

ASK-315MHZ RECEIVER MODULE



315Mhz RF module Upgraded For WL101-331 Superheterodyne 315 mhz Wireless Receiver Modules Diy Kit For Arduino uno Remote control

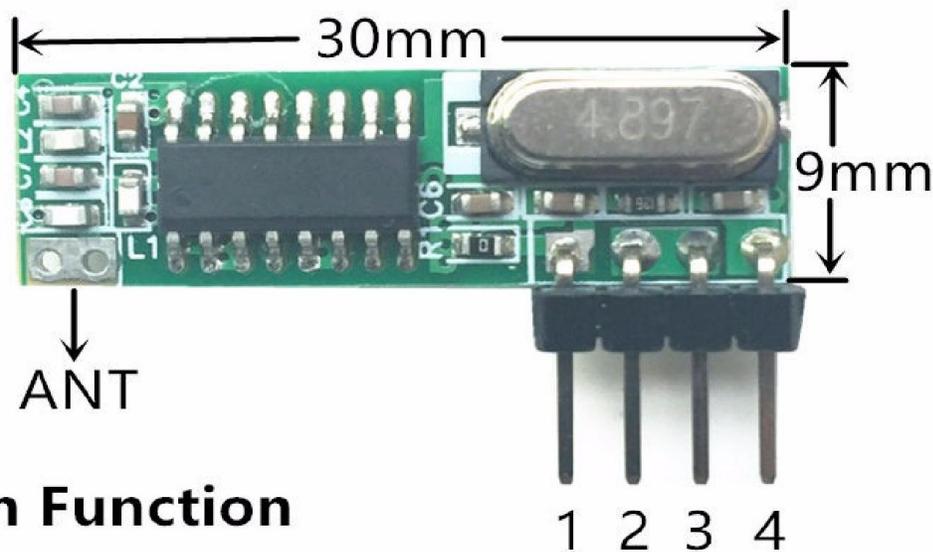
Application environment

Remote control switch, receiver module, motorcycles, automobile anti-theft products, home security products, electric doors, shutter doors, windows, remote control socket, remote control LED, remote audio remote control electric doors, garage door remote control, remote control retractable doors, remote volume gate, pan doors, remote control door opener, door closing device control system, remote control curtains, alarm host, alarm, remote control motorcycle remote control electric cars, remote control MP3.

Product Description

[Receiver module] Product Model: RX470-3

RX470-3 : superheterodyne wireless receiver module is receiving UHF ASK demodulators support ASK and OOK modulation. The receiver module has high sensitivity (-108dBm), Low-power performance, along with high dynamic range (greater than 60dB). Module uses highly integrated chip, built front-end low-noise amplifier , Mixers, filters, frequency synthesizer circuit, etc., can maximize the signal optimization.



Pin Function

- ANT - Antenna Pin
- 1.VCC - Power input Pin
- 2.DO - Data Output Pin
- 3.DO - Data Output Pin
- 4.GND - Power Ground Pin

