

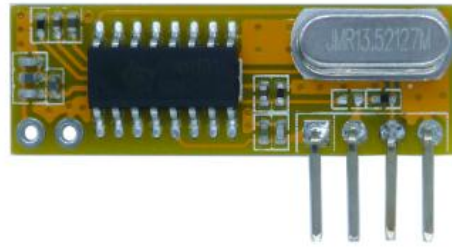


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY21-XXX

Description:

The CY21 is an ASK/OOK compatible super heterodyne wireless receiving module with high performance for ISM frequency band. With the adoption of European brand RF wireless data transferring/receiver chipsets, the module has advantages at high receiving sensitivity, small size and low cost. It solves the problem on space for the small-sized product. From wireless signal input to data output can be done without any electrical circuit. User only use extra simple data decode circuit can achieve wireless products development.



Order Information:

Model NO.	Frequency
CY21-315	315 MHz
CY21-433	433.92 MHz

Features:

- Frequency: 315MHz/433.92MHz (custom frequency is available);
- High sensitivity -107dBm;
- Supply voltage: 2.4V - 3.6V;
- Low power consumption: 3V @ 315MHz, 3.7mA; 3V @ 433.92MHz, 4.9mA;
- Data Rate: 2.4Kbps (Manchester Code)
- Operating temperature: -20°C ~ 70°C, work normally even in the severe temperature environment;
- Excellent inhibiting ability for local oscillator radiation: multiple receivers receive signals from one transmitter simultaneously without any mutual interference and influence on range;
- Favorable selectivity and inhibiting ability for stray radiation; easy to pass CE/FCC Certificates
- Dimension: 30.5*10*5mm

Application

- Remote door openers
- Remote keyless entry
- Wireless security systems
- Remote control
- Wireless door ring
- Wireless data transmission

Pin Description

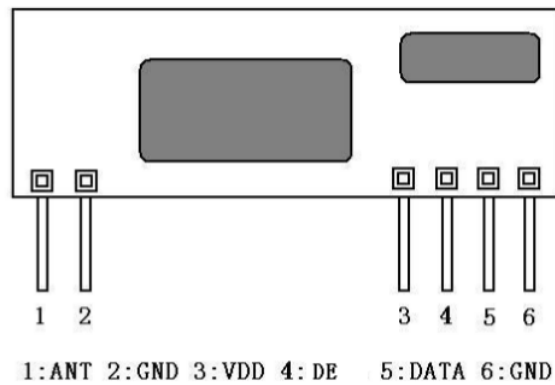


Figure1 CY21 Shape & Pins

Pin Name	Pin Definition
ANT	Antenna In
GND	Connect to negative power supply
VCC	Connect to positive power supply
DE	1. Data output 2. Enable control (OPTIONAL) (Working mode in low level input) (Sleeping mode in high level input)
DATA	Data Output
GND	Connect to negative power supply

Note 1: ANT pin is a 50 ohm antenna input. The length is about:
 23cm for 315MHz
 17cm for 433.92MHz

**Electrical Characteristics:**

Condition: Ta=25°C Vcc=3V Frequency=315MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	314.9	315	315.1	MHz	
Modulation	ASK				
RF Sensitivity		-107		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Start-up Time			10	ms	
Supply Voltage, VDD	2.4	3	3.6	V	
Current	3.5	3.7	3.9	mA	
Decoding output max. voltage	3.5		5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

Condition: Ta=25°C Vcc=3.0V Frequency=433.92MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	
Modulation	ASK				
RF Sensitivity		-107		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Start-up Time			10	ms	
Supply Voltage, VDD	2.4	3	3.6	V	
Current	4.7	4.9	5.1	mA	
Decoding output max. voltage	3.5		5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	



Mechanical Size: (Unit: MM)

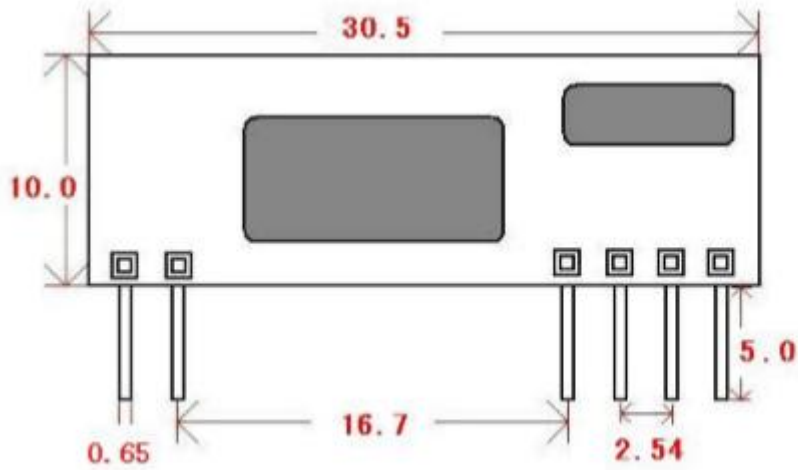


Figure2 CY21 Dimension

For more information and assistance, please contact us as follows:

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