

Wireless Radio Superregenerative Receiver Module



Model No.: RM1SG

A. Technical Specifications:

Parameter	Remarks	Reference Value			Units
		Minimum	Standard	Maximum	
Operating Voltage	DC	3	5	8	V
Quiescent Current			5		mA
Modulation Mode	AM				
Frequency		100	315/433	500	MHz
Receiving Sensitivity			-103		dbm
Transfer Rate			4.8K		bps
Output Mode	TTL				
Dimension(LWH)			30*14*7		mm

B. Pin Function Introduction:

Pin	Name	Function
	VDD	Power Anode
	RXD	Signal Output
	GND	Power Cathode

C. Product Specifications:

1. Applying LC oscillating circuit, built-in magnifying exchange, output signal is TTL and can be directly connected to decoder;
2. Receiver module has wide receiving bandwidth ± 10 MHz;
3. Powered by voltage from DC3V to DC8V, generally DC5V is applied.
4. Frequency range of module is from 260MHz to 440MHz with general use of 315MHz or 433MHz;

5. Quiescent current of module is generally 5mA and it can be 1.5mA as minimum in case of special requirement, but the receiving sensitivity will be reduced.
6. Output of receiver module comes with noise, also can be silent in case of special requirement, then the receiving sensitivity will be reduced.

D. Notes:

1. Connect 50ohm 1/4 of wavelength cable antenna (wavelength= light speed/frequency), around 23 cm before using. Pulling out the antenna and keeping it straight will bring best effect.
2. Must make sure there are stable voltage and good wave filtration for the module, because low voltage or wave interference of power source will shorten the receiving distance.
3. The same frequency interference will shorten the receiving distance. If SCM is used to be decoder, the SCM should come with low frequency crystal oscillation, if not, with higher frequency crystal oscillation, there will be stronger interference. Keep the module far away from interference source and apply lower frequency crystal oscillation as you can.
4. To avoid affecting the receiving distance, the antenna should be pulled outside of metal shell, for the metal shell will shield, the receiving distance will be affected.
5. Usually should avoid using two receiver modules at the same time, for the oscillation sources will interfere each other and the receiving distance will be shortened.