Content

Part 1   Product Introduction

Wifi is a new generation product of our Shuncom. It is an industrial embedded module which provides UART interface for data transfer based on WIFI wireless network standard. It integrates IEEEE802.11 and TCP/IP protocol. It can easily make the traditional devices access to wireless network.

Interface：

Double pins interface
Baud rate：1200—115200bps
power supply：3.3V or 5V

wireless：

Compatible IEEE standard 802.11b/g/n
IEEE standard 802.11 RF transceiver
Unique serialized Mac address
Date Rate：1 or 2 Mbps
Distance：up to 400M（1300 feet）
Working in ISM band 2.400–2.484GHz
Can choose 14 channels
Support 802.1x and 802.1i safety：WEP、WPA-PSK and WPA2-PSK
Support two network: Infra and Adhoc
Small U.FL SMA Antenna
America（FCC）、Canada（IC）、Europe（ETSI）and Japan（ARIB）Radio regulatory approvals
Pass Wi-Fi® certification

Others：

Support multiple network protocols: TCP、UDP、DHCP、ICMP、DNS
Support UART transparent transmission
PC Configuration
Support simple AT command to configure

Application：

1. Public utilities and smart energy: Thermostats, smart meters
2. Consumer electronics: remote control, home security, toys, etc.
3. Industrial control: sensors, industrial safety, M2M communication
4. Remote device management: location asset tracking, automotive
5. Retail, health care, etc. the Internet of things industry

Part 2 Technical Parameters

| Name	Parameters	WIFI wireless module
Wireless network	Wireless standard	IEEE802.11b
	Frequency range	2.400–2.484 GHz
	Receiver Sensitivity	The typical sensitivity is -91dBm when on 1Mbps
	Data rate	1 and 2 Mbps
	Modulation	DSSS
	Transmit Power	The typical transmit Power is +10 dBm (but we test it is +7dBm)
Hardware	Interface	UART（RS232/RS485/TTL）
	Data rate	1200~115200 bps
	Power supply	5V or 3.3V
	Antenna	IPEX antenna
	Receiving Current	160mA
	Transmitting current	200mA(Peak current 250mA)
	Wireless Certification	America（FCC）、Canada（IC）、Europe（ETSI）and Japan （ARIB）Radio regulatory approvals
Software	Network Type	Infra/Adhoc
	Security Mechanisms	WEP/WPA-PSK/WPA2-PSK
	Network protocol	TCP/UDP/ICMP/DHCP/DNS
	URAT command	AT command
	Network protocol	TCP/ ICMP/DHCP/DNS
Working Environment	Operating Temperature	-20°C ~ 85°C
	Storage Temperature	-40°C ~ 125°C

Part 3　Product Review

3.1 Outline

This part is the introduction of WIFI module by the hardware and functions. Interface is the standard 2.54 double pins for convenient to connect to user device See the picture as follows:
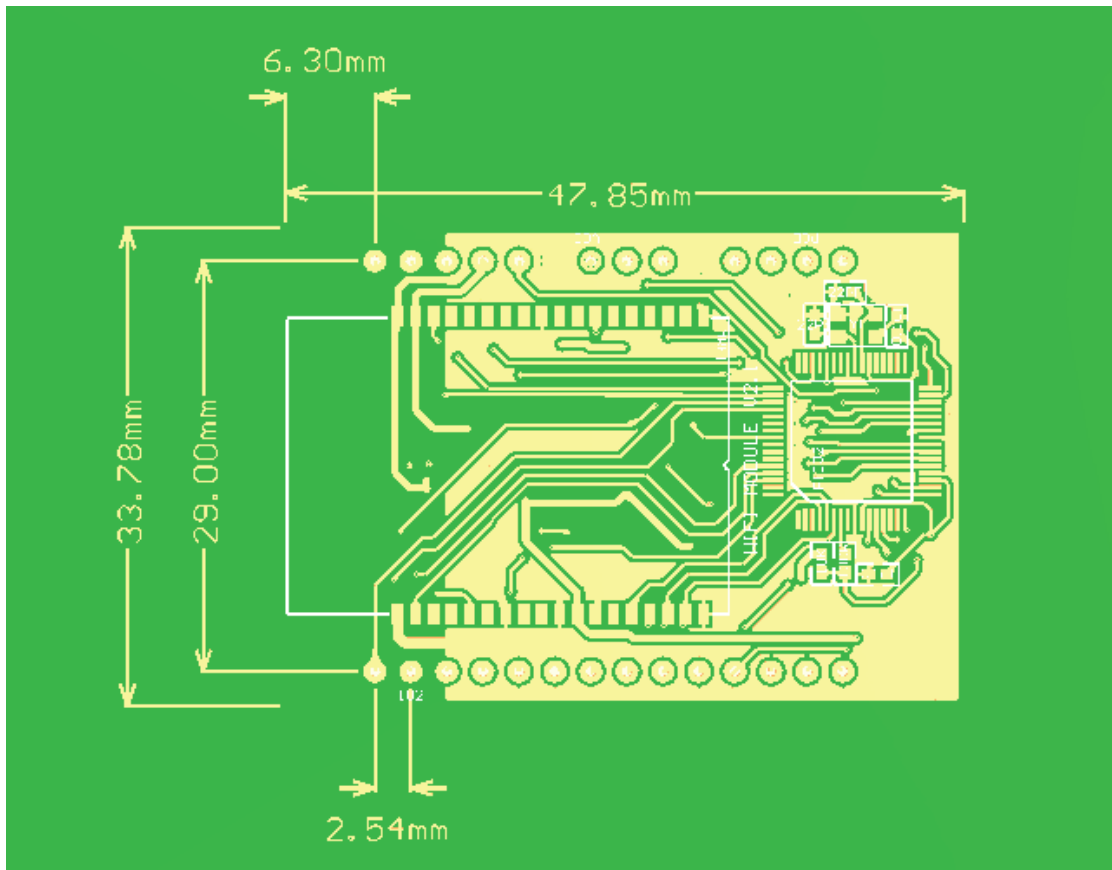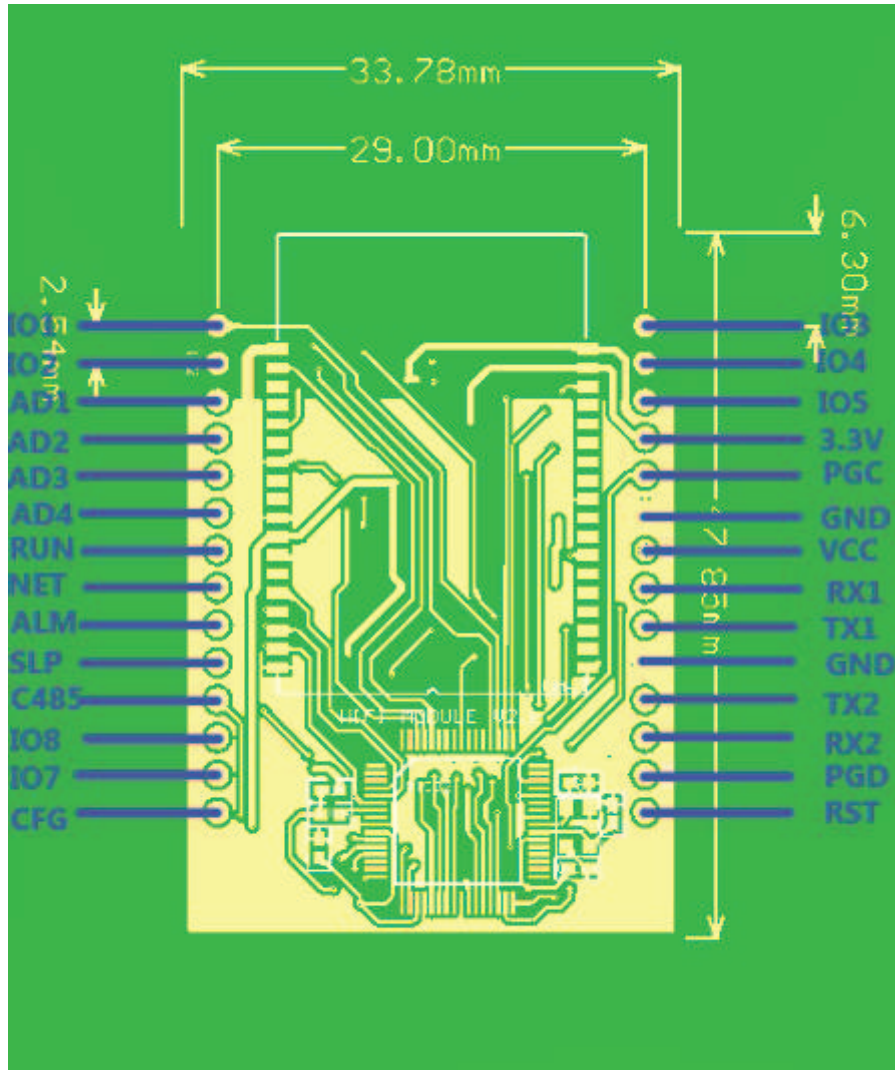

