


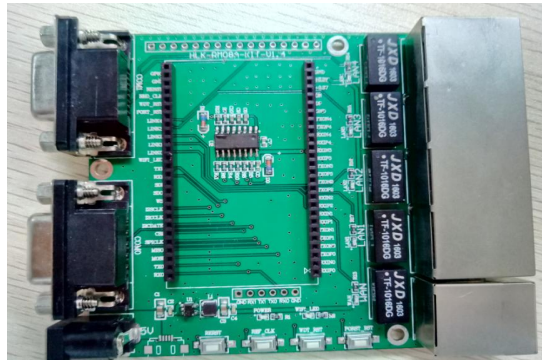





HLK-7688A user manual2

Serial to WIFI (AP mode)

Shenzhen Hi-Link ElectronicTechnology co.,Ltd

Note: To ensure the normal operation, please make sure you have purchased the HLK-7688A Development Kit from us.as the following picture:

	HLK-7688A Module
	HLK-7688A Test board
	2.4G rod antenna
	5V 1000mA power supply
	Network cable (optional)

Please contact well as the following way in the picture:



Please note the direction that HLK-7688A plugged into the backplane!

1 Brief Introduction

HLK-7688A is a new low-cost embedded UART-ETH-WIFI module (serial port - Ethernet - Wireless network) developed by Shenzhen Hi-Link ElectronicTechnology co., Ltd

This product is an embedded module based on the universal serial interface network standard,built-in TCP / IP protocol stack, enabling the user serial port, Ethernet, wireless network (wifi) interface between the conversions.

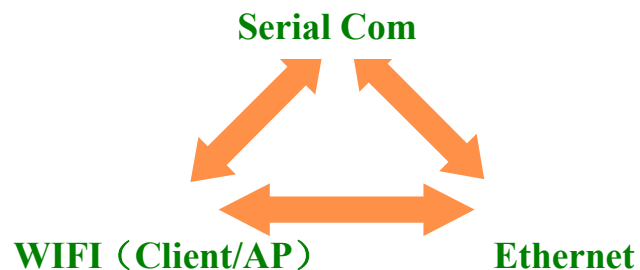


Chart 1. F-structure

Through the HLK-7688A module, the traditional serial devices do not need to change any configuration; data can be transmitted through the Internet network. Provide a quick solution for the user' s serial devices to transfer data via Ethernet.

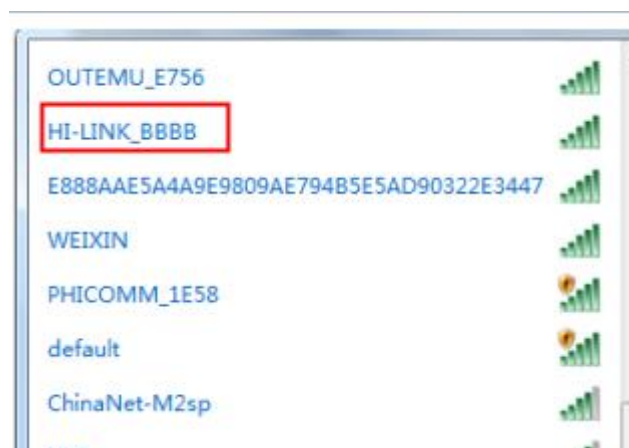
底板各个部分功能见下图:

2.Serial to WIFI (AP) configuration Method

The module you get from us is the factory defaults value.You can use the serial port to WIFI (AP mode) directly. **The method is as follows:**

1. Power on the test board.The power supply is 5V.Seril RS232 Connector connects with the computer ' s serial port. (Directly connected serial line).wait 30S, Startup is complete.
2. Using the WIFI of your mobile phone or computer to scan the WIFI signal in the space.Find the MT7688_AP (neutral version of the name is: Serial WIFI).
3. Join in the HI-LINK_XXXX (or Serial WIFI) .Password:12345678.Your mobile Phone or computer will get IP automatically.
4. Open the TCP testing software(testing tools) of the phone or computer.connect the IP:192.168.16.254. Port: 8080.Send character:HLK-7688A.

Note: iphone/Android phone can search TCP tools, PC software can search TCP UDP assistant through Baidu Browser.





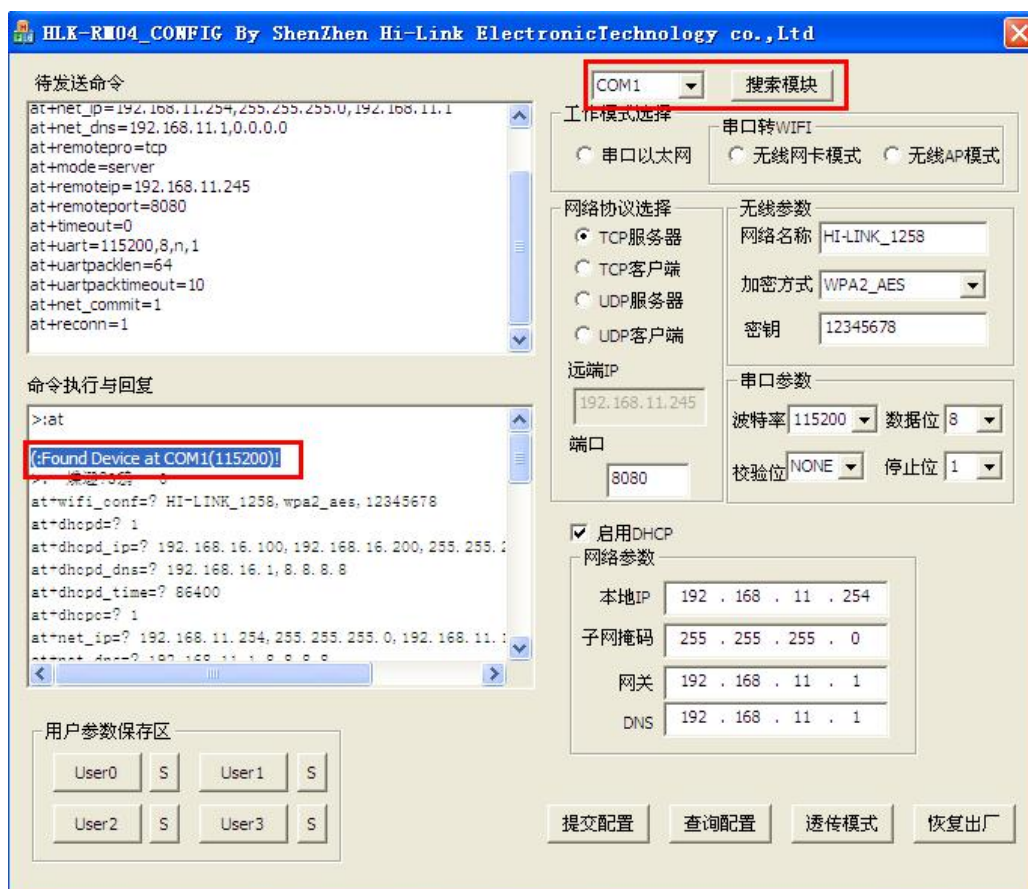
Note: In the default mode, WIFI and Ethernet are both open. The power consumption is relatively large. If you just use the serial to WIFI (AP mode) conversion, the module can be configured through the following methods.

Method one : Through the serial port

1. **First please ensure the module is in default mode.**The method of restoring the factory settings: power-on the module, wait 35 seconds.Then hold down the WDT_RST button on the bottom board more than 6 seconds
2. **Power-on the module again, wait 35 seconds until the light on the module blinking** , and then connect the DB9 serial port with the computer's serial port in a straight line. Or connect the test board directly with a USB to serial cable as the following picture::



3. Press the "Exit transparent transmission / Preset" button, open the **configuration software**, select the serial number, click on the search button, If there appears message >: at (: Found Device at COM8 (115200)! In the response area, it means the module is found.



4 Parameter configuration

Operating mode:WIFI AP

Network Protocol: TCP server

Remote IP: Remote IP is not working as a sever

Port: The monitoring port of the starting TCP server

Serial Parameter: Change the parameters according to your requirement.

Network parameter: IP:192.168.11.254 .This IPis different from the default one,the default IP is 192.168.16.254

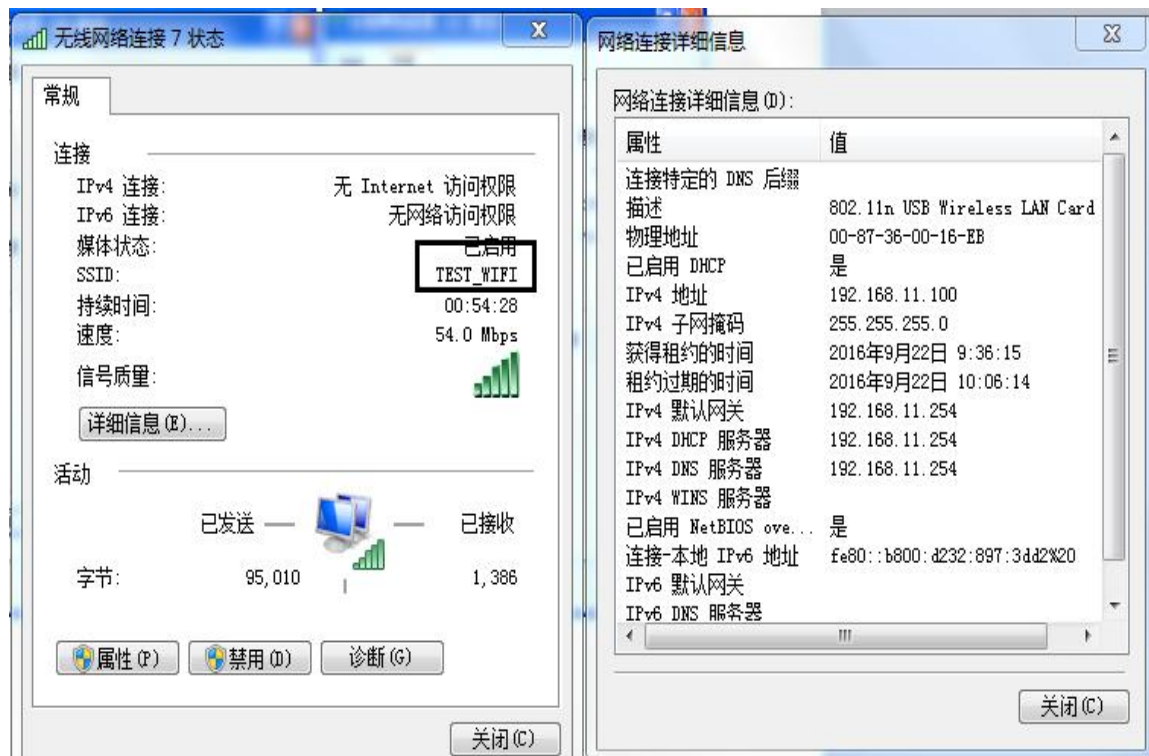
Mask:255.255.255.0



After selecting the configuration parameters configuration, click on the 'commit' button.

5.If you use PC to search the WIFI signal,you will find the following interface:





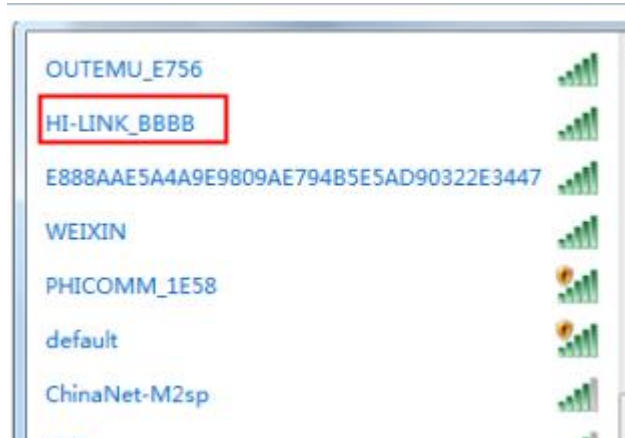
6.Open the serial debugging tools and network debugging tools.



The data sending and receiving from Seril to network is normal.

Method two: Through WIFI web page

1. First,restore the factory value.Press any button on the test board more than 6 senconds,wait for starting(about 30s),after starting, use the Pc' s WIFI to scan the WIFI signal in the space,join in the WIFI,Pass word:12345678



2. 在 Input 192.168.16.254 in the browser, it will pop-up a dialog box, enter the user name and password. Both of the username and password are admin.

