

# VDB2601 规格书/datasheet

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### 设备清单/Bill of Material

名称/name	型号/model	数量/number	备注/remark
蓝牙网关//BLE Gateway	VDB2601	1	VDB2601
5V 适配器/5V power adapter	GA-0502000CL	1	INPUT:AC100~240V/0.6A OUTPUT: 5V/2A

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## 1 产品介绍/Product introduction

VDB2601 是一个集成了 WiFi 和蓝牙 BLE 两种无线通信方式的信标，WiFi 与蓝牙之间通过串口通信，可灵活应用于各种场景。例如，远程控制 BLE 设备，接收 BLE 设备发送的数据并转发到后台服务器等。VDB2601 的 WiFi 速率可达百兆，BLE 速率可达 1Mbps。此外，VDB2601 支持 POE 交换机供电和 5V 适配器供电两种供电方式，应用更加方便。VDB2601 还具有功耗小、可拆卸、造型美观等优点。

VDB2601 is a wireless beacon integrating WIFI and BLE 4.2. WIFI and Bluetooth communicate through serial port, which can be flexibly used in various scenarios. For example, remote control of BLE devices, receiving data sent by BLE devices and forwarding to background servers, etc. The VDB2601 has WiFi speeds up to 100 megabits and BLE speeds up to 1Mbps. In addition, VDB2601 supports POE switch power supply and 5V adapter power supply, the application is more convenient. VDB2601 also has the advantages of low power consumption, disassembly, beautiful shape and so on.



图 1/Figure 1: VDB2601

### 1.1 VDB2601 特性 Features

- ◆ 支持 POE 供电和 DC-DC 5V 供电/ Supports the POE switch power supply and 5V adapter power supply.
- ◆ 支持 IEEE 802.11n, IEEE 802.11g, IEEE 802.11b 协议/ Support IEEE 802.11n, IEEE 802.11g, IEEE 802.11b Protocol
- ◆ 支持 Bluetooth ® 4.2 /Support Bluetooth ® 4.2
- ◆ 结构小，轻便/ Small structure, light weight
- ◆ 1 个 WAN/LAN 可变网口/ One WAN/LAN variable network port
- ◆ 符合 RoHS, FCC, CE 标准/ RoHS, FCC,CE compliance

## 1.2 安装方法/installation method

VDB2601 采用旋转卡扣式安装，方便安装和拆卸，其安装方法如下。

VDB2601 adopts rotary buckle type installation, convenient installation and disassembly, its installation method is as follows.

- a. 逆时针旋转，取下 D 型卡扣

Rotate counterclockwise and remove the D-type buckle.

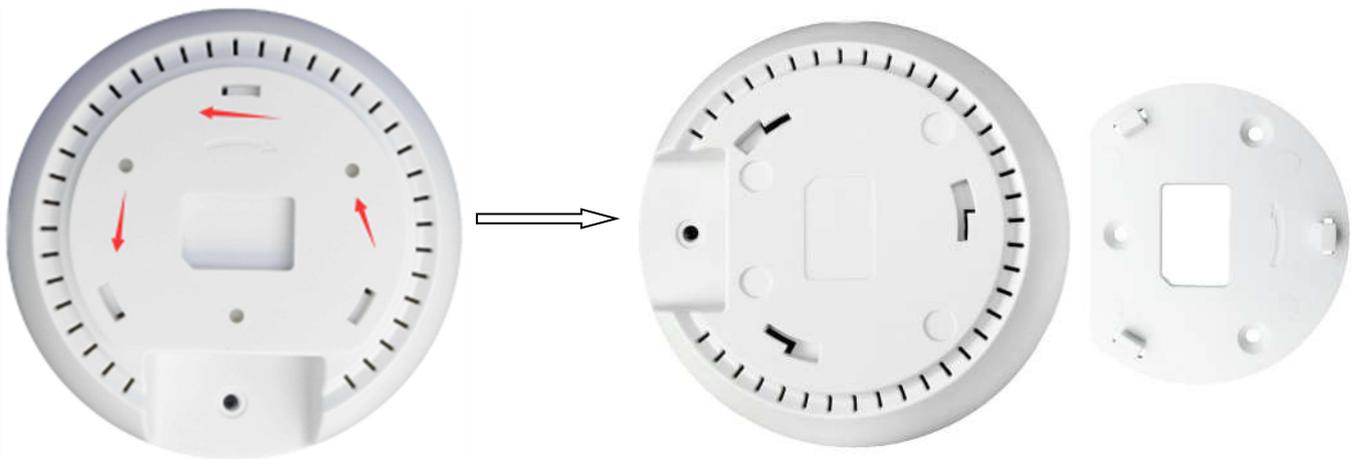


图 1.2.a/Figure 1.2.a: VDB2601 D-shape buckle rotating way

- b. 把 D 型卡扣平面一侧靠近安装处，安装到合适位置，使用螺丝紧固卡扣。

Place the flat side of the D type buckle close to the mounting place. Install it in place and tighten the buckle with screws.



图 1.2.b/Figure 1.2.b: VDB2601 D-shape buckle

- c. 把网关网口和 DC 头出线一侧对齐 D 型卡扣。

Align the D type buckle to the gateway port and DC outlet side.



图 1.2.c/Figure 1.2.c: VDB2601 installing

### 1.3 系统框图/system chart

VDB2601 内置 WiFi 和蓝牙两种无线通信方式。WiFi 与蓝牙之间通过串口通信。VDB2601 支持 POE 供电和 5V 电源供电两种供电方式。

VDB2601 built-in WiFi and Bluetooth two wireless communication modes. WiFi and Bluetooth communicate through serial port. VDB2601 supports POE power supply and 5V power supply.

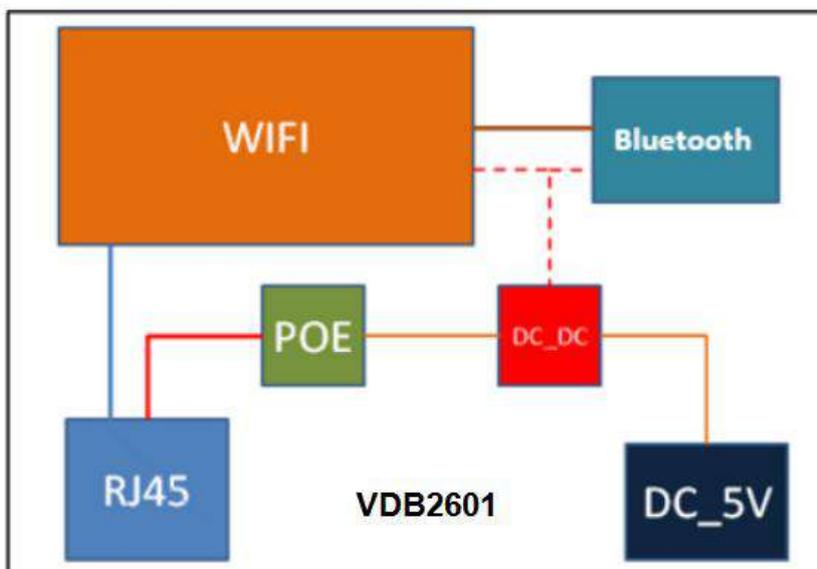


图 1.2: VDB2601 框图

## 1.4 接口介绍/interface introduction

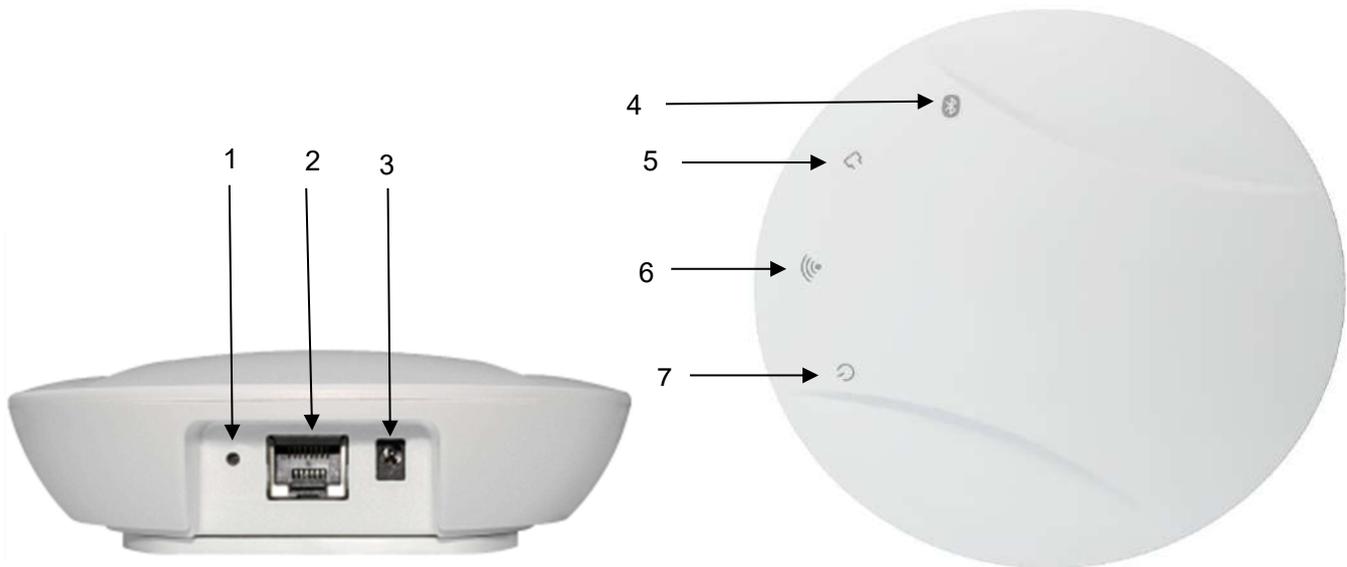


图 1.4/Figure 1.4: VDB2601 interface

- 1: 复位按键 Reset/Reset button
- 2: WAN/LAN 网口/ WAN/LAN front-end ports
- 3: DC 接口/DC interface
- 4: 蓝牙灯/bluetooth light
- 5: 网口灯/Meker burner
- 6: WiFi 灯/Wifi light
- 7: 电源灯/power light

### 1.4.1 网口/WAN/LAN Port

VDB2601 网口支持五类线和超五类线,可传输数据同时也能支持 POE 供电(由 POE 交换机供电称为 POE 供电,电压范围 44~57V,默认支持网线线序 1,2,3,6 如下图)。网口为 WAN/LAN 可变网口。

The VDB2601 network port supports five types of lines and super five types of lines, which can transmit data and also support POE power supply (power supply by POE switch is called POE power supply, voltage range 44~57V. Default net-line order is 1,2,3,6,like the figure below). The network port is a WAN/LAN variable port.

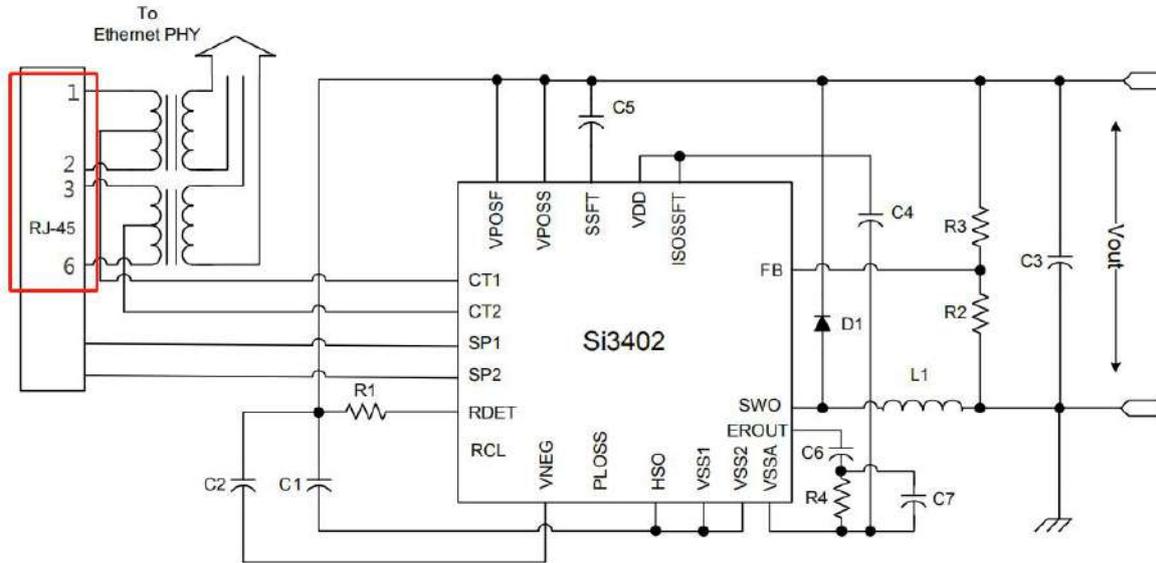


图 1.4.1/ Figure 1.4.1: VDB2601 POE 网口接线图

工作模式/Working mode	网口/net gape
AP Client	LAN
Getway	WAN

### 1.4.2 DC 电源接口/DC power interface

VDB2601 的电源接口支持 DC 输入，输入电压范围为 4.5-6.3V，电流大于 1000mA，接口采用 DC 电源插座，电源座孔径 3.5mm,针径为 1.35mm，针头为正极。

The power interface of VDB2601 supports DC input, the input voltage range is 4.5-6.3V, the current is greater than 1000mA, the interface adopts DC power socket, the power base aperture is 3.5mm, the needle diameter is 1.35mm, the needle is positive pole

说明：出厂配备的 5V 电源适配器输入电压为 AC 100-240V,50/60Hz 输出电压为 5V 2A。电源接头为外负内正。

Description: The input voltage of 5V power adapter is AC 100-240V, and the output voltage of 50/60Hz is 5V 2A. The power connection is positive inside and negative outside.

