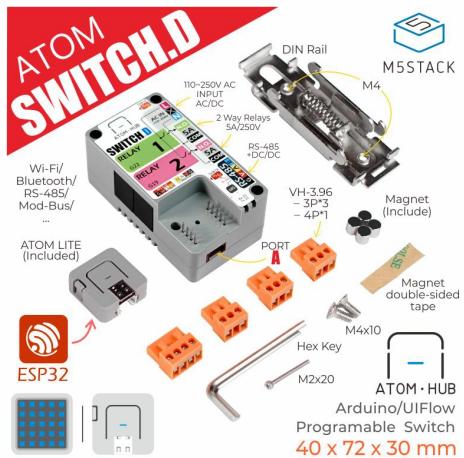


Atom Switch-D

SKU: K042-D



Description

Atom Switch-D is a dual-channel relay power control switch specifically designed for ATOM controllers. The "D" stands for "Directly," indicating that the Switch-D adopts a design where the power input is directly connected to the relays. The AC power flows directly to the NO (Normally Open) contacts of the two relays, which are controlled by the ATOM for switching. When using this module, users only need to connect the electrical load to the relay without the need for additional power wiring. Compared to previous relay control solutions, this module offers a more concise and efficient way to control electrical loads.

In addition to powering the relay loads, the input power also passes through a built-in step-down module to provide a 5V/1A DC power supply for the ATOM. To ensure safety, the power input circuit is equipped with overheat and short-circuit protection, effectively disconnecting the circuit in case of excessive current or short-circuit to prevent component damage. The module features an SP485EE level conversion chip, providing an RS485 communication interface that supports multi-device communication. It also integrates a 9-24V to 5V step-down circuit to meet the power requirements in industrial scenarios, expanding the power supply capability. A HY2.0-4P interface is provided for connecting I2C peripherals or general-purpose I/O devices. Combined with the built-in WiFi functionality of the ATOM, **Atom Switch-D** can quickly set up remote device switching applications.

Features

- Compatible with Atom-Matrix/Atom-Lite
- Built-in AC-DC power supply circuit
- 2-channel relay
- Built-in RS485 level conversion, supports Modbus
- HY2.0-4P expansion interface
- Short-circuit and overheat protection
- Controllable via WiFi and RS485

Includes

- 1 x Atom-Lite
- 1 x Atom Switch-D
- 4 x Strong magnets
- 1 x Double-sided tape
- 1 x Rail clamp
- 1 x HT3.96-4P terminal
- 3 x 3.96 x 2P male headers
- 1 x M4 hex key
- 1 x M2 hex key
- 2 x M4*10mm hex socket head screws
- 1 x M2*20mm hex socket head machine screw