Product Features

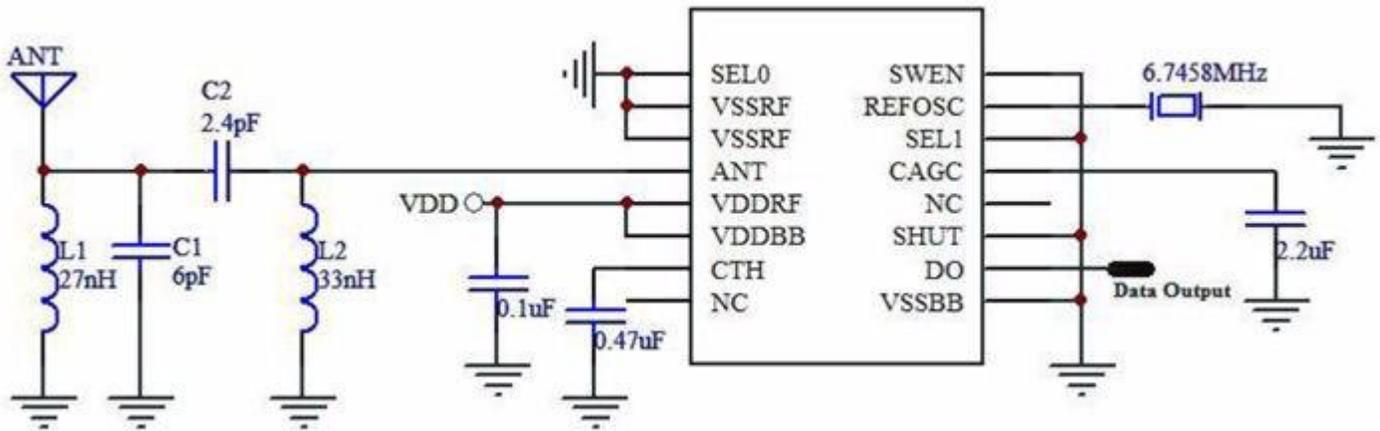
1. Support ASK / OOK modulation, the receiver sensitivity of -108dBm;
2. Operating frequency: 315 MHz, bandwidth of about ± 150 KHz;
3. mains input voltage range: 2.2V-5V;
Working current: Type :2.1mA (Requirement:VDD=5V) ; Type :2.1mA (Requirement:VDD=3V)
4. Quiescent Current: 1uA
5. Low power consumption;
6. good selectivity and spurious radiation suppression, and easy to pass CE / Fcc international certification;
7. Good local oscillator radiation suppression, multiple receiver module to work with (ie, more than single income) and will not interfere with each other, used together without affecting the receiving distance;
8. multiple transmission rates, the general module for 2KHz, up to 10KHz;
9. Temperature range: -40-85 °C
10. ultra-small size of 30 × 9 × 1 (mm) (can be customized according to customer)
- 11.External antenna: 32CM single core wire, wound into a spiral

Applications

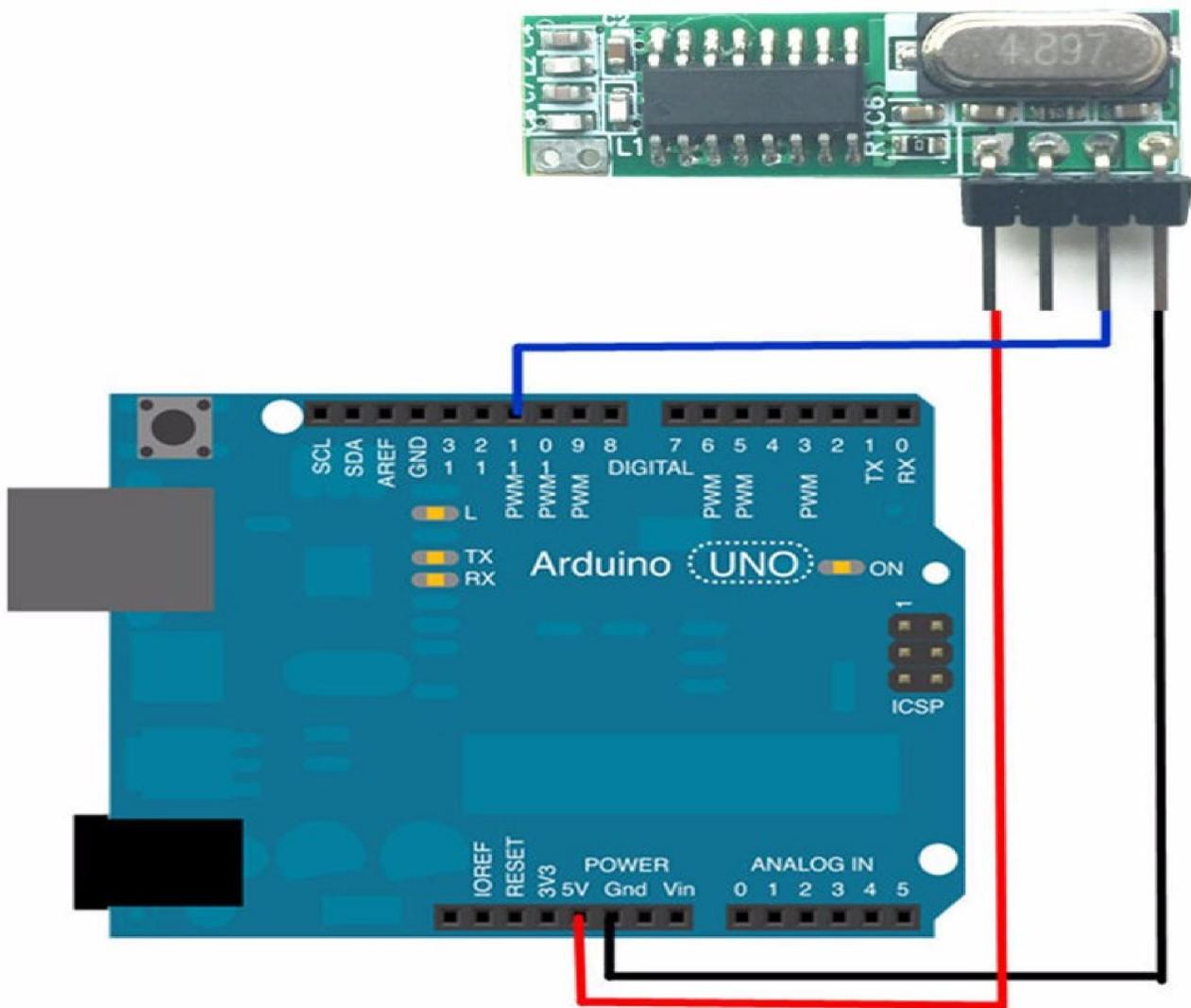
- 1.wireless power switch, socket, remote control switch, receiver module,
2. access control, electric cars, motorcycles, automobile anti-theft products, remote door openers, closers control system
3. security, surveillance systems, home security products, electric doors, alarm host, alarm