### 1.4.3 复位按键/Reset button

长按 VDB2601 的复位按钮 5 秒钟以上，VDB2601 内部的 WiFi 会恢复出厂设置。

Long press the reset button of VDB2601 for more than 5 seconds, the WiFi inside the VDB2601 will restor the factory Settings

#### 1.4.4 指示灯/Indicator LED

电源指示灯/Power indicator: 上电 LED 灯常亮/Power on LED light is always on

网口指示灯/Network port indicator light: 上电网口插网线后 LED 灯常亮, 有数据传输时会快闪, 拔下网线会熄灭;

The LED light is always on after the network cable is inserted into the grid port. When there is data transmission, the LED light will flash, and the cable will be extinguished when it is unplugged.

WiFi 指示灯/WiFi light: 上电 1-2 秒后, LED 灯常亮, WiFi 连接或传输数据时会快闪

After 1-2 seconds of power on, the LED light is always on and flash when WiFi is connected or data is transmitted

蓝牙指示灯/Bluetooth indicator light: 上电后 LED 灯闪烁/The LED light flashes after charging

### 1.5 应用场景/Application Block Diagram

**应用场景 1: 传感器信息采集、指令下发/Scene1: Sensor data collection or command deliver**

- 1) VDB2613 里蓝牙模块收集附近蓝牙传感器的信息, 如温湿度、光照度、CO2 浓度等, 一秒一次。
- 2) VDB2613 Bluetooth module collects information about BLE sensor, such as Humidity and Temp., brightness, CO2 density etc., once per second.
- 3) 云平台的控制信息, 通过网关发给蓝牙控制器模块或蓝牙开关, 用来调节温湿度等, 一秒一次。
- 4) The cloud controlcenter send the command information to BLE control module or BLE switch through VDB2613 , so as to adjust the Temp. and Humidity, once per second.



图 1.5.1 蓝牙网关采集蓝牙传感器信息

Figure 1.5.1 BLE Gateway collect BLE sensor data

#### 应用场景 2: 室内定位/Scene2: Indoor position

- 1) VDB2601 里蓝牙模块收集附近 Beacon 的信息，包括 RSSI，MAC 等，一秒一次。  
1)The Bluetooth module in VDB2601 collects the information of nearby beacons, including RSSI, MAC, etc., once a second.
- 2) 蓝牙模块将收到 Beacon 信息，通过 UART 串口发给 VDB2601 里面的 WIFI 模块，一秒一次。  
2) The Bluetooth module will receive the Beacon information and send it to the WiFi module in VDB2601 through the UART serial port, once a second.
- 3) WIFI 模块收到蓝牙模块传过来的信息，传输到指定的 UDP 服务器，并能接受服务器返回的信息。  
3) The WiFi module receives the information from the Bluetooth module, transmits it to the designated UDP server, and can accept the information returned by the server.
- 4) UDP 服务器收到来自某个 IP 的探针数据后，通过解析数据和计算，得到 Beacon 的位置信息，可以显示在前端页面，并能下发命令到 WIFI 模块，WIFI 模块透传到蓝牙模块，定制性的工能开发（比如：结合灯具使灯亮起来等）。  
4)After the UDP server receives the probe data from a certain IP, through analyzing the data and calculating, the position information of the Beacon can be obtained, which can be displayed on the front-end page, and

can issue commands to the WIFI module, which can be transmitted to the Bluetooth module through the WIFI module, and customized industrial development (such as: light up the lamp combined with lamps, etc.)

定位示意图/Positioning diagram:



图 1.5.2 蓝牙网关采集蓝牙信标信号强度

Figure 1.5.2 BLE Gateway collect BLE Beacon RSSI

## 2.硬件参数/Hardware parameters

尺寸/Dimension	直径 124mm；高 40mm/Diameter: 124mm; Height: 40mm
供电方式//Power Supply	DC 5V、POE 供电/Power Supply
平均电流//currents	200mA@5V
工作温度//Operating Temperature	-20℃~70℃
物理接口//Physical interface	网口一个、DC 电源接口一个 One network port, one DC power interface
WiFi	
Wifi 协议/protocol	IEEE 802.11n, IEEE 802.11g, IEEE 802.11b
传输速率/transmission rate	IEEE 802.11 b Standard Mode: 1,2,5.5,11Mbps
	IEEE 802.11g Standard Mode: 6,9,12,18,24,36,48,54Mbps
	IEEE 802.11n : 72Mbps @ HT20 150Mbps @ HT40
接收灵敏度/Sensitivity	HT40 MCS7 : -67dBm@10% PER(MCS7)
	HT20 MCS7 : -73dBm@10% PER(MCS7)

	54M: -76dBm@10% PER
	11M: -91dBm@ 8% PER
发射功率/Transmit Power	IEEE 802.11n: 15dBm @HT40 MCS7 15dBm@HT20 MCS7
	IEEE 802.11g: 16dBm
	IEEE 802.11b: 18dBm
无线安全/Wireless Securit	WPA/WPA2, WEP, TKIP, and AES
工作模式/Working mode	Bridge、Gateway、AP Client
蓝牙/Bluetooth	
蓝牙协议/Bluetooth Protocol	Bluetooth ® 4.2
传输速率/Bluetooth Protocol	1Mbps
无线安全/Wireless Security	AES HW Encryption
覆盖范围/coverage area	80m
发射功率/Transmit Power	-4~+20dBm

### 3. 配置参数/Configuration

#### 3.1 网络拓扑/network topology

##### 3.1.1 通过上级路由网段访问/Access through the superior routing network segment

VDB2601 在 gateway 模式下,唯一的网口为 WAN,,PC 与 VDB2601 连接相同的上级路由,访问 VDB2601。

In the Gateway mode of VDB2601, the only network port is WAN,, PC and VDB2601 connect the same superior route, access VDB2601.

VDB2601 工作在 apcli 模式下, PC 通过与 VDB2601 连接相同的上级路由,访问 VDB2601。

VDB2601 works in APCLI mode, where the PC accesses VDB2601 through the same superior route as VDB2601.

下图是网络连接的拓扑图, VDB2601 的 wan 口连接路由器的 lan, 个人 PC 也连接到路由器的 lan 口或者无线热点, 此时在 PC 上使用浏览器可以访问 VDB2601 的管理界面:

The following figure is the topology of the network connection. The WAN port of VDB2601 is connected to the ROUTER's LAN port, and the PERSONAL PC is also connected to the router's LAN port or wireless hotspot. At this point, the management interface of VDB2601 can be accessed through the browser on the PC.

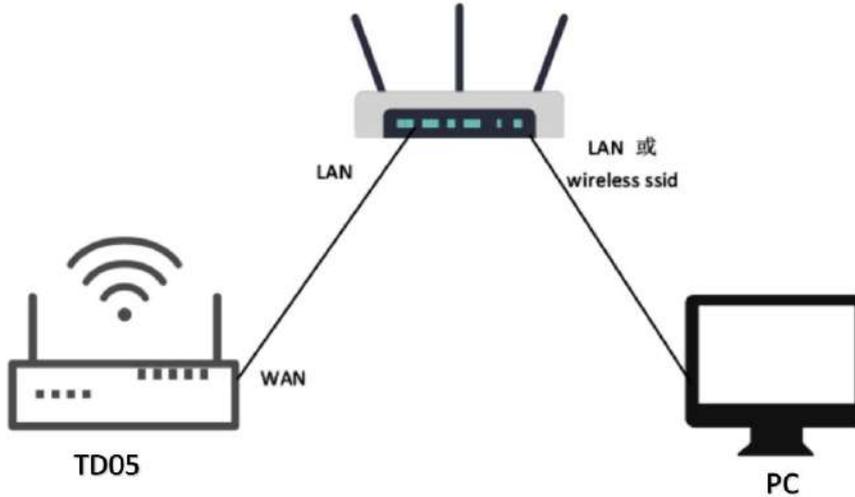


图 3.1.1.a 通过上级路由网段访问

Figure3.1.1.a .Access through the superior routing network segment

下面假设此时路由器分配给 VDB2601 的 IP 地址为 192.168.0.106，PC 分配的 IP 为 192.168.1.118，此时在 PC 上使用浏览器访问 192.168.0.106，可以进入 VDB2601 的 web 认证界面。如下图所示

It is assumed that the IP address assigned to VDB2601 by the router is 192.168.0.106, and the IP assigned to THE PC is 192.168.1.118. At this time, the browser can access 192.168.0.106 on the PC, and the Web authentication interface of VDB2601 can be entered.As shown in the figure below

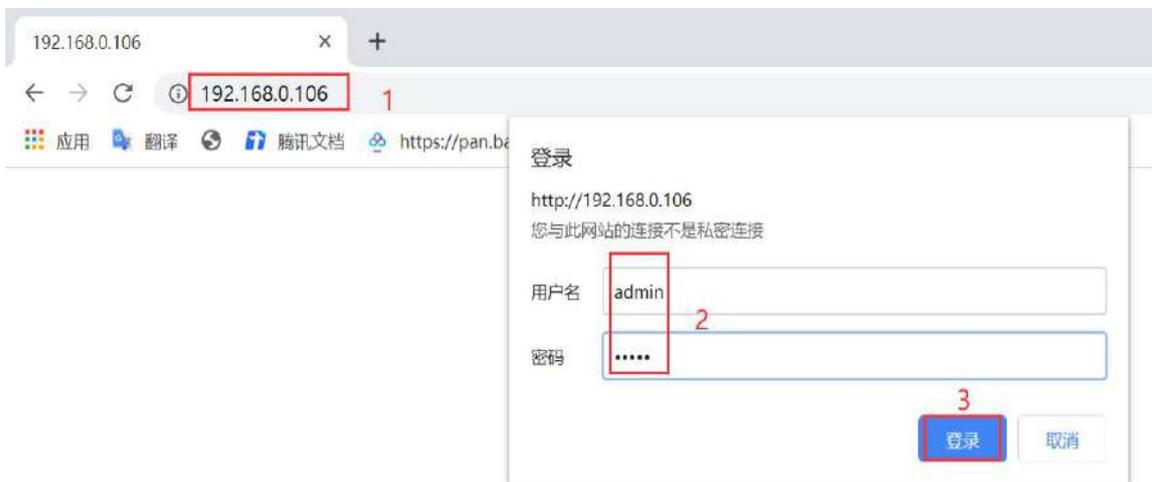


图 3.1.1.bVDB2601 的管理账号密码分别为 admin/admin

Figure3.1.1.b The password of VDB2601 is admin/admin.

### 3.1.2 通过局域网连接/Connect via LAN

VDB2601 在 gateway 模式下, PC 通过 VDB2601 的 WIFI 热点访问 WIFI 模块。

VDB2601 in Gateway mode, the PC accesses the WIFI module through the WIFI hotspot of VDB2601.

VDB2601 在 ap-cli 模式下, PC 可通过 VDB2601 的 WIFI 热点和唯一的网口访问 WIFI 模块。

VDB2601 In AP-CLI mode, THE PC can access the WIFI module through the WIFI hotspot of VDB2601 and the unique network port.

