

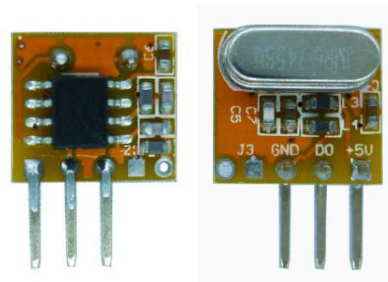


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY14-XXX

Description:

CY14 is a superheterodyne wireless receiving module, which adopts high integrated RF wireless data transmission receiving chip. The CY14 is a high performance module at a competitive pricing and small in size. This module improves the stability and reliability of low-end wireless products, improves the image of the product quality and enhances the product competitiveness. It makes some low-end products can get rid of using super-regenerative module due to the limitation of price reason. It can achieve data signal input to wireless signal output without any additional circuits. Users only need to add a simple data decoding circuit and it can easily achieve the development of wireless products.



Order Information:

Model NO.	Frequency
CY14-315	315 MHz
CY14-433	433.92 MHz

Features:

- Frequency: 315M/433.92MHz (custom frequency is available)
- Supply voltage: 3.3~5.5V
- Receiving sensitivity to -107dBm
- Low power consumption, 5.0V@433.92MHz, 3.8-4.1mA; 5.0V @315MHz, 2.6-2.8mA; continuously data rate transmission to 2.4k (Manchester code)
- Good selectivity and stray radiation inhibition ability, easy to go through international CE/FCC certification;
- Good capable of suppressing the vibration radiation. Multiple receiving modules can work at the same time (that is single transmitter and multiply receivers).



There is no interference with each other it does not affect the receiving distance when multiple receivers work together.

- Operating temperature: -20°C ~ +70°C. It can work normally under hostile environment. (it can custom design to 40°C ~ +85°C)
- Dimension: 12.00×10.50×5.00 (mm)

Application

- Remote gate controls, Brake
- Remote keyless entry (RKE)
- Wireless control Curtain device
- Wireless security systems
- Wireless Industrial Control
- Wireless parking lot barrier

Pin Description

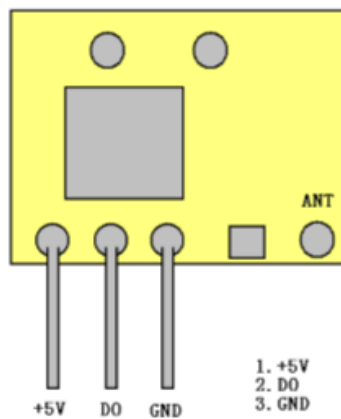


Figure1 CY14 Shape & Pins

Pin-out as showed in figure 1 above

Pin Name	Pin Definition
+5V	Positive Power Supply
DO	Data Output
GND	Ground



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=5.0V Frequency=315MHz

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	314.90	315	315.10	MHz	
Modulation	ASK				
Receiver Sensitivity		-107		dBm	50 Ohm Antenna direct input/1K Kbps
Data Rate			2.4	Kbps	
Working Voltage	3.3	5.0	5.5	V	
Working Current	2.6	2.8	3.1	mA	
Operating Temperature	-40		85	°C	
Receiver Bandwidth		200		KHz	
Receiver Turn on time			20	ms	
Highest Output Voltage when Decoding	3.5		5	V	RL=500K
Lowest Output Voltage when Decoding			0.5	V	
Working Temperature	-20		70	°C	

Condition: Ta=25°C Vcc=5.0V Frequency=433.92MHz

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	
Modulation	ASK				
Receiver Sensitivity		-107		dBm	50 Ohm Antenna direct input/1K Kbps
Data Rate			2.4	Kbps	
Working Voltage	3.3	5.0	5.5	V	
Working Current	3.8	3.9	4.1	mA	
Operating Temperature	-40		85	°C	
Receiver Bandwidth		200		KHz	
Receiver Turn on time			9	ms	



CY14

Highest Output Voltage when Decoding	3.5		5	V	RL=500K
Lowest Output Voltage when Decoding			0.5	V	
Working Temperature	-20		70	°C	

Mechanical Size: (Unit: MM)

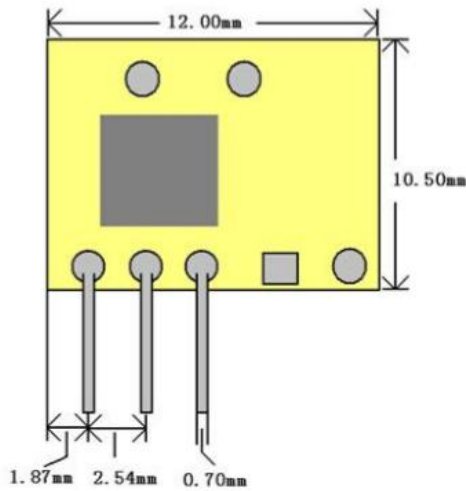


Figure2 CY14 Dimension

PRE-CAUTION:

The CY14 module data output pin drive current is weak, so if it directly to drive the single chip microcomputer, then the I/O port of MCU can't be connected with to pull-up or pull-down resistors. And please disable the pull-up and pull-down resistors inside the MCU.

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

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