

ASK/OOK Wireless Receiver Module

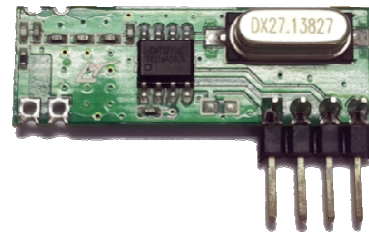
Model No.: RFM210LCF/RFM210LCF-A

1. General Information

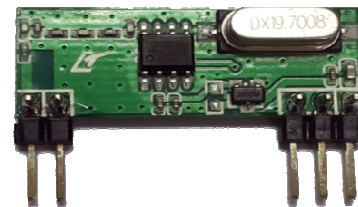
RFM210LCF/RFM210LCF-A is a ASK/OOK wireless data receiver, ultra low power consumption, high sensitivity, long distance communication, cost-effective ASK/OOK RF receiver module, suitable for ISM band wireless applications.

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:≤1uA
- Data Rate:1-5 kbps

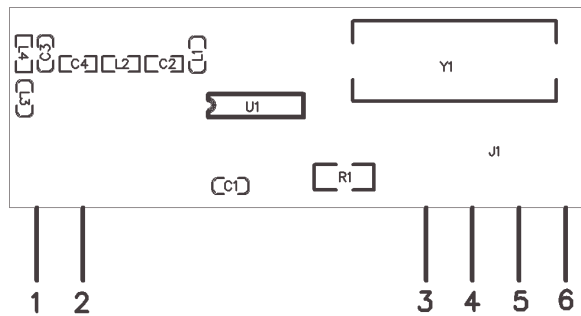
3. Application

- 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

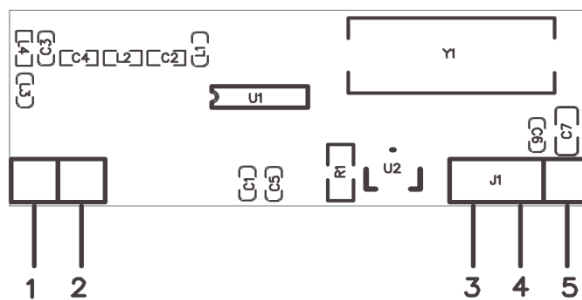
RFM210LCF



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 |

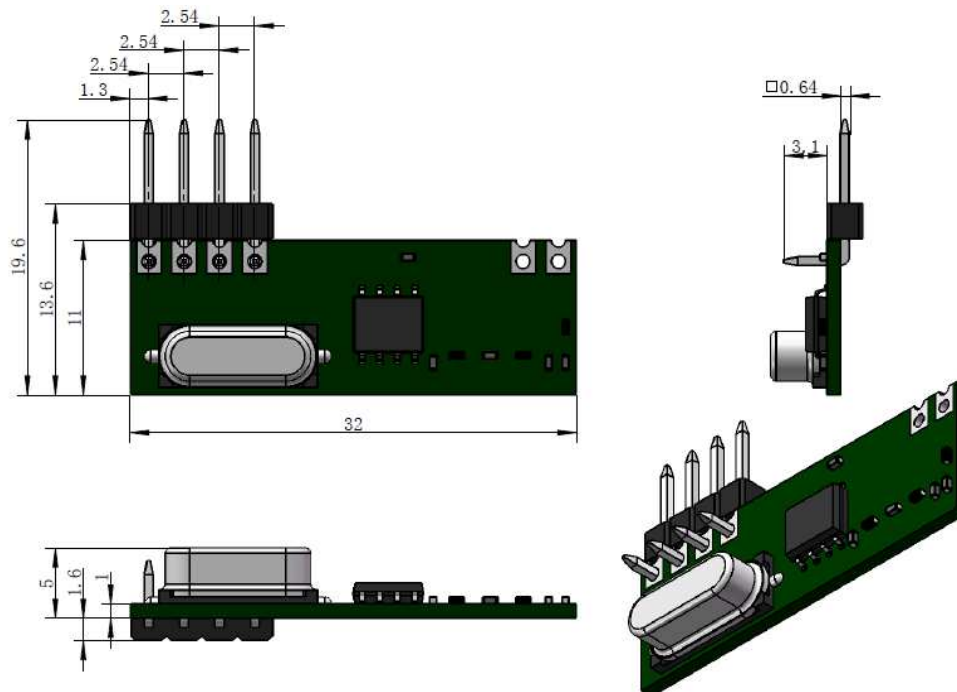
RFM210LCF-A

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 |

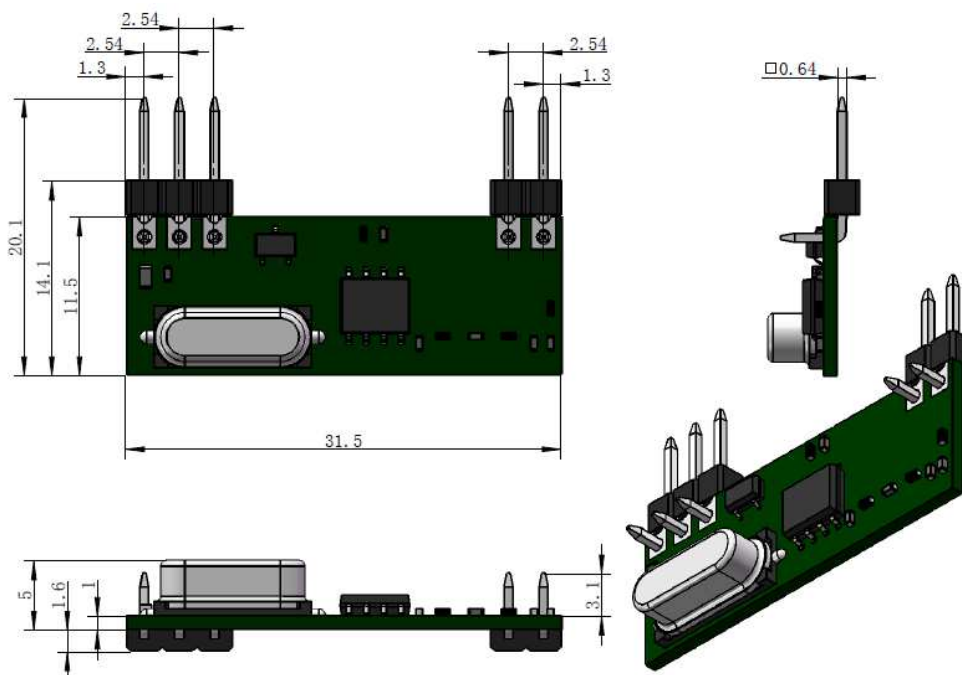
6. Dimensions Diagram

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 |

HOPE MICROELECTRONICS CO.,LTD

Add:2/F,Building3,pingshan Private
Enterprise science and Technology
Park,xili Town,Nanshan District,
Tel: 86-755-82973805
Fax: 86-755-82973550
Email: sales@hoperf.com
Website: <http://www.hoperf.com>
<http://www.hoperf.cn>

This document may contain preliminary information and is subject to change by Hope Microelectronics without notice. Hope Microelectronics assumes no responsibility or liability for any use of the information contained herein. