

Transceiver module NRF24L01+PA+LNA 2.4 GHz with antenna

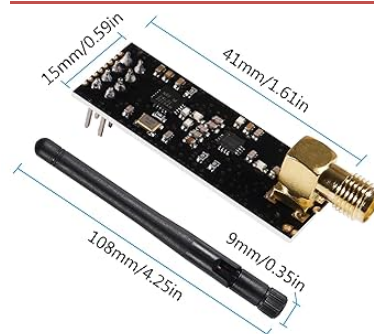


Features:

The NRF24L01+PA+LNA transceiver module is designed to offer long-range, high-reliability wireless communication in the 2.4GHz ISM band. Featuring a built-in power amplifier and low-noise amplifier, it can achieve distances of over 1000 meters in open space. The SPI interface allows easy integration with microcontrollers like Arduino, Raspberry Pi, and others. It supports multiple air data rates and operates on a 3.3V logic level, with 5V tolerant inputs, making it versatile for many wireless data transmission applications.

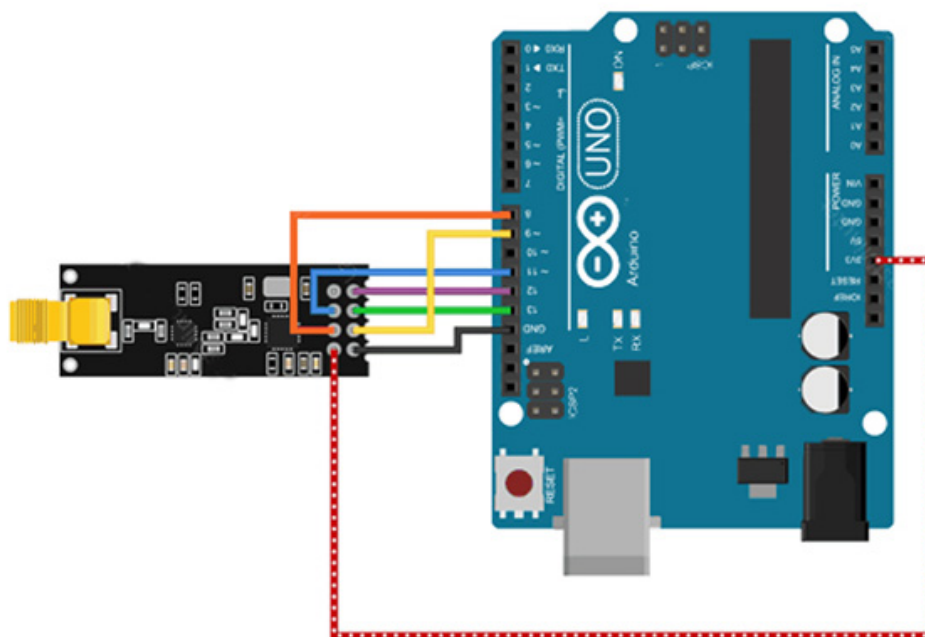
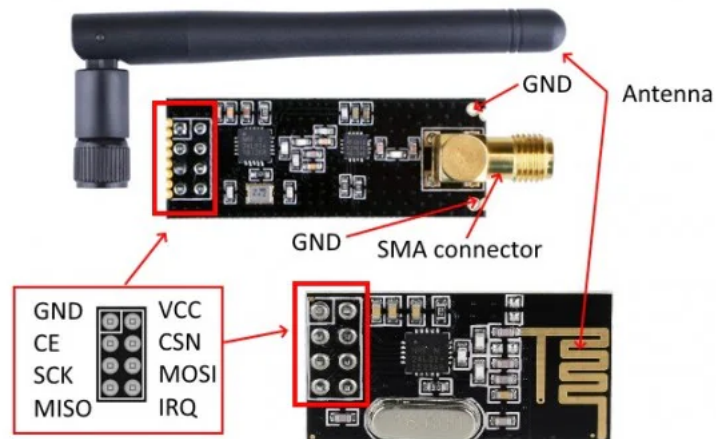
Specifications	
Frequency Band	2.4 GHz ISM
Max Communication Range	>1000 meters (line of sight)
Output Power	Up to +20 dBm
Receiver Sensitivity	~ -95 dBm
Data Rate Options	250kbps, 1Mbps, 2Mbps
Interface	SPI
Power Supply Range	1.9V – 3.6V
Operating Voltage	3.0V – 3.6V
Input Tolerance	5V tolerant
Crystal Frequency	16 MHz $\pm$ 60 ppm
Antenna	External SMA connector
Serial Ports	2 (ISP and TTL)
Flash Storage Chip	W25Q16JV (2 MiB SPI Flash)

Product Dimensions:



Pinouts:

Pin Name	Type	Description
GND	Power	Ground connection for power and signal reference
VCC	Power	Power supply input (1.9V to 3.6V, typically 3.3V)
CE	Input	Enables RX or TX mode depending on internal state
CSN	Input	Chip Select (active low); selects the SPI device
SCK	Input	Serial Clock line for SPI communication
MOSI	Input	Data input line for SPI (Master Out Slave In)
MISO	Output	Data output line for SPI (Master In Slave Out)
IRQ	Output	Interrupt output; active low signal to notify MCU



Product Pictures:

