

# ASK/OOK Wireless Receiver Module

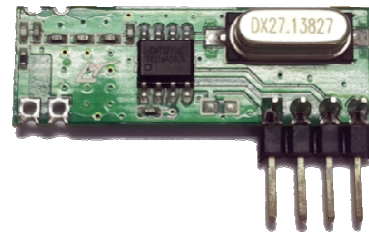
**Model No.: RFM210LCF/RFM210LCF-A**

## 1. General Information

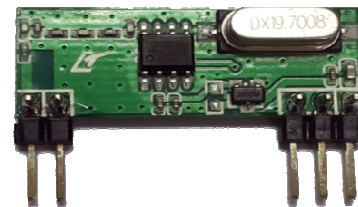
RFM210LCF/RFM210LCF-A is a ASK/OOK wireless data receiver, ultra low power consumption, high sensitivity, long distance communication, cost-effective ASK/OOK RF receiver module, suitable for ISM band wireless applications.

It has the characteristics of good anti-interference and high reliability, and it cannot be affected the working distance even in the situation of complex interference environment.

The Module is provided by two versions base on 315MHz and 433.92MHz, both of them support 1~5kbps data rate. Users only need to attach a simple data decoding circuit to achieve the development of wireless products easily.



**RFM210LCF**



**RFM210LCF-A**

## 2. Features

- Comply with FCC and ETSI
- Strong anti-interference ability, suitable for complex interference environment
- Receiving Sensibility: -114dBm
- Working Frequency: 315MHz, 433.92MHz
- Supply Voltage Range: 1.8V-3.6V (RFM210LCF) ; 4.5V-5.5V (RFM210LCF-A)
- Working Current: 3.9mA
- Sleeping Current:  $\leq 1\mu\text{A}$
- Data Rate: 1-5 kbps

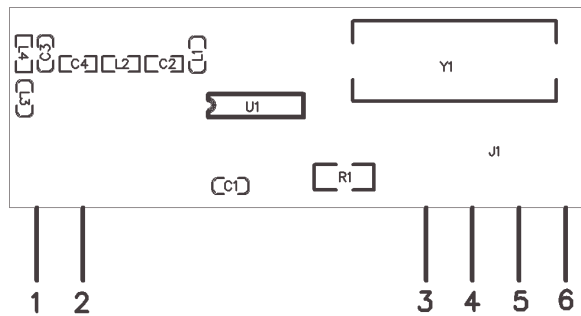
## 3. Application

- Remote Entrance Guard
- Battery Car Security System
- Remote Socket
- Remote Doorbell

- Wireless Data Transmission
- Wireless Lighting Control
- Remote Control Toys
- Remote Control Home Appliances
- Wireless Alarming & Security System

## 4. Pin definition

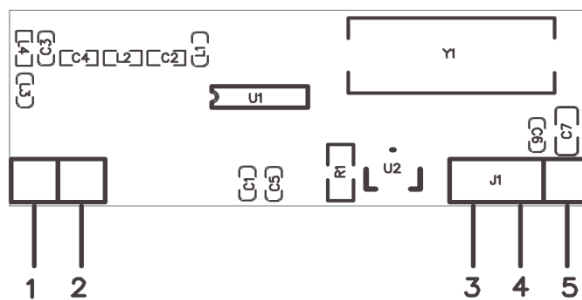
### RFM210LCF



1. ANT    2. GND    3. SDN    4. VCC    5. DATA    6. GND

Pin	Name	Function
1	ANT	Antenna Input
2	GND	Ground
3	SDN	Shutdown Logic Control Input
4	VCC	Positive power
5	DATA	Data Output
6	GND	Ground

### RFM210LCF-A



1. ANT    2. GND    3. GND    4. DATA    5. VCC

Pin	Name	Function
1	ANT	Antenna Input
2	GND	Ground
3	GND	Ground
4	DATA	Data Output
5	VCC	Positive power

## 5. Electrical Characteristics

### RFM210LCF

Testing Conditions: DC 3.3V / 25°C

Parameter	Label	Status	MIN.	Typical Value	MAX.	Unit
Frequency Range	Fc	Model: RFM210LCF-315D		315		MHz
		Model: RFM210LCF-433D		433.92		MHz
Modulation			ASK/OOK			
Sensibility		1 Kbps		-114		dBm
Data Rate	DR		1	3.3	5	Kbps
Receiver Bandwidth				330		KHz
Supply Voltage			1.8	3.3	3.6	V
Working Current		433.92MHZ		3.8	4.2	mA
Sleeping Current					1	uA
Image Rejection	IMR			30		dB
Working Temperature			-40		+85	°C

