

**HM-R series FSK receiver module****General**

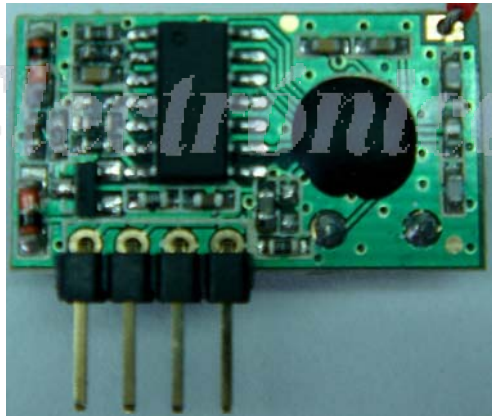
HM-R series receiver module is specially designed by Hope Microelectronics Co., Ltd. For replacing those applications that used ASK technology module already. It used together with HM-T/HM-TP series FSK transmission module. Due to the benefits form FSK technology, the module is robust to interference,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

**FEATURES**

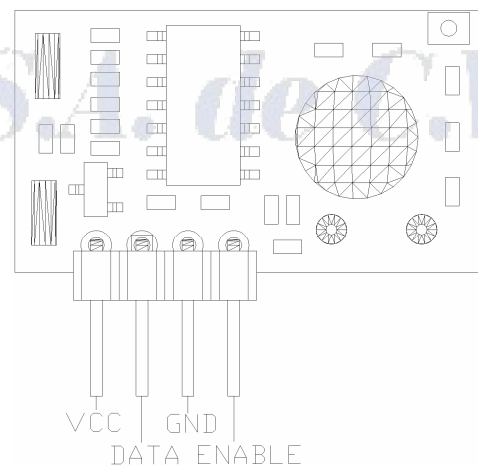
1. Highly integrated, small size
2. Hi sensitivity, low power consumption
3. FSK technology, suitable for replacing ASK modules
4. Less interference, longer working range
5. Can be used to replace ASK module pair W/O software modification
6. No manual tuning required during production

The module

HM-R receiver module



Pins name



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

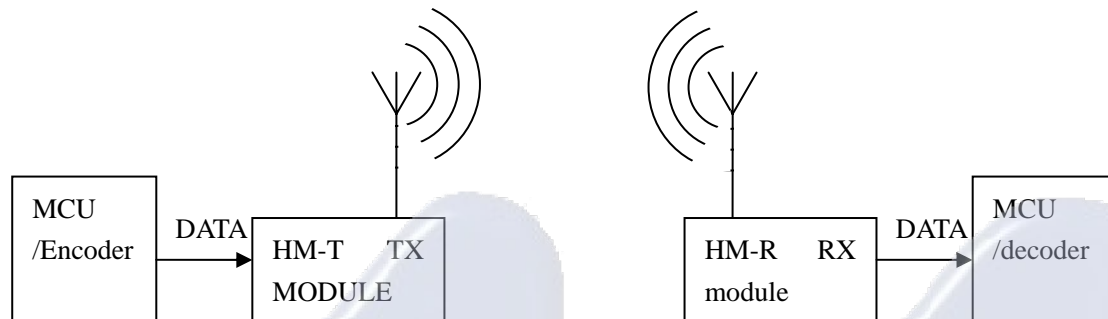
It is recommended than keep ENABLE low while power on, and then active it after module initialization

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## HM-R

### Application

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



### Specification

#### 1. DC parameter

	Min	Typ	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

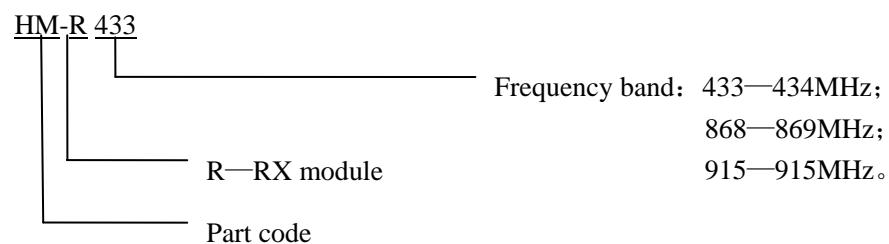
VCC=3V, T=25°C

Model	Condition	HM-R433	HM-R868	HM-R915	单位
Frequency		434	869	915	MHz
Sensitivity		-97	-98	-99	dBm
RX current		9	10	11	mA
Reliable range	Work with HM-T	240	160	250	m
	Work with HM-R	260	290	370	m