- 4. rooms controls, shutter doors, windows, remote control socket, remote control LED, remote audio remote control electric doors, garage door remote control, remote control retractable doors, remote rolling gates, sliding door
- 5. smart home products, remote control curtains, remote MP3, audio

Circuit schematics



Superheterodyne receiver



Antenna selection Description

General application mode

For general application mode, the antenna can directly adopt the general specifications from the market;

The special enhancement mode

The general application mode cannot satisfy if you need farther communication distance, so the special enhancement mode can receive farther communication distance, and the specific information as follows:

315Mhz Antenna

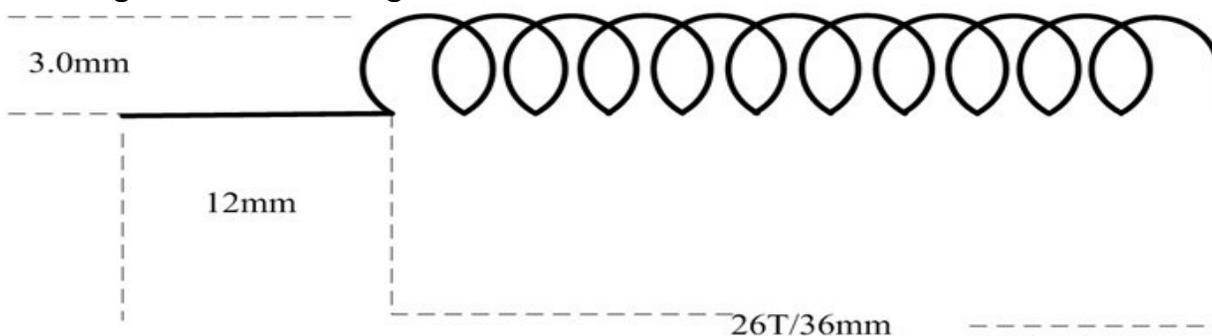
The antenna's core of conductor diameter (including the Antenna skin): 1.0mm; (except the Antenna skin): 0.35mm

The wire length of weld end: 12mm

The diameter of antenna winding (except the Antenna skin): 3.0mm;

The turn number of winding: 26 turns; The length of the winding: 36mm

The diagrammatic drawing:



Antenna for 433Mhz RF module

Short antenna for Transmitter



long antenna for Receiver

