

2pcs 1W high power FSK modulation Si4463 RF4463F30  
long distance rf wireless module free shipping

## Order List

2pcs \* RF4463F30-433mhz wireless module

2pcs \* spring antenna

If you need 470/868/915mhz, please leave us message.

## Product description

**RF4463F30** adopts Silicon Lab Si4463 RF chip, which is a highly integrated wireless ISM band transceiver chip. Extremely high receive sensitivity (-126 dBm) and +30 dBm output power ensure that the covering of the range and improve the data link performance. Built in antenna diversity and the hopping function can be used to aggressively improve the performance.

## Feature

- Frequency Range: 433/470/868/915 MHz
- Sensitivity up to -126 dBm
- Max. Output power up to 30dBm
- 10mA@ receiver status
- Data transfer rate:0.1-1000 kbps
- (G)FSK, 4(G)FSK, (G)MSK
- 1.8~3.6V Power supply
- Ultra-low consumption shutdown mode
- Digital received signal strength indicator (RSSI)
- Timed wake-up function
- The antenna automatically match and two-way switch control
- Configurable packet structure
- Preamble detection
- 64/128byte transmit and receive data register(FIFO)
- Low-power detection
- Temperature sensor and 8-bit analog-to-digital converters
- Operating Temperature Range:-40 ~ + 85 °C
- Integrated voltage regulator
- Frequency hopping
- Power-on reset function

- Built-in crystal adjustment function

## Application

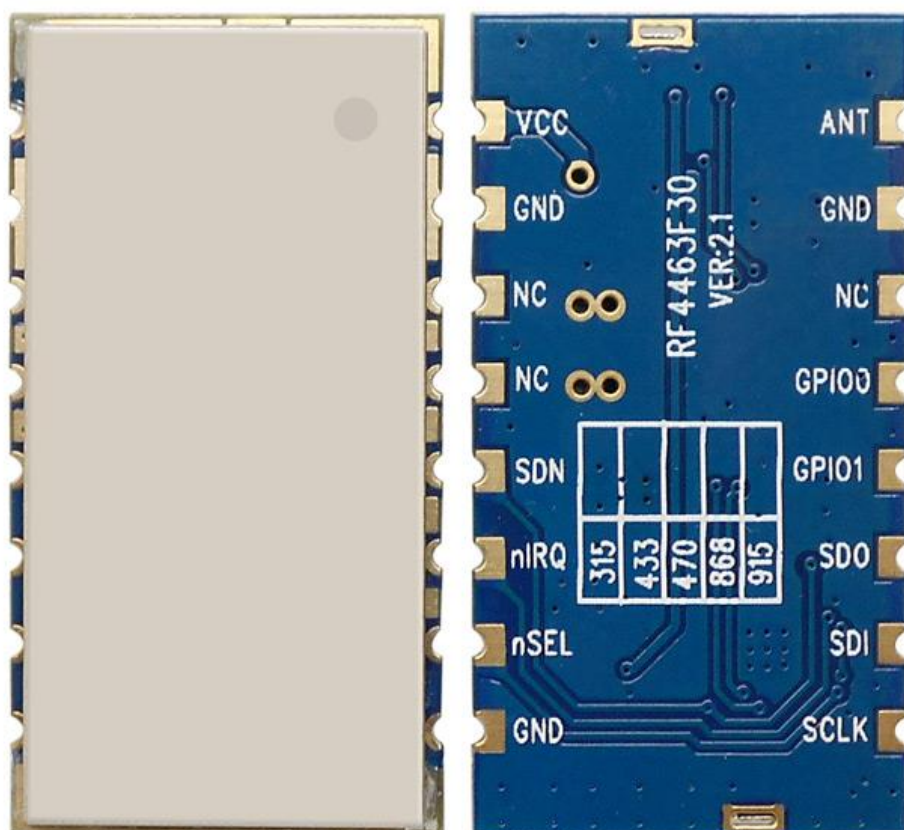
- Remote control
- Remote meter reading
- Home security alarm and remote keyless entry
- Sensor networks
- Industrial control
- Tire Pressure Monitoring
- Home automation telemetry
- Health Monitoring
- Personal data records
- Wireless PC peripherals
- Toy control
- Tag reader