Applications

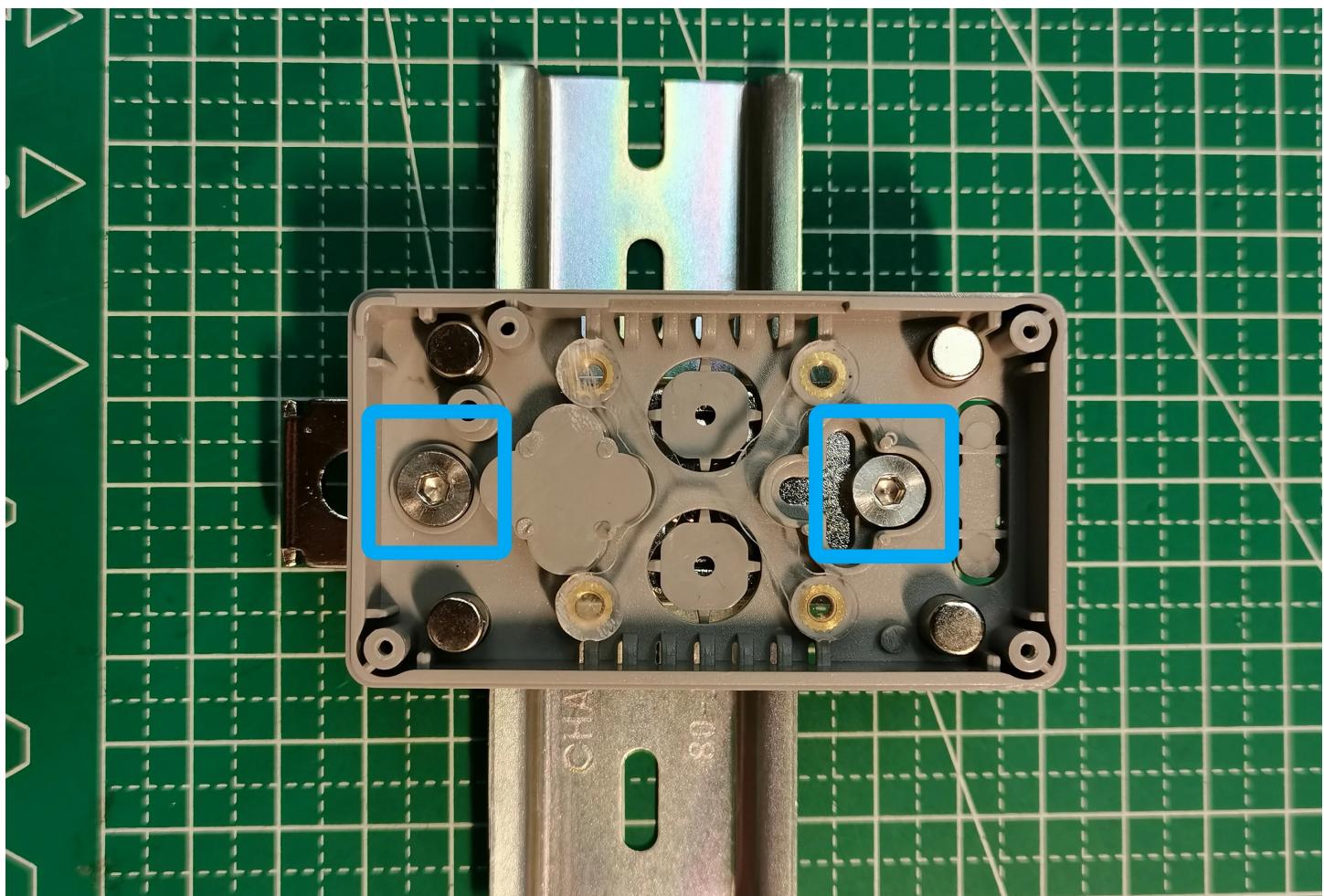
