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Type: Super-Heterodyne Receiver Module Model: RXB12

# **DESCRIPTION:**

RXB12 is an ASK/OOK receiver super-heterodyne module adopted SYN400R, which 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 RXB12 is based on a single-conversion, super-heterodyne receiveer 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 RXB12 is a high performance module at a competitive cost and easily to design for your product. The RXB12 module can be also a RoHS compliant product.





### Features:

- Low cost ASK/AM radio superhet receiver
- High frequency stability (no adjust components) & coherence
- Very low RF re-radiation at the antenna
- Operation temperature  $-20 \sim 70$  degrees centigrade
- Supply voltage: 2.8~5.5v
- Available frequency: 315/433.92MHz (other Frequency customer selectable)
- Compatible with most AM (ASK/OOK) transmitters
- Smal package: SIL-6PIN (2.54mm of pin distance)
- Lead Temperature (soldering, 3s): 330 degrees centigrade

## APPLICATION:

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

#### **Electrical Characteristics :**

Parameter	Specification			Unit	Condition
	Min	Тур	Max	Unit	Condition
Frequency Range	300	315/433.92	450	MHz	
Receiver Sensitivity	-110		-105	dBm	
Data Rate	0.058		10	KBaud	
Supply Voltage, VDD	3.0		5.5	v	DC
Current	5.7		7.3	mA	
Operating Temperature	-20		+85	°C	

### PCB Size



PIN-layout:

PIN No. (from left to right)	1	2	3	4	5	6
Name	ANT	GND	VDD	DATA	DATA	GND
		Power	Power	Digital	Digital	Power
Description	RF Input	Supply	Supply	Data	Data	Supply
		GND	VDD	output	output	GND

Note:

For whip antenna: 22.6cm for 315 MHz, 17cm for 433.92 MHz is recommended.

For more information and assistance, contact us as follows:

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