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

**Model: CY41-2.0**

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### Description:

The CY41-2.0 is an ASK/OOK compatible super heterodyne wireless receiving module with high performance for ISM frequency band. With the adoption of RF wireless data transferring/receiver chipset, the module has advantages at high receiving sensitivity, small size and low cost. It solves the problem on space for the small-sized product. From wireless signal input to data output can be done without any electrical circuit. User only use extra simple data decode circuit can achieve wireless products development.



### Order Information:

Model NO.	Frequency
CY41-V2.0 - 315	315 MHz

### Features:

- Frequency: 315MHz;
- High sensitivity -110dBm;
- Supply voltage: 2.6V – 5.5V;
- Low power consumption: 5V @ 315MHz, 3.5mA;
- Data Rate: 2.4Kbps (Manchester Code);
- Consumption on energy saving mode: min. 0.8uA;
- Operating temperature: -20°C ~ 70°C, work normally even in the severe temperature environment;
- Good selectivity and stray radiation suppression ability, easy to pass the CE/FCC international certification;
- Excellent inhibiting ability for local oscillator radiation: multiple receivers receive signals from one transmitter simultaneously without any mutual interference and influence on range;
- Dimension: 10.7\*10.6\*2.1mm

## Application

- Car remote control door switch (RKE);
- Remote control door opener;
- Wireless security alarm;
- Wireless door bell;
- Wireless Controller;
- Wireless data transmission;

## Pin Description

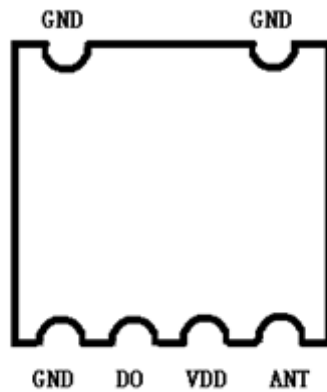


Figure1 CY41-V2.0 Shape & Pins

Pin-out as showed in figure 1 above

Pin	Pin Name	Pin Definition
1	GND	Ground
2	DO	Data Output
3	VDD	Connect to positive power supply
4	ANT	Antenna

**Note 1:** ANT pin is a 50 ohm antenna input. The length is about:  
23cm for 315MHz



### Electrical Characteristics:

Condition: Ta=25°C Vcc=5V Frequency=315MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	314.9	315	315.1	MHz	
Modulation	ASK				
RF Sensitivity		-110		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		300		KHz	
Start-up Time			10	ms	
Supply Voltage, VDD	2.6	5.0	5.5	V	
Current	3.0	3.5	4	mA	
Decoding output max. voltage	2.6		5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

### Mechanical Size: (Unit: MM)

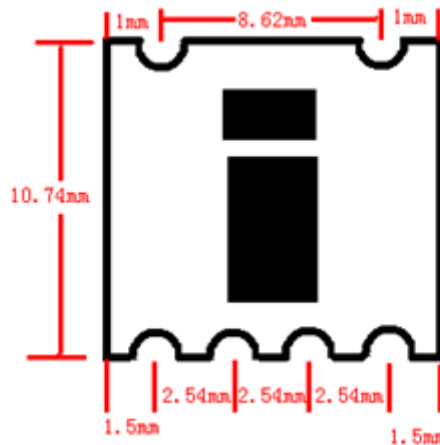


Figure2 CY41-V2.0 Dimension



## Precaution

The driving current of the data output pin of CY41-V2.0 module is relatively weak. If the MCU is driven directly, the I / O port of the microcontroller cannot be connected to a pull-up or pull-down resistor, and the internal pull-up or pull-down resistor of the microcontroller must also be set in a disabled state.

For more information and assistance, please contact us as follows:

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