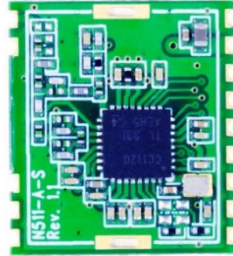


## N511BS, CC1125 Module



### N511BS Module Introduce

N511BS CC1125 transceiver narrowband module designed for 169M, 433M, 868M and 915MHz ISM band. Up to +15 dBm output power and down to -120 dBm sensitivity at 1.2kbps.

N511BS is a low-cost and small size spi RF transceiver module for transmitting and receiving digital data via radio frequency. All of the N511's electronics (don't including an antenna) reside on a single PCB, and all operational power is derived from a single supply voltage.

The transceiver module design consists of a CC1125 low-power, integrated sub 1G transceiver RF chip. The module available frequency is from 169 to 960 Mhz, The hardware is designed for maximum range, 1500m + Range (Line of Sight).

N511BS module based TI CC1125 transceiver, the module leads out all pins of CC1125 chip, The interface of the module is SPI port and RF pin. The module is packaged with small size SMD, it is suitable for SMT production. Rapid development without understanding RF. The module supports Arduino.

N511BS is suitable for ISM band in China, EU and USA.

### N511BS Module Parameter

Model	N511BS
Module Interface	SPI
Frequency	160-175 MHz, 410-480 Mhz, 860-960 Mhz
RF Data Rate	0-200 kbps
Transmitting Power	+15 dBm

Receiving Sensitivity	-120 dBm
TX Current	56 mA
RX Current	18 mA
Frequency Deviation	+/- 1 khz
Communication Distance	10 – 1500 m(Visual distance)
Antenna Interface	RF pin
Installation Mode	SMD
Volume (mm)	19 mm x 17 mm x 3 mm
Operating Voltage	2 - 3.6 V
Working Temperature and Humidity Environment	Temperature: -40-80 °C; Humidity 10-95 %RH
Storage Temperature and Humidity Environment	Temperature: -40-80 °C; Humidity 10-95 %RH
Weight (kg)	≈10g

### N511BS Module Pinout

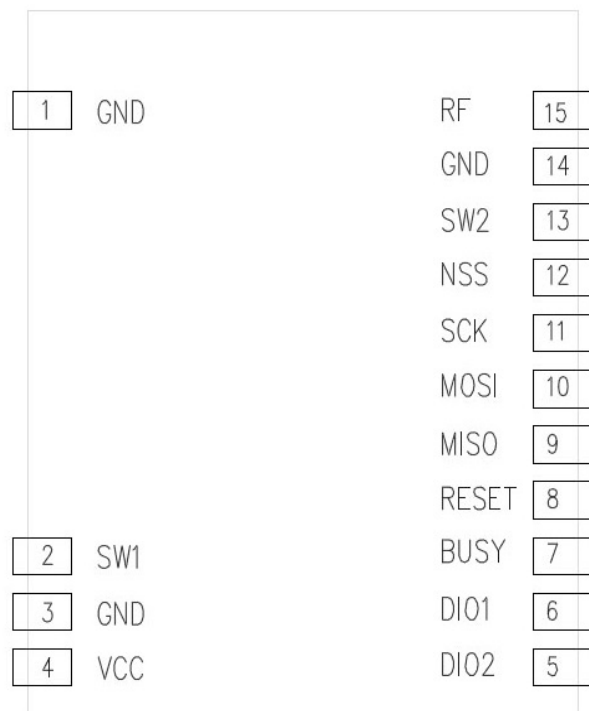
Pin Number	Function	Describe
1	RF	RF pin
2	GND	
3	GND	
4	GPIO3	Connected to MCU IO port
5	RESET	Connected to MCU IO port
6	VTC	TCXO power supply, Connected to MCU IO port or VCC.
7	GPIO2	Connected to MCU IO port
8	MOSI	SPI
9	SCK	SPI
10	MISO	SPI
11	GPIO0	Connected to MCU IO port
12	NSS	SPI
13	VCC	1.8V to 3.6V

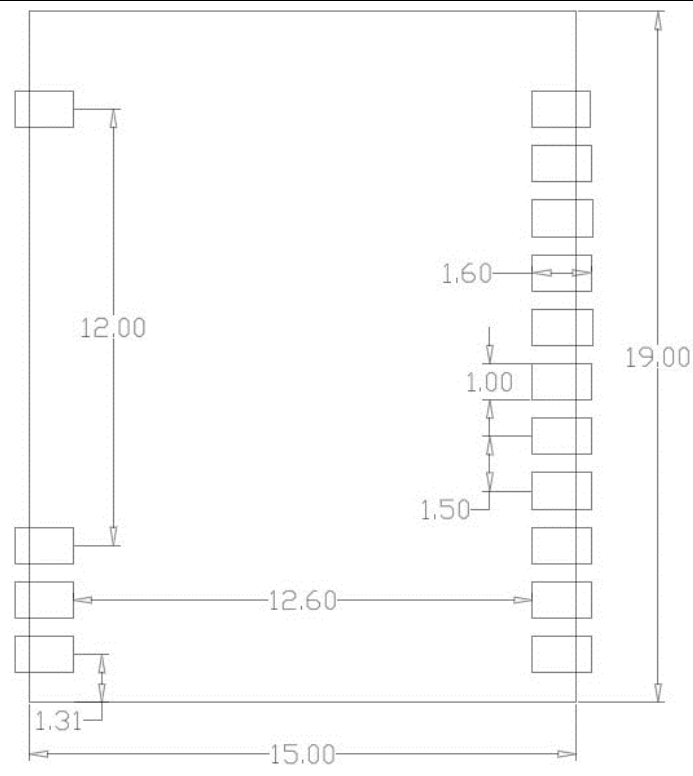
14	GND	
----	-----	--

**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
- Arduino

**N511BS Layout (mm)**





**Ordering Information**

N511BS-169M	RF Module	N511BS-169M	+15 dBm – 160-175Mhz
N511BS-433M	RF Module	N511BS-433M	+15 dBm – 410-510Mhz
N511BS-868M	RF Module	N511BS-868M	+15 dBm – 860-960Mhz

More information please contact with us.