通过以上方式连接 VDB2601 后, VDB2601 会分配 IP 地址给 PC。用户可在 PC 上, 通过访问网关 IP, 登录到 VDB2601 的管理界面。默认的 IP 地址网段为 10.10.10.0/24, 假设用户没有修改 VDB2601 的 IP 网段, 那么, 可在 PC 上通过浏览器 10.10.10.254, 来到 VDB2601 的管理界面。

After connecting to VDB2601 in the above way, VDB2601 will assign the IP address to the PC. Users can log in to the administration interface of VDB2601 on a PC by accessing the gateway IP. The default IP address network segment is 10.10.10.0/24. Assuming that the user has not modified the IP network segment of VDB2601, then the user can go to the management interface of VDB2601 through the browser on the PC at 10.10.10.254.

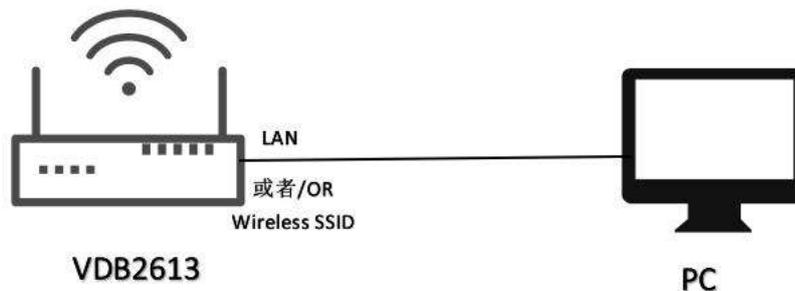


图 3.1.2.a 通过 VDB2601 局域网访问

Figure3.1.2.a Access via VDB2601 LAN

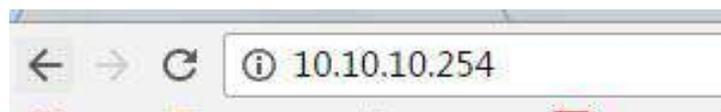


图 3.1.2.b 上图是 PC 上的访问截图

Figure3.1.2.b The above is a screenshot of the access on PC

## 3.2 广域网配置/Wan configuration

### 3.2.1 wan 口上网/Wan port access to the Internet

(1) 系统工作默认为 gateway 模式； /The system works in gateway mode by default;



说明：点击 Save，可以保存配置，但不会立即生效，可以在系统配置完后，再一次性确定；

Note: Click Save, the configuration can be saved, but it will not take effect immediately. It can be determined once the system is configured.

点击“确定”，会立即生效，网络会重启，需要等待网络恢复；

Click "OK", it will take effect immediately, the network will restart, need to wait for the network recovery;

(2) 广域网为动态地址分配； /Wan for dynamic address allocation;



(3) 查看状态/Check the status



### 3.2.2 无线上网/wireless internet

(1) 系统模式配置为 apclient 模式，按下图操作，点击"Save"后，需要刷新

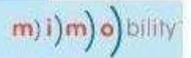
The system mode is configured as APCLI mode. Follow the operation as shown in the figure below and click "Save" to refresh



(2) 广域网配置为动态地址分配; /The WAN is configured for dynamic address assignment;



(3) 配置上级 AP 信息; /Configure superior AP information;



开启全部 | 关闭全部



### AP Client Feature

You could configure AP Client parameters here.

AP Client Parameters	
SSID	SKYLAB91
MAC Address (Optional)	
Security Mode	WPA2PSK <span style="float: right;">2</span>
Encryption Type	AES
Pass Phrase	Skylab20026
<input type="button" value="Save"/> <input type="button" value="Apply"/> <span style="margin-left: 20px;">3</span> <input type="button" value="Cancel"/>	

## 3.3 局域网配置/LAN configuration

### 3.3.1 更改局域网 IP 地址/Change the LAN IP address

VDB2601 默认的局域网网段为 10.10.10.254/24，客户可以根据需求修改局域网 IP 地址，下面介绍其操作步骤：

The default LAN segment of VDB2601 is 10.10.10.254/24. Customers can modify the LAN IP address according to their needs. The following steps are described:

(1) 按照下图步骤操作：/Follow the steps below;



开启全部 | 关闭全部



### 局域网设置

您可以启用/停止以及设置所有的网络功能。

局域网设置	
网络名称	Mediatek <span style="float: right;">3</span>
IP 地址	172.16.10.254 <span style="float: right;">在此处设置需要设置的IP</span>
子网掩码	255.255.255.0
局域网 2	<input type="radio"/> 启用 <input checked="" type="radio"/> 禁用 <span style="float: right;">4</span>
局域网 2 IP 地址	<input type="text"/> <span style="float: right;">在此空白处点击，下方的 DHCP 参数会自动同步</span>
局域网 2 子网掩码	<input type="text"/>
MAC 地址	(null)
DHCP 类型	服务器
起始 IP 地址	172.16.10.100
结束 IP 地址	172.16.10.200
子网掩码	255.255.255.0
备用 DNS 服务器	168.95.1.1
其他 DNS 服务器	8.8.8.8
预设值	172.16.10.254



(2) 修改完 IP 地址后，网络会重启，如果使用 WIFI 热点连接，可能出现断网情况，再次连接到热点，使用新设置的 IP 地址访问模块。

After the IP address is modified, the network will restart. If the WIFI hotspot is used to connect, the network may be disconnected. Connect to the hotspot again and use the newly set IP address to access the module.



### 3.3.2 增设局域网网段/Add LAN segment

VDB2601 可以增设局域网网段 lan2，默认没有开启 lan2。

Lan2 can be added to LAN segment in VDB2601. Lan2 is not enabled by default.

(1) 按下图步骤设置 lan2。/Follow the steps below to set up LAN2

您可以启用/停止以及设置所有的网络功能。

局域网设置	
网络名称	Mediatek
IP 地址	172.16.10.254
子网络遮罩	255.255.255.0
局域网 2	<input checked="" type="radio"/> 启用 <input type="radio"/> 停用
局域网 2 IP 地址	193.169.10.254
局域网 2 子网络遮罩	255.255.255.0
MAC 地址	(null)
DHCP 类型	服务器
起始 IP 地址	172.16.10.100
结束 IP 地址	172.16.10.200
子网络遮罩	255.255.255.0
惯用 DNS 服务器	168.95.1.1
其他 DNS 服务器	8.8.8.8
预设信关	172.16.10.254
释放时间	86400



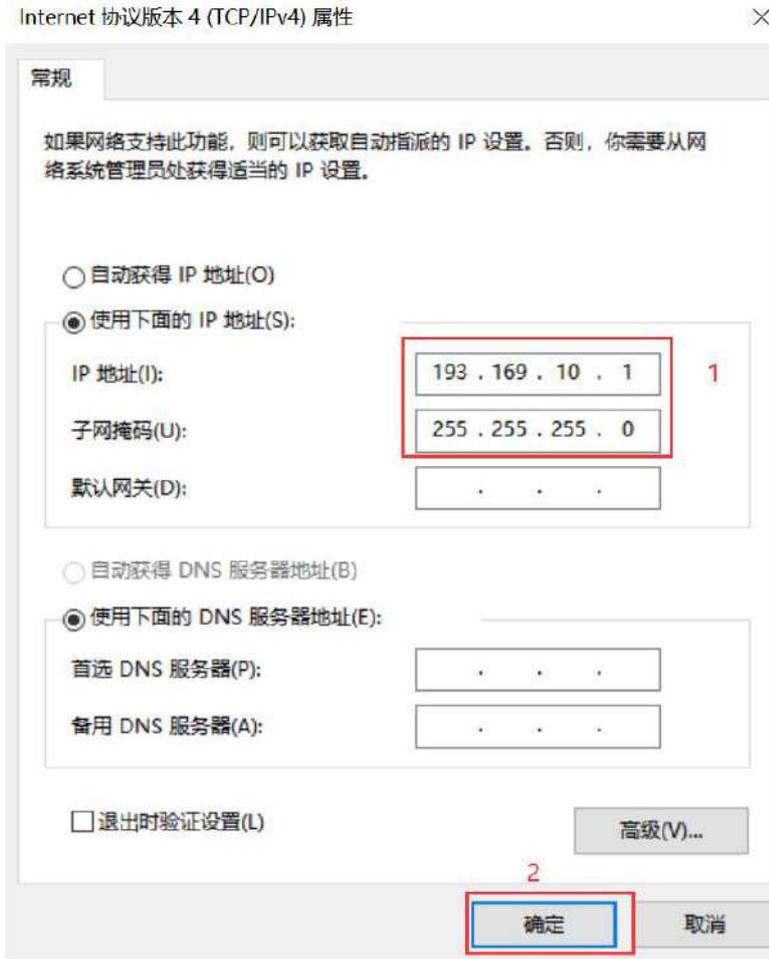
The screenshot shows the DHCP configuration page in the 95POWER web interface. The interface includes a sidebar menu on the left with categories like '功能' (Function), '网络设置' (Network Settings), '广域网' (WAN), 'DHCP 客户端列表' (DHCP Client List), 'VPN Passthrough', '高级路由配置' (Advanced Routing Configuration), 'IPV6', '无线网络设置' (Wireless Network Settings), 'NAT 设置' (NAT Settings), 'NAS', '系统管理' (System Management), and '蓝牙' (Bluetooth). The main content area is titled 'DHCP 类型' (DHCP Type) and '服务器' (Server). It contains a table of DHCP settings:

DHCP 类型		服务器
起始 IP 地址	172.16.10.100	
结束 IP 地址	172.16.10.200	
子网掩码	255.255.255.0	
常用 DNS 服务器	168.95.1.1	
其他 DNS 服务器	8.8.8.8	
预设信关	172.16.10.254	
释放时间	86400	
静态指定	MAC: <input type="text"/>	IP: <input type="text"/>
静态指定	MAC: <input type="text"/>	IP: <input type="text"/>
静态指定	MAC: <input type="text"/>	IP: <input type="text"/>
802.1d Spanning Tree	停用	
LLTD	停用	
IGMP Proxy	停用	
UPNP	停用	
Router Advertisement	停用 3	

At the bottom of the form, there are three buttons: 'Save', '确定' (Confirm), and '取消' (Cancel). The '确定' button is highlighted with a red box.

(3) lan2 设置完成后，用户可以使用设置静态 IP 为该网段，与设置通信，通过 lan2 的 IP 访问网关。

After lan2 is set up, the user can set the static IP for the network segment and communicate with the set through lan2's IP access gateway.



### 3.3.3 配置 DHCP 参数/configuration DHCP

VDB2601 支持用户修改 DHCP 的各个参数，包括起始 IP、结束 IP、IP 地址租赁时间等参数，也支持用户关闭 DHCP 功能，使用静态 IP 连接。

VDB2601 supports users to modify various DHCP parameters, including starting IP, ending IP, IP address lease time and other parameters, and also supports users to turn off DHCP function and use static IP connection.

(1) 下面是关闭 DHCP 服务的步骤：/The following steps are to close the DHCP service

局域网设置

您可以启用/停止以及设置所有的网络功能。

局域网设置	
网络名称	Mediatek
IP 地址	172.16.10.254
子网络遮罩	255.255.255.0
局域网 2	<input checked="" type="radio"/> 启用 <input type="radio"/> 停用
局域网 2 IP 地址	193.169.10.254
局域网 2 子网络遮罩	255.255.255.0
MAC 地址	(null)
DHCP 类型	停用 2
802.1d Spanning Tree	停用
LLTD	停用
IGMP Proxy	停用
UPNP	停用
Router Advertisement	停用 3

Save 确定 取消

下面是设置 DHCP 服务器参数的步骤：/Here are the steps to set the DHCP server parameters:

(1) 按图示步骤设置/Set according to the steps shown in the diagram



开启全部 | 关闭全部



DHCP 类型	服务器 ▾
起始 IP 地址	172.16.10.100
结束 IP 地址	172.16.10.110
子网掩码	255.255.255.0
惯用 DNS 服务器	168.95.1.1
其他 DNS 服务器	8.8.8.8 2
预设网关	172.16.10.254
释放时间	86400
静态指定	MAC: <input type="text"/> IP: <input type="text"/>
静态指定	MAC: <input type="text"/> IP: <input type="text"/>
静态指定	MAC: <input type="text"/> IP: <input type="text"/>
802.1d Spanning Tree	停用 ▾
LLTD	停用 ▾
IGMP Proxy	停用 ▾
UPNP	停用 ▾
Router Advertisement	停用 ▾ 3

Save 确定 取消

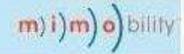
### 3.3.4 绑定 IP 地址/Bind IP address

在调试过程中，在 PC 上模拟服务器端进行测试时，可绑定 PC 的 IP 地址，使服务器在测试中 IP 地址固定。

In the debugging process, when the server side is simulated on PC for testing, the IP address of THE PC can be bound so that the IP address of the server can be fixed during the test.

