

## N621PA, CC1312R Module



### **N621PA Module Introduce**

N621PA CC1312R transceiver module based TI wireless MCU **CC1312R** and **CC1190** chip, designed for 868M and 915MHz band. Up to **+27 dBm** output power and down to -112 dBm sensitivity at 50kbps.

N621PA is a low-cost and small size sub g transceiver module for transmitting and receiving digital data via radio frequency. All of the N621PA's electronics (don't including an antenna) reside on a single PCB, and all operational power is derived from a single supply voltage.

The N621PA module design consists of a CC1312R low-power, integrated sub 1G transceiver RF chip, all IO pin of CC1312R are brought out. The module available frequency is from 820 to 960Mhz. The hardware is designed for maximum range, 5000m + Range (Line of Sight).

N621PA module based TI CC1312R transceiver. The module use SMD package. It has small size, the module is suitable for SMT production. Rapid development without understanding RF. The module supports WMBus and so on.

N621PA is suitable for ISM band in China, EU and USA at 868/915Mhz.

### **N621PA Module Parameter**

Model	N621PA
Module Interface	SPI, UART
Frequency	860-960 Mhz,1200Mhz
RF Data Rate	0-4000 kbps
868Mhz Transmitting Power	+27 dBm
868Mhz Receiving Sensitivity	-112 dBm at 50 kbps
868Mhz TX Current	450 mA (type)
868Mhz RX Current	9 mA
Frequency Deviation	+/- 10 khz,with Crystal oscillator(TCXO optional)
Communication Distance	10 – 5 000 m(Visual distance)
Antenna Interface	RF pin, IPEX
Installation Mode	SMD
Volume (mm)	36 mm x 32 mm x 3 mm
Operating Voltage	2 - 3.6 V
Working Temperature and Humidity Environment	Temperature: -30-70 °C; Humidity 10-95 %RH
Storage Temperature and Humidity Environment	Temperature: -40-80 °C; Humidity 10-95 %RH
Weight (kg)	≈10g

### N621PA Module Pinout

Pin Number	Function	Describe
1	GND	
2	VCCPA	CC11190 power supply, 2V -- 3.6V; MAX current: <b>500mA</b>
3	VDD	CC1312R power supply, 2V -- 3.6V
4	DIO1	MCU IO port
5	DIO2	MCU IO port
6	DIO3	MCU IO port
7	DIO4	MCU IO port
8	DIO5	MCU IO port
9	DIO6	MCU IO port

10	DIO10	MCU IO port
11	DIO11	MCU IO port
12	DIO12	MCU IO port
13	DIO13	MCU IO port
14	DIO14	MCU IO port
15	DIO15	MCU IO port
16	TMS	TMS
17	TCK	TCK
18	DIO16	MCU IO port
19	DIO17	MCU IO port
20	DIO18	MCU IO port
21	DIO19	MCU IO port
22	RESET	MCU IO port
23	DIO20	MCU IO port
24	DIO21	MCU IO port
25	DIO22	MCU IO port
26	DIO23	MCU IO port
27	DIO24	MCU IO port
28	DIO25	MCU IO port
29	DIO26	MCU IO port
30	DIO27	MCU IO port
31	DIO28	MCU IO port
32	DIO29	MCU IO port
33	DIO30	MCU IO port
34	RF	
35	GND	

### **N621PA Application Area**

Ultra low-power wireless applications

Operating in the 315/433/868/915 MHz ISM/SRD bands

Wireless alarm and security systems

Industrial monitoring and control

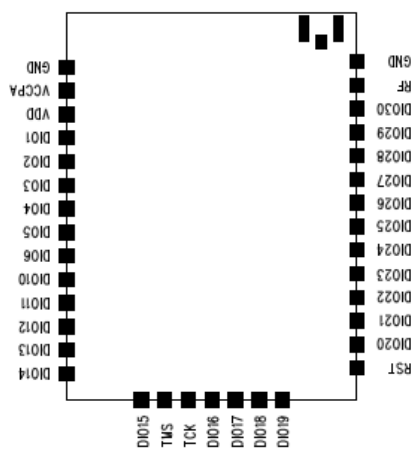
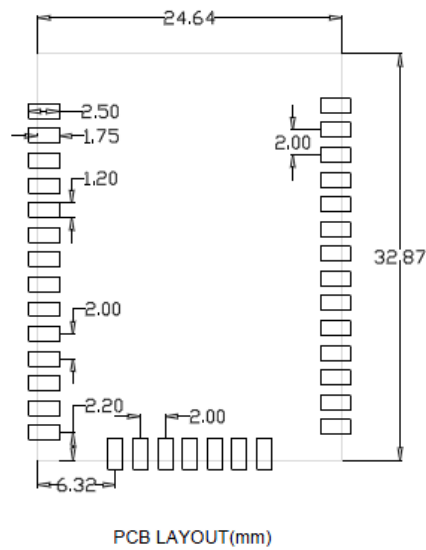
Wireless sensor networks

AMR – Automatic Meter Reading

Home and building automation

Wireless MBUS

**N621PA Layout**



**Ordering Information**

N621PA-CC1312R-868M

RF Module CC1312R+CC1190

500mW – 860-880Mhz

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N621PA-CC1312R-915M	RF Module	CC1312R+CC1190	500mW – 910-930Mhz
N621PA-CC1312R-1200M	RF Module	CC1312R+CC1190	500mW – 1210-1250Mhz

More information please contact with us.