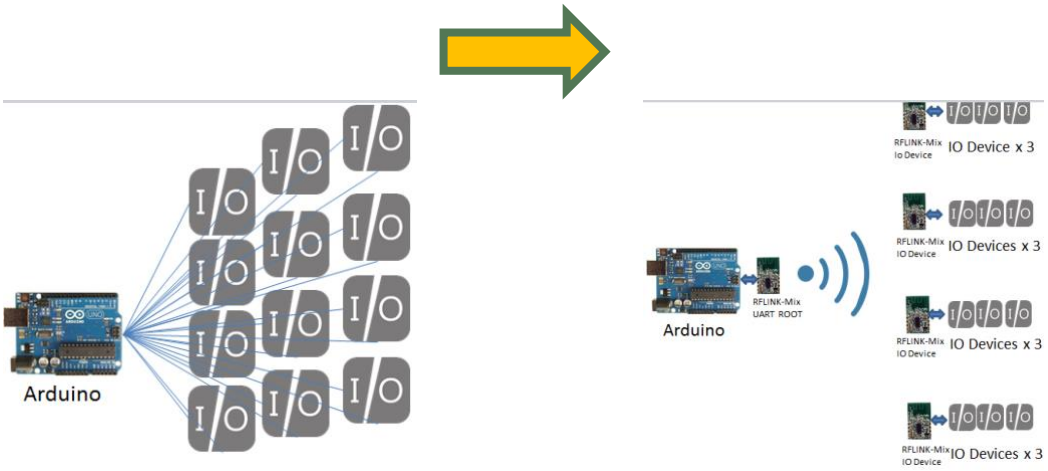
RFLINK-Mix Wireless UART-to-IO

Provide heterogeneous device connection path

An easy way to make all connections wireless



Directory

RFLINK-Mix Wireless UART-to-IO is an easy-to-use module that allows users to quickly set up remote IO devices. You don't need to set up many long cables as the general wired IO suite do, you only need to connect the UART ROOT board of RFLINL-Mix to the master board (Arduino, Raspberry Pi, any other HOST), and the IO device board of RFLINK-Mix to the IO devices, then a wireless IO system is ready to go. Each IO device board has 3 sets of IO port , thus an 1-to-4 RFLINK-Mix UART to IO suite can control 12 sets of IO port.

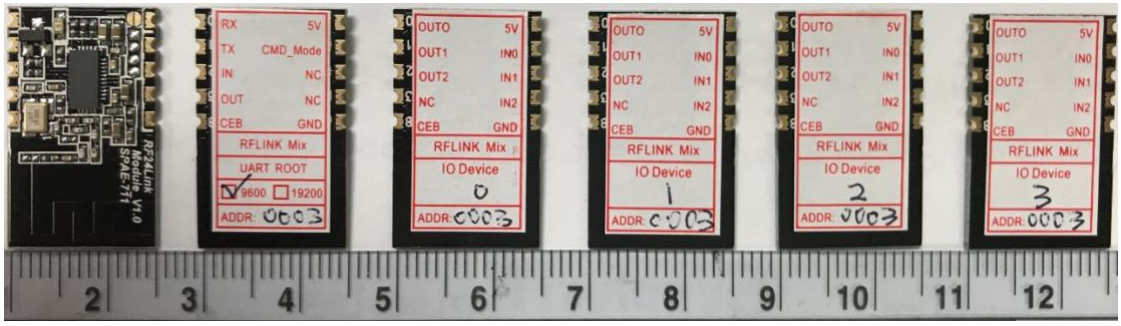
Module appearance and dimension

The RFLINK-Mix UART-to-IO module contains a piece of the UART ROOT end (left). Up to four IO Devices (right side of the figure below, numbered 0 to 3), both Although the appearance is the same, it can be identified by the label on the back of the ROOT or DEVICE Check the box to identify.

As shown in the figure below, the leftmost figure is the part side, and the others are the label side

The Group Address of this group of RFLINK-UARTROOT modules is 0001, Baud rate 19200.

