

# CY15-XXX ASK/OOK Super-Heterodyne Receiver Module

#### DESCRIPTION

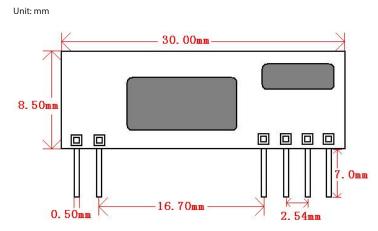
CY15 is an ASK/OOK receiver super-heterodyne module is designed specifically for unlicensed remote-control and wireless security receiver operating at 315/433.92MHz under FCC Part 15 regulation or pass ETSI certification. The CY15 is based on a single-conversion, super-heterodyne receiver architecture 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.

## 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

## MECHANICAL DIMENSION

Figure 2 CY15 Dimension



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

ELECTRICAL CHARACTERISTICS						
		Reference Value			11	
Parameters	Condition	Min	Тур	Max.	Unit	
Frequency Range	other freq. available	314.90	315.00	315.10	MHz	
Receiver Sensitivity	BER=10E-2		-107		dBm	
Data Rate	Manchester Code			2.4	Kbps	
Supply Voltage VDD	DC	3.0	5.0	5.5	V	
Current	DC	2.8		4.1	mA	
Operating Temperature		-20		+70	°C	

Condition: Ta=25°C VCC=5.0V Frequency=433.92MHz
ELECTRICAL CHARACTERISTICS

	Reference Value			11	
Parameters	Condition	Min	Тур	Max.	Unit
Frequency Range	other freq. available	433.82	433.92	434.02	MHz
Receiver Sensitivity	BER=10E-2		-107		dBm
Data Rate	Manchester Code			2.4	Kbps
Supply Voltage VDD	DC	3.0	5.0	5.5	V
Current	DC	2.8		4.1	mA
Operating Temperature		-20		+70	°C



Lead

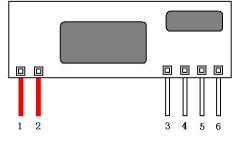
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#### APPLICATION

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

#### PIN DEFINITION

Figure 1 CY15 Shape & Pins



1:ANT 2:GND 3:VDD 4:DATA 5:DATA 6:GND

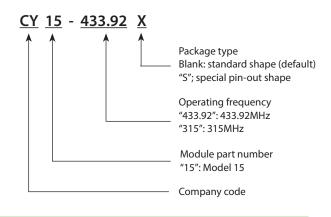
Please note: CY15 is come with standard 4 PINs (without the red colored pins). Please notify us if you would like 6PINs.

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

# ORDER INFORMATION:



### **RELM CHATRAL TELECOMUNICAÇÕES LTDA**

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