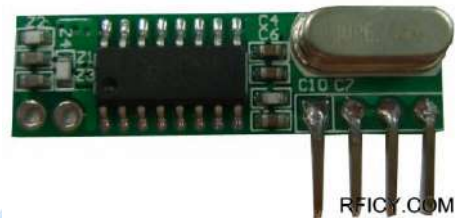


**Type: ASK/OOK Super-Heterodyne Receiver Module**  
**Model: CY15-XXX**

## 1. DESCRIPTION:

CY15 is an ASK/OOK receiver super-heterodyne module is designed specifically for unlicensed remote-control and wireless security receiver operating at 315/433.92MHz under FCC Part 15 regulation or pass ETSI certification. The CY15 is based on a single-conversion, super-heterodyne receiver architecture and incorporates an entire Phase-Locked Loop (PLL) for precise local oscillator generation. It can be used in OOK/ HCS/ PWM modulation signal and demodulate to digital signal. The CY15 is a high performance module at a competitive cost and easily to design for your product. The CY15 module can be also a RoHS compliant product



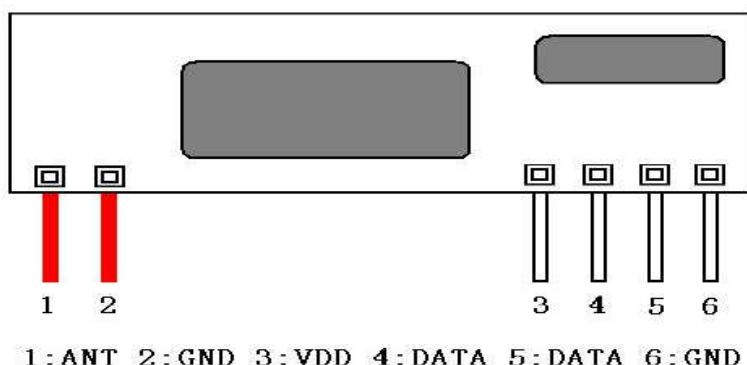
## 2. FEATURES:

- Frequency: 315M/433.92MHz (custom frequency is available)
- Low cost ASK radio super-heterodyne receiver
- High frequency stability (no adjust components) & coherence
- Very low RF re-radiation at the antenna
- Operation temperature: -20°C ~70°C ( It can custom to -40~85°C upon requests)
- Supply voltage: 3.0~5.5v
- Compatible with most (ASK/OOK) transmitters

## 3. APPLICATION:

- Smart home system
- Remote controls
- Remote fan and light control
- Garage door and gate openers
- Alarm and security system

#### 4. PIN DEFINITION:



**Please note:** CY15 is come with standard 4 PINs (without the red colored pins). Please notify us if you would like 6PINs.

Figure1 CY15 Shape & Pins

Pin Name	Pin Definition
ANT	RF signal input pin
GND	Connect to negative power supply
VDD	Connect to positive power supply
DATA	Data output pin
DATA	Data output pin
GND	Connect to negative power supply

Note1: ANT pin is a 50 ohm antenna input. The length is about:  
 23cm for 315MHz  
 17cm for 433.92MHz

#### 5. ELECTRICAL CHARACTERISTICS:

Condition: Ta=25°C Vcc=5.0V Frequency=315MHz

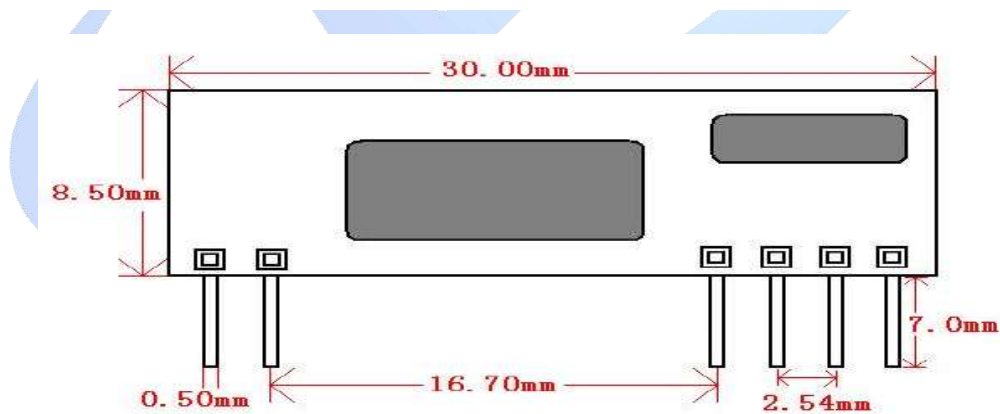
Parameter	Specification			Unit	Condition
	Min	Typ	Max		
Frequency Range	314.90	315.00	315.10	MHz	Other freq. available
Receiver Sensitivity		-107		dBm	BER=10E-2



Data Rate			2.4	Kbps	Manchester code
Supply Voltage, VDD	3.0	5.0	5.5	V	DC
Current	2.8		4.1	mA	DC
Operating 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	Other freq available
Receiver Sensitivity		-107		dBm	BER=10E-2
Data Rate			2.4	Kbps	Manchester code
Supply Voltage, VDD	3.0	5.0	5.5	V	DC
Current	2.8		4.1	mA	DC
Operating Temperature	-20		+70	°C	



**6. MECHANICAL SIZE: (UNIT: mm)**

**Figure2 CY15 Dimension**

## 7. ORDER INFORMATION:

