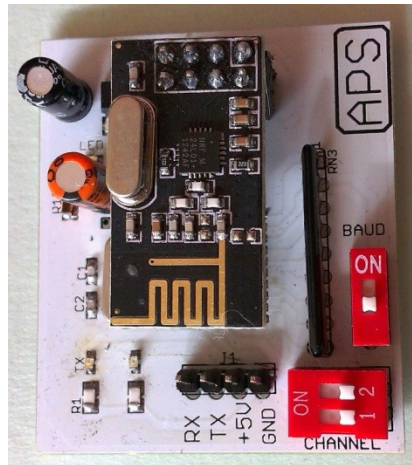


NRF24L01 UART Module (ZIGBEE 2.4Ghz)



Overview:

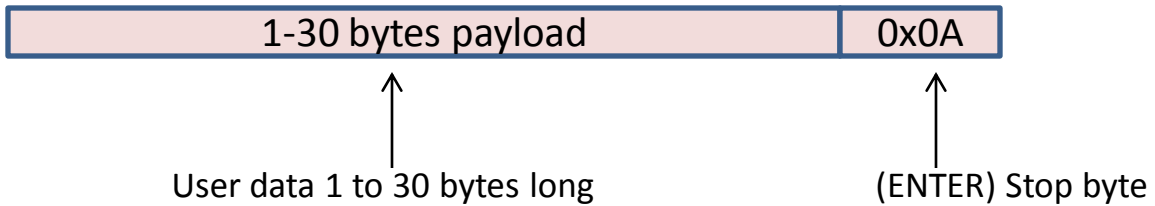
NRF24L01 UART Module is a transceiver module which provides easy to use RF communication at 2.4 Ghz. It can be used to transmit and receive data at 9600/4800 baud rate from any standard CMOS/TTL source. It works in half duplex mode. Channeling is provided using DIP switches which keep user interface simple. Also allows host ends to communicate using two different baud rates.

Features:

- Supports Baud rate 9600/4800
- Works on ISM band (2.4 GHz)
- 4 Frequency Channels
- 1 to 30 bytes dynamic payload length
- Speed of upto 20 packets/sec
- Transmit / Receive LED indication.
- Automatic packet handling
- Authentication based packet communication
- Auto re-transmit if no authentication
- No complex wireless connection software or intimate knowledge of RF is required to connect our serial devices.
- Designed to be as easy to use as cables.
- No external Antenna required.
- Plug and play device.
- Works on 5 DC supply.

Protocol:

Packet format:



Payload or user data can vary between 1 to 30 bytes. 0x0A OR ENTER OR '\n' is the end character(stop byte) which determines end of packet. If the user has a payload of more than 30 bytes it needs to be broken down into packets of 30 bytes each followed by a stop byte. As the module receives a end character or a stop byte, it initiates the transmission.

A minimum of 50msec delay is required between two successive packet transmission, as the chip is operated in auto re-transmit mode.

Specifications:

- Input Voltage - 5Volts DC.
- Baud Rate – 9600/4800.
- TTL Interface.
- Range – Max 100 Feets - Line of Sight.
- Channel Selection DIP.
- Baud Rate Selection DIP.