Product front view
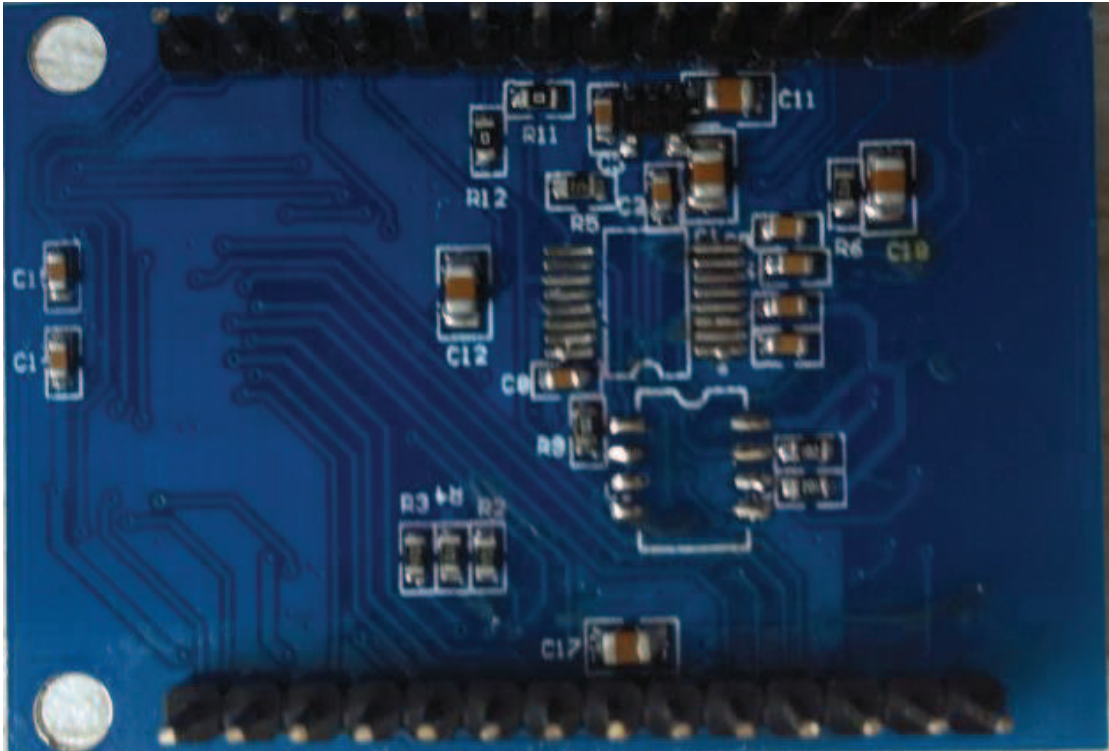
Product opposite view

3.2 Dimensions and Size

Size：48mmX34mmX10mm（length*width*height）

3.3 Pins Definition:

Pin	Description
VCC	The cathode of power, +5V
GND	System Ground
RX1	UART receive (TTL)
TX1	UART Transmit (TTL)
RX2	RS232 or RS485 receive
TX2	RS232 or RS485 transmit
C485	RS485 control
CFG	Configuration
RST	Reset
PGD、PGC	this port for program debugging
RUN	RUN light flashes in 1 seconds when operating normally
NET	NET light is on when on network, off means not on network.

IO1、IO2、IO3、IO4、IO5	IO1、IO2、IO3、IO4、IO5 can realize 5 way PWM output (reserved ports, now can't realize)
AD1、AD2、AD3、AD4	AD1、AD2、AD3、AD4 can realize 4 way 10 AD Sampling (reserved ports, now can't realize)
ALM 、 SLP 、 IO7、IO8	ALM、SLP、IO7、IO8 is IO port, can realize the normal IO input and output. (reserved ports, now can't realize)

Notes: now only have the function of serial port transparent data transmission, other ports haven't open, just for reserved.

3.4 Antenna

This module has an IPX antenna interface.
WIFI module can use the following antennas which have passed the related certifications:

表 2-2:　　　经过认证的外部天线列表

部件编号	类型	增益（dBi)	VSWR 最大值	连接器	厂商
RFA-02-P05	PCB	2	2.0	IPEX	Aristotle
RFA-02-L6H1-70-35	双极	2	2.0	IPEX	Aristotle
RFA-02-D3	双极	1.5	2.0	IPEX	Aristotle
RFA-02-L2H1	双极	2	2.0	IPEX	Aristotle
RFA-02-3-C5H1	双极	3	2.0	IPEX	Aristotle
RFA-02-5-C7H1	双极	5	2.0	IPEX	Aristotle
RFA-02-5-F7H1	双极	5	2.0	IPEX	Aristotle
WF2400-15001A	双极	5	2.0	IPEX	Saytec
WF2400-15001AR	双极	5	2.0	RF-IPEX	Saytec
WF2400-10001I	双极	2	2.0	IPEX	Saytec
WF2400-10001R	双极	2	2.0	RF-IPEX	Saytec
AN2400-5901RS，与连接器 SMASFR8-3152H-00X00I 配合使用	全向	9	2.0	IPEX	Saytec
AN2400-5901RS，与连接器 SMASFR8-3152H-00X00IR 配合使用	全向	9	2.0	RF-IPEX	Saytec

3.5 Wireless network choosing

Wireless network includes Infra and Adhoc, our WIFI module can support both of them.

There are two concepts we need to know:

AP, in computer networking, a wireless access point (AP) is a device that allows wireless devices to connect to a wired network using Wi-Fi, or related standards. The

AP usually connects to a router (via a wired network) if it's a standalone device, or is part of a router itself.

A station (STA) is a device that has the capability to use the 802.11 protocol. For example, a station may be a laptop, a desktop PC, PDA, access point or Wi-Fi phone.

Infra Network：

Infra is created by AP, lots of STA access into it.   AP is the network center, all the communication is transfer by AP.

1. Can expand the communication range by wireless router
2. The IP address can be dynamically allocated by the router's DHCP function
3. Can set WPA2 encryption to protect the data safe in network

If you use Shuncom WIFI module, As long as the work area have wireless internet to access, Shuncom WIFI module can access the Internet.   In other any place, if you can serve on the internet, you can control the Shuncom WIFI module by network.

Adhoc Network:

Adhoc is organized by at least two STA, not exist AP. It has the following characteristics:

1. Not need router
2. Can support many modules to access
3. Need to set static IP

It is a low cost, easy-to-use mode, you can directly connect module by laptop or mobile phone not depending on wireless router.

3.6 Security Mechanisms

This module supports multiple wireless encryption modes to make sure the user data safe.

The encryption includes:
OPEN (no encryption)
WEP64
WEP128
WPA-PSK
WPA2-PSK

3.7 UART transparent transmission

This module is for the UART transparent data transmission. User firstly needs to configure the following wireless network parameters before communication:

Network name（Ssid）
Safety mode

Encryption (depends on your need to choose)

Defaulted TCP/UDP connection parameters:

Protocol type

Connection type

Destination address

Destination port

3.8 WIFI Configuration Tool

For convenient to use, we provide the simple configuration tool to configure. All the parameters will be saved in the chip flash after configuration until there is a new configuration.

3.9 AT command configuration

Besides WIFI configuration tool, you also can use the **AT command** to configure. The details please see the back chart of **AT command**

3.10   TCP/IP Protocol

Shuncom WIFI module is embedded a complete TCP/IP protocol which supports TCP/UDP/ICMP/ DHCP/DNS etc. protocols.

Part 4 How to use the WIFI module

4.1 Preparation

Hardware:

Shuncom WIFI module

Shuncom WIFI board

Serial port wire

Software:

WIFI configuration tool V1.0
Com Tool: sscom32
Network Assistant Tool

4.2 Web parameters configuration

If the laptop supports WIFI, or the mobile phone supports WIFI and ADHOC, you can use the web to do configuration. If not, please see 4.3 to use Serial port tool to configure.

If the first time power supply, module will create a point-to –point network by using defaulted parameters. Defaulted SSID: SHUNCOM_hoc, Defaulted IP address: 169.254.1.1

After power supply, laptop begins to search the network, Point-to-point network (SHUNCOM_hoc) will appear in the list of network:

The network is not Encryption, can use it directly.

After connection, be sure that computer and WIFI module are on the same network. Then begin to configure. Change the computer IP to be static IP address: 169.254.1.xxx
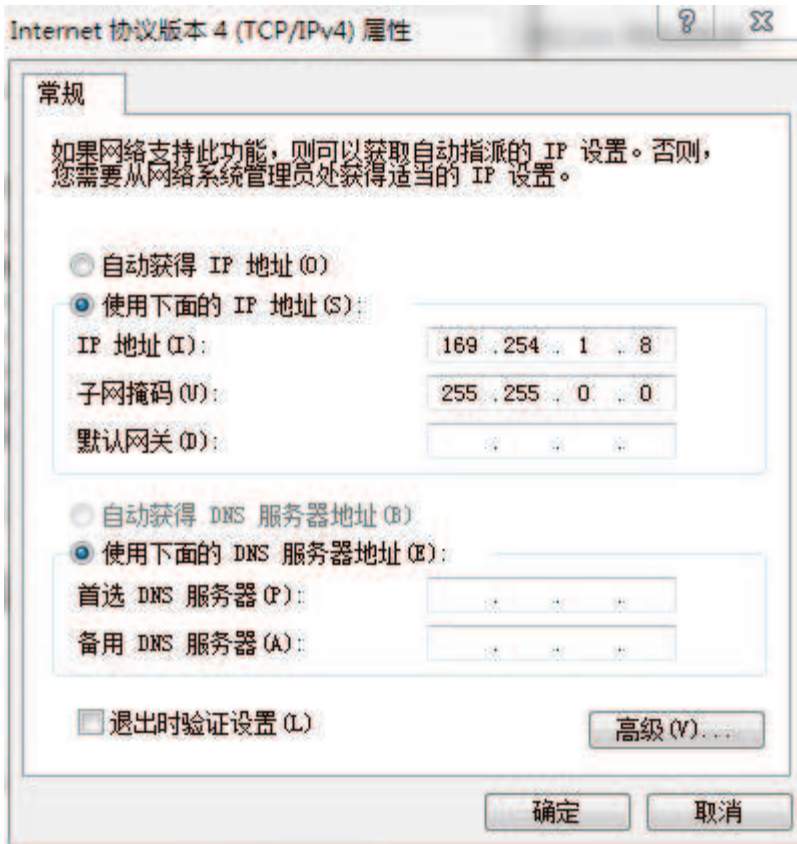
Finish IP configuration, Open the browser to input:"169.254.1.1"，then press "Enter" can see the User login screen, input User name: **admin**   Password: **shuncom**
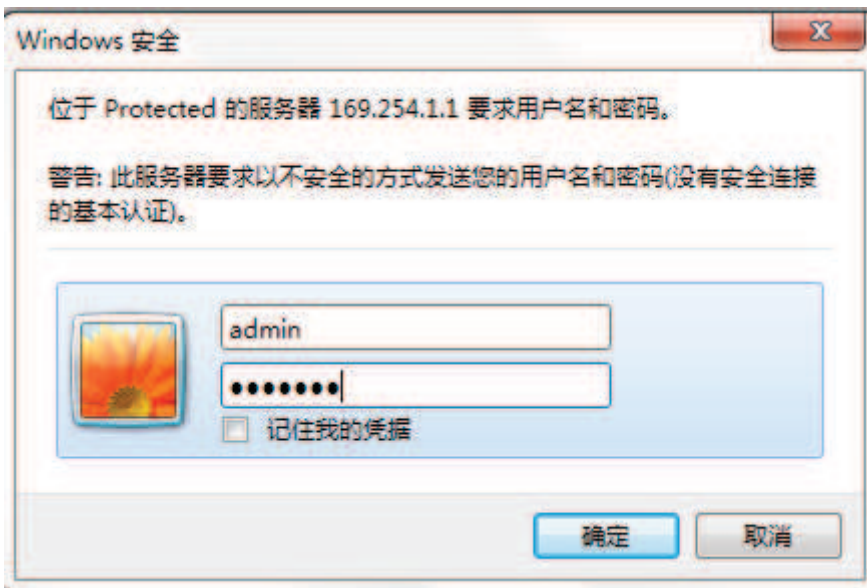
Click "sure", can see the Web screen as follows:

Click the "CONFIG" to enter configuration screen

All parameters will appear here. About the meaning of parameters, please see the following chapters.

Notes: Finish configuration, please click "Save Config", then power supply again, the configuration will be valid.

4.3 WIFI Configuration Tool configuration

1、 Wifi module plug into WIFI board, serial port wire connection, power supply, press "CFG"on WIFI board.
2、 Open WIFI configuration tool V1.0
3、 Choose the right Serial port, press "connect", then appear "connected" (if not appear, press the "CFG" on WIFI board again, meanwhile power supply, then press "connect" again .)

4、 If connection successfully, it will appear the following screen. On the"network type"choose "Infra", then according to the existed AP to configure the WIFI parameters (network name, security mode, key). If need automatically to obtain an IP, please tick the" ENABLE DHCP". If need the fixed IP, please input "IP address, Subnet mask, Gateway, DNS address"

5、 In "TCP configure", Advice: TCP/UDP is TCP, C/S mode is client, server IP address is the PC IP address and port (port configure to be more than 1024)

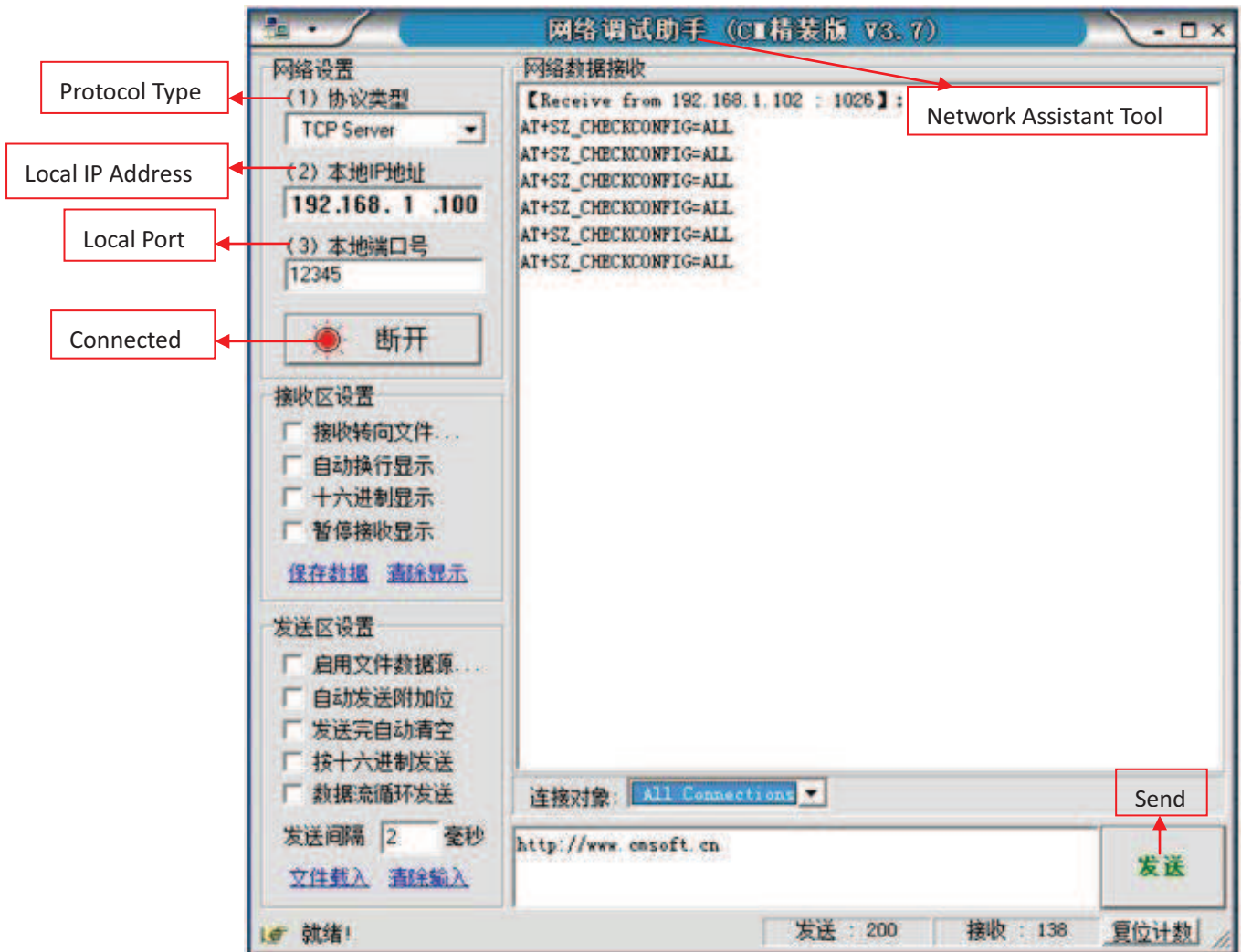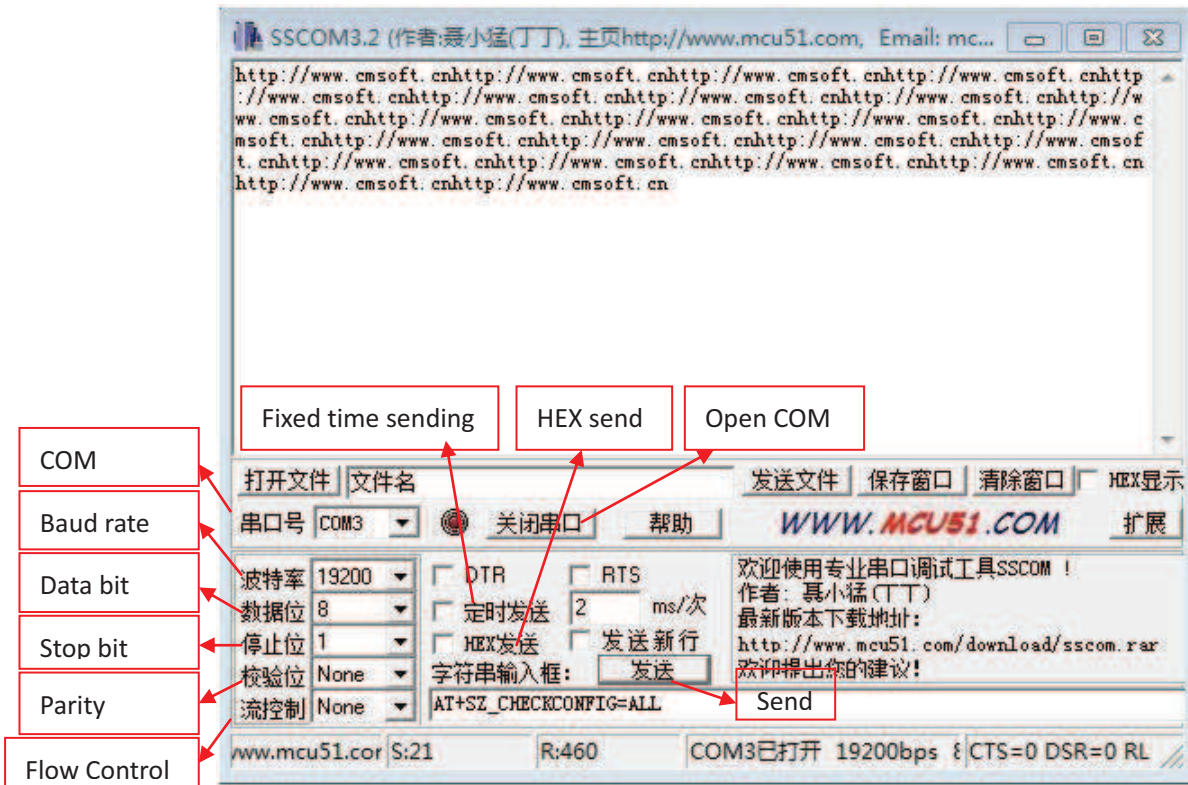6、 On the "Serial configure" , Set the baud rate, parity, data bit, stop bit

7. Press "save configre" to save the configuration.

4.4 Begin to test

1、 Using Network Assistant Tool to create a TCP SERVER of monitoring port is 12349, as follows:

Protocol Type

Local IP Address

Local Port

Connected

Send

2、Start Com Tool sscom32 to configure the baud rate, parity, data bit, stop bit

3、After module and PC create TCP connection, then can send the data between Network Assistant Tool and Com Tool, as follows:

COM

Baud rate

Data bit

Stop bit

Parity

Flow Control

Fixed time sending

HEX send

Open COM

Send

Protocol Type

Local IP Address

Local Port

Connected

Network Assistant Tool

Send

Part 5　How to Configuration

5.1 Network type

1. When module try to connect with AP, please choose "Infra"

2. If need point-to-point network (such as laptop and mobile phone to connect to module, or module to module communication), please choose " Adhoc"，
   If have network, it will connect to the existed network automatically, if not, it will create a new network.

5.2 wireless configuration

Wireless configuration includes network name（SSID）, security mode, key mode, key index, key.
As follows:

Network Name：
Wifi Network ID: 1 to 32 ASCII characters.
Fill a network name in following:

Security mode：

It contains OPEN、WEP64、WEP128、WPA-PSK、WPA2-PSK。
Choose the suitable one as your requirement on the drop-down menu

Key mode：

You can choose HEX or ASCII under the security mode of WEP64 and WEP128

Key Index：

You can choose from 1 to 4 under the security mode of WEP64 and WEP128

Key:

Different key have different length:

WEP64（HEX）：   10 characters
WEP64（ASCII）：   5 characters
WEP128（HEX）：   26 characters
WEP128（ASCII）：   13 characters
WPA/WPA2-PSK（ASCII）：   8~63 characters

Notes: If **WPA,** Module fist time connects network, it will take a long time. After that, it will become very fast.

Fill key in the following:

5.3 Network configuration

It contains: whether use DHCP to obtain IP address, IP address, Subnet mask, Gateway, DNS, as follows:

Start DHCP (automatically obtain IP address):

If choose "ENABLE DHCP", it will automatically obtain an IP address. All other parameters will become invalid

Notes: please don't use this one if on point-to-point mode. You have to define your IP address, Subnet mask, Gateway, DNS

IP address:

If not choose " ENABLE DHCP", Input your IP address

Subnet mask:

If not choose "ENABLE DHCP", Input your subnet mask

Gateway:
If not choose "ENABLE DHCP", input Gateway address

DNS Server：

If not choose "ENABLE DHCP", Input DNS address:

5.4 Working mode setting (TCP configure)

Working mode setting (TCP configure) includes: protocol, C/S mode, server IP, port. Set as follows:

Protocol Type:

We create the defaulted protocols which are TCP and UDP
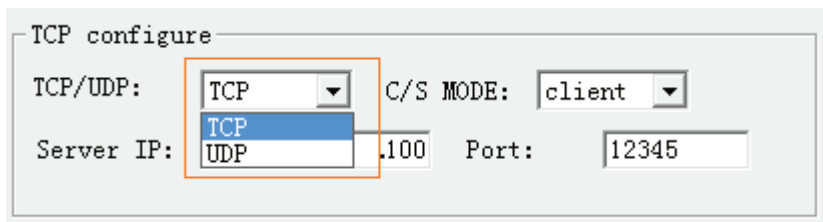
C/S mode：

Create Defaulted C/S mode which are Server and client.

Server IP:

If C/S mode is Client, the connected server can be IP address or domain name. It will invalid if C/S mode is server.

Port：

Input the port number

5.5 Communication setting（Serial Configure）

On "Serial Configure" to set baud rate, parity, data bit, stop bit, data length and data time.

Baud rate:

Baud rate is 1200~115200bps, defaulted setting is 19200bps
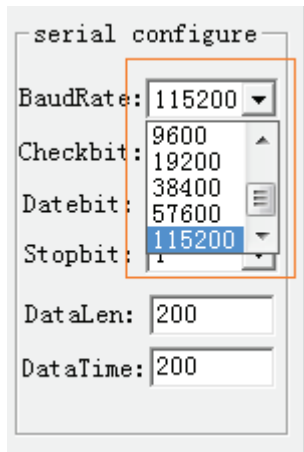
Parity:

It contains "none, odd or even". Defaulted setting is "none"
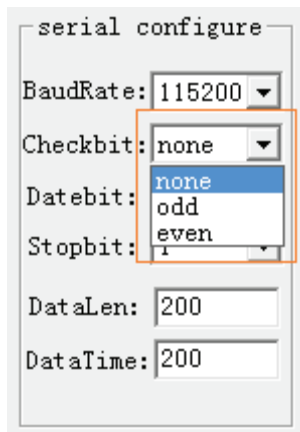
Data bit:
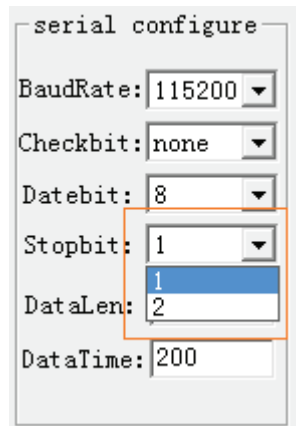
Data bit can be 8 or 9, defaulted setting is 8.
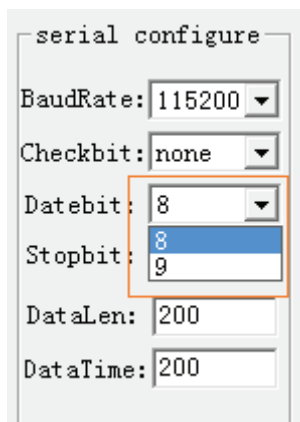
Stop bit:

Normally it is "1" or "2",defaulted setting is "1"
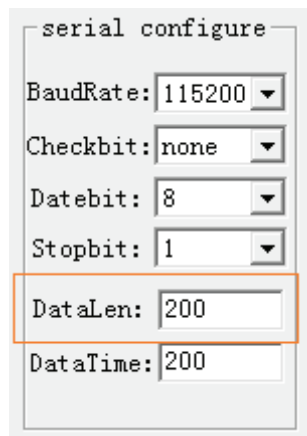
Data length：

If data length to be the length you set, it will send out. Now the length we support is 0-1023 bytes. It only supports TCP but not supports UDP.
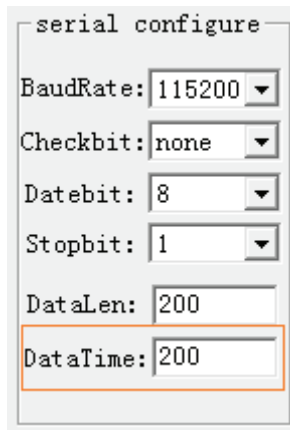
Data time：

If the data length not reach as the setting length, but data time is more than the setting data time, the data will sent out. It only supports TCP but not supports UDP. The unite time is **millisecond**.

5.6 Submit parameters

After finishing configuration, it will be saved in the flash of chip. Press "save configure" to save.

Press "sure", it means configuration is OK.
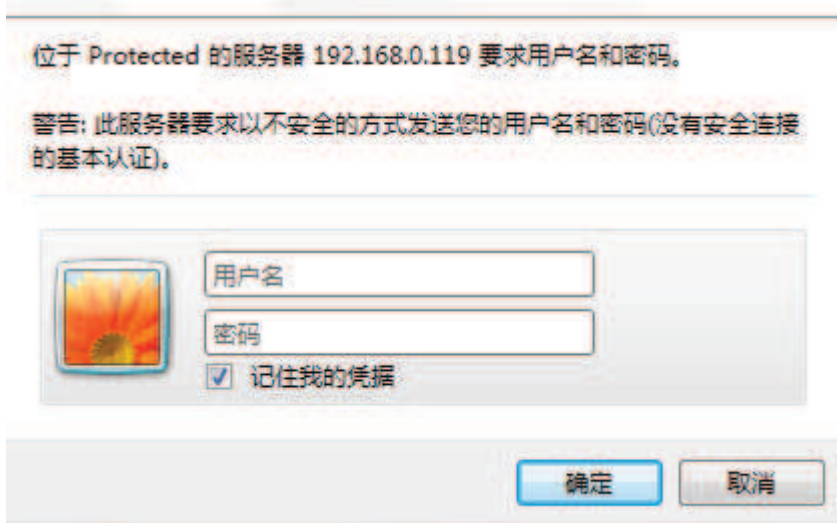
Notes: pleas assure that all the parameters have be set, if not complete, maybe it will affect the module to work normally.

Part 6 Embedded WEB Configuration

Our module has embedded WEB server which supports remote visit by IE browser for remote configuration and control.

Notes： Only after module connecting to network, then can visit embedded WEB.

It is easy to enter embedded WEB. Assure the device you used and our WIFI module are on the same network. Input the WIFI module's IP address in browser, then can visit WEB. As follows:

Here input the user name and password to visit WIFI module, if first use, the user name: **admin**, password: **shuncom**. You can set them on the WEB configuration.

Input user name and password, it will appear the screen as follows:

顺舟科技WIFI模块配置与控制界面

CONFIG   CONTROL

If do configuration, Press "CONFIG".

If need monitoring and control, press "CONTROL" (This function is reserved for the next new version, now can't use)

6.1 WEB Configuration

Press "CONFIG", it will appear as follows:

SHUNCOM CONFIGE

nettype: infra ▼

SSID: SHUNCOM123
SecurityMode: OPEN ▼
KeyMode: HEX ▼
KeyIndex: 1 ▼

KEY:

☑ ENABLE DHCP

IP ADDRESS: 192.168.0.119
SUBNET MASK: 255.255.255.0
GATEWAY: 192.168.0.250
DNS ADDRESS: 192.168.0.250

TCP/IP: TCP ▼
C/S MODE: client ▼
ServerIP: 192.168.0.176

Port: 12345

BaudRate: 19200
Checkbit: none ▼
Datebit: 8 ▼
Stopbit: 1 ▼

DateLen: 256
DataTime: 10

UserName: admin
PassWord: shuncom

[Save Config]

The above parameters are the parameters which are saved in the WIFI module.
Notes: WEB configuration and WIFI tool configuration are the same function for configuration.

The configuration details of parameters as follows：

1、network type

2、Wireless configure

SSID:
SecurityMode:
KeyMode:
KeyIndex:
KEY:

The meaning of parameters and how to configure, please see the **Part 5.**

3. Network Configure

ENABLE DHCP:
IP ADDRESS:
SUBNET MASK:
GATEWAY:

DNS ADDRESS:

The meaning of parameters and how to configure, please see the **Part 5.**

4、TCP configure

TCP/UDP: TCP ▾
C/S MODE: client ▾
ServerIP: 192.168.0.176
Port: 12345

TCP/UDP:
C/S MODE:
Server IP:
Port:

The meaning of parameters and how to configure, please see the **Part 5.**

5、Communication configure

BaudRate: 19200
Checkbit: none ▾
Datebit: 8 ▾
Stopbit: 1 ▾

DateLen: 0
DataTime: 0

BaudRate:
Checkbit:
Datebit:
Stopbit:
DateLen:
DataTime:

The meaning of parameters and how to configure, please see the **Part 5.**

6、WEB user name and password

UserName:
PassWord:

Username：

Password：

If the first time use, the user name is **admin**, password is **shuncom**
If you change new user name and password, you should remember it.
Once you forget them, please use **AT command** to get them. See the **part 7 AT command.**

7、Save configuration

Save Config

Finish configuration, please press "save config" to save. After the configuration, it should power off the module, then power on again, the configure parameters will become valid. If not power off and power on, the configuration will not valid.