(1) 可以先查看 VDB2601 的 DHCP 列表，复制对应 PC 的 MAC。下图是查看 DHCP 列表的步骤：

You can first check the DHCP list of VDB2601 and copy the MAC corresponding to PC. The following is the steps to view the DHCP list:



开启全部 | 关闭全部

### DHCP 客户端列表

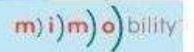
您可以在这里检视所有 DHCP 客户端。



DHCP 客户端				
网络名称	MAC 地址	IP 地址	过期	Os device
HONOR_20S-c0b62	44:55:C4:26:CA:37	172.16.10.100	23:56:40	
yang	3C:95:09:67:A1:5D	172.16.10.101	00:00:00	

(2) 通过下图方式绑定 PC 的 IP 地址，绑定后对应 PC 连接到 VDB2601，获取的 IP 就是绑定的 IP 地址。

Bind THE IP address of PC through the following method. After binding, the PC is connected to VDB2601, and the IP obtained is the binding IP address.



开启全部 | 关闭全部



DHCP 类型	服务器
起始 IP 地址	172.16.10.100
结束 IP 地址	172.16.10.110
子网掩码	255.255.255.0
惯用 DNS 服务器	168.95.1.1
其他 DNS 服务器	8.8.8.8
预设信关	172.16.10.254
释放时间	86400
静态指定	MAC: 3C:95:09:67:A1:5D IP: 172.16.10.100
静态指定	MAC: <input type="text"/> IP: <input type="text"/>
静态指定	MAC: <input type="text"/> IP: <input type="text"/>
802.1d Spanning Tree	停用
LLTD	停用
IGMP Proxy	停用
UPNP	停用
Router Advertisement	停用

Save 确定 取消

### 3.4 无线参数配置/Wireless parameter configuration

#### 3.4.1 修改 WIFI 热点名、设置固定信道/Modify WIFI hotspot name and set fixed channel

95POWER m) i) m) o) bility

启用全部 | 关闭全部

微能

- 运作模式
- 网络设置
- 无线网络设置 **1**
  - 基本设置** **1**
  - 高级设置
  - 安全设置
  - WPS
  - 客户端列表
  - 统计资料
- NAT 设置
- NAS
- 系统管理
- 蓝牙

网络模式	11b/g/n mixed mode
网络名称 (服务集合标识符)	SKYLAB_28A1E8F9CE <b>2 修改SSID热点名</b>
广播网络名称 (服务集合标识符)	<input checked="" type="radio"/> 启用 <input type="radio"/> 停用
AP Isolation	<input type="radio"/> 启用 <input checked="" type="radio"/> 停用
基本服务集合标识符	30:EB:1F:07:1B:A2
频率 (频道)	2452MHz (Channel 9) <b>切换通信信道</b>
<b>高吞吐量实体模块</b>	
运作模式	<input checked="" type="radio"/> 混合模式 <input type="radio"/> Green Field
频道带宽	<input type="radio"/> 20 <input checked="" type="radio"/> 20/40
保护间隔	<input type="radio"/> 长 <input checked="" type="radio"/> 自动
MCS	Auto
反转方向权限(RDG)	<input checked="" type="radio"/> 停用 <input type="radio"/> 启用
延伸频道	2432MHz (Channel 5)
空时分组编码(STBC)	<input type="radio"/> 停用 <input checked="" type="radio"/> 启用
聚合MAC业务数据单元 (A-MSDU)	<input checked="" type="radio"/> 停用 <input type="radio"/> 启用
自动单一区块确认	<input type="radio"/> 停用 <input checked="" type="radio"/> 启用

95POWER m) i) m) o) bility

启用全部 | 关闭全部

微能

- 运作模式
- 网络设置
- 无线网络设置 **3**
  - 基本设置
  - 高级设置
  - 安全设置
  - WPS
  - 客户端列表
  - 统计资料
- NAT 设置
- NAS
- 系统管理
- 蓝牙

基本服务集合标识符	30:EB:1F:07:1B:A2
频率 (频道)	2452MHz (Channel 9)
<b>高吞吐量实体模块</b>	
运作模式	<input checked="" type="radio"/> 混合模式 <input type="radio"/> Green Field
频道带宽	<input type="radio"/> 20 <input checked="" type="radio"/> 20/40
保护间隔	<input type="radio"/> 长 <input checked="" type="radio"/> 自动
MCS	Auto
反转方向权限(RDG)	<input checked="" type="radio"/> 停用 <input type="radio"/> 启用
延伸频道	2432MHz (Channel 5)
空时分组编码(STBC)	<input type="radio"/> 停用 <input checked="" type="radio"/> 启用
聚合MAC业务数据单元 (A-MSDU)	<input checked="" type="radio"/> 停用 <input type="radio"/> 启用
自动单一区块确认	<input type="radio"/> 停用 <input checked="" type="radio"/> 启用
拒绝单一区块确认要求	<input checked="" type="radio"/> 停用 <input type="radio"/> 启用
HT Disallow TKIP	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
HT LDPC	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
<b>其它</b>	
高吞吐量传送数据流	2
高吞吐量接收数据流	2

Save **确定** 取消

193.169.10.254/index.shtml

### 3.4.2 设置热点加密/不加密/Set hotspot encryption/unencryption

下面是设置开放热点的步骤图：/Here is the step-by-step diagram for setting up an open hot spot:

**Wireless Security/Encryption Settings**

Setup the wireless security and encryption to prevent from unauthorized access and monitoring.

Select SSID

SSID choice: SKYLAB\_28A1E8F9CE

"SKYLAB\_28A1E8F9CE"

Security Mode: Disable

访问策略

功能: 停用

新增:

Save Apply Cancel

下面是介绍设置密码连接的配置图：/Here is the configuration diagram for setting up a password connection:

**Wireless Security/Encryption Settings**

Setup the wireless security and encryption to prevent from unauthorized access and monitoring.

Select SSID

SSID choice: SKYLAB\_28A1E8F9CE

"SKYLAB\_28A1E8F9CE"

Security Mode: WPA2-PSK

WPA

WPA Algorithms:  TKIP  AES  TKIPAES

Pass Phrase: 12345678 设置密码

Key Renewal Interval: 3600 seconds (0 ~ 4194303)

PMF

MFPC:  Enable  Disable

MFPR:  Enable  Disable

MFPSHA256:  Enable  Disable

访问策略

功能: 停用

新增:

Save Apply Cancel

## 4、服务器信息配置/Server information configuration

用户可以通过 web 界面配置服务器地址和端口信息,配置的服务器地址和端口需要 VDB2601 可以访问到。此外, VDB2601 默认的上网方式为 UDP 协议,在 web 界面可以自定义通信协议,可以选择的协议有 TCP/UDP/MQTT。配置方式如下:

The user can configure the server address and port information through the Web interface, which requires VDB2601 to be accessible. In addition, the default Internet access mode of VDB2601 is UDP protocol. In the Web interface, you can customize the communication protocol, and the optional protocol is TCP/UDP/MQTT. The configuration method is as follows:

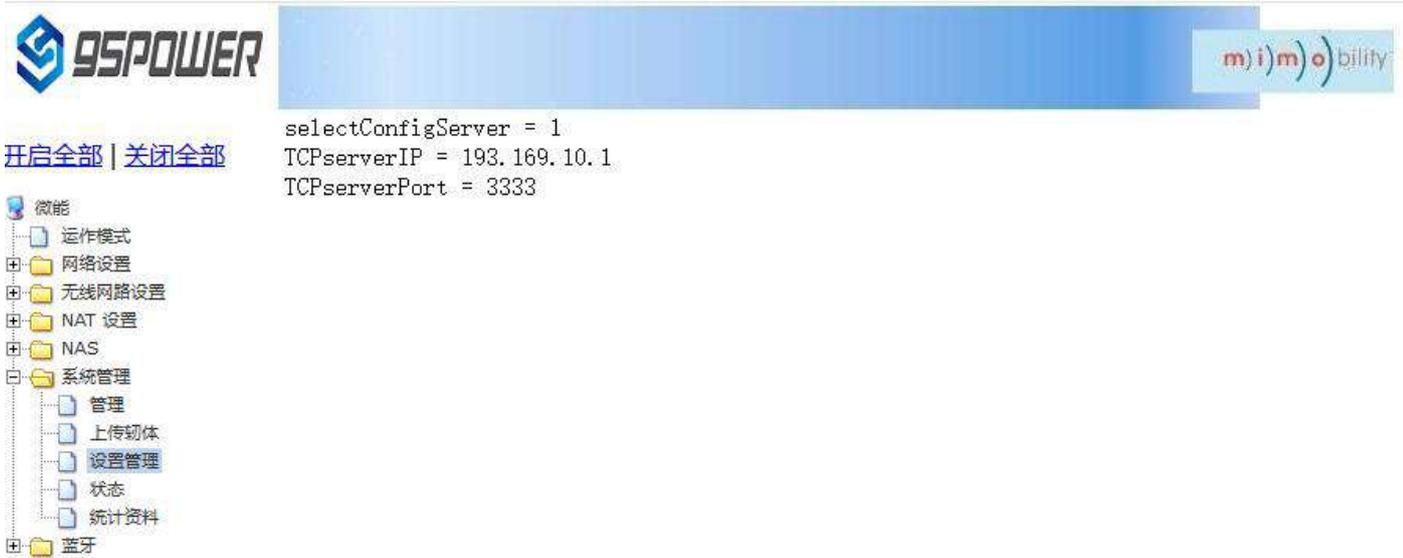
### 4.1 配置为 TCP 协议通信/Configure for TCP protocol communication

配置为 TCP 协议通信方式,配置截图如下:

The configuration is the communication mode of TCP protocol. The configuration screenshot is as follows

The screenshot displays the 95POWER web interface for configuring the server information. The sidebar on the left shows the navigation menu, with '系统管理' (System Management) highlighted. The main content area contains several configuration sections:

- 汇出设置 (Export Settings):** Includes a '汇出按钮' (Export Button) and a '汇出' (Export) button.
- 汇入设置 (Import Settings):** Includes a '设置档位置' (Settings File Location) field with a '浏览...' (Browse...) button and '未选择文件。' (No file selected.) text, and '汇入' (Import) and '取消' (Cancel) buttons.
- 装入原厂默认值 (Load Factory Default Values):** Includes a '装入默认值按钮' (Load Default Value Button) and a '装入默认值' (Load Default Value) button.
- Reboot System:** Includes a 'Reboot System Button' and a 'Reboot System' button.
- Server Type:** A dropdown menu is set to 'TCP Server'.
- TCP Server Init:** This section is expanded, showing:
  - 'TCP Server Init IP Setting' set to '193.169.10.1'
  - 'TCP Server Init Port Setting' set to '3333'
  - 'Apply' and 'Cancel' buttons at the bottom.



