

## PRODUCT SPECIFICATION

Product Name: 433 wireless transmitter module

Product Model: WL102series

## WL102 系列 433/315 无线发射模块

### 1、Product description

The transmitter module of WL102 is the UHF ASK modulation transmitter, supporting ASK and OOK two modulation types. This transmitter module equips PPL circuit and ASK simulate modulation circuit, has the high level of integration, can be applied to short distance wireless communication.

The working frequency is between 433MHz, the transmit power is greater than 11dBm.

According to different application requirements, and according to the working voltage and working frequency, WL102series receiving module have the several products:

Serial number	Identification of product	Working voltage	Working frequency
	WL102-34X	2.0V-3.6V	433MHz

### 2、Product Feature

- Supporting ASK/OOK Modulation Mode, transmit power is greater than 11dBm;
- Working frequency: 433.92 MHz;
- Supply voltage input range: 2.0V-3.6V;
- Low power consumption, when the current is in shutdown mode is less than 1uA;
- Transmission rate can reach 20KHz;
- Temperature range: -40-85°C;Can work normally even under the harsh environmental temperature;

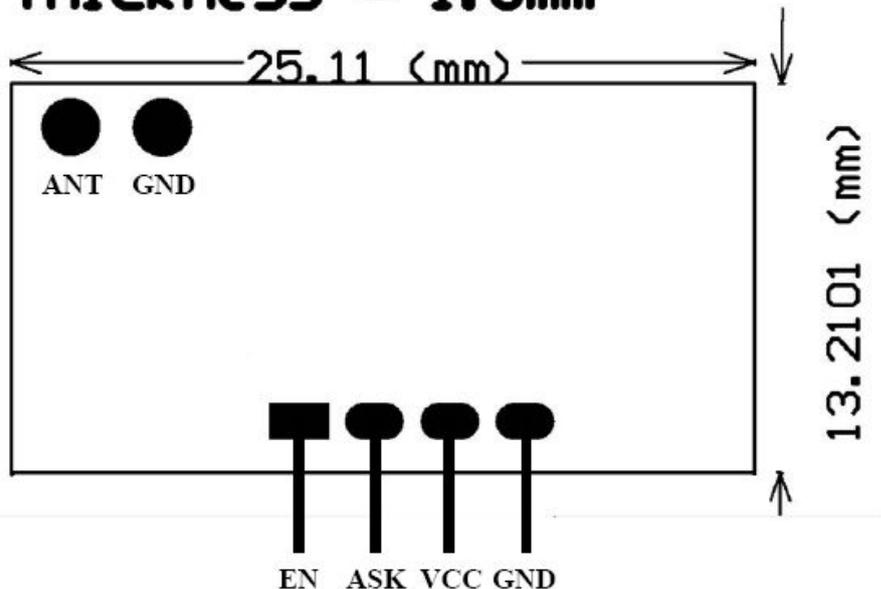
### 3、Application range

- Wireless power switch、socket
- Remote control for window curtain、entrance guard、electric car
- Security and protection system、monitoring system
- Hotel rooms control
- Intelligent household products

### 4 The arrangement of the encapsulation and pin

- Insert pin module - WL102-XX1series

**Thickness = 1.0mm**



Pin No.	Symbol	Name	Introductions
1.	ANT	Antenna pin	RF signal output, can directly connect to the antenna.
2.	GND	Power-ground Pin	The GND, power to ground pin, can connect the antenna's shell shield.
3.	EN	Enable Pin	When the EN connects the high level, the module working; when connects the low level, the module sleeping.
4.	ASK	Data input pin	Wave signal input;
5.	VCC	Power supply pin	Power Input
6.	GND	Power-ground Pin	The ground wire connects power supply.

## 5、Antenna size

### ➤ General application mode

For general application mode, the antenna can directly adopt the general specifications from the market; The specific information as follows:

The antenna's core of conductor diameter(including the Antenna skin): 1.0mm, (except the Antenna skin) : 0.5mm;

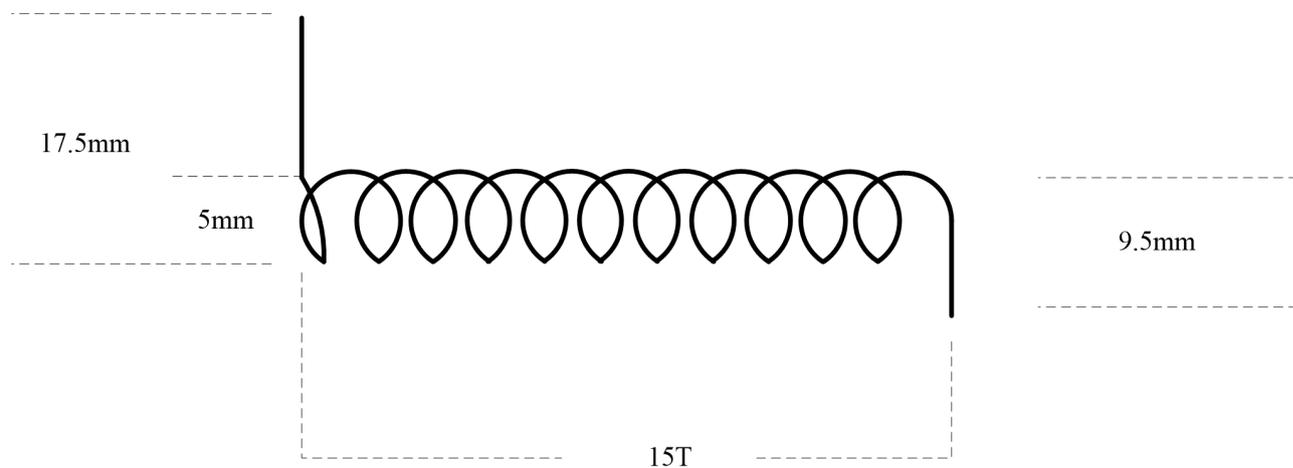
The wire length of weld end: 17.5mm, the wire length of antenna terminal: 9.5mm;

The diameter of antenna winding (including the Antenna skin):5mm;

The turn number of winding: 15 turns;

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The diagrammatic drawing:



### 6、Notes

- (1) These products are belong to CMOS device, must **pay attention** the static electricity when it is reserving, transporting or using.
- (2) When the devices are using, must **make sure** it are connected well to the ground wire.