

RFM210LCF-S1 ASK/OOK Wireless Receiver Module

1. General Information

RFM210LCF-S1 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-S1

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
- Working Current:3.9mA
- Sleeping Current:≤1uA
- Data Rate:1-5 kbps

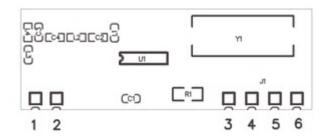
3. Application

- 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-S1



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 |

5. Electrical Characteristics

RFM210LCF-S1

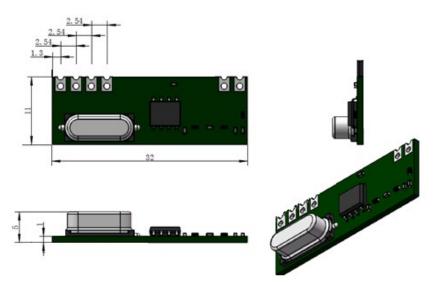
Testing Conditions: DC $3.3V / 25^{\circ}C$

| Parameter | Label | Status | MIN. | Typical | MAX. | Unit |
|---------------------|-------|-----------------------|---------|---------|------|--------------|
| | | | | Value | | |
| 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 | $^{\circ}$ C |



6. Dimensions Diagram

RFM210LCF-S1



Unit: mm

7. Ordering information

| Module P/N | Frequency | Voltage | Sleeping |
|-----------------|-----------|----------|----------|
| RFM210LCF-315S1 | 315MHz | 1.8-3.6V | Y |
| RFM210LCF-433S1 | 433MHz | 1.8-3.6V | Y |

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