

N532AS-B , CC1310 Module



N532AS-B Module Introduce

The N532AS-B is a low-cost, high-performance 868/915 MHz wireless module based on the TI CC1310 MCU and a Skyworks front-end module (FEM). It delivers up to **+31 dBm** output power with >52% PA efficiency, achieving an **8 km line-of-sight range** at 50 kbps (3 dBi antenna). The module provides three programmable power levels: **+27 dBm at 3.0 V**, **+30 dBm at 4.2 V**, and **+31 dBm at 4.8 V**. With an outstanding **-124 dBm receiver sensitivity**, the N532AS-B realizes a **155 dB link budget** – sufficient to penetrate walls, foliage, and industrial obstacles. The device is controlled via simple UART **AT commands**, eliminating the need for complex RF matching, firmware stacks, or lengthy certification debugging. It is ideal for battery-powered long-range IoT applications including smart agriculture, utility metering, industrial control, and smart city infrastructure.

N532AS-B Module Parameter

Model	N532AS-B
Module Interface	SPI, UART
Frequency	860-930 Mhz
RF Data Rate	0-4000 kbps
868Mhz Transmitting Power	+31 dBm(vccpa = 5v); +27 dBm(vccpa = 3.3v)
868Mhz Receiving Sensitivity	-112 dBm at 50 kbps

868Mhz TX Current	550 mA (vccpa = 5v); 370 mA (vccpa = 3.3v)
868Mhz RX Current	12 mA
Frequency Deviation	+/- 10 khz, with Crystal oscillator
Communication Distance	10 – 3 000 m (Visual distance)
Antenna Interface	RF pin, IPEX
Installation Mode	SMD
Volume (mm)	30 mm x 21 mm x 3 mm
MCU Operating Voltage	2.5 - 3.6 V
PA Operating Voltage	2.5 – 5.5 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

N532AS-B Module Pinout

Pin Number	Function	Describe
1	RF	RF pin
2	GND	GND
3	GND	GND
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	DIO7	MCU IO port
11	DIO8	MCU IO port
12	DIO9	MCU IO port
13	DIO10	MCU IO port
14	VCCPA	PA power supply, 2.5V – 5.5V MAX current: 600mA
15	VDD	CC1310 Power supply
16	GND	GND
17	DIO11	MCU IO port
18	DIO12	MCU IO port
19	DIO13	MCU IO port
20	DIO14	MCU IO port
21	DIO15	MCU IO port
22	TMS	MCU TMS
23	TCK	MCU TCK
24	RESET	MCU RESET
25	DIO16	MCU IO port
26	DIO17	MCU IO port

27	DIO20	MCU IO port
28	DIO21	MCU IO port
29	DIO22	MCU IO port
30	DIO23	MCU IO port
31	DIO24	MCU IO port
32	DIO25	MCU IO port
33	DIO26	MCU IO port
34	DIO27	
35	DIO28	
36	DIO29	
37	DIO30	
38	GND	
39	GND	

Application Area

Ultra low-power wireless applications

Operating in the 868/915 MHz ISM/SRD bands

Wireless alarm and security systems

Industrial monitoring and control

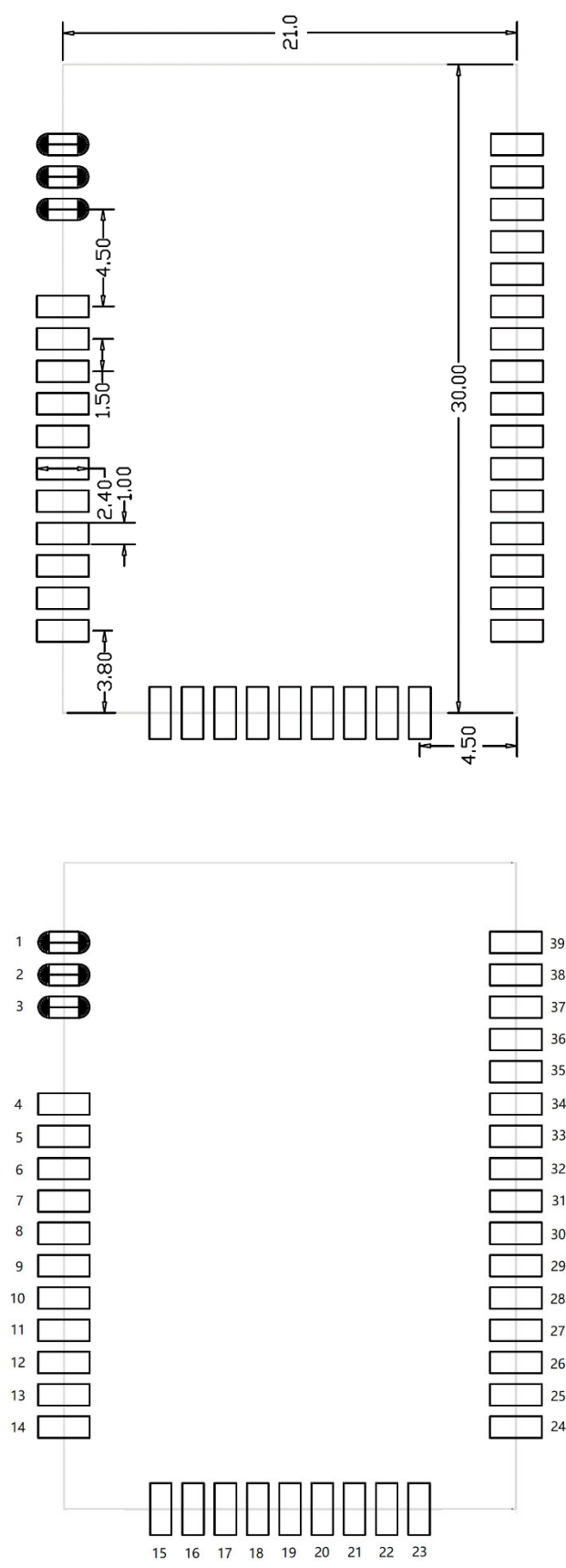
Wireless sensor networks

AMR – Automatic Meter Reading

Home and building automation

Wireless MBUS

N532AS-B Layout



Ordering Information

N532AS-B-CC1310-868M	RF Module	31DBM	1200mW – 860-880Mhz
N532AS-B-CC1310-915M	RF Module	31DBM	1200mW – 910-930Mhz