**Type: ASK/OOK Super-Low Power Consumption Super Heterodyne Decoding Receiver Module**

Model: CYRM05-XXX

1. **DESCRIPTION:**

CYRM05 is a super low power consumption super heterodyne decoding wireless receiving module. It is a superior performance receiving module of ISM frequency band. It adopts Taiwan brand industrial-grade RF wireless data transmission receiving chip which has higher receiver sensitivity and strong anti-jamming capability. CYRM05 is a module with perfect antistatic protection and high reliability in competitive pricing. It can be used in a large number of applications such as remote controls, garage doors, extendable doors, brake, GSM/GPS car system, industrial control, communications, security and other wireless applications.
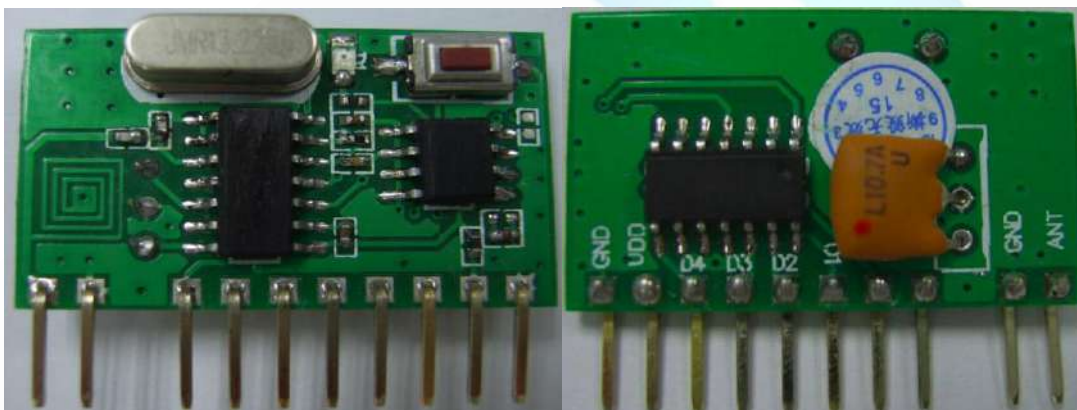

2. **FEATURES:**

- Frequency: 315MHz/433.92MHz/ (custom frequency is available);
- High sensitivity -106dBm;
- Supply voltage: VCC= 2.4 to 5.0 V;
- Very low power consumption, 2.7mA in working mode and 400uA(315Mhz) in standby mode.
- Good selectivity and stray radiation inhibition ability.   It's easy to go through the international CE/FCC certification.
- Good capable of suppressing the vibration radiation. It can work with multiple receiving modules (one transmitter with multiple receivers) and they do not interfere with each other. There is no affection over the receiving distance when they work at the same time.
- 4 Channel output, EV1527 Learning Code Decoding Receiving Module. (It can custom design to PT2272 Fixed Code).
- Good selectivity and stray radiation inhibition ability.
- Temperature range -30-85℃, It can work normal even under harsh environment.

3. APPLICATION:

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

4. PIN DEFINITION:

ANT GND DATA VT D1 D2 D3 D4 VDD GND
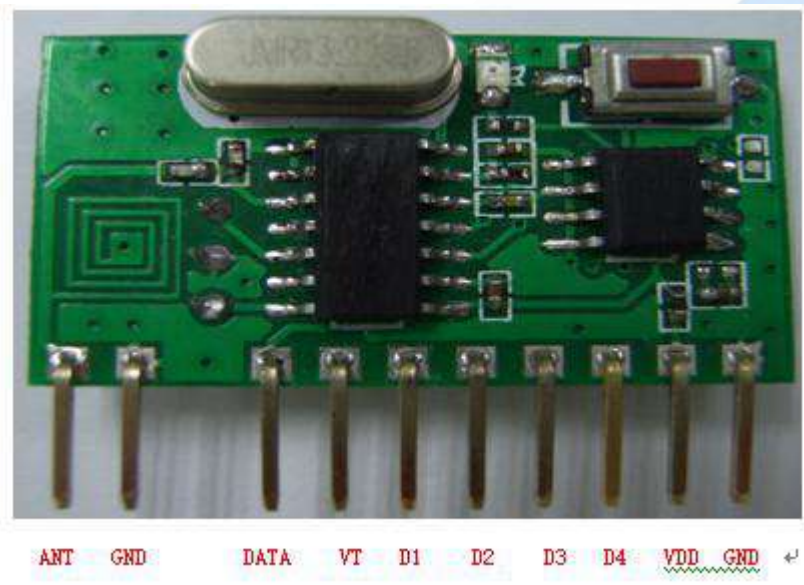
PIN	PIN NAME	PIN DEFINITION
1	ANT	Antenna In
2	GND	Ground
3	DATA	Wireless data testing port
4	VT	Connecting port to learning key. Connect a key to Ground as a learning key.
5	D1	D1 Channel output, please ifnorm us whether you want latches or temorary storage mode
6	D2	D2 Channel output, please ifnorm us whether you want latches or temorary storage mode
7	D3	D3 Channel output, please ifnorm us whether you want latches or temorary storage mode
8	D4	D4 Channel output, please ifnorm us whether you want latches or temorary storage mode
9	VDD	Positive Power Supply
10	GND	Ground

