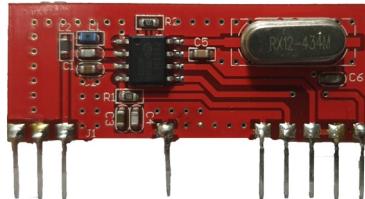
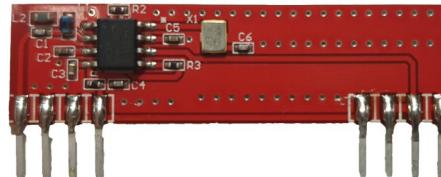




# Super Heterodyne Receiver Module

## Features

- Complete RF Receiver
- ASK Demodulation
- PLL Enhanced Noise immunity
- CMOS / TTL Output
- Stable Operating Frequency
- Sleep Mode  $0.5\mu\text{A}$
- 3V - 5Vdc Operating Voltage
- Low Power Consumption
- High sensitivity:
  - -110dBm @315MHz
  - -110dBm @433MHz



## Applications

- Wireless Security Systems
- Car Alarms
- Remote Gate Controls
- Remote Sensing
- Data Capture
- Sensor Reporting

## General Description

The RF Solutions AM Super heterodyne receivers are compact modules, which can be used to capture un-decoded data from any equivalent AM Transmitter.

The module exhibits extremely stable electronic characteristics with no adjustable components and very reliable operation. The modules are compatible with RF Solutions Ltd. range of AM transmitter to provide a complete Radio Link.

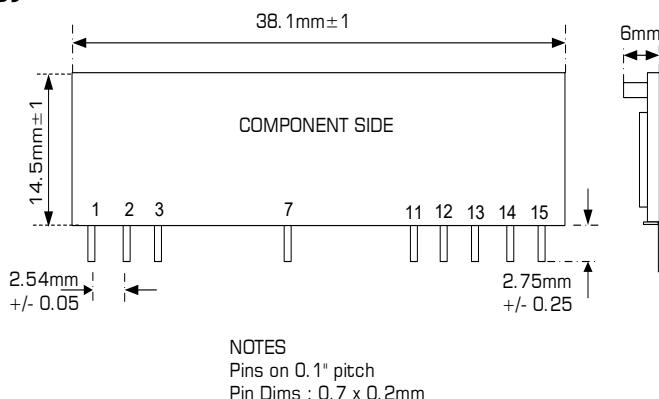
## Ordering Information

Part Number	Description
AM-RX12ES-433P	SIL AM Receiver Module 433.92MHz
AM-RX12A-433P	SIL AM Receiver Module 433.92MHz



## Pin Descriptions (AM-RX12E-433)

Pin	Description
1, 12	Supply Voltage
2, 7, 11	Ground
3	External Antenna
13, 14	Data Output
15	Power Down GND = Standby Mode 5V = Normal Operation

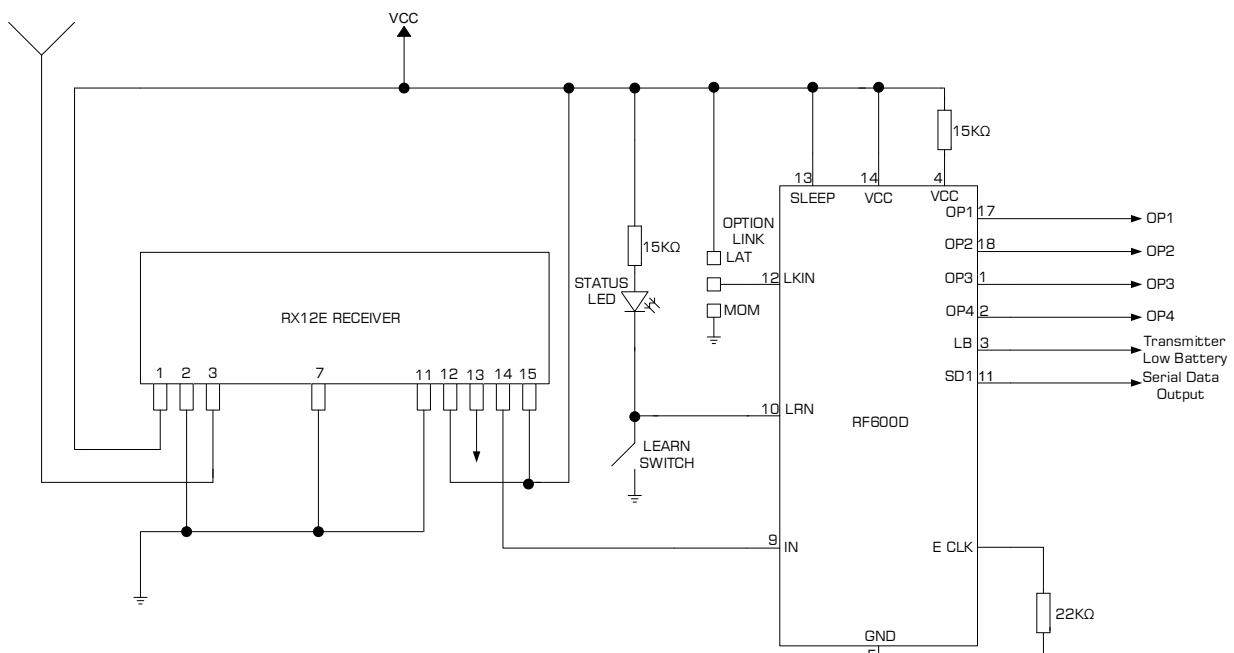


## Electrical Characteristics

Ambient temp = 25°C unless otherwise stated.

