Summary

INHAOS offers a wide variety of 2.4G RF module to suit different applications. we do this to make your RF solution simple.

All RF-24xx series module are based on BK2421 chipset, it provide max 5dBm programmable output power and 1M/2Mbps air data rate in 2400-2483.5 MHz ISM band.

RF-2400 series provide a fully RF physical device with 3 models, the module have to working with your extend processor to implement the RF function.

RF-2410 series combined RF and C8051 MCU, INHAOS create a new conception is RF SOB (RF system on board) to make the RF like a simple UART operation, INHAOS will provide sample code to help user to develop the own application on the RF-2410x module, and also will release firmware for direct use.

RF2410U
RF-2410M
RF-2400P
RF-2400W
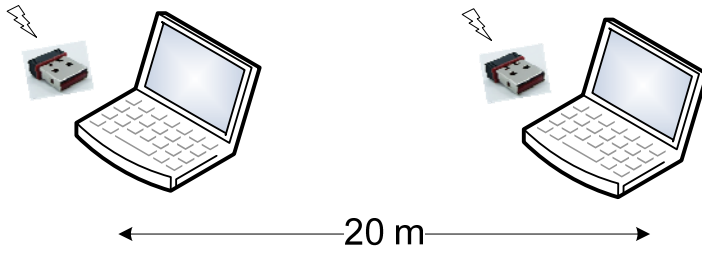RF-2400-V03
… …

RF-24xx series RF module selection

RF-2400W and RF-2400P has the same dimensions and electrical interfaces, and different antenna, Wiggle Antenna is about 1dB lower than PIFA with smaller dimension. You can purchase RF-2400W and RF-2400P to measure to select the appropriate antenna design for mass production.RF-2400-V3 can use SMD reflow, and is available for quantity production with smaller size and lower cost. From cost and package, RF-2400-V3 is very suitable for mass production.

RF-2410U is designed as a nano dongle, it can be used as receiver and build a bridge between RF nodes and PC. RF-2410M provide a standard 3wire UART and provide a IO used to parameter configuration, also the RESET pin can used for weakup during the MCU under power down mode, this feature make the module working with very small power consumption.

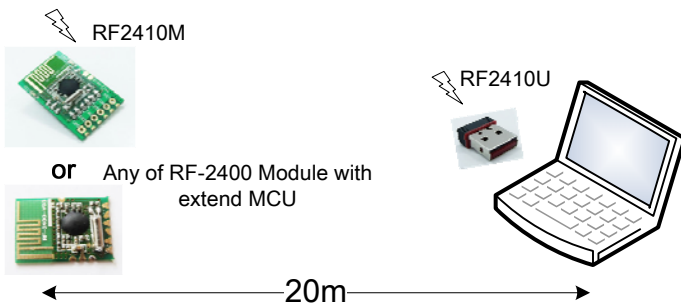| No.	Model	Package	Size(mm)	Antenna	Application	Picture
1	RF-2400W	DIP	15 x 26	Wiggle antenna	DIY Performance verification	
2	RF-2400P	DIP	15 x 26	PIFA antenna	DIY Performance verification	
3	RF-2400-V03	SMT	14 x 20	PIFA antenna	Product design	
4	RF-2410M	DIP/SMT	28 x 18	PIFA antenna	DIY Performance verification Product design	
5	RF-2410U	Nano dongle	With case	PIFA antenna	Product design	

Application

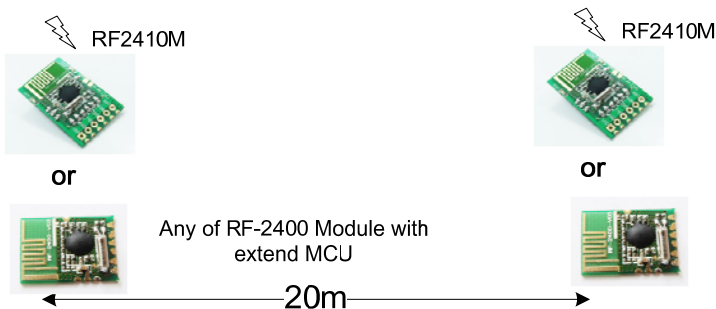### 1, Communication between PC and PC

RF-2410U provide USB 2.0 Full speed interface, user can used it for RF connection between PC and PC, INHAOS will release a reference design for this application.

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2, Communication between PC and periphery

RF2410M

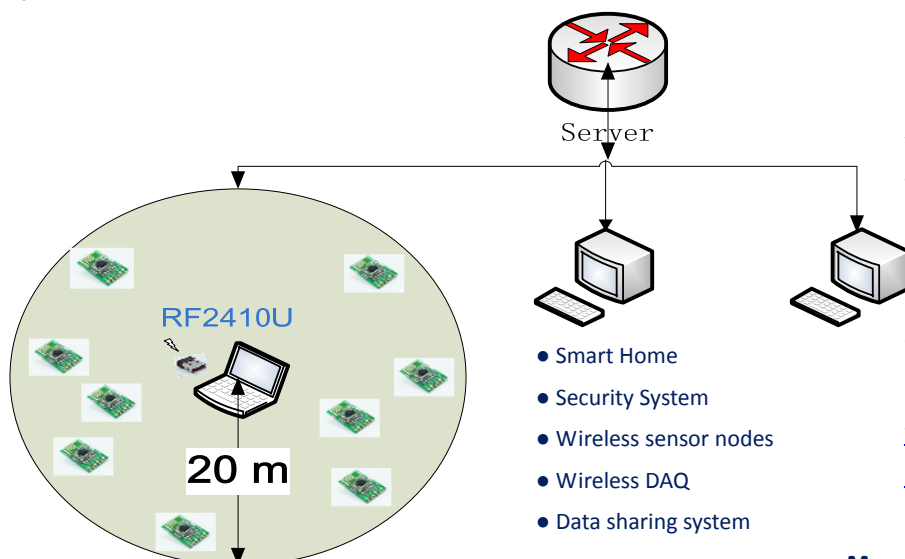**or** Any of RF-2400 Module with extend MCU

RF2410U

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RF-2410U used as a RF receiver, can be connection to any of RF-24xx series module, note the RF2410M is MCU based and it can be work alone as a independent device.

3, Communication between periphery and periphery

RF2410M

RF2410M

or

Any of RF-2400 Module with extend MCU

or

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Thank for the good compatibility of the RF-24xx series product, it can be connection with anyone each other.

4, Wireless network

Server

INHAOS will help user apply RF-24xx family product to network application, if you have similar project, Whether it's or not a commercial project, we can provide samples/demo code and all help what INHAOS can do.

RF2410U

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- Smart Home
- Security System
- Wireless sensor nodes
- Wireless DAQ
- Data sharing system
- … …

We special welcome opensource project use our product, please contact us:

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More applications, waiting for your creative… …