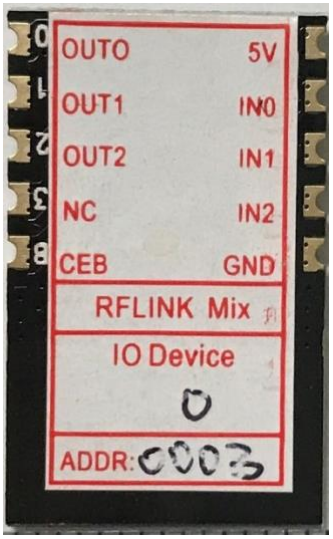
RFLINK I2C Devices as Device 0 , Device 1,Device 2, Device 3, Group Address is 0003。



Module characteristics

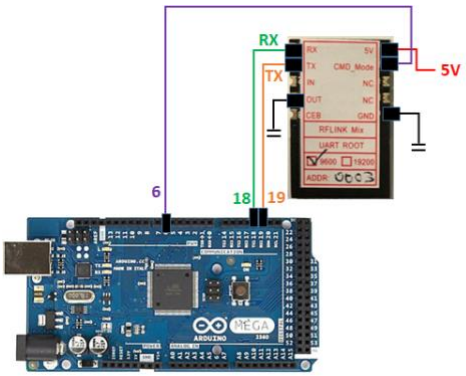
1. **Operating voltage:** 3.3~5.5V
2. **RF Frequency**:2400MHz~2480MHz。
3. **Power** consumption: Transmits about 24 mA@ +5dBm and receives about 23mA.
4. **Transmit power:** +5dBm
5. **Transmission distance: about** 80 to 100m in the open space
6. **Baud Rate(UART ROOT)**： 9,600bps or19,200bps
7. **Dimension :** 25 mm x 15 mm x 2 mm (LxWxH)
8. **Combinations of 1-to-1 or 1-to-many (up to four) IO Device Modules** are **supported up to 12 groups IO, 1-to-many use in command mode with command to select which Device Module to transfer with.** 。

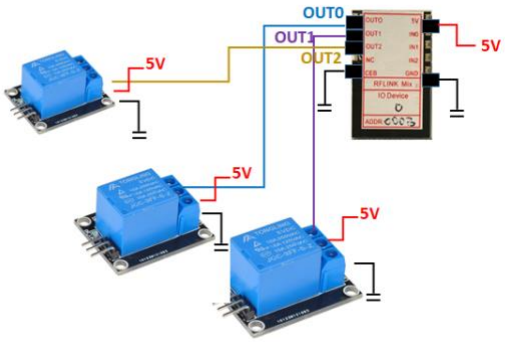
Pin definition

UART ROOT	**IO DEVICE**
	
GND→ Ground **+5V**→ 5V voltage input **The TX**→ corresponds to the RX of the motherboard UART **The RX**→ corresponds to the TX of the motherboard UART **THE CEB**→ PIN REQUIREs a grounding (GND) module to operate power-on and can be used as a power-saving control function. **OUT**→ IO Port Export Pin (On/Off Export) →The input pin of the IN IO Port (On/Off receive). **CMD_Mode**→ ROOT for command mode startup pin, active low	**GND**→ Ground **+5V**→ 5V voltage input **IN0**→ Input pin (On/Off receive) for group 0 IO Ports **OUT0**→ Group 0 IO Port Export Pin (On/Off Export) **IN1**→ Input pin (On/Off receive) for group 1 IO Ports **OUT1**→ Set 1 IO Port Export Pin (On/Off Export) **IN2**→ Input pin (On/Off receive) for group 2 IO Ports **OUT2**→ Group 2 IO Port Export Pin (On/Off Export) **THE CEB**→ PIN REQUIREs a grounding (GND) module to operate power-on and can be used as a power-saving control function.

How to use

You can use this module RFLINK-Mix UART-to-IO to control multiple sets of relays to achieve wireless automatic control.





RFLINK-Mix UART-to-IO usage examples can be downloaded from the official website http://www.sunplusit.com/TW/Shop/IoT/Document.