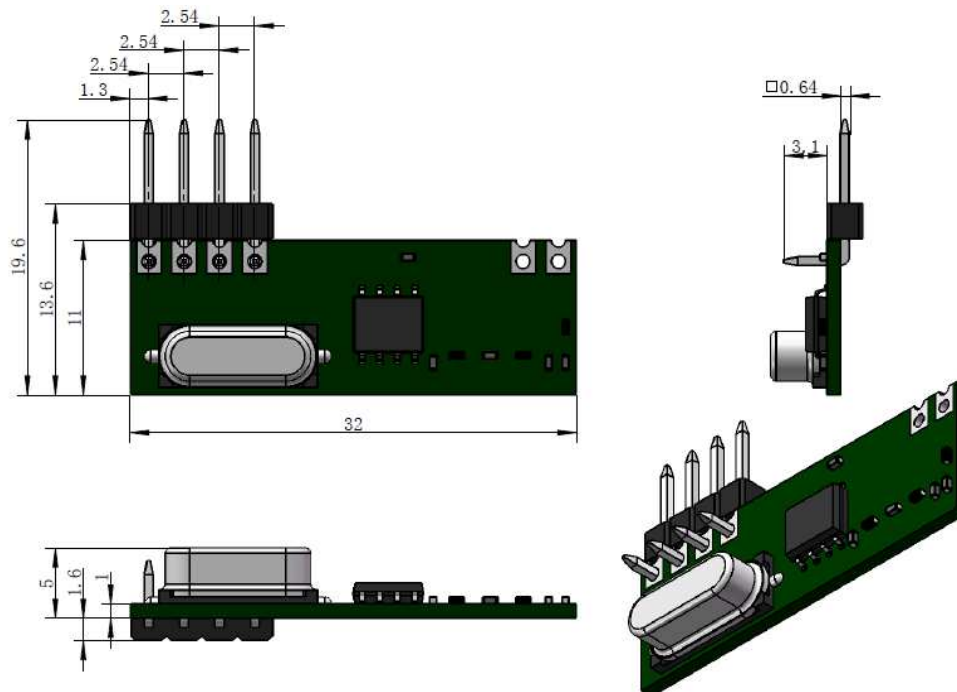
### RFM210LCF-A

Testing Conditions: DC 5V / 25°C

Parameter	Label	Status	MIN.	Typical Value	MAX.	Unit
Frequency Range	Fc	Model: RFM210LCF-315D-A		315		MHz
		Model: RFM210LCF-433D-A		433.92		MHz
Modulation			ASK/OOK			
Sensibility		1Kbps		-114		dBm
Data Rate	DR		1	3.3	5	Kbps
Receiver Bandwidth				330		KHz
Supply Voltage			4.5	5	5.5	V
Working Current		433.92MHZ		3.8	4.2	mA
Sleeping Current					1	uA
Image Rejection	IMR			30		dB
Working Temperature			-40		+85	°C

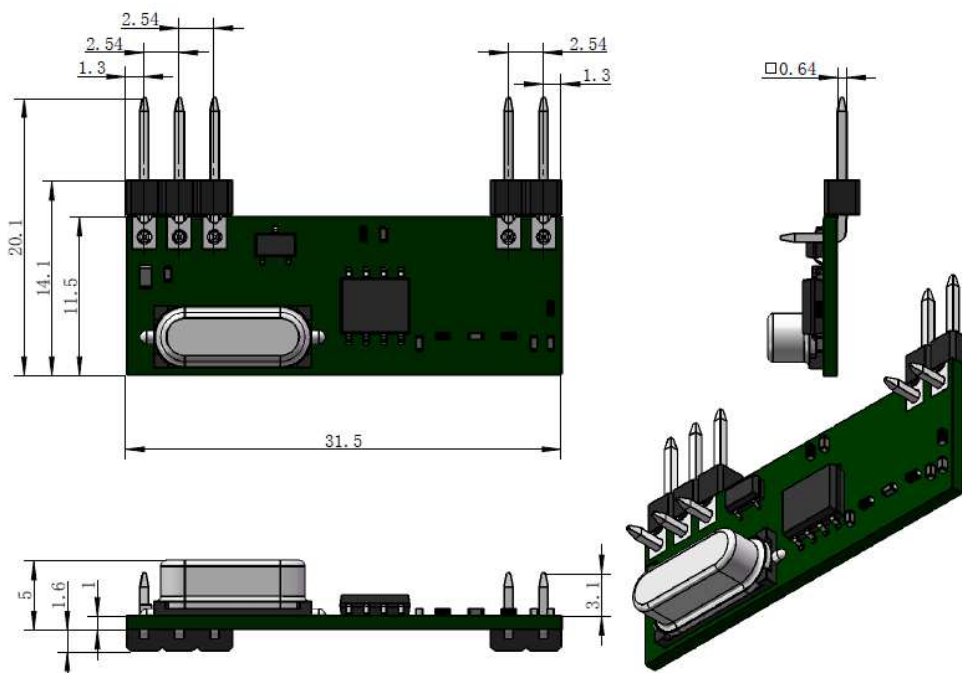
## 6. Dimensions Diagram

### RFM210LCF



Unit: mm

### RFM210LCF-A



Unit: mm

## 7. Ordering information

Module P/N	Frequency	Voltage	Sleeping
RFM210LCF-315D	315MHz	1.8-3.6V	Y
RFM210LCF-433D	433MHz	1.8-3.6V	Y
RFM210LCF-315D-A	315MHz	4.5-5.5V	N
RFM210LCF-433D-A	433MHz	4.5-5.5V	N

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