## 4.2 配置为 UDP 协议通信/It is configured for UDP protocol communication

配置为 UDP 协议方式通信，配置截图如下所示：

The configuration is UDP protocol communication. The configuration screenshot is as follows:



开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
  - 无线网络设置
  - NAT 设置
  - NAS
  - 系统管理
    - 管理
    - 上传固件
    - 设置管理
    - 状态
    - 统计资料
  - 蓝牙

```

selectConfigServer = 0
UDPserverIP = 193.169.10.1
UDPserverPort = 3333
    
```

### 4.3 配置为 MQTT 协议通信/Configure for MQTT protocol communication

Reboot System Button | Reboot System

开启全部 | 关闭全部

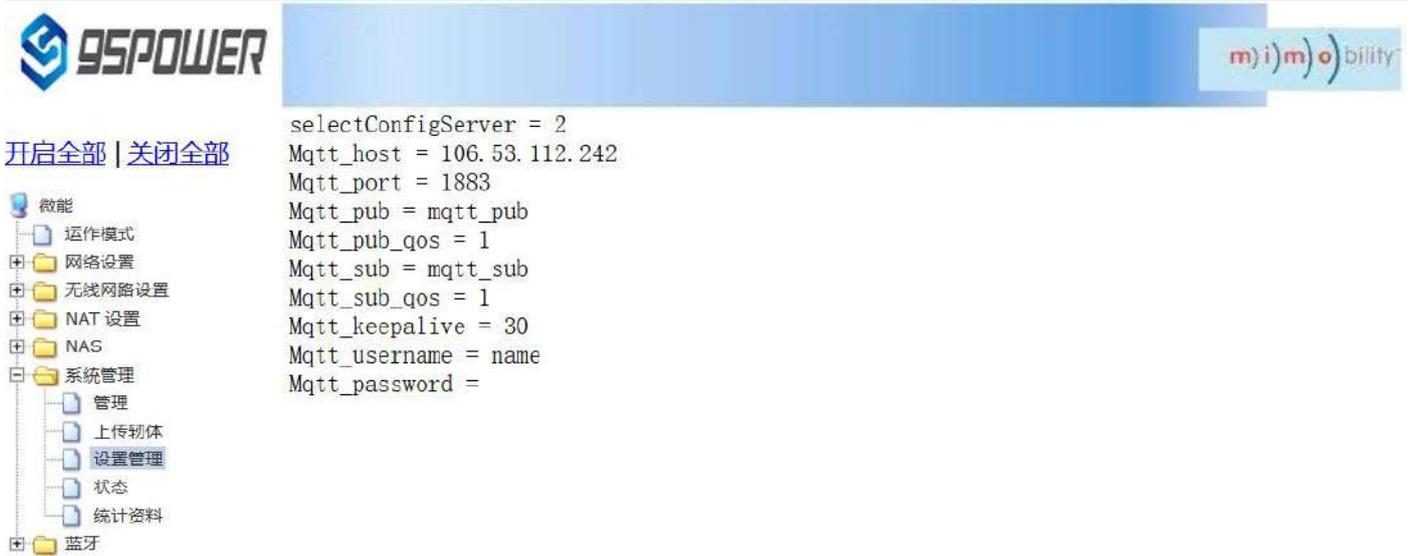
- 微能
  - 运作模式
  - 网络设置
  - 无线网络设置
  - NAT 设置
  - NAS
  - 系统管理
    - 管理
    - 上传固件
    - 设置管理
    - 状态
    - 统计资料
  - 蓝牙

Server Type: MQTT Server

MQTT Server Init	
Host	106.53.112.242
Port	1883
Pub	mqtt_pub
Pub Qos	1
Sub	mqtt_sub
Sub Qos	1
Keepalive(s)	30
Username	name
Password	

Apply | Cancel

激活 Wiir  
转到“设置”



## 5、 设置蓝牙信息/Set bluetooth information

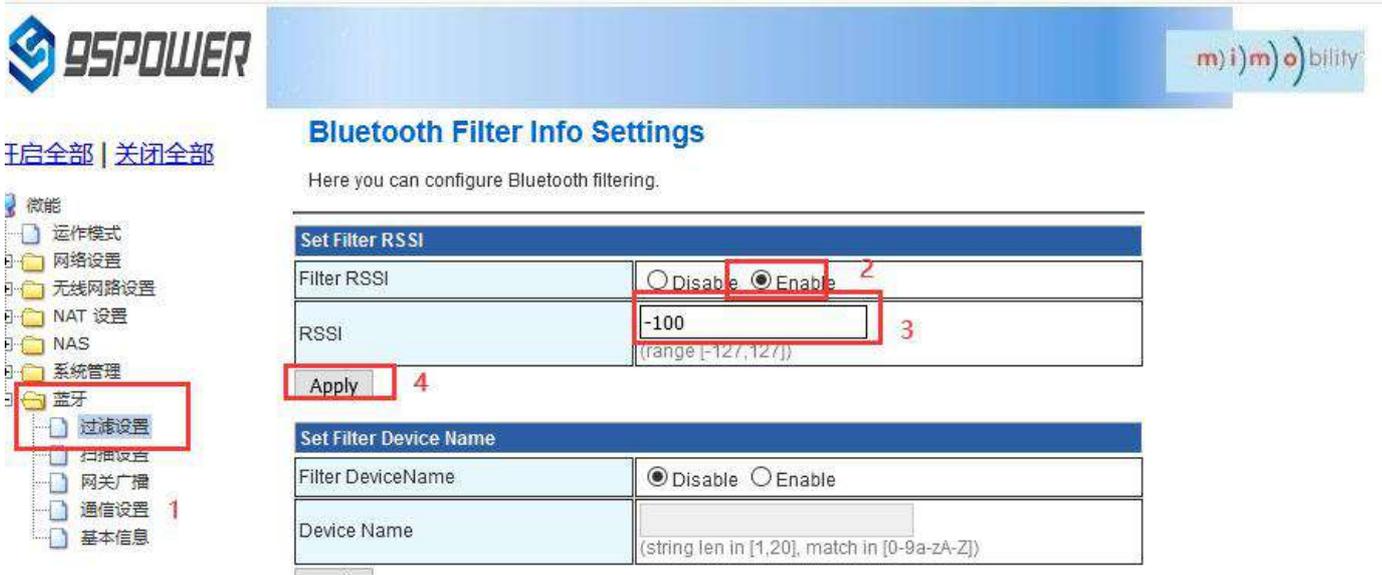
用户可以通过 web 界面配置蓝牙的各种参数，主要包括扫描过滤参数，扫描数据参数、网关蓝牙广播参数、网关蓝牙与 APP 和设备通信的各个 UUID。

Users can configure various parameters of Bluetooth through the Web interface, including scanning and filtering parameters, scanning data parameters, gateway Bluetooth broadcasting parameters, and uUids that gateway Bluetooth communicates with APP and device.

### 5.1 配置蓝牙的过滤信息/Configure Bluetooth filtering information

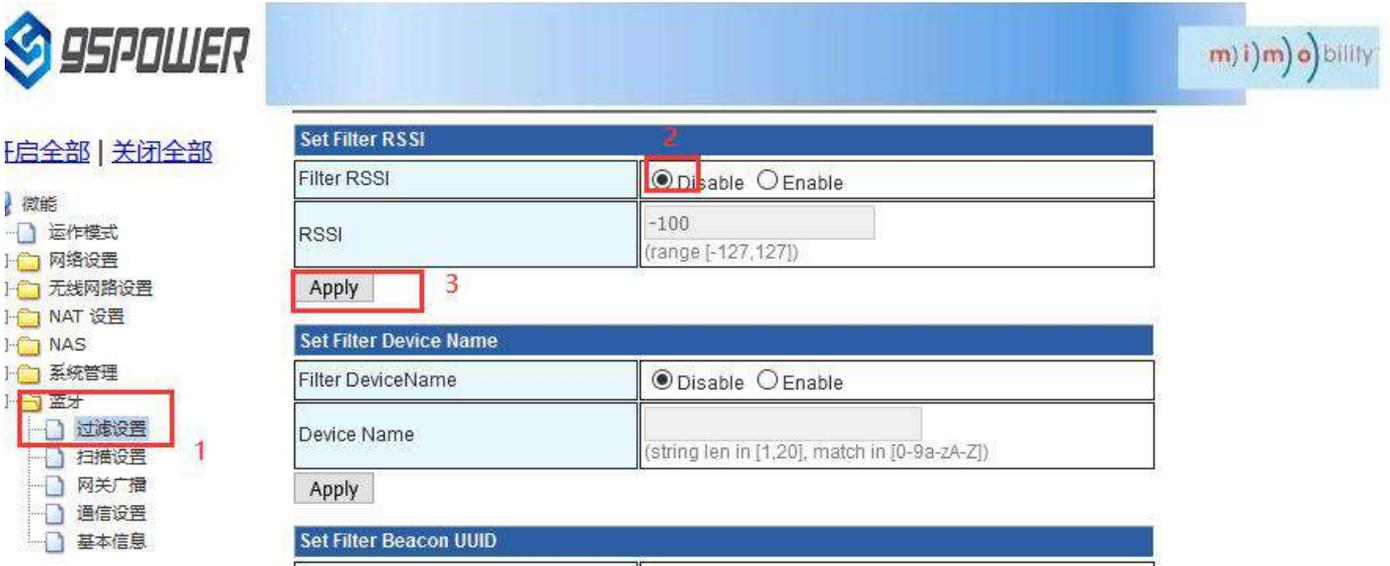
#### 5.1.1、设置/取消扫描过滤的信号强度 RSSI 值/Set/unfilter signal strength RSSI value

设置过滤的信号强度 RSSI 值/Set the filtered signal strength RSSI value



取消扫描过滤的信号强度 RSSI 值设置； /

Cancel the RSSI value setting of scanning filter signal strength;



### 5.1.2、设置/取消扫描过滤的设备名称/Set/unscan filter device name

设置扫描的设置名称/Set the Settings name for the scan

微能

- 运作模式
- 网络设置
- 无线网络设置
- NAT 设置
- NAS
- 系统管理 1
- 蓝牙
  - 过滤设置
  - 扫描设置
  - 网关广播
  - 通信设置
  - 基本信息

Filter RSSI	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
RSSI	-100 (range [-127,127])
Apply	
<b>Set Filter Device Name</b>	
Filter DeviceName	<input type="radio"/> Disable <input checked="" type="radio"/> Enable 2
Device Name	sk* (string len in [1,20], match in [0-9a-zA-Z])
Apply 3	
<b>Set Filter Beacon UUID</b>	

取消过滤设备名称的设置/Unset the filter device name

95POWER

m) i) m) o) bility

开启全部 | 关闭全部

微能

- 运作模式
- 网络设置
- 无线网络设置
- NAT 设置
- NAS
- 系统管理
- 蓝牙 1
  - 过滤设置
  - 扫描设置
  - 网关广播
  - 通信设置
  - 基本信息

<b>Set Filter RSSI</b>	
Filter RSSI	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
RSSI	-100 (range [-127,127])
Apply	
<b>Set Filter Device Name</b>	
Filter DeviceName	<input checked="" type="radio"/> Disable <input type="radio"/> Enable 2
Device Name	sk* (string len in [1,20], match in [0-9a-zA-Z])
Apply 3	
<b>Set Filter Beacon UUID</b>	

### 5.1.3、设置/取消扫描过滤的 Beacon UUID/Set/Unscan the filtered Beacon UUID

设置扫描过滤 Beacon UUID/Set the scan filter Beacon UUID

95POWER (m) i (m) o bility

开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
  - 无线网络设置
  - NAT 设置
  - NAS
  - 系统管理
  - 蓝牙
    - 过滤设置 **1**
    - 扫描设置
    - 网关广播
    - 通信设置
    - 基本信息

**Set Filter RSSI**

Filter RSSI  Disable  Enable

RSSI   
(range [-127,127])

Apply

**Set Filter Device Name**

Filter DeviceName  Disable  Enable

Device Name   
(string len in [1,20], match in [0-9a-zA-Z])

Apply

**Set Filter Beacon UUID**

Filter Beacon UUID  Disable  Enable **2**

Beacon UUID   
(string len is 32, match in [a-fA-F0-9])

Apply **4**

取消扫描过滤 Beacon UUID 的设置/Unset the scan filter Beacon UUID

95POWER (m) i (m) o bility

开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
  - 无线网络设置
  - NAT 设置
  - NAS
  - 系统管理
  - 蓝牙
    - 过滤设置 **1**
    - 扫描设置
    - 网关广播
    - 通信设置
    - 基本信息

**Set Filter RSSI**

Filter RSSI  Disable  Enable

RSSI   
(range [-127,127])

Apply

**Set Filter Device Name**

Filter DeviceName  Disable  Enable

Device Name   
(string len in [1,20], match in [0-9a-zA-Z])