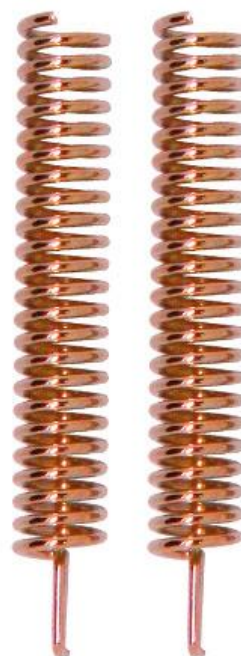
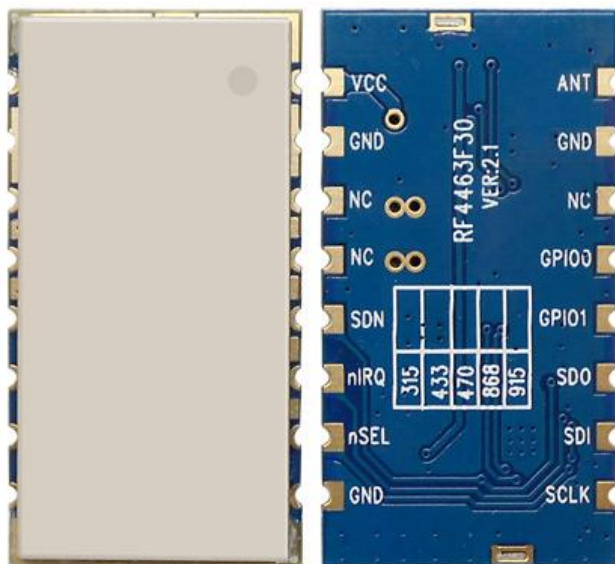
## Electrical Specifications

Note: the following parameters is VCC = 5 v, with 50 ohm copper axis test instrumentation.

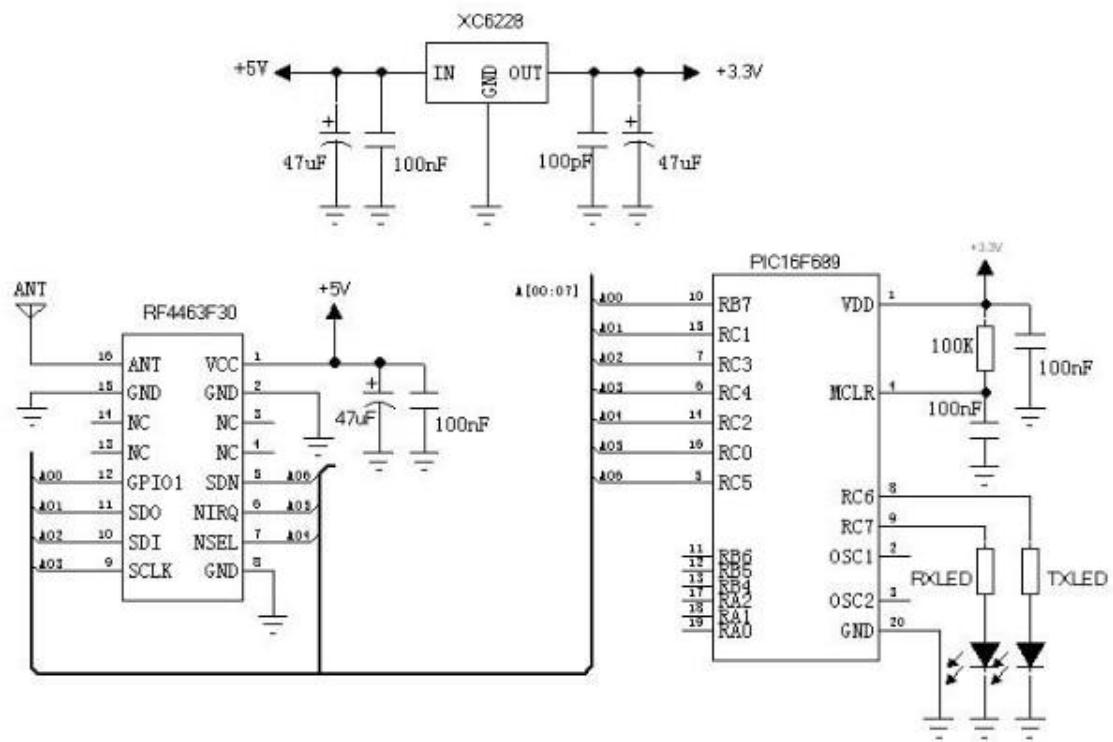
Parameter	Min	Typ	Max	Unite	Condition
Working condition					
Working voltage range	3.3	5	6.5	V	
Temperature voltage	-40		85	°C	
Current consumption					
Receiving current		13.5		<u>mA</u>	Low sensitivity mode
Receiving current		10		<u>mA</u>	High sensitivity mode
Transmitting current		540	580	<u>mA</u>	<u>V<sub>CC</sub>=5v, T<sub>x</sub>=30 dB m</u>
Sleep current		<2	3	<u>uA</u>	
parameter					
Frequency range	410	433	450	MHZ	@433MHZ
	470	490	510	MHZ	@470MHZ
	863	868	873	MHZ	@868MHZ
Modulation rate	0.1		1000	<u>Kbps</u>	FSK
Output power range	29.5	30	31	<u>dBm</u>	433MHz, VCC = 5V
Receiving sensitivity	-125	-126		<u>dBm</u>	433MHz@data=600bps, <u>F<sub>dev</sub>=3kHz</u>

