HLK-7628N

Wi-Fi Routing Module

Serial WI-FI module wireless routing module supports OpenWrt

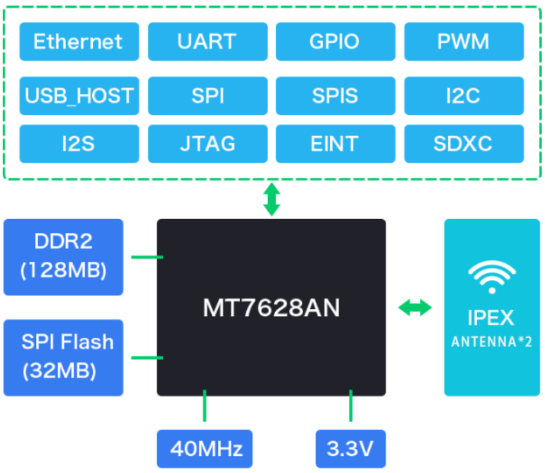
Description:

Serial port to WiFi module 7628N wireless module MT7628 chip serial port transparent transmission OpenWrt development board

Dual antennas 300M high performance wifi routing module. Double serial port five network port / MT7628N scheme.

- AP, STA and Router / Bridge are supported
- 5 10/100m adaptive network ports
- Rich peripherals UART/SPI/GPIO/PCM/I2C/I2S
- Support AT+ instruction set/web page configuration

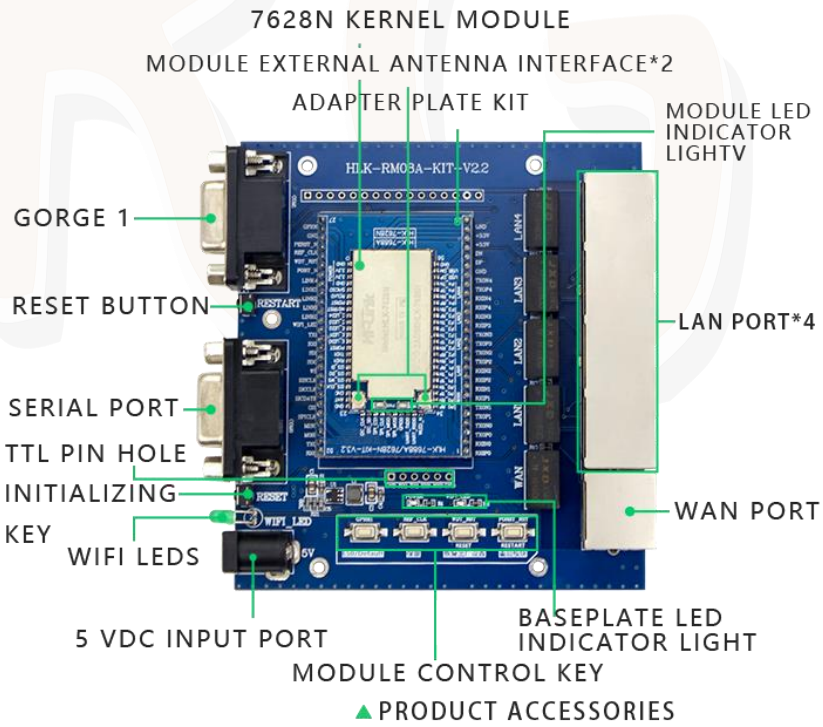
Block Diagram:



Interfaces:

Interface type	Module specific interface	Factory firmware support interface
WiFi standard	IEEE802.11b/g/n	1 WAN and LAN
UART	3 way	2 channels can establish TCP connection
SDIO	1 way	not support
SPI	1 WAY	not support
I2C	1 WAY	not support
I2S	1 WAY	not support
PWM	1 WAY	not support
GPIO	8 channels or more	Defined function

Product Test Kit:



7628N MODULE+FUNCTIONAL TEST FLOOR+
5V1A POWER ADAPTION+2.4G ANTENNA*2(STANDARD SUITE)

