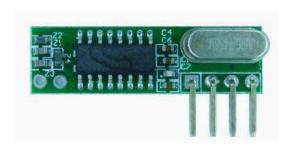


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY15-XXX

### **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.



#### **Order Information:**

Model NO.	Frequency		
CY15-315	315 MHz		
CY15-433	433.92 MHz		

#### **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
- $\bullet$  Operation temperature: -20°C ~70°C ( It can custom to -40°C ~ 85°C upon requests)
- Supply voltage: 3.0~5.5V
- Compatible with most (ASK/OOK) transmitters



# **Application**

- Smart home system
- Remote controls
- Remote fan and light control
- Garage door and gate openers
- Alarm and security system
- Wireless Industrial Control
- Wireless parking lot barrier

# **Pin Description**

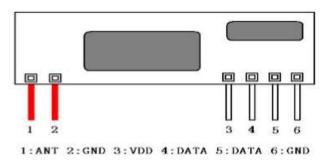


Figure1 CY15 Shape & Pins

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

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		

**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			l lait	Condition
	Min.	Тур.	Max.	Unit	Condition
Frequency Range	314.90	315	315.10	MHz	Other freq. available
Receiver Sensitivity		-107		dBm	BER=10E-2
Data Rate			2.4	Kbps	
Supply Voltage,VDD	3.0	5.0	5.5	V	DC
Current	2.8		4.1	mA	DC
Working Temperature	-20		70	°C	

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

Parameter	Specification			l lmit	Condition
	Min.	Тур.	Max.	Unit	Condition
Frequency Range	433.82	433.92	434.02	MHz	Other freq. available
Receiver Sensitivity		-107		dBm	BER=10E-2
Data Rate			2.4	Kbps	
Supply Voltage,VDD	3.0	5.0	5.5	V	DC
Current	2.8		4.1	mA	DC
Working Temperature	-20		70	°C	

# Mechanical Size: (Unit: MM)

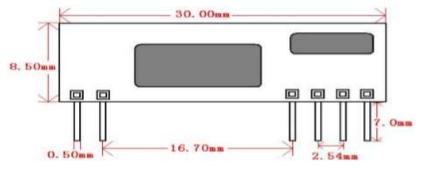


Figure 2 CY15 Dimension



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

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