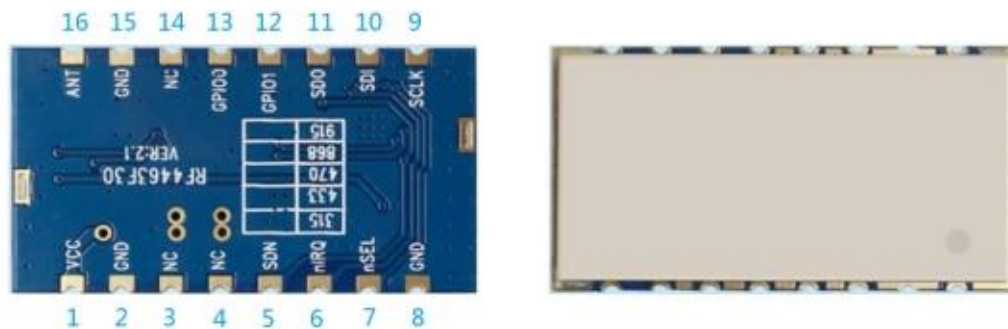
Product show









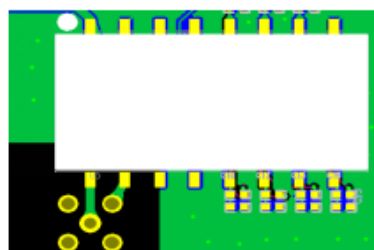


★ The GPIO2, GPIO3 of the Si4463 is connected to the antenna switch on the module.

GPIO2=RX EN ; GPIO3=TX EN

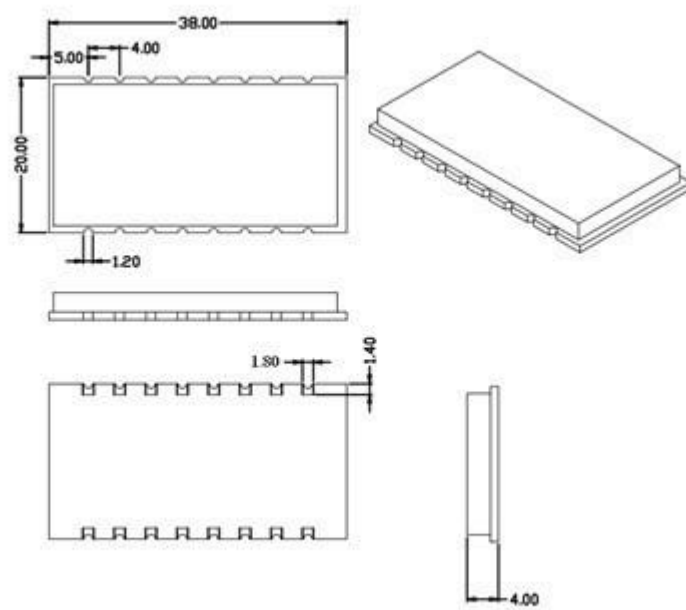
Pin Number	Pin Definitions	Description
1	VCC	Positive power supply
2	GND	Connected to power ground
3,4,14	NC	Vacant, not connected
5	SDN	Power down control. SDN = 1, power down                      SDN = 0, normal working
6	nIRQ	Interrupt output
7	nSEL	Serial data selection for SPI interfaces.
8	GND	Connected to power ground
9	SCLK	Serial data clock for SPI interface.
10	SDI	Serial data in for SPI interface.
11	SDO	Serial data out for SPI interface.
12	GPIO1	GPIO1 of Si4463
13	GPIO0	GPIO0 of Si4463 for I/O interface
15	GND	Connected to power ground
16	ANT	From 50 ohm coaxial antenna

★ Note: Pin 15 (ANT GND ) is connected to the ground of antenna, do not connect to the ground of power supply. The routing between antenna pad and antenna shall be as short as possible, and thickness larger than 1mm, shown as below:

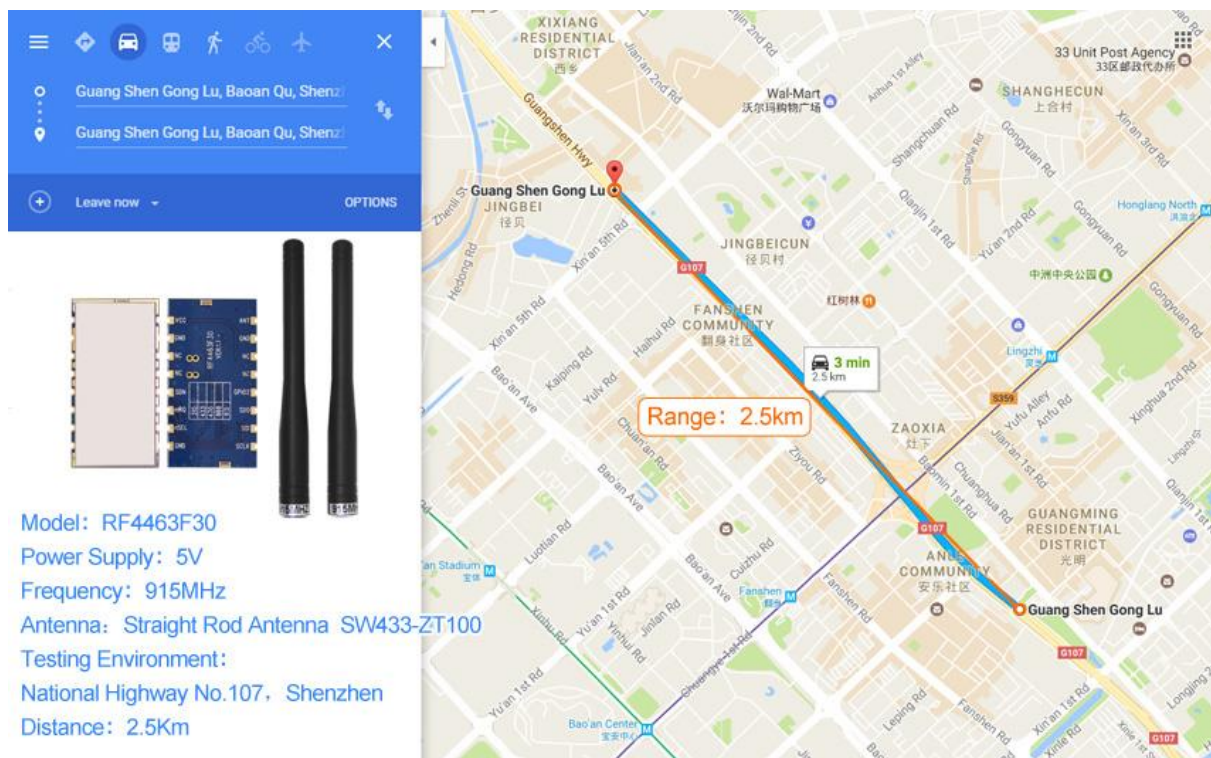




## Mechanical dimensions



## Distance Test



## Products Ordering Information

RF4463F30-433

Module Model

Frequency

For example: If the customer needs a patch module small crystal 433MHZ band module that order model: RF4463F30-433

Note: For Accessories (antenna and USB bridge board), please contact us, we will give you another links to buy.