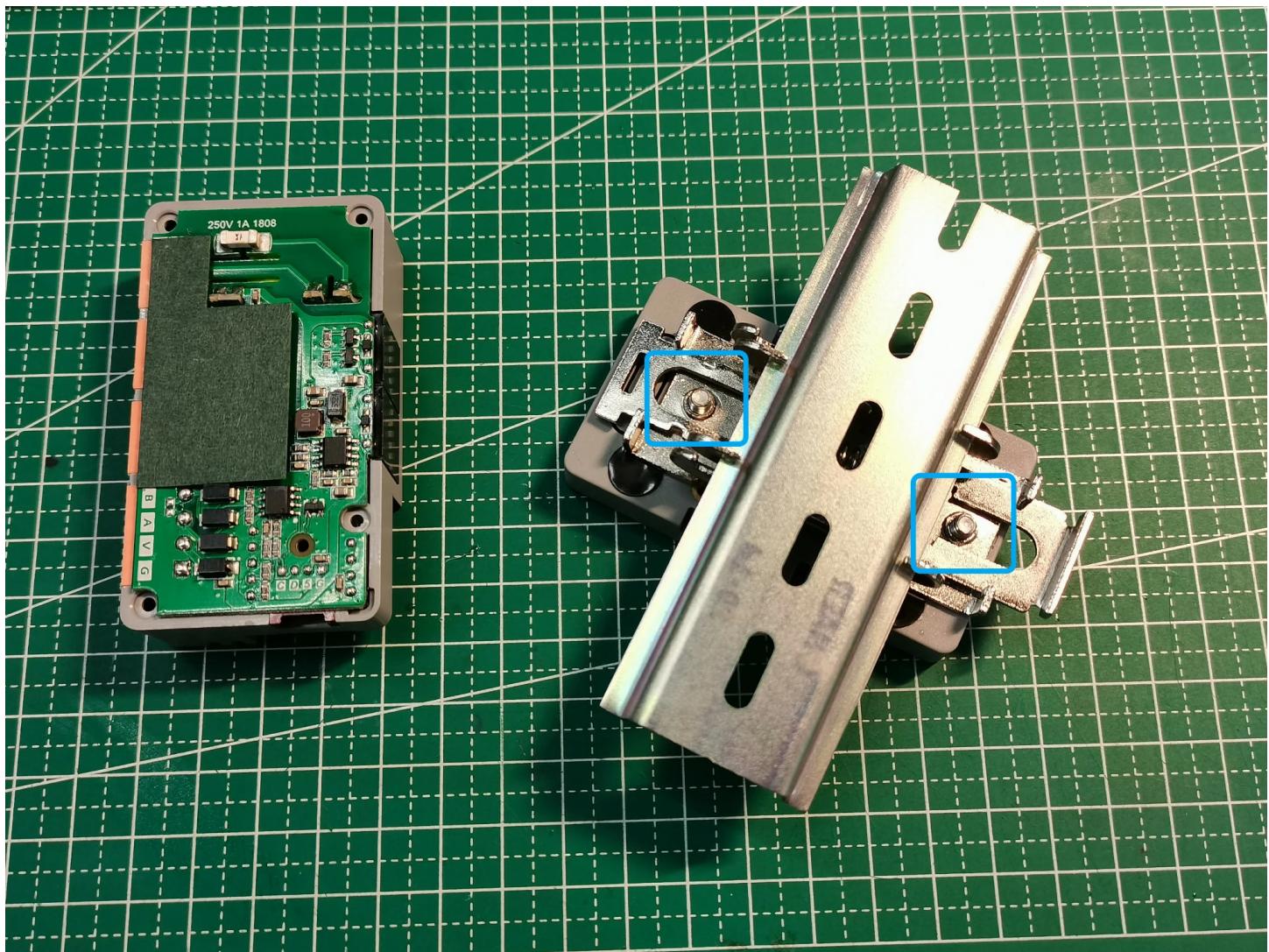
- Smart switches