Apply

**Set Filter Beacon UUID**

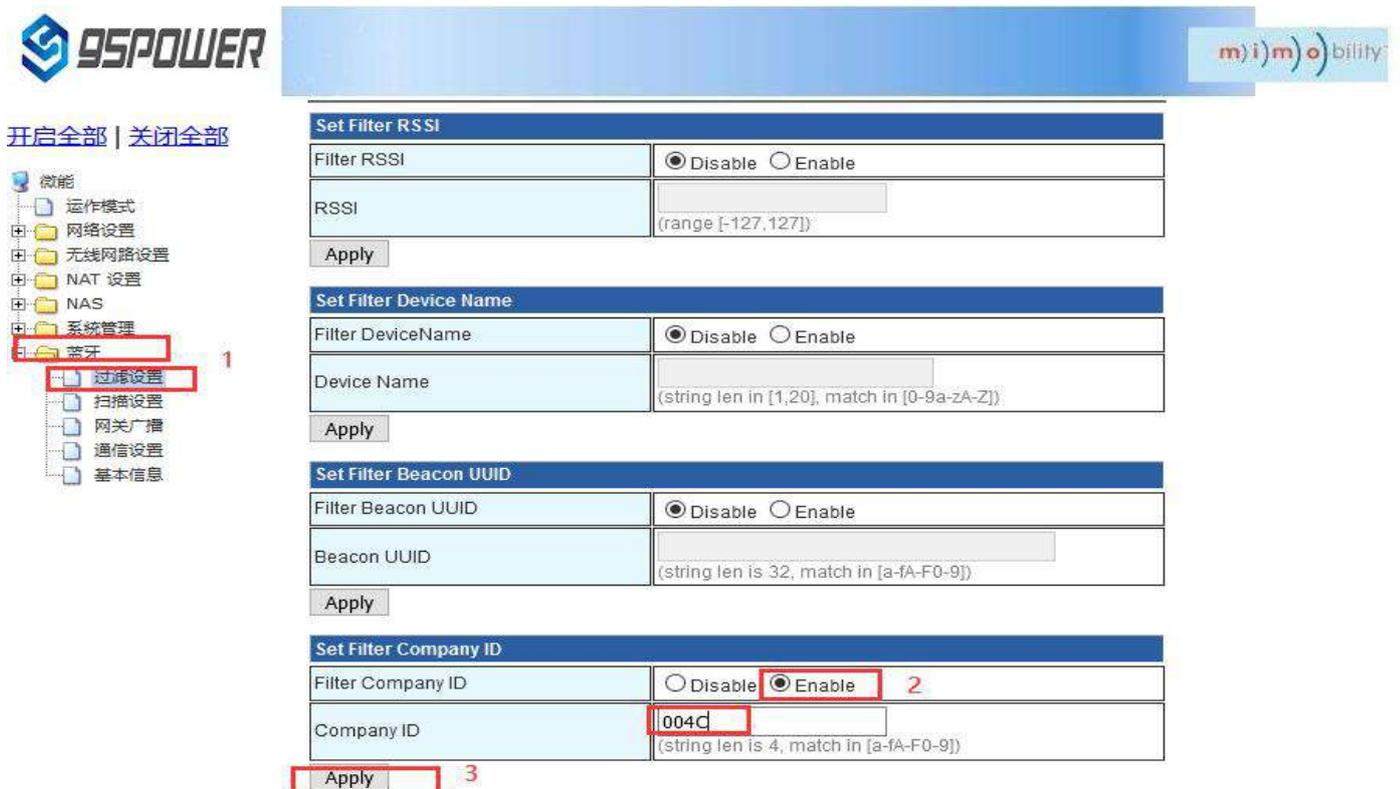
Filter Beacon UUID  Disable  Enable **2**

Beacon UUID   
(string len is 32, match in [a-fA-F0-9])

Apply **3**

### 5.1.4、设置/取消扫描过滤的 CompanyId /Set/unscan filtered CompanyId

设置扫描过滤的 CompanyId / Set the CompanyId for scanning and filtering



The screenshot shows the 95POWER web interface with the following settings:

- Set Filter RSSI:** Filter RSSI is set to  Disable. RSSI field is empty. (range [-127,127])
- Set Filter Device Name:** Filter DeviceName is set to  Disable. Device Name field is empty. (string len in [1,20], match in [0-9a-zA-Z])
- Set Filter Beacon UUID:** Filter Beacon UUID is set to  Disable. Beacon UUID field is empty. (string len is 32, match in [a-fA-F0-9])
- Set Filter Company ID:** Filter Company ID is set to  Enable (2). Company ID field contains '004d' (1). (string len is 4, match in [a-fA-F0-9])

The 'Apply' button (3) is highlighted in red.

取消扫描过滤 CompanyId 的设置 /Unset the scan filter CompanyId

## 5.2 配置蓝牙扫描参数 / Configure the Bluetooth scan parameters

### 5.2.1、设置扫描输出开关 / Set the scan output switch

设置蓝牙扫描输出开关的步骤如下图： / The steps to set the Bluetooth scan output switch are as follows:

### 5.2.2、设置是否启动扫描请求 / Sets whether to start a scan request

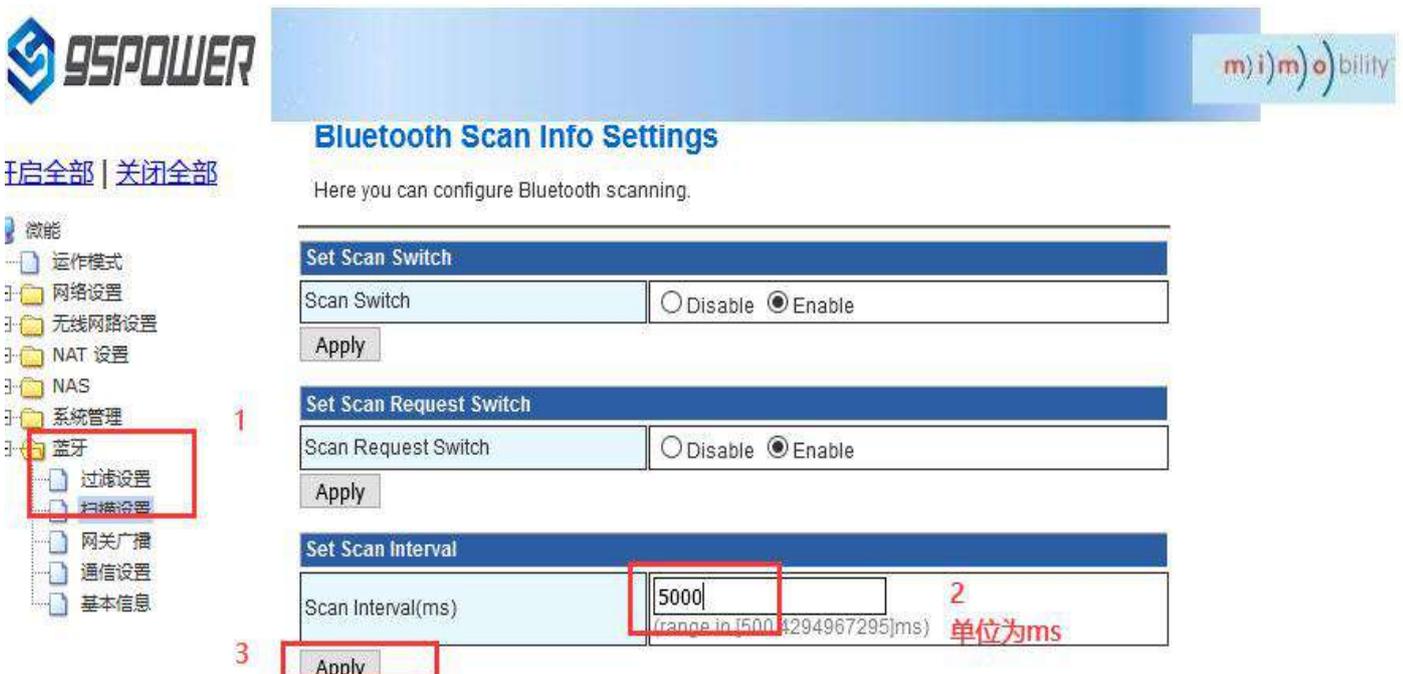
当启动扫描请求时，扫描输出的数据量为 62 字节，默认是启动的。当不启动扫描请求时，扫描输出的数据量为 31 字节。

When the scan request is started, the scan output is 62 bytes, which is started by default. When the scan request is not started, the amount of data output from the scan is 31 bytes.



### 5.2.3、设置扫描输出的时间间隔 / Set the time interval for the scan output

设置扫描输出的时间间隔，最小值为 500ms。 / Set the time interval of scan output to a minimum of 500ms.



### 5.2.4、设置单次输出设备信息数量 / Sets the number of output device information at a time

设置单次输出的设备信息的数量，最小为 1./ Set the amount of device information output at a time to a minimum of 1.

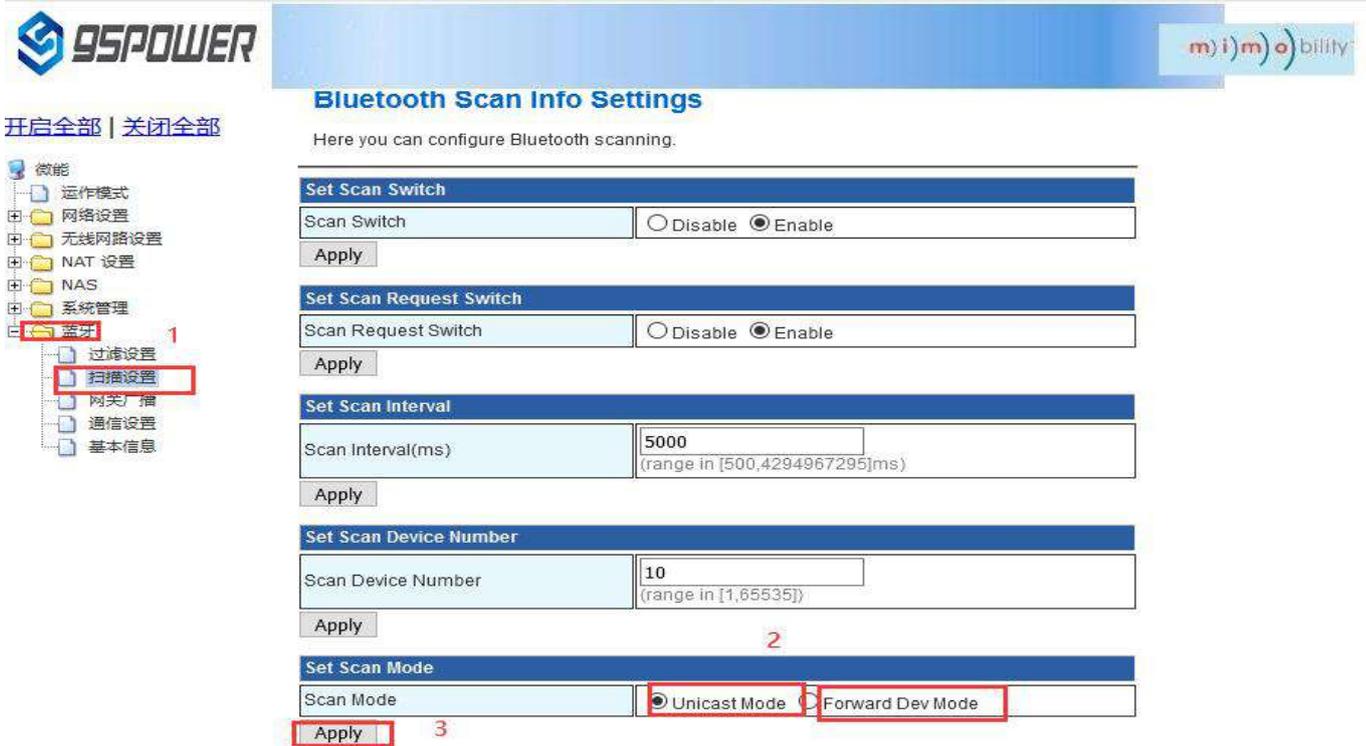


### 5.2.5、设置扫描单广播通用设备模式还是转发工卡模式。

#### Sets the scan single broadcast universal device mode or the forward work card mode

默认为单广播通用设备模式，根据应用需要可设置为转工卡模式。

The default is single broadcast universal device mode, which can be set to transfer card mode according to application needs.



### 5.3 配置网关广播配置信息 /

## Configure the gateway to broadcast configuration information

### 5.3.1、设置网关广播开关 / Set the gateway broadcast switch

默认网关开启蓝牙广播，用户可根据需求关闭蓝牙广播。

The default gateway turns on Bluetooth broadcasting, and users can turn off Bluetooth broadcasting according to their needs.



开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
    - 无线网络设置
    - NAT 设置
    - NAS
    - 系统管理
      - 蓝牙
        - 过滤设置 1
        - 扫描设置
        - 网关广播
        - 通信设置
        - 基本信息

### The Gateway Broadcast Info Settings

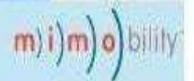
Here you can configure the gateway broadcast informatio. **Disable:关闭蓝牙广播**  
**Enable:开启蓝牙广播**

Set Gateway Broadcast Switch	
Gateway Broadcast Switch	<input type="radio"/> Disable <input checked="" type="radio"/> Enable 2
Apply 3	
Set Gateway Broadcast Name	
Gateway Broadcast Name	?????? (string len is [1,20], match in [0-9a-zA-Z])
Apply	
Set Gateway Broadcast Interval	

### 5.3.2、设置网关广播名称 / Set the gateway broadcast name

设置蓝牙广播的名称，长度最大 20 字节。 /

Sets the name of the Bluetooth broadcast to a maximum length of 20 bytes.