Part 7   AT Command

For customer to easily use our embedded WIFI module, Shouncom supply simple **AT command** to configure it. User can configure it by MCU. Entering configuration the Baud rate is 19200

AT commands as follows:

1、AT+SZ_SSID=
It is for setting the network name, add the network name behind the "=". For example if network name is "**shuncom**", then the whole AT command is
AT+SZ_SSID=SHUNCOM/r/n

2、 AT+SZ_NETWORKTYPE=
It is for setting network type, if is infra network, add INFRASTRUCTURE behind "=". If Adhoc, add ADHOC behind "=".for example:
    Infra: AT+SZ_NETWORKTYPE=INFRASTRUCTURE/r/n
    Adhoc: AT+SZ_NETWORKTYPE=ADHOC/r/n

3、AT+SZ_SECURITY=
It is for setting security mode, you can add four modes(including OPEN、WEP64、WEP128、 WPA/WPA2PHASE) behind "=".For example:
    OPEN: AT+SZ_SECURITY=OPEN/r/n

WEP64: AT+SZ_SECURITY= WEP64/r/n

WEP128: AT+SZ_SECURITY= WEP128/r/n

WPA-PSK: AT+SZ_SECURITY= WPA/WPA2PHASE/r/n

WPA2-PSK: AT+SZ_SECURITY= WPA/WPA2PHASE/r/n

Notes: if using **AT command** to update on the mode of WPA or WPA2, security mode and key should renew at the same time.

4、AT+SZ_WEPINDEX=

It is valid only for configuring key format and key index on the mode of WEP64 and WEP128.It is made of two consecutive characters behind "=". the first character can be "0"、"1"、"2"、"3"respectively means index 1, index 2, index 3,index 4.The second character could be"A"、"H",A means that key is ASCII, H means that key is HEX, for example:

If index is 1，key is ASCII: AT+SZ_WEPINDEX=0A/r/n

If index is 3, key is HEX: AT+SZ_WEPINDEX=2H/r/n

5、AT+SZ_SECURITY_KEY=

It is for configuring network key. Add network key behind "=" directly, for example:

If WEP64,ASCII, password is 12345: AT+SZ_SECURITY_KEY=12345/r/n

If WEP64,HEX, password is 12345: AT+SZ_SECURITY_KEY=3132333435/r/n

If WPA/WPA2-PSK,password is 123456789: AT+SZ_SECURITY_KEY=123456789/r/n

Notes: if using AT command to update on the mode of WPA or WPA2, security mode and key should be renewed at the same time.

6、AT+SZ_DHCP=

It is for choosing whether to use the automatic allocation of IP address. Add ENABLE or DISABLE behind "="

Automatic allocation IP address: AT+SZ_DHCP=ENABLE/r/n

Not automatic allocation IP address but specified IP address: AT+SZ_DHCP= DISABLE/r/n

7、AT+SZ_IP_DEFAULT=

It is valid when not using DHCP. It is for giving shuncom WIFI module a fixed IP address. Add the IP address behind "=", for example"

If the fixed IP is 192.168.1.123: AT+SZ_IP_DEFAULT=192.168.0.123/r/n

8、AT+SZ_MASK_DEFAULT=

This command is for giving the shuncom WIFI module a fixed subnet mask when not using DHCP, Add the subnet mask behind "=", for example"

If fixed subnet mask is 255.255.255.0: AT+SZ_MASK_DEFAULT =255.255.255.0/r/n

9、AT+SZ_GATE_DEFAULT=

It is valid when not using DHCP. It is for giving the shuncom WIFI module a fixed gateway address. Add the gateway address behind "=", for example:

If fixed gateway address is 192.168.1.1：AT+SZ_GATE_DEFAULT =192.168.1.1/r/n

10、AT+SZ_DNS_DEFAULT=

It is valid when not using DHCP. It is for giving the shuncom WIFI module a fixed DNS server. Add the DNS server behind "=", for example

If DNS server is 192.168.1.1：AT+SZ_DNS_DEFAULT=192.168.1.1/r/n

11、AT+SZ_TCPUDP_MODEL=

It is for setting work protocol type, can add TCP or UDP behind "="
TCP protocol work: AT+SZ_TCPUDP_MODEL=TCP/r/n
 UDP protocol work: AT+SZ_TCPUDP_MODEL=UDP/r/n

12、AT+SZ_S_C_MODEL=

It is for configuring connection form. Adding SERVER and CLIENT behind "=" which respectively represent the module to be server or client.
As server: AT+SZ_S_C_MODEL=SERVER/r/n
As client: AT+SZ_S_C_MODEL=CLIENT/r/n

13、AT+SZ_TCP_SERVER_IP=

when wifi module as client，this command is valid to set IP address for connecting the server. Add IP address behind "="
If server IP address is 192.168.1.100:
AT+SZ_TCP_SERVER_IP=192.168.1.100/r/n

14、AT+SZ_S_C_PORT=

It is for connecting port number, add port number behind "=".port number could be from 0 to 65535
If TCP connected port number is 12345: AT+SZ_S_C_PORT=12345/r/n

15、AT+SZ_BAUDRATE=

Configuring serial baud rate, add the baud rate behind "=", in theory, baud rate could be set from 76 to 20M
If configure baud rate to be 19200bps: AT+SZ_BAUDRATE=19200/r/n

16、AT+SZ_UARTDATA_BIT=

Configuring serial data bit, add data bit behind "=".data bit could be 8 bit or 9 bit, for example:

If Set the data bit to be 8: AT+SZ_UARTDATA_BIT=8/r/n

17、AT+SZ_UARTDATA_CHECK=

Set the parity bit, add ODD,EVEN or NONE, for example:

Set the serial to be ODD parity: AT+SZ_UARTDATA_CHECK=ODD/r/n
Set the serial to be EVEN parity；AT+SZ_UARTDATA_CHECK=EVEN/r/n
Set the serial to be NONE parity: AT+SZ_UARTDATA_CHECK=/r/n

18、AT+SZ_UARTDATA_STOPBIT=

Configuring serial stop bit, add 1 or 2 behind "=", respectively represent 1 stop bit or 2 stop bit

Set 1 stop bit: AT+SZ_UARTDATA_STOPBIT=1/r/n
Set 2 stop bit: AT+SZ_UARTDATA_STOPBIT=2/r/n

19、AT+SZ_DATELENGTH=

Set data length on the mode of serial transparent transmission. Add 0 to 256 behind "=".if the data from serial is bigger or the equal to the data length, the serial will send out the data. For example:

Setting the data length to be 0: AT+SZ_DATELENGTH=0/r/n
Setting the data length to be 256: AT+SZ_DATELENGTH=256/r/n

20、AT+SZ_DATETIMEOUT=

Setting the data time, add any time behind "=", the unit time is millisecond .for example:
Setting the data time to be 0: AT+SZ_DATETIMEOUT=0/r/n
Setting the data time to be 5 second: AT+SZ_DATETIMEOUT=5000/r/n

21、AT+SZ_WEBUSERNAME=

It is for setting user name of WEB, add new user's name behind "=". For example:
Set WEB user name to be admin: AT+SZ_WEBUSERNAME=admin/r/n

22、AT+SZ_WEBPASSWORD=

It is for setting the WEB password, add new password behind "="

If set WEB password to be shuncom: AT+SZ_WEBPASSWORD=shuncom/r/n

23、AT+SZ_SAVE_CONFIG=SAVE/r/n

This command is for saving configuration. After finishing configuration, enter this AT command for saving all of the above configured parameters. Module will be reset by itself.