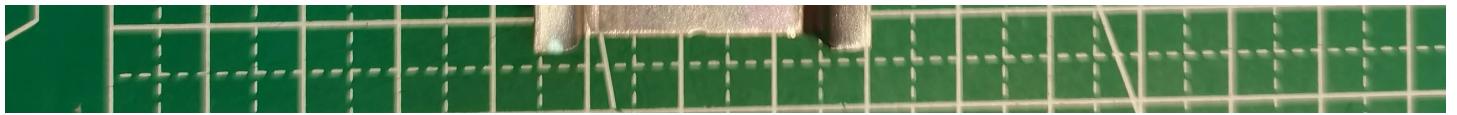
Specifications

Specification	Parameters
Relay parameters	AC 250V/5A
Switch power (AC-DC)	AC 110 ~ 250V -> DC 5V
RS485 supply voltage	DC 9 ~ 24V
Interfaces	1 x HY2.0-4P (PORT.A), 1 x HT3.96-4P (RS485), 2 x HT3.96-2P (Relay), 1 x HT3.96-2P (AC/DC IN)
Housing material	Plastic (PC)
Product Size	72 x 40 x 30mm
Product weight	134g
Package Size	102.0 x 78.0 x 35.0mm
Gross weight	158g

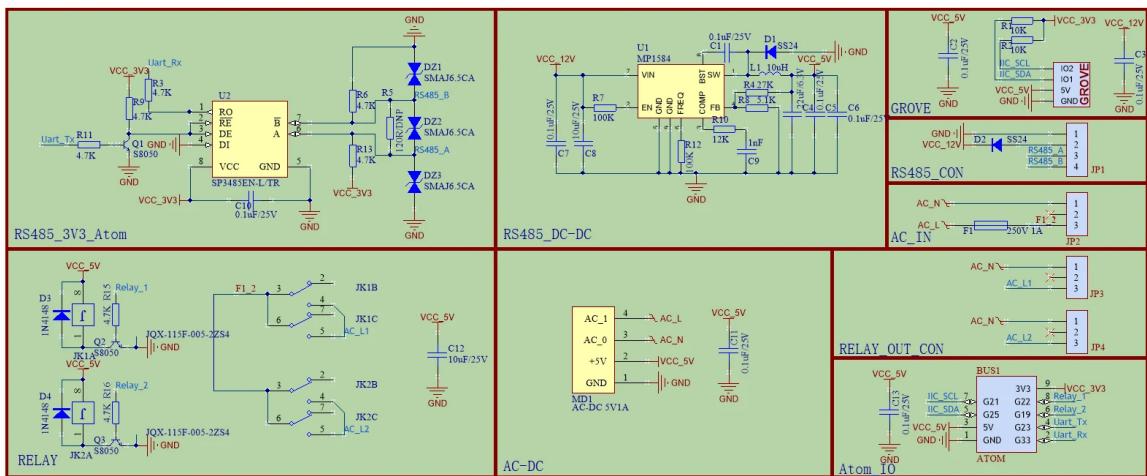
Learn

The kit includes a rail mounting fixture. Please refer to the following images for installation:





Schematics

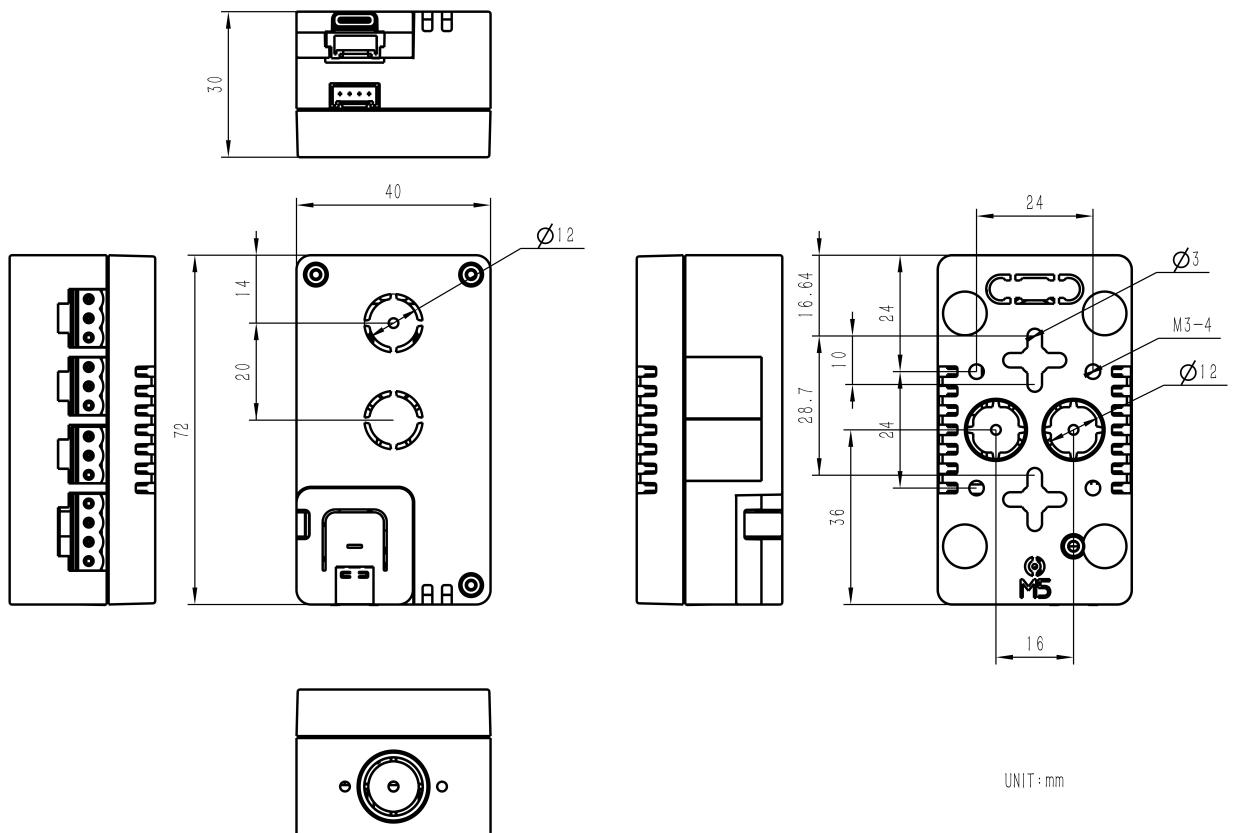


PinMap

PIN	LEFT	RIGHT	PIN
		1	3V3
PORT.A	2	3	RELAY1
PORT.A	4	5	RELAY2
5V	6	7	RS485_RX
GND	8	9	RS485_TX

Model Size

- Atom Switch-D Model Size PDF



Datasheets

- [SP485EE](#)

