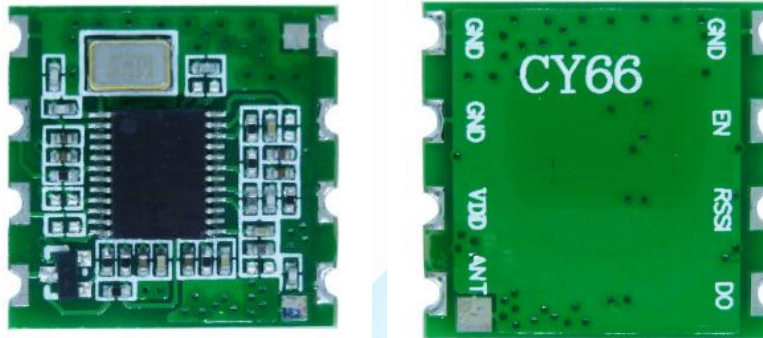


**Type: ASK/OOK Super-Heterodyne Receiver Module**

**Model: CY66-XXX**

## 1. DESCRIPTION:

The CY66-XXX is a ASK/OOK compatible superhet receiver which is designed with high sensitivity and long distance transmission. It can easily achieve the development of wireless products by adding a simple data decoding circuit.



## 2. FEATURES:

- Frequency: 315MHz/433.92MHz(custom frequency is available);
- High sensitivity -116dBm (ASK/OOK);
- Supply voltage: VCC= 3.6 to 5.5 V;
- IF band: 220KHz;
- Low power consumption: Icc=6.3mA(FM mode, Vcc=5.0V@434MHz);
- Consumption current during BS(battery saving)mode: 0uA(typ.);
- Temperature: -40 ~ 85°C
- Easy for application;
- Wide operating temperature;
- Fast response time.

## 3. APPLICATION:

- Remote gate controls
- Remote keyless entry
- Car alarm systems
- Wireless security systems
- Automation systems

#### 4. PIN DEFINITION:



Figure1 CY66 Shape & Pins

Pin Name	Pin Definition
<b>ANT</b>	Antenna In
<b>VDD</b>	Positive Power Supply
<b>GND</b>	Ground
<b>GND</b>	Ground
<b>DO</b>	Data output
<b>RSSI</b>	YES
<b>EN</b>	Optional output:  1, No Connect (default setting)  2, Battery Saving Mode:  (Working mode in High level input)  (Sleeping mode in Low level input)
<b>GND</b>	Ground

Note: 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		
Carrier Frequency	310	314.98	316	MHz	IF = 220kHz
Supply Voltage	3.6	5.0	5.5	V	5.0v at default
Supply current	4.3	5.7	7.1	mA	
Modulation Mode	ASK				
RF sensitivity		-116		dBm	600bps(Manchester), dev=±40kHz
Frequency Deviation		±40		kHz	
-3dB Bandwidth		250		KHz	
Data Rate		1.2	9.6	Kbps	
Turn on time from sleep			3	ms	
“L” level input/output level	0		0.2	mA	
“H” level input/output level	2.6		5.5	V	
Output leak current (H level)		0	2	μA	
Output voltage (L level)			0.4	V	I <sub>DATAL</sub> = 200μA
Wave shaping output duty ratio	45	50	55	%	V <sub>IN</sub> (MIX) = 60dBmVEMFF or single tone
Image Suppression Ratio		35		dB	
Operating Temperature Range	-40		+85	°C	

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

Parameter	Specification			Unit	Condition
	Min	Typ.	Max		
Carrier Frequency	430	433.92	435	MHz	IF = 220kHz
Supply Voltage	3.0	5.0	5.5	V	5.0v at default
Supply current	4.6	6.1	7.6	mA	
Modulation Mode	ASK				
RF sensitivity		-116		dBm	600bps(Manchester), dev=±40kHz
Frequency Deviation		±40		kHz	
-3dB Bandwidth		250		KHz	
Data Rate		1.2	9.6	Kbps	
Turn on time from sleep			3	ms	
“L” level input/output level	0		0.2	mA	
“H” level input/output level	2.6		5.5	V	
Output leak current (H level)		0	2	μA	
Output voltage (L level)			0.4	V	I <sub>DATAL</sub> = 200μA
Wave shaping output duty ratio	45	50	55	%	V <sub>IN</sub> (MIX) = 60dBm VEMFF or single tone
Image Suppression Ratio		35		dB	
Operating Temperature Range	-40		+85	°C	

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

Length: 20mm

Width: 20mm

Height: 2.3mm

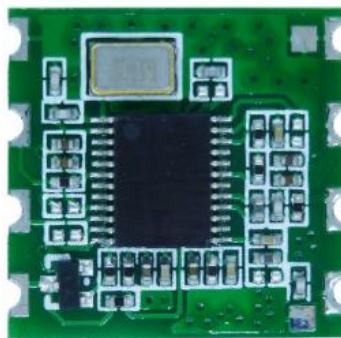
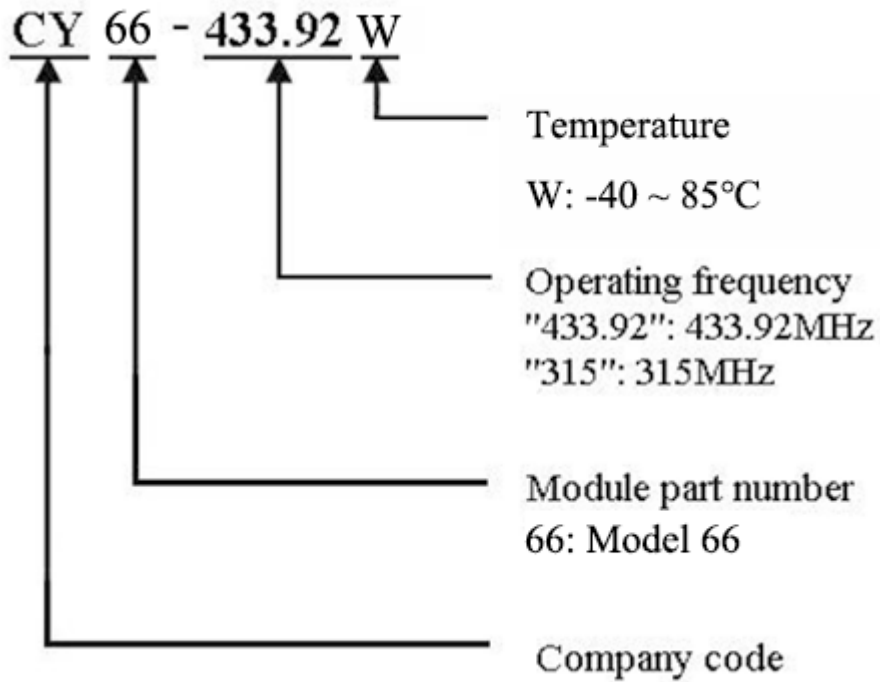


Figure2 CY66 Dimension

## 7. ORDER INFORMATION



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](http://www.rficy.com)

Email: [info@rficy.com](mailto:info@rficy.com)