5. ELECTRICAL CHARACTERISTICS:

Condition: Temperature =25℃ Vcc=5.0V Frequency=315MHz

Parameter	Symbol	Condition	Reference Value			Unit
			Min	Typ	Max	
Working Freq.	Fc		314.90	315.00	315.10	MHz
Modulation			ASK			
Sensitivity		50 Ohm antenna input directly/1K Kbps		-106		dBm
Receiving Turn-on Time	Ton				80	ms
Receiving Bandwidth				200		KHz
Working Current	IRC		2.5	2.6	2.7	mA
Standby Current			390	400	410	uA
Image Rejection		304.3MHz		30		dB
Decoding the highest output voltage		RL=500K	5.0			V
Decoding the lowest output Voltage					0.5	V
Working Temperature			-30		+85	℃

Condition: Ta=25℃ Vcc=5.0V Frequency=433.92MHz

Parameter	Symbol	Condition	Reference Value			Unit
			Min	Typ	Max	
Working Freq.	Fc		433.82	433.92	434.02	MHz
Modulation			ASK			
Sensitivity		50 Ohm antenna input directly/1K Kbps		-106		dBm
Receiving Bandwidth				200		KHz
Receiving Turn-on Time	Ton				80	ms
Working Current	IRC		2.7	2.8	2.9	V
Stand-by Current			400	410	420	uA
Image Rejection		423.22MHz		30		dB
Decoding the highest output voltage		RL=500K	5.0			V
Decoding the lowest output Voltage					0.5	V
Working Temperature			-30		+85	℃

6. CYRM05 Super heterodyne receiver module remote control code and delete methods

Before using, CYRM05 receiving module needs to pare with remote control by learning code.
---To set the receiver module into learning receiving mode. (Press learning key VT, learning indication light will be on)
---Press any key on the remote control, learning indication LED flash and last for 1 second and then automatically off.
---When the remote control output code been learning successfully, the whole learning process is done.
---Or after pressing the learning key, the receiver module didn't receive signal within 10 seconds, the decoder will automatically abandon this learning.
---If you have multiple remote controls, you can use the above mentioned method to do the paring and then you can have more than one remote control.
---If you accidentally lost one or a few remote control, you can let all remote control failure (Press learning key over 8 seconds, after the learning light LED off, the receiving module will automatically remove the memory in the memory capacity), and then re-paring the rest of the remote controls.   After the process is done, it can let the lost remote control failure and invalid.

7.   MECHANICAL SIZE: (UNIT: mm)
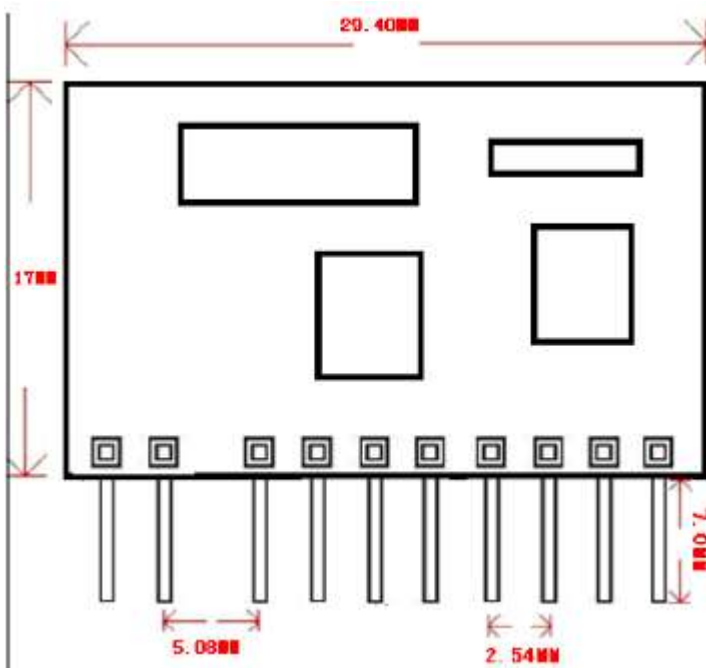
8. ORDER INFORMATION:

CYRM05-315M

CYRM---Decoding Receiving Module

05-----Model Number

315M---Working frequency is 315Mhz

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

CY WIRELESS TECHNOLOGY LIMITED

Add: 1407, Block C, Tairan Building, 8th Tairan Road, Futian District,

Shenzhen, Guangdong Province, China

Website：www.rficy.com

Email: info@rficy.com