If change a part of commands, make sure that input this command as saving, other parameters which not change will be keep the original configuration.

Notes: This AT command not only support single command to change but also support parts of commands to change. After a new configuration each time, it must input **AT+SZ_SAVE_CONFIG=SAVE/r/n** to save all previous configuration.

The following AT command is the query command:

24、AT+SZ_CHECKCONFIG=ALL/r/n

This command query all the save parameters in configuration mode, all the saved parameters will be output from the serial port. The output format as follows:

At original state, enter the configuration mode, input the above command, the parameters from Serial ports output are as follows:

NetworkType:ADHOC
SSID:SHUNCOM_hoc
Security:OPEN
Key_Mode:HEX
Key_Index:1
KEY:
DHCP:DISENABLE
IP_address:169.254.1.1
Gateway_address:169.254.1.1
Subnet_mask:255.255.0.0
DNS_server:169.254.1.1
TCPUDP_Mode:TCP
SC_Mode:Client
Server_IP:169.254.1.1
Port:12345
Baudrate:19200
Uartdata_Check:None
Uartdata_Bit:8
Uartdata_Stopbit:1
Uartdata_Long:256
Uartdata_Timeout:10
Web_Username:admin
Web_Password:shuncom

The following **AT command** is the signal query of the command **AT+SZ_CHECKCONFIG=ALL/r/n**

25、AT+SZ_CHECKCONFIG=NETWORKTYPE/r/n

This command query network type in the mode of configuration, network parameters will be output from the serial port as follows:

NetworkType:ADHOC

26、AT+SZ_CHECKCONFIG=SSID/r/n

This command query the parameters of network name in configuration mode, network name parameters will be output from the serial port as follows:

SSID:SHUNCOM_hoc

27、AT+SZ_CHECKCONFIG=SECURITY/r/n

This command query security mode in the mode of configuration, security mode parameters will be output from the serial port as follows:

Security:OPEN

28、AT+SZ_CHECKCONFIG=KEY_MODE/r/n

This command query encryption key parameters in configuration mode, encryption key parameters will be output from the serial port as follows:

Key_Mode:HEX

29、AT+SZ_CHECKCONFIG=KEY_INDEX/r/n

This command query encryption key index parameters in the mode of configuration, encryption key index parameters will be output from the serial port as follows:

Key_Index:1

30、AT+SZ_CHECKCONFIG=KEY/r/n

This command query encryption key parameters in the mode of configuration. Encryption key parameters will be output from the serial port as follows:

KEY:

31、AT+SZ_CHECKCONFIG=DHCP/r/n

This command query DHCP function in configuration mode, DHCP function

parameters will be output from the serial port as follows:

DHCP: DISENABLE

32、AT+SZ_CHECKCONFIG=IPADD/r/n
This command is to query IP address parameters in configuration mode , IP address parameters will be output from the serial port as follows:

IP_address:169.254.1.1

33、AT+SZ_CHECKCONFIG=GATEADD/r/n
This command query gateway parameters in configuration mode, gateway parameters will be output from the serial port as follows:

Gateway_address:169.254.1.1

34、AT+SZ_CHECKCONFIG=MASKADD/r/n

This command query subnet mask parameters in configuration mode, subnet mask parameters will be output from the serial port as follows:

Subnet_mask:255.255.0.0

35、AT+SZ_CHECKCONFIG=DNSADD/r/n
This command query DNS server parameters in configuration mode, DNS server parameters will be output from the serial port as follows:

DNS_server:169.254.1.1

36、AT+SZ_CHECKCONFIG=TCPUDP/r/n
This command query work protocol parameters in configuration mode, work protocol parameters will be output from the serial port as follows:

TCPUDP_Mode:TCP

37、AT+SZ_CHECKCONFIG=SC/r/n
This command query connection mode parameters in configuration mode. Connection mode parameters will be output from the serial port as follows:

SC_Mode:Client

38、AT+SZ_CHECKCONFIG=SERVER_IP/r/n
This command queries sever IP address parameters in configuration mode, server IP address parameters will be output from the serial port as follows:

Server_IP:169.254.1.8

39、AT+SZ_CHECKCONFIG=SC_PORT/r/n

This command query port number parameters in configuration mode, port number parameters will be output from the serial port as follows:

Port:12345

40、AT+SZ_CHECKCONFIG=BAUDRATE/r/n

This command query baud rate parameters in configuration mode, baud rate parameters will be output from the serial port as follows:

Baudrate:19200

41、AT+SZ_CHECKCONFIG=UARTDATA_CHECK/r/n

This command query parity parameters in configuration mode, parity parameters will be output from the serial port as follows:

Uartdata_Check:None

42、AT+SZ_CHECKCONFIG=UARTDATA_BIT/r/n

This command query data bit parameters in configuration mode, data bit parameters will be output from the serial port as follows:

Uartdata_Bit:8

43、AT+SZ_CHECKCONFIG=UARTDATA_STOPBIT/r/n

This command query stop bit parameters in configuration mode, stop bit parameters will be output from the serial port as follows:

Uartdata_Stopbit:1

44、AT+SZ_CHECKCONFIG=UARTDATA_LONG/r/n

This command query data length parameters in configuration mode, frame length parameters will be output from the serial port as follows:

Uartdata_Long:256

45、AT+SZ_CHECKCONFIG=UARTDATA_TIMEOUT/r/n

This command query data timeout parameters in configuration mode, frame timeout parameters will be output from the serial port as follows:

Uartdata_Timeout:10

46、AT+SZ_CHECKCONFIG=WEB_USERNAME/r/n

This command query WEB user name parameters in configuration mode. WEB user parameters will be output from the serial port as follows:

Web_Username:admin

47、AT+SZ_CHECKCONFIG=WEB_PASSWORD/r/n

This command query embedded WEB password parameter in configuration mode, embedded WEB password parameter will be output from the serial port as follows:

Web_Password:shuncom

Part 8 Assistant Tool

8.1 Summary

Shuncom WIFI module has our own special configuration tool to configuration and remote data connection test. All tools we will be sent with the WIFI module, or you can visit our company web or consult our customer service to obtain.
We advice you'd better use Shuncom configuration tools to configure your device parameters. Of course, you also can use your tool or third-party tool to configure. Please read relevant sections of this document carefully before configuration.

8.2 WIFI configuration tool

WIFI configuration tool ----It is helpful to configure WIFI module network parameters which include network type, communication setting, configuration parameter, network setting, work mode setting and so on.

8.3 Network Assistant Tool

Network Assistant Tool ---- It is for as server center to send and receive data.

8.4 Technical support

Shanghai Shuncom Electronic Technology Co.,Ltd
Add: 4-502 No.289. Bisheng Road, Zhangjiang High-Tech Park, Shanghai, China
Tel: 021-33933988/78/68/58/28/18
Fax: 021-33933988-6800
Email: 6822@shuncom.com, 6835@shuncom.com
Website: www.shuncom.com