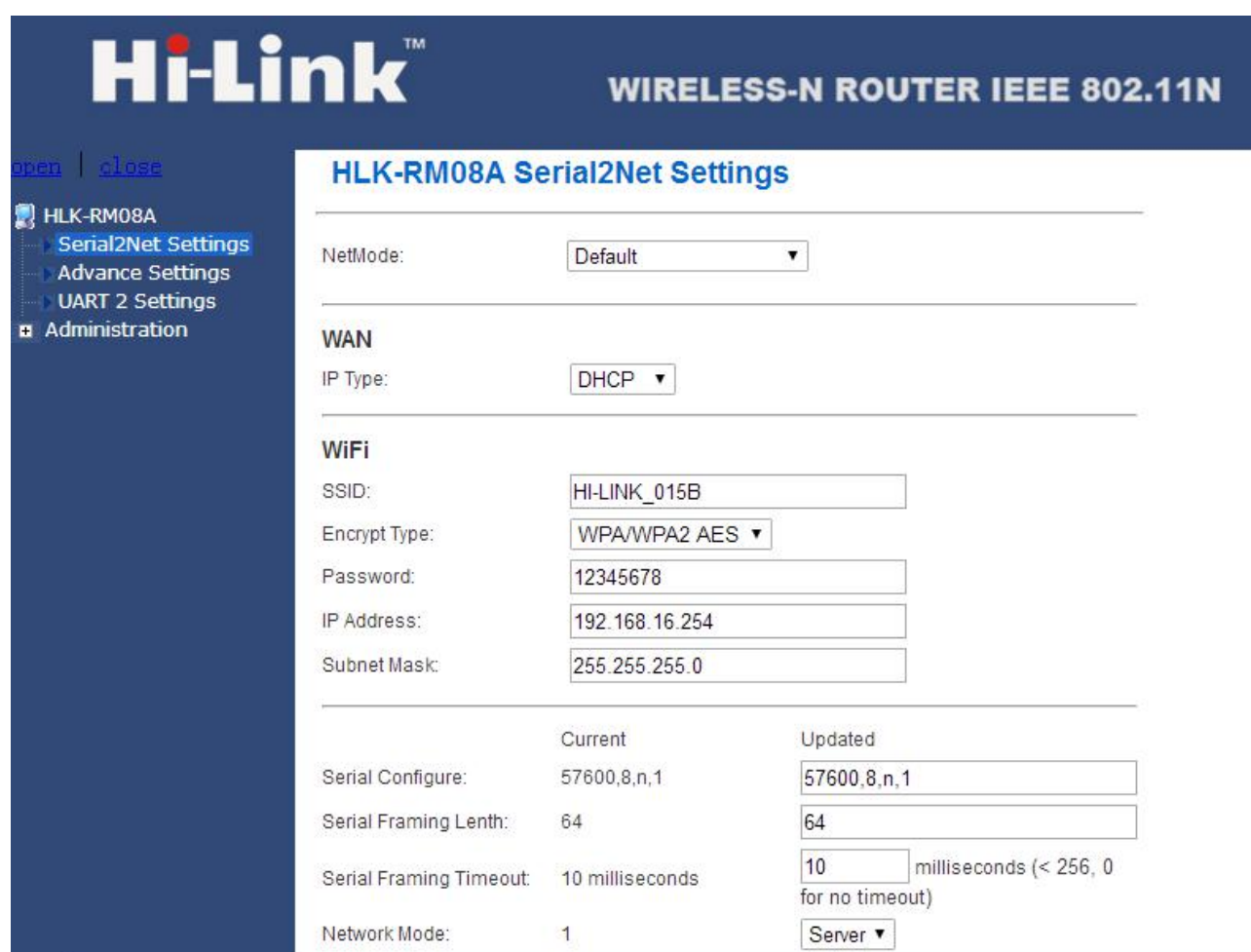


用户名 : admin

密码 : •••••

确定 取消

You will see the following interface after logging on:



Hi-Link WIRELESS-N ROUTER IEEE 802.11N

open | close

HLK-RM08A

- Serial2Net Settings
- Advance Settings
- UART 2 Settings
- Administration

HLK-RM08A Serial2Net Settings

NetMode: Default

WAN

IP Type: DHCP

WiFi

SSID: HI-LINK_015B

Encrypt Type: WPA/WPA2 AES

Password: 12345678

IP Address: 192.168.16.254

Subnet Mask: 255.255.255.0

	Current	Updated
Serial Configure:	57600,8,n,1	57600,8,n,1
Serial Framing Lenth:	64	64
Serial Framing Timeout:	10 milliseconds	10 milliseconds (< 256, 0 for no timeout)
Network Mode:	1	Server

3. Choose WIFI(AP)-SERIALmode,change the IP to 192.168.11.254

NetMode:	<div>WIFI (AP)-SERIAL</div>	
SSID:	<div>WIFI_TEST</div>	
Encrypt Type:	<div>WPA2 AES</div>	
Password:	<div>12345678</div>	
IP Address:	<div>192.168.11.254</div>	
Subnet Mask:	<div>255.255.255.0</div>	

	Current	Updated
Serial Configure:	115200,8,n,1	<div>115200, 8, n, 1</div>
Serial Framing Lenth:	64	<div>64</div>
Serial Framing Timeout:	10 milliseconds	<div>10</div> milliseconds (< 256, 0 for no timeout)
Network Mode:	server	<div>Server</div>
Remote Server Domain/IP:	192.168.11.245	<div>192.168.11.245</div>
Locale/Remote Port Number:	8080	<div>8080</div>
Network Protocol:	tcp	<div>TCP</div>
Network Timeout:	0 seconds	<div>0</div> seconds (< 256, 0 for no timeout)

Apply

Cancel

Click on the button 'Apply' after finishing the parameter configuration, submit the modification.

4After you have made your changes, please do the operation according to the step5 in the method one.