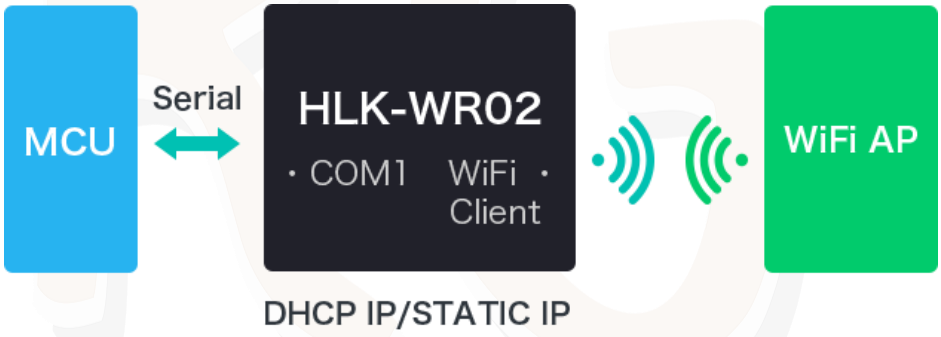
Function Description:

Product functions can be divided into: default mode, serial port to Ethernet, serial port to WiFi CLIENT and serial port to WiFi AP.

▲ Serial port to Ethernet model

In this mode, the WiFi and LAN functions are turned off, and the data of COM1 and the network data of WAN can be converted mutually through setting.

The Ethernet can be configured as a dynamic IP address (DHCP) or a static IP address (STATIC).



▲ Serial port to WiFI CLIENT

In this mode, the WAN and LAN functions are turned off. Through settings, the data of COM1 and WiFi can be converted mutually.

WiFi CLIENT can be configured as a dynamic IP address (DHCP) or a static IP address (STATIC).

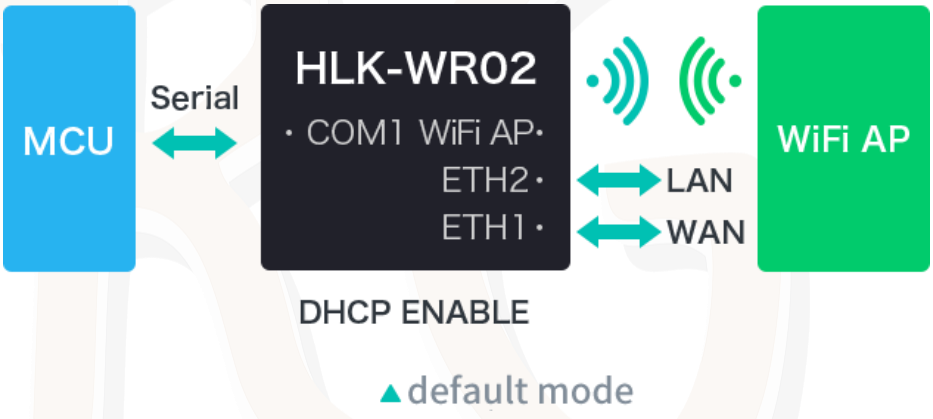
WiFi security supports all current encryption methods.

▲Serial port to WiFi AP model

In this mode (AP mode), the WAN and LAN functions are turned off, and the data of COM1 and WiFi can be converted mutually through setting.

The WiFi device can connect to the product and become a device under the WiFi LAN.

WiFi security supports all current encryption methods.



▲default mode

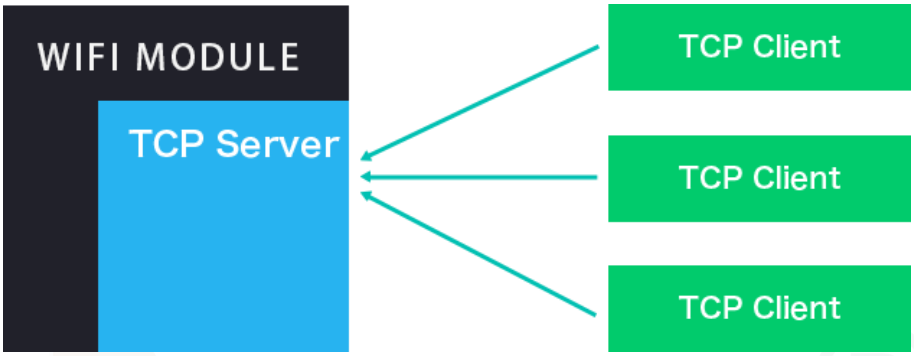
In this mode (AP mode), WAN and LAN functions are available. Through settings, the data of COM1 and WiFi can be converted mutually.