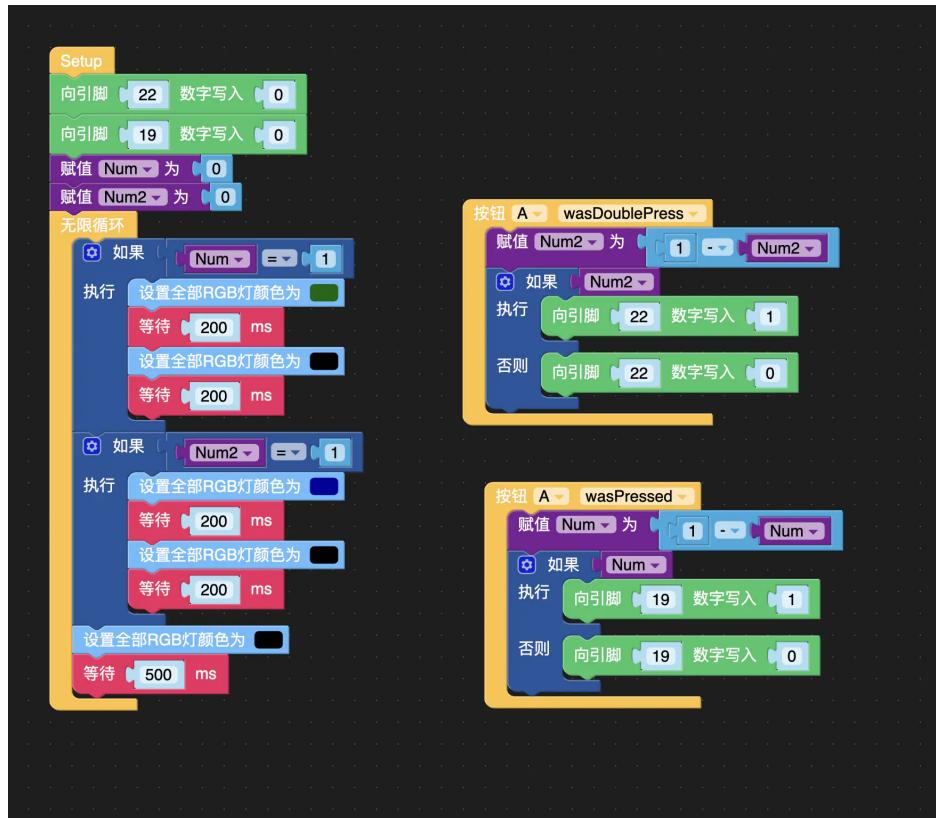
Softwares

Arduino

- [Atom Switch-D Test Example](#)

UiFlow1

- [Atom Switch-D Test Example](#)



EasyLoader

Easyloader	Download Link	Notes
Atom Switch-D Easyloader	download	/

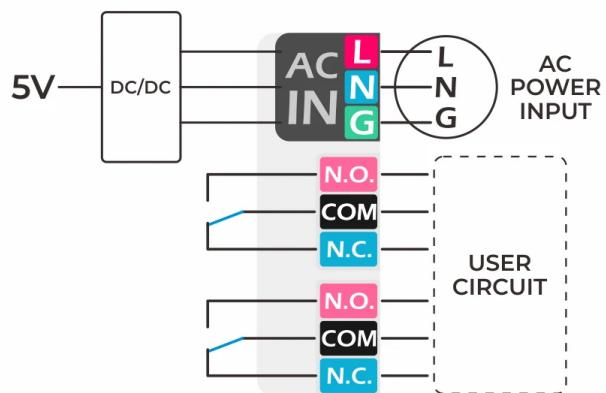
Video

[ATOM_SWITCH_D.mp4](#)

Product Comparison

/	Switch	Switch-D
Relay current	AC 250V/10A	AC 250V/5A
Power input interface	HT3.96R 2P	HT3.96R 3P
Relay interface	(NO, NC, COM) x2	(NO (directly connected to AC L), COM (directly connected to AC N)) x2

ATOM SWITCH



ATOM SWITCH.D

