RS485 Wireless Transponder Module Manual



Technical specifications:

Supply voltage: DC 8-25V (12V recommended);

Working current: 18-30MA;

Baud rate:9600/19200/38400/115200 default 9600, N, 8, 1;

Wireless operating frequency: 426MHz~508.5MHz, 16 channels, channel spacing 5.5MHz, default

426MHz;

Transmit power:20dBm;

Receiving sensitivity: -121dBm.

Wireless transmission distance: 800-1000m(unobstructed open space)

Communication interface: RS485;

By changing the 485 address, a maximum of 63 modules can be cascaded (if more than 16

modules are used, use an RS485 repeater);

Size: 107 X 54 X 32MM;

Weight: 72g.

Product Overview:

wireless transmission module, based on the 433M frequency band development, can be RS485 received data signal into wireless signal, can be within a certain distance and the other end of the wireless transmission module for wireless communication, the other end of the wireless transmission module received wireless signal, and then converted into RS485 signal output.

Users can use multiple wireless transmission modules for data transmission without the need to lay too many long signal transmission lines. The modules only need to be powered on and connected to RS485 devices to achieve mutual data transmission, which is very convenient for users to operate RS485 devices at the remote end and effectively avoid the inability to transmit data due to rusty, broken or poor contact signal lines.

The module only requires two parameters to be set, which can be set via dip switches, simplifying the parameter setting process and making it very user-friendly. The parameters that can be set are the baud rate and the channel, and the dip switch settings can be found in the following selection table.

Radio frequency of the module = channel * 5.5MHz + 426MHz.

Product description:



Number	Function	Description			
1	Antenna	SMA Antenna interface			
2	Power Interface	DC 8~25V power supply			
3	PWR Indicator light	Power indicator, blinks 5 times after power up and then lights up long			
4	RS485 Interface	Connecting RS485 devices			
5	RX Indicator light	Wireless receive indicator, flashes when data is received wirelessly			
6	TX Indicator light	Wireless transmit indicator, blinks after successful wireless data transmission			
7	Baud rate selection	Reference baud rate selection table			
8	Channel selection	Reference channel selection table			

Frequency Band(Channel) selection table:

Location	Channels	Location	Channels	Location	Channels	Location	Channels
ON 1	0	ON 1	4	ON 1	8	ON 1	12
ON 1	1	ON 1	5	ON 1	9	ON 1 2 3 4 5	13
ON 1	2	ON 1	6	ON 1	10	ON 1	14
ON 1	3	ON 1	7	ON 1	11	ON 1	15

Baud rate selection table:

Location	Baud Rate	Location	Baud Rate
ON 1 = 1	9600	ON 1	38400
ON 1 = 1	19200	ON 1 = 2	115200

Wiring diagram:

Control other RS485 devices as an RS485 wireless bus:

One-to-One Transmission



One-to-Many Transmission (Master-Slave)





Directly control RS485 wireless relay(N4RFA04):

One-to-One Transmission



One-to-Many Transmission (Master-Slave)