The WiFi device can connect to the product and become a device under the WiFi LAN. The WAN side defaults to dynamic IP address mode. LAN and WiFi are the same local area network, DHCP server is turned on by default

WiFi security supports all current encryption methods.

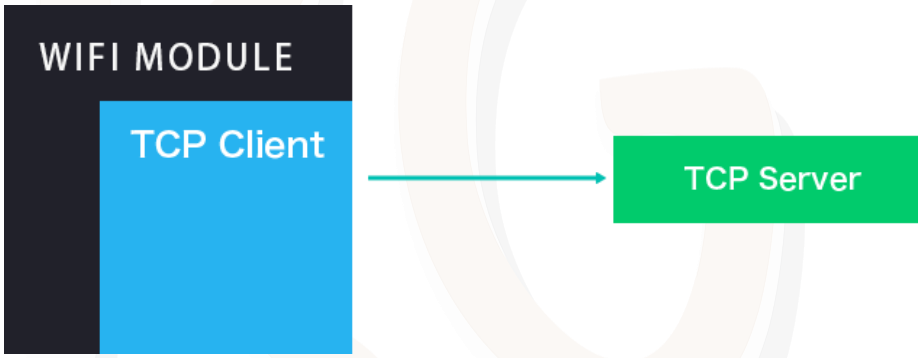
The serial port/network data conversion of the product is divided into 4 modes: TCP Server, TCP Clinet, UDP Server, UDP Client.

TCP Server



In this mode, the module monitors the designated port and waits for the TCP Client to connect. After the connection, all TCP data is sent directly to the serial port, and the data from the serial port is sent to all TCP Clients.

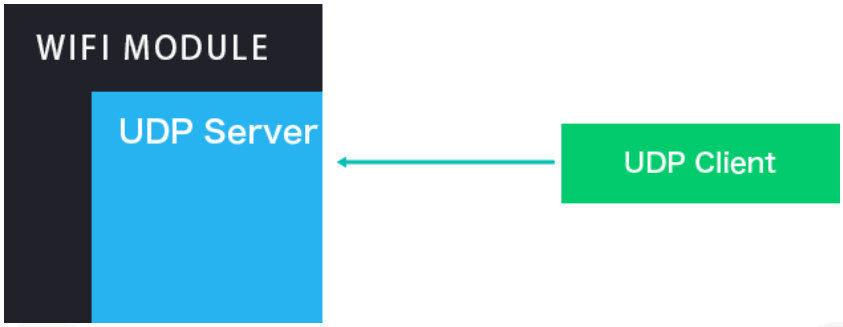
TCP Client



In this mode, the module connects to the specified domain name/IP and port. All data sent from the TCP Server end is sent directly to the serial port, and the data from the serial port is sent to the TCP Server end. When the module is used as a TCP Server, it supports up to 2 TCP Clients to connect to the TCP Server.

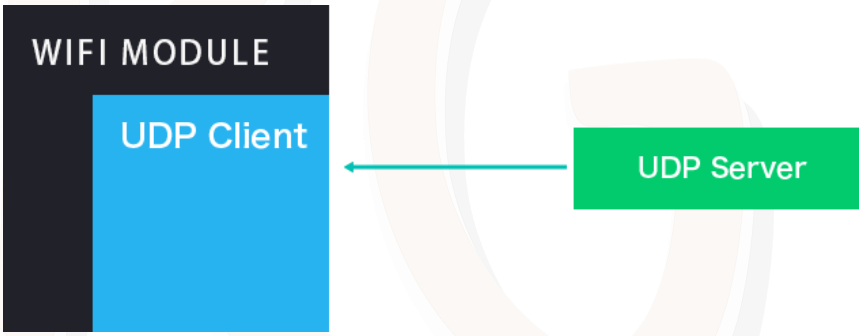
The abnormal network will cause the product to reconnect actively. When TCP active reconnection is available, TCP Server actively disconnects, and the product will actively reconnect immediately, otherwise the module will not reconnect.

UDP Server



In this mode, the module opens the local designated port. Once the data sent to this port is received, the module will send the data to the serial port and record the remote IP and port. The module will only record the remote information of the last connection. The data received by the serial port will be sent directly to the recorded remote IP and port.

UDP Client



In this mode, the module directly sends serial port data to the specified ip and port. The data returned from the server will be sent to the serial port.

Application:

- In smart devices for cloud service