开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
    - 无线网络设置
    - NAT 设置
    - NAS
    - 系统管理
      - 蓝牙
        - 过滤设置 1
        - 扫描设置
        - 网关广播
        - 通信设置
        - 基本信息

### The Gateway Broadcast Info Settings

Here you can configure the gateway broadcast informatio.

Set Gateway Broadcast Switch	
Gateway Broadcast Switch	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Apply	
Set Gateway Broadcast Name	
Gateway Broadcast Name	skffa 2 (string len is [1,20], match in [0-9a-zA-Z])
Apply 3	
Set Gateway Broadcast Interval	

### 5.3.3、设置网关广播的间隔 / Set the interval between gateway broadcasts

95POWER (m) i (m) o blll

全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
  - 无线网路设置
  - NAT 设置
  - NAS
  - 系统管理
  - 蓝牙 1
    - 过滤设置
    - 扫描设置
    - 网关广播 2
    - 通信设置
    - 基本信息

#### Set Gateway Broadcast Interval

Gateway Broadcast Interval(ms)	500	2
	(range [20,10000])	
Apply	3	

#### Set Gateway Broadcast iBeacon UUID

Gateway Broadcast iBeacon UUID	1234567890ABCDEF1234567890ABCDEF	
	(string len is 32, match in [a-fA-F0-9])	
Apply		

#### Set Gateway Broadcast iBeacon Major

Gateway Broadcast iBeacon Major	850	
	(range in [0,65535])	
Apply		

### 5.3.4、设置网关广播的 iBeacon UUID / Set the iBeacon UUID for the gateway

#### broadcast

95POWER

m) i) m) o) bility

开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
  - 无线网络设置
  - NAT 设置
  - NAS
  - 系统管理
  - 蓝牙
    - 过滤设置
    - 扫描设置
    - 网关广播
    - 通信设置
    - 基本信息

1

2

3

#### Set Gateway Broadcast Interval

Gateway Broadcast Interval(ms)	500 <small>(range [20,10000])</small>
<input type="button" value="Apply"/>	

#### Set Gateway Broadcast iBeacon UUID

Gateway Broadcast iBeacon UUID	1234567890ABCDEF1234567890ABCDEF <small>string len is 32, match in [a-fA-F0-9])</small>
<input type="button" value="Apply"/>	

#### Set Gateway Broadcast iBeacon Major

Gateway Broadcast iBeacon Major	850 <small>(range in [0,65535])</small>
<input type="button" value="Apply"/>	

### 5.3.5、设置网关广播的 iBeacon Major / Set the iBeacon Major for gateway broadcast

微能

开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
  - 无线网络设置
  - NAT 设置
  - NAS
  - 系统管理
  - 蓝牙
    - 过滤设置 <sup>1</sup>
    - 扫描设置
    - 网关广播
    - 通信设置
    - 基本信息

Apply

**Set Gateway Broadcast iBeacon UUID**

Gateway Broadcast iBeacon UUID	1234567890ABCDEF1234567890ABCDEF <small>(string len is 32, match in [a-fA-F0-9])</small>
--------------------------------	---

Apply

**Set Gateway Broadcast iBeacon Major**

Gateway Broadcast iBeacon Major	0 2 <small>(range in [0,65535])</small>
---------------------------------	--

Apply <sup>3</sup>

**Set Gateway Broadcast iBeacon Minor**

Gateway Broadcast iBeacon Minor	999 <small>(range in [0,65535])</small>
---------------------------------	--

### 5.3.6、设置网关广播的 iBeacon Minor / Set the iBeacon Minor for gateway broadcast

微能

开启全部 | 关闭全部

- 微能
  - 运作模式
  - 网络设置
    - 无线网络设置
    - NAT 设置
    - NAS
    - 系统管理
    - 蓝牙
      - 过滤设置 1
      - 扫描设置
      - 网关广播
      - 通信设置
      - 基本信息

Apply

**Set Gateway Broadcast iBeacon UUID**

Gateway Broadcast iBeacon UUID	1234567890ABCDEF1234567890ABCDEF <small>(string len is 32, match in [a-fA-F0-9])</small>
--------------------------------	---

Apply

**Set Gateway Broadcast iBeacon Major**

Gateway Broadcast iBeacon Major	0 <small>(range in [0,65535])</small>
---------------------------------	--

Apply

**Set Gateway Broadcast iBeacon Minor**

Gateway Broadcast iBeacon Minor	0 2 <small>(range in [0,65535])</small>
---------------------------------	--

Apply 3

### 5.3.7、设置网关广播的 iBeacon Measured power / Set iBeacon Measured Power for gateway broadcast

微能

- 运作模式
- 网络设置
- 无线网络设置
- NAT 设置
- NAS
- 系统管理
- 蓝牙**
- 过滤设置
- 扫描设置
- 网关广播**
- 通信设置
- 基本信息

Apply

**Set Gateway Broadcast iBeacon UUID**

Gateway Broadcast iBeacon UUID   
(string len is 32, match in [a-fA-F0-9])

Apply

**Set Gateway Broadcast iBeacon Major**

Gateway Broadcast iBeacon Major   
(range in [0,65535])

Apply

**Set Gateway Broadcast iBeacon Minor**

Gateway Broadcast iBeacon Minor   
(range in [0,65535])

Apply

**Set Gateway Broadcast iBeacon Measured power**

Gateway Broadcast iBeacon Measured power(dbm)    
(range in [-127,127])

Apply <sup>3</sup>

## 5.4 配置与通信相关参数

### Configure the parameters associated with communication

#### 5.4.1 配置与 APP 通信的 UUID / Configure the UUID that communicates with the APP

The screenshot shows the 95POWER web interface. The sidebar menu on the left includes '微能', '运作模式', '网络设置', '无线网络设置', 'NAT 设置', 'NAS', '系统管理', '蓝牙', '过滤设置', '扫描设置', '网关广播', '通信设置', and '基本信息'. The '通信设置' (Communication Settings) option is highlighted. The main content area is titled 'Configure parameters for communication with app or device' and contains the following form:

Set APP Parameters	
Service UUID	FED76543211234567890098765432112 <small>(string len is 32, match in [a-fA-F0-9])</small>
Write UUID	ABCDEF1234567890ABCDEF1234567892 <small>(string len is 32, match in [a-fA-F0-9])</small>
Notify UUID	ABCDEF1234567890ABCDEF1234567891 <small>(string len is 32, match in [a-fA-F0-9])</small>

Below the form is an 'Apply' button. The text 'Here you can configure the parameters to communication with app or device.' is displayed above the form. The text 'm) i) m) o) bility' is visible in the top right corner of the interface.

Red annotations in the image indicate: '2' next to the 'Set APP Parameters' header, '1' next to '扫描设置' in the sidebar, '3' next to the 'Apply' button, and three red boxes around the UUID input fields with corresponding Chinese labels: '设置与APP通信的服务UUID', '设置蓝牙与APP通信的写特征UUID', and '设置蓝牙与APP通信的通知特征UUID'. A note at the bottom right states '以上三个值不能相互相同' (The above three values cannot be the same).

Below the form, the configuration is shown as code:

```
app_service_uuid = FED76543211234567890098765432112
app_write_uuid = ABCDEF1234567890ABCDEF1234567892
app_notify_uuid = FFFDEF1234567890ABCDEF1234567891
```

点击“通信设置”，查看设置情况。设置成功后，需要重启网关，使配置生效。下面是重启网关的操作

Click "Communication Settings" to view the Settings. After the setup is successful, you need to restart the gateway for the configuration to take effect. Here is how to restart the gateway

The screenshot shows the 'System Management' section of the 95POWER interface. The 'Reboot System' button is highlighted with a red box and labeled with a '2'. A red arrow points from the text above to this button. Other sections like 'Import Settings' and 'Load Default Values' are also visible.

### 5.4.2 配置与设备通信的 UUID / Configure the UUID that communicates with the device

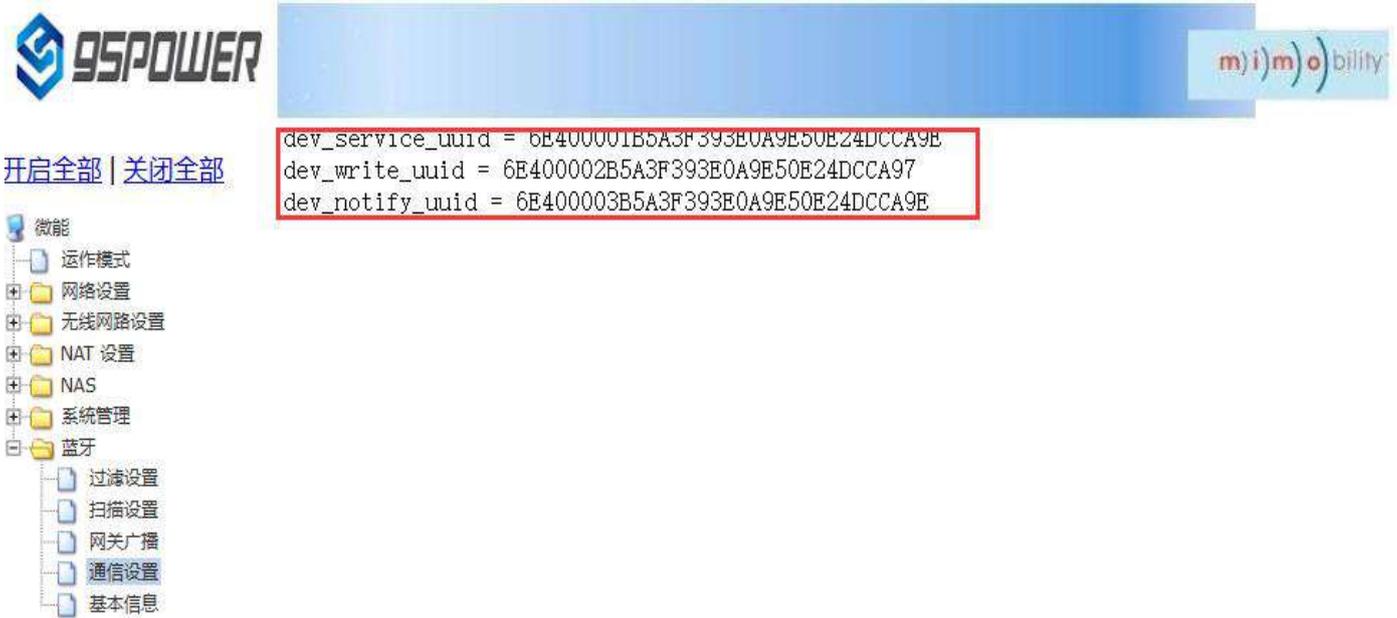
The screenshot shows the 'Bluetooth' settings section. The 'Set Device Parameters' table is highlighted with a red box. The 'Apply' button below it is also highlighted with a red box and labeled with a '3'. A red arrow points from the text above to the 'Apply' button.