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Hope Microelectronics or third parties. The products described in this document are not intended for use in implantation or other direct life support applications where malfunction may result in the direct physical harm or injury to persons. NO WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MECHANABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE OFFERED IN THIS DOCUMENT.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [RF Modules](#) category:

Click to view products by [Hope Microelectronics](#) manufacturer:

Other Similar products are found below :

[HMC-C009](#) [HMC-C011](#) [nRF24L01P-MODULE-PCB](#) [HMC-C021](#) [HMC-C024](#) [XB9XT-DPRS-721](#) [XBP9B-DMUTB022](#) [nRF24L01P-MODULE-SMA](#) [CMD-KEY2-418-CRE](#) [XM-C92-2P-UA](#) [XB9XT-DPUS-721](#) [V640-A90](#) [HMC-C583](#) [MAAM-008818-TR3000](#) [MTSMC-H5-U](#) [SIMSA868-PRO](#) [SIMSA915C-PRO](#) [SIMSA868C-PRO](#) [SIMSA433C-PRO](#) [SIMSA915-PRO](#) [XBP9B-DMUT-042](#) [HMC-C582](#) [HMC-C022](#) [XBP9B-DPST-041](#) [XBP9B-DMWT-042](#) [SM-MN-00-HF-RC](#) [HMC-C031](#) [MT-02](#) [M1002GB](#) [702-W](#) [SIMSA868C-N-PRO](#) [SIMSA433C-N-PRO](#) [SIMSA915C-N-PRO](#) [ADP-R202-00B](#) [PEPPER WIRELESS C1 USB](#) [S2-10732-Z1T61](#) [S2-107XB-Z2356-Z2352](#) [S2-10672-Z1L85](#) [S2-10686-Z1L1D](#) [S2-10688-Z1L1T](#) [S2-106BA-Z1P20](#) [S2-1060C-Z1F0A](#) [S2-106R4-Z1Q6F-Z1Q6Q](#) [S2-106R4-Z1Q6J-Z1Q6Q](#) [S2-106RB-Z1Q6V-Z1Q6Q](#) [S2-107DR-Z1Y5B](#) [SU60-2230C-PU](#) [RC-TFSK3-868](#) [NANO RFID POE](#) [650201424G](#)