Characteristic	Min	Typical	Max	Dimensions
Supply Voltage	3	5	5.5	Vdc
Supply Current		6		mA
Standby Current (PD=+Vcc)		0.5		µA
RF Sensitivity (Vcc=5V, 1Kbps AM 99% Square wave modulation)		-110		dBm @433MHz
Working Frequency		433.92		MHz
Operating Temperature Range	-40		+85	°C

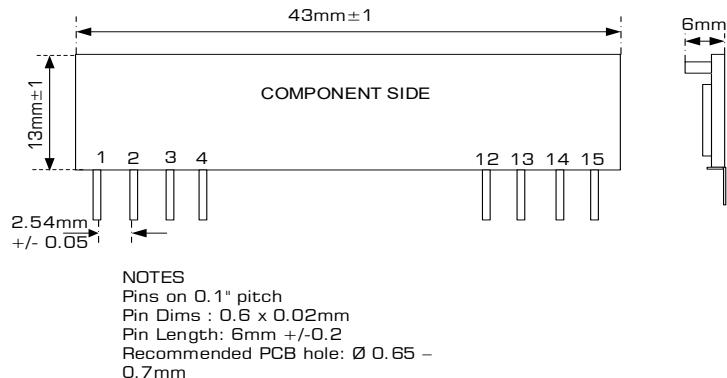
## Typical Application





## Pin Descriptions (AM-RX12A-433)

Pin	Description
1	ANT
2, 3, 15	Ground
4, 12	Vcc
13, 14	Data Output

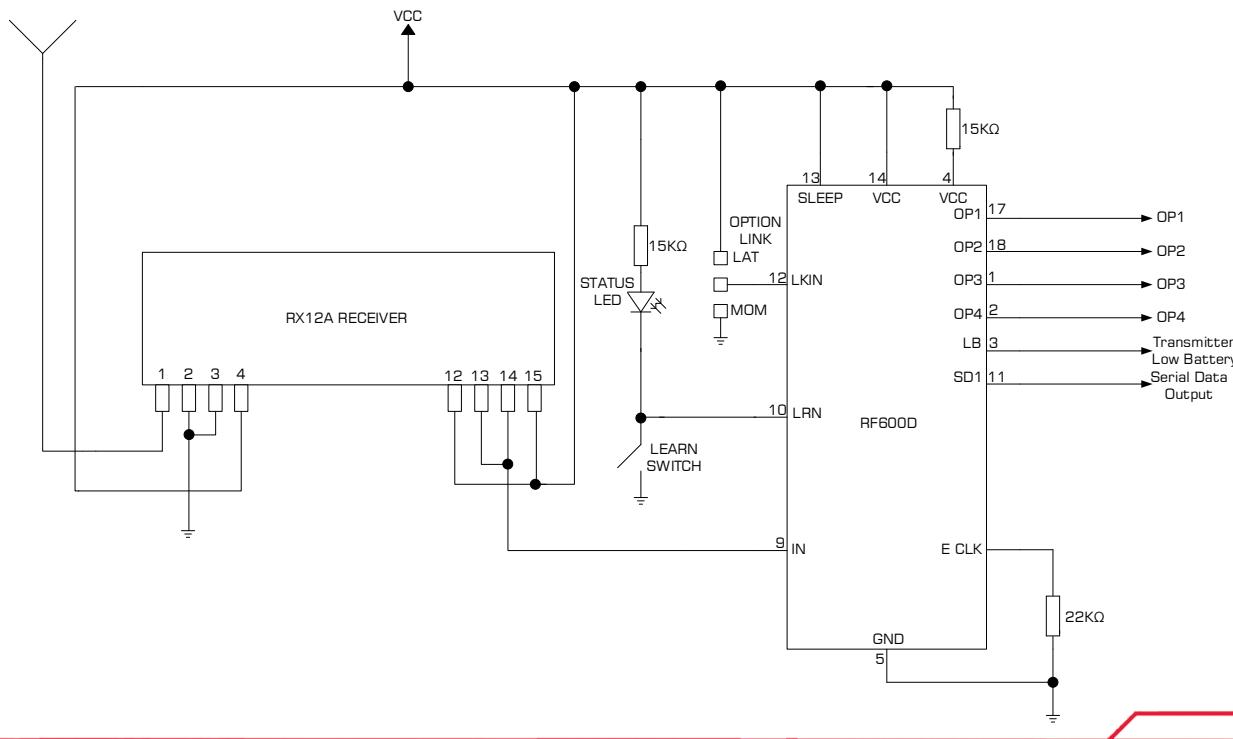


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Operating Temperature Range	-40		+85	°C

## Typical Application





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When using the module in an end product, continued compliance can only be assured by incorporating the module in accordance with RF Solutions specific installation instructions and in accordance with the published information on the RF Solutions product data sheet. The antenna gain specification must be adhered to at all times.

Article 3.1a and 3.1b of the EU Radio Equipment Directive 2014/53/EU should be assessed in the final product.

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Environment Agency producer registration number: WEE/JB0104WV.

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