



Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY30-XXX

Description:

The CY30 is a ASK/OOK compatible superhet receiver module. CY30 is a superior performance receiver for ISM band. With the adoption of Infineon's Industrial RF wireless data receiver chip, CY30 has the high receiving sensitivity and strong anti-interference ability. It can do wireless signal input to the data signal output without any external circuit. Its superior performance makes a lot of before market car manufactures adopt this module as the preferred choice for RKE receiver module. Users only need to decode the data plus a simple circuit and then any wireless products development can be easily achieved.



Order Information:

Model NO.	Freq.
CY30-315	315MHz
CY30-433	433.92MHz

Features:

- Frequency: 315MHz/433.92MHz(custom frequency is available)
- High sensitivity -110dbm@433.92 1kbps BER10E-2
- Power down mode with very low supply current (100nA typ)
- Higher sensitivity: -110dBm
- Operation temperature: -40°C ~85°C
- Supply voltage: 5V
- Low current: 4.6mA(5V, 315MHz)
- Be compatible with most (ASK/OOK) transmitters
- Fully integrated VCO and PLL Synthesizer

Application

- TPMS/RKE/PKE
- Remote controls
- Car alarm systems
- Garage door and gate openers
- Alarm and security system
- Automation systems

Pin Description

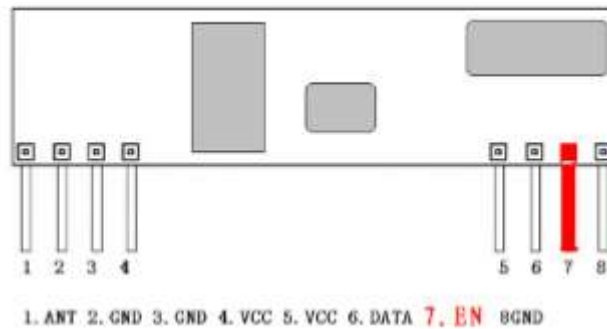


Figure1 CY30 Shape & Pins

Pin	PIN NAME	PIN DEFINITION
1	ANT	RF signal input pin, connect antenna outside(Note1)
2	GND	Connect to negative power supply
3	GND	Connect to negative power supply
4	VCC	Connect to positive power supply
5	VCC	Connect to positive power supply
6	DATA	Data connected to MCU
7	EN	Optional output 1.Empty (default setting) 2.Battery saving mode: (Working mode in High level input) (Sleeping mode in Low level input)
8	GND	Connect to negative power supply



Note 1: ANT pin is a 50 ohm antenna input. The length is about:
23cm for 315MHz
17cm for 433.92MHz

Electrical Characteristics:

Condition: Ta=25°C Vcc=5.0V Freq.=315MHz

Specification	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	314.90	315.00	315.10	MHz	Other freq. available
Receiver Sensitivity		-110		dBm	BER=10E-2
Data Rate			2.4	Kbps	Manchester code
Supply Voltage	4.5	5.0	5.5	V	DC
Current			4.6	mA	DC
Operating Temperature	-40		85	°C	

Condition: Ta=25°C Vcc=5.0V Freq.=433.92MHz

Specification	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	Other freq. available
Receiver Sensitivity		-110		dBm	BER=10E-2
Data Rate			2.4	Kbps	Manchester code
Supply Voltage	4.5	5.0	5.5	V	DC
Current			4.6	mA	DC
Operating Temperature	-40		85	°C	



Mechanical Size: (Unit: MM)

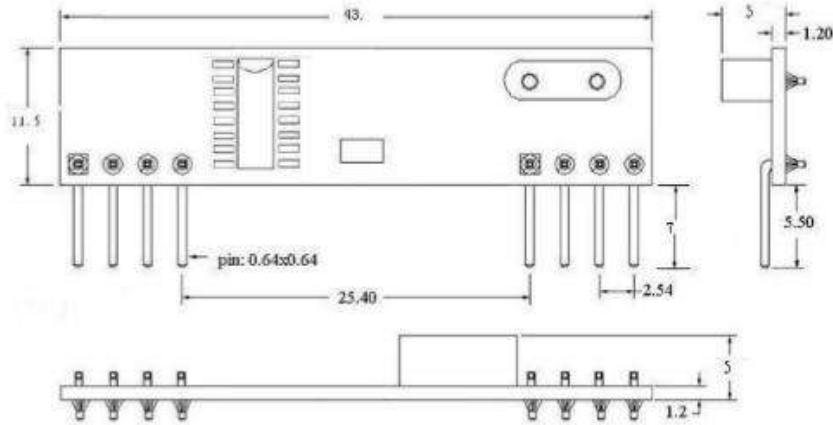


Figure2 CY30 Dimension

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

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