# **HOPE RF**

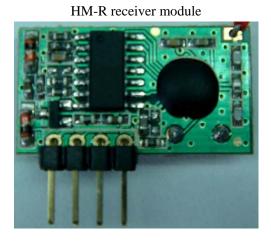
### HM-R series FSK receiver module

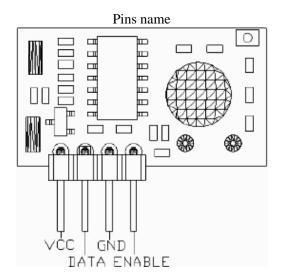
#### GENERAL

HM-R series receiver module is specially designed by Hope Microelectronics Co., Ltd. For replacing those applications that used ASK technology module already. It used together with HM-T/HM-TP series FSK transmission module. Due to the benefits form FSK technology, the module is robust to interference, and longer working range can be achieved.

#### **FEATURES**

- 1. Highly integrated, small size
- 2. High sensitivity, low power consumption
- 3. FSK technology, suitable for replacing ASK modules
- 4. Less interference, longer working range
- 5. Can be used to replace ASK module pair W/O software modification
- 6. No manual tuning required during production



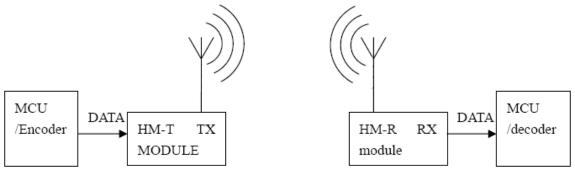


Note: ENABLE active hi make module work and low sleep the module.

It is recommended than keep ENABLE low while power on, and then active it after module initialization

### Application

Pin to pin replace the old ASK module pair. Special design can be made for more sophisticated application.



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### **Specification**

1. DC parameter

	Min	Тур	Max	Unit
Power supply	2.5	3	5	V
Temperature	-35		80	°C
Data rate	600	4800	9600	bps

Note: Data rate can be customize from 300bps to 100kbps

#### 2. Performance

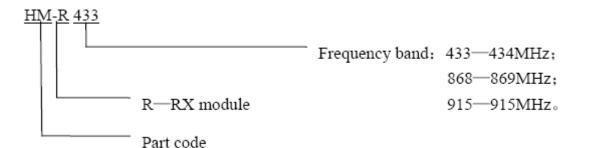
VCC=3V, T=25℃

Model	Condition	HM-R433	HM-R868	HM-R915	单位
Frequency		434	869	915	MHz
Typical Sensitivity		-109	-105	-105	dBm
Maximum Sensitivity		-100	-98	-98	dBm
Typical RX current		10	11.5	13	mA

Note: 1.Range test conditions: 1.Open area; 2.Antenna is about 2m above ground.

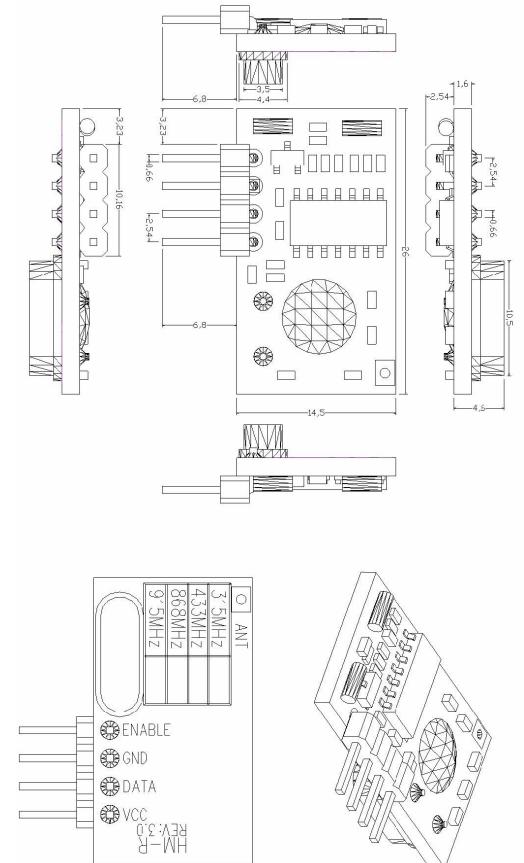
2. If 5V power supplied, even longer range is possible, however more power be consumed

#### Naming





#### **Mechanical outline**



### **HOPE RF**

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