Set APP Parameters	
Service UUID	FED76543211234567890098765432112 <small>(string len is 32, match in [a-fA-F0-9])</small>
Write UUID	ABCDEF1234567890ABCDEF1234567892 <small>(string len is 32, match in [a-fA-F0-9])</small>
Notify UUID	FFFDEF1234567890ABCDEF1234567891 <small>(string len is 32, match in [a-fA-F0-9])</small>

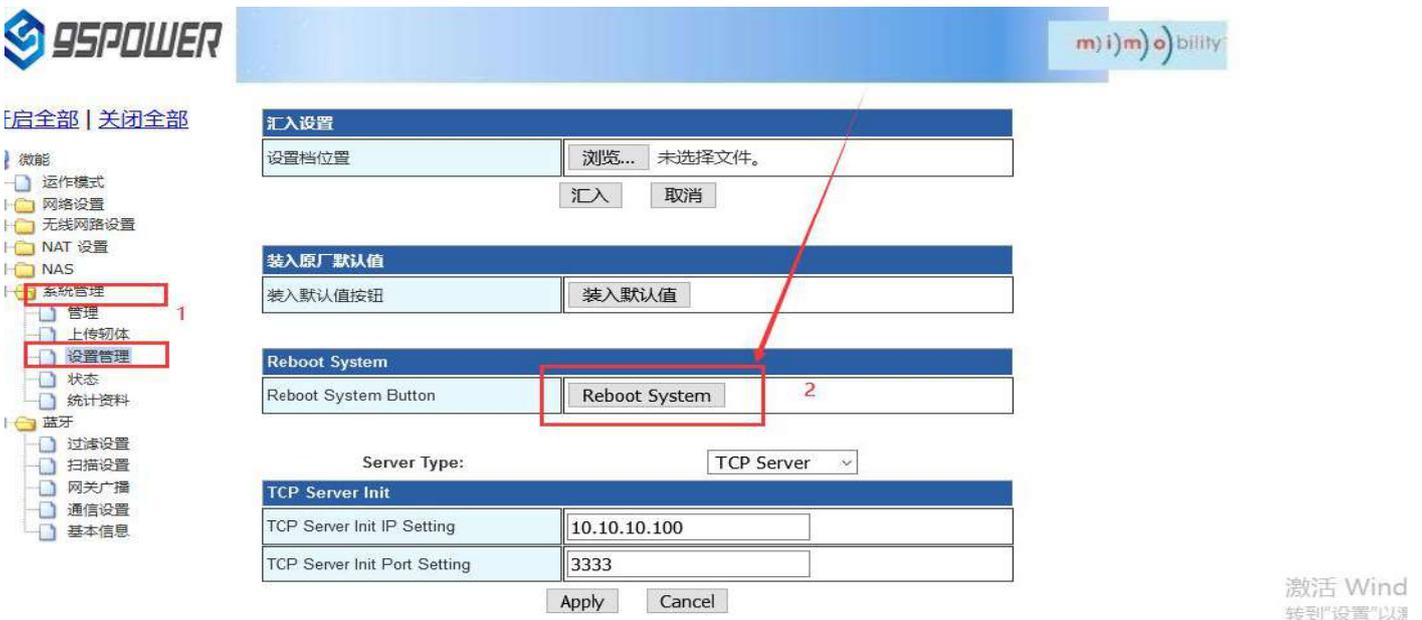
Set Device Parameters	
Service UUID	6E40001B5A3F393E0A9E50E24DCCA9E <small>(string len is 32, match in [a-fA-F0-9])</small>
Write UUID	6E40002B5A3F393E0A9E50E24DCCA97 <small>(string len is 32, match in [a-fA-F0-9])</small>
Notify UUID	6E40003B5A3F393E0A9E50E24DCCA9E <small>(string len is 32, match in [a-fA-F0-9])</small>

点击 apply 后，会跳转界面，如下所示： / After clicking Apply, the interface will jump to, as shown below:



点击“通信设置”返回对应界面，查看设置情况。设置成功后，需要重启网关，使配置生效，操作如下

Click "Communication Settings" to return to the corresponding interface to check the Settings. After the setup is successful, you need to restart the gateway for the configuration to take effect, as follows



## 6、 系统管理配置 / System management configuration

### 6.1 设置 WEB 界面显示 / Set up the WEB interface display

VDB2601 的网页支持简体中文、繁体中文、英文的显示，默认为简体中文显示。客户根据需要可以切换显示的语言，操作步骤如下：

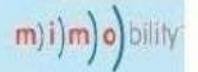
VDB2601 web pages support simplified Chinese, traditional Chinese, English display, default for simplified Chinese display. Customers can switch the displayed language according to their needs. The operation steps are as follows:

(1) 选择需要切换的语言，下面以切换到英文为例，图中 2 时，选择 English。

Select the language to be switched. Take Switching to English as an example. In figure 2, select English.



(2) 查看切换效果 / Check the switching effect



[open all](#) | [close all](#)

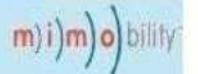
langSelection = en  
webs: Listening for HTTP requests at address 10.10.10.254

- 95POWER
  - Operation Mode
  - Internet Settings
  - Wireless Settings
  - NAT Settings
  - NAS
  - Administration
  - Bluetooth

## 6.2 恢复出厂设置 / factory data reset; restore factory setting

网关固件升级后，默认保留原来的设置，如果需要恢复出厂设置，请按下面图示的步骤操作。

If you need to restore factory Settings, please follow the steps shown below.



[开启全部](#) | [关闭全部](#)

汇出按钮      汇出

- 微能
  - 运作模式
  - 网络设置
  - 无线网络设置
  - NAT 设置
  - NAS
  - 系统管理**
    - 管理 1
    - 上传固件
    - 设置管理**
    - 状态
    - 统计资料
  - 蓝牙

汇入设置

设置档位置      浏览... 未选择文件。

汇入      取消

装入原厂默认值

装入默认值按钮      **装入默认值** 2

Reboot System

Reboot System Button      Reboot System

## 6.3 重启系统 / Restart the system

下面是重启系统的操作步骤 / Here are the steps to restart the system

The screenshot shows the 95POWER web management interface. On the left is a navigation tree with '系统管理' (System Management) selected and '设置管理' (Settings Management) highlighted with a red box and labeled '1'. The main content area shows several configuration sections: '设置档位置' (Settings File Location) with a file browser; '装入原厂默认值' (Load Factory Default Values) with a '装入默认值' (Load Default Values) button; 'Reboot System' with a 'Reboot System' button highlighted by a red box and labeled '2'; and 'TCP Server Init' with IP and port settings. At the bottom right, there is a '激活 W 转到设置' (Activate W Go to Settings) button.

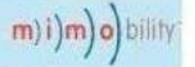
## 6.4 升级系统 / upgrade system

通过 Web 界面可以升级 WIFI 固件，升级步骤如下：

WiFi firmware can be upgraded through the Web interface. The upgrade steps are as follows:

(1) 下图中点击 2 后，在本地选择你所需要升级的固件，确定后，出现 3 的提示，点击确定开始升级。

After clicking 2 in the figure below, select the firmware you need to upgrade locally. When you confirm, a prompt of 3 appears and click OK to start the upgrade.



开启全部 | 关闭全部



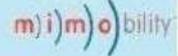
### 固件更新

更新Ralink SoC固件获得新功能。上传更新Flash需要大约1分钟的时间请耐心等待。警告！不正常的Image将中断系统的运作。

固件更新	
位置:	浏览... (V\0271.1.0)95Power_uImage_SKW92B_20200928
确定	2 3
4	
启动加载程序更新	
位置:	浏览... 未选择文件。
确定	
Update Bluetooth	
Location:	浏览... 未选择文件。
Apply	

(2) 升级过程会出现下图所示提示，提示没有消失前，不要断电，此时断电可能导致模块升级变砖。

During the upgrade process, a prompt as shown in the figure below will appear. Do not power off until the prompt disappears. At this point, power off may cause the module to be upgraded to brick



开启全部 | 关闭全部



### 固件更新

更新Ralink SoC固件获得新功能。上传更新Flash需要大约1分钟的时间请耐心等待。警告！不正常的Image将中断系统的运作。

固件更新	
位置:	浏览... (V\0271.1.0)95Power_uImage_SKW92B_20200928
确定	
启动加载程序更新	
位置:	浏览... 未选择文件。
确定	
Update Bluetooth	
Location:	浏览... 未选择文件。
Apply	

Uploading firmware

Please be patient and don't remove usb device if it presented...

(3) 升级成功后，会有重启系统的提示，如下图所示。

After the successful upgrade, there will be a prompt to restart the system, as shown in the figure below.



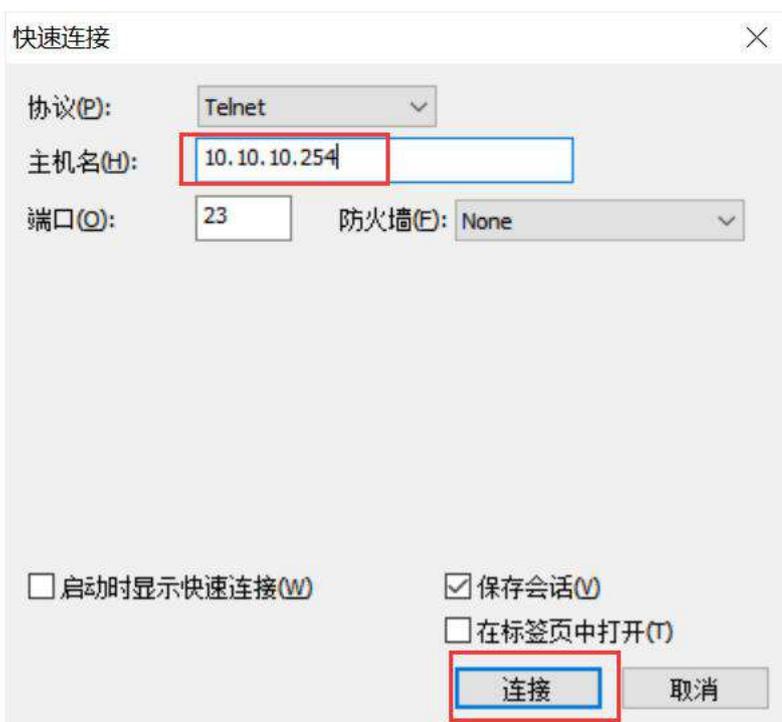
## 6.5 telnet 测试管理 / Telnet test management

下面介绍使用 SecureCRT 工具配置 Telnet 的过程。

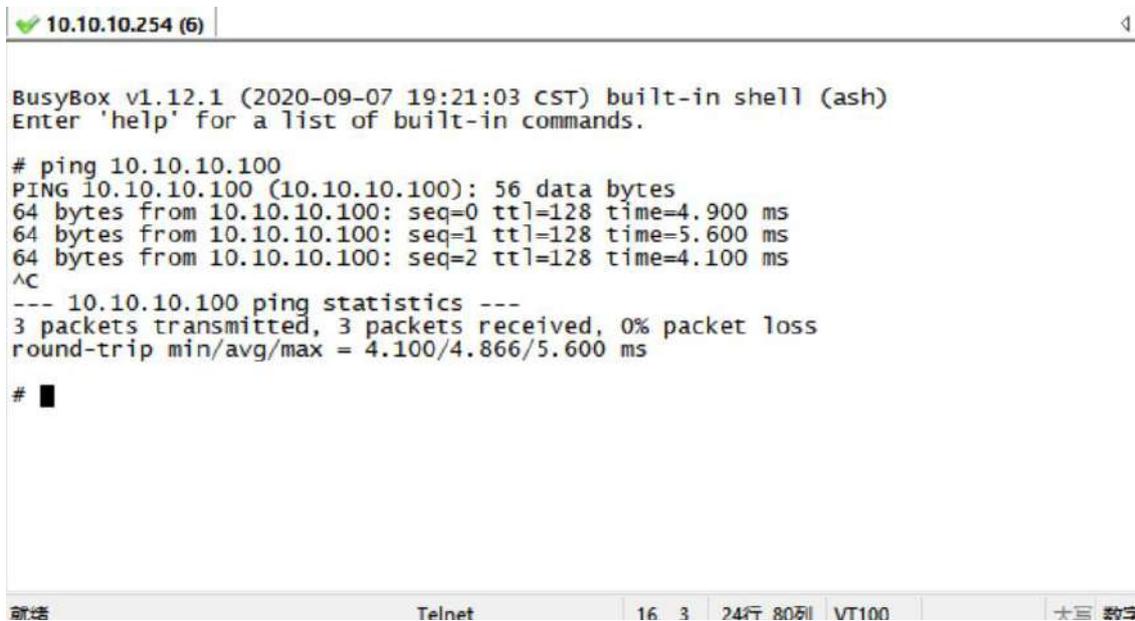
The following describes the process of configuring Telnet using the SecureCRT tool.

(1) 选择 telnet 协议，主机名为 10.10.10.254，端口默认 23 即可；

Select Telnet protocol, host name 10.10.10.254, port default 23;



(2) 进入到管理终端后，使用命令检测。 / After entering the administrative terminal, use the command detection



```
10.10.10.254 (6)
BusyBox v1.12.1 (2020-09-07 19:21:03 CST) built-in shell (ash)
Enter 'help' for a list of built-in commands.

# ping 10.10.10.100
PING 10.10.10.100 (10.10.10.100): 56 data bytes
64 bytes from 10.10.10.100: seq=0 ttl=128 time=4.900 ms
64 bytes from 10.10.10.100: seq=1 ttl=128 time=5.600 ms
64 bytes from 10.10.10.100: seq=2 ttl=128 time=4.100 ms
^C
--- 10.10.10.100 ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max = 4.100/4.866/5.600 ms

# █
```

## 7. 联系方式/Content

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