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

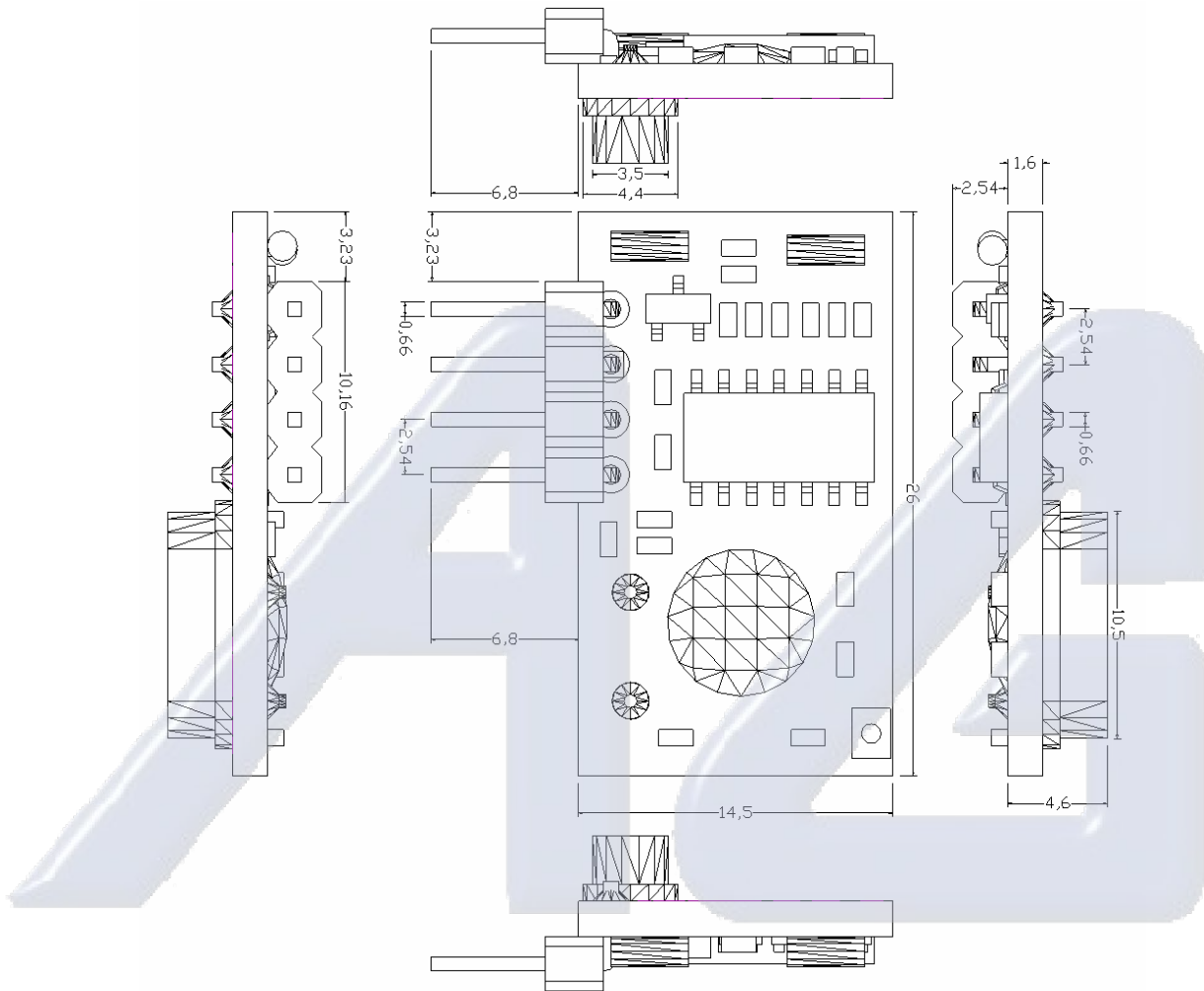
### Naming



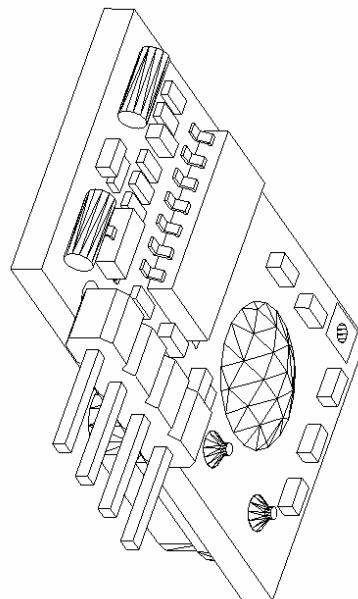
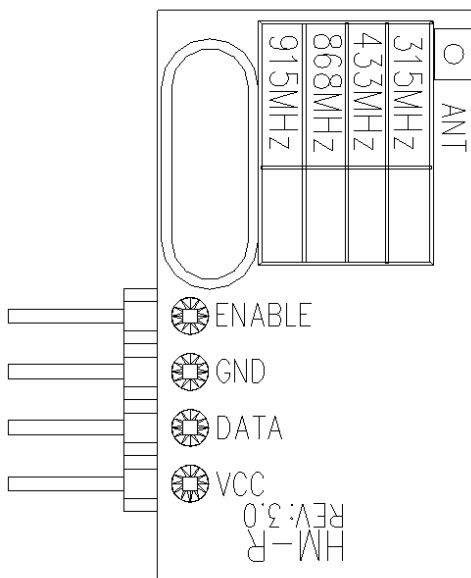
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## Mechanical outline



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