



VDB2606规格书

VDB2606 datasheet

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名称	型号	数量	备注
蓝牙网关 /BLE Gateway	VDB2606	1	
5V 适配器 5V power adapter	BSF-008	1	POE 供电时可不配 POE don't need this

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1. 产品介绍 Product introduction

VDB2606 是一款集成了 WiFi 和 BLE4.2 的蓝牙网关，可灵活应用于各种场景。可以用来做蓝牙室内定位基站，也可以作为蓝牙网关来发送指令到蓝牙设备或者接收蓝牙设备（如蓝牙传感器、报警装置等）的信号并上传到后台服务器，其互联网接入方式可以是 WiFi 也可以是以太网。供电方式上，可以使用 5V 1A 电源适配器，兼容 48V 标准 POE 供电。

VDB2606 is a Bluetooth Gateway integrating WiFi, Bluetooth 4.2. It can be used in various scenarios flexibly. For example, it can be used as indoor positioning anchor, or it can also be used as a bluetooth gateway to send instruction to the bluetooth devices or receive the bluetooth (such as bluetooth sensor, alarm device, etc.) of signals and uploaded to the backend server, it can be a WiFi Internet access way can also is Ethernet. Power supply on the way, you can use the 5V 1A DC power adapter, compatible with standard POE 48V power supply .



图 1/Figure 1: VDB2606

1.1 VDB2606 特性 Features

支持 POE 供电和 DC-DC 4.5-12.0V 供电

Supports the POE switch power supply and 4.5V to 12.0V 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

VDB2606 采用旋转卡扣式安装，方便安装和拆卸，其安装方法如下。

VDB2606 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.

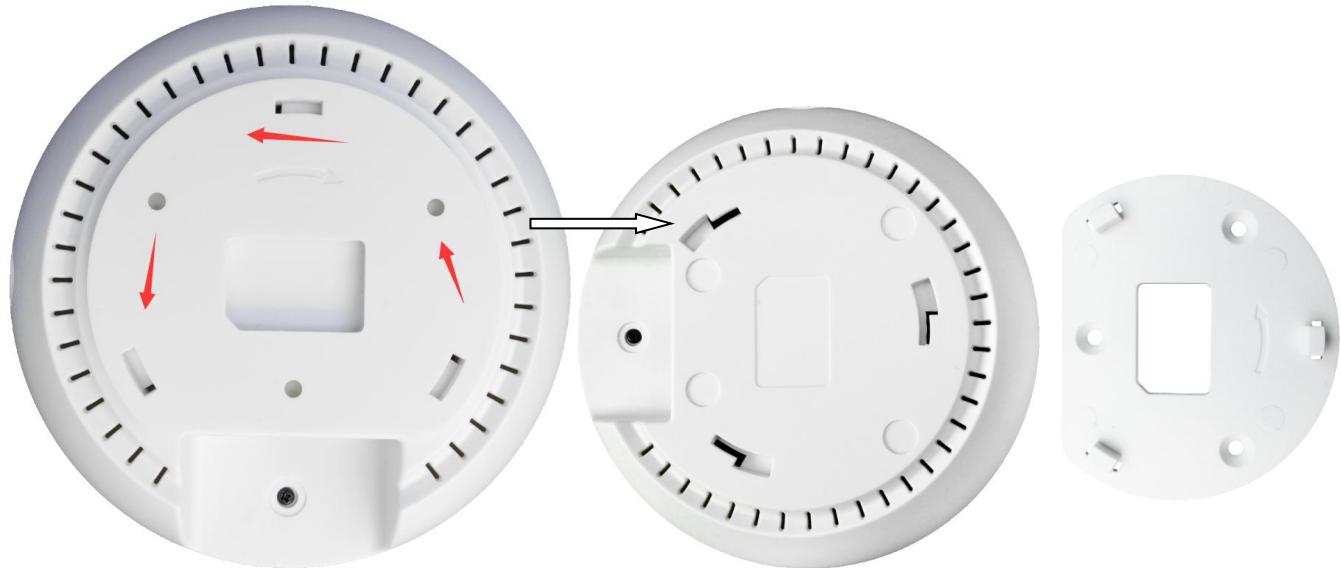


图 1.2.a/Figure 1.1.a: VDB2606 D-shape buckle rotating way

- 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 1.1.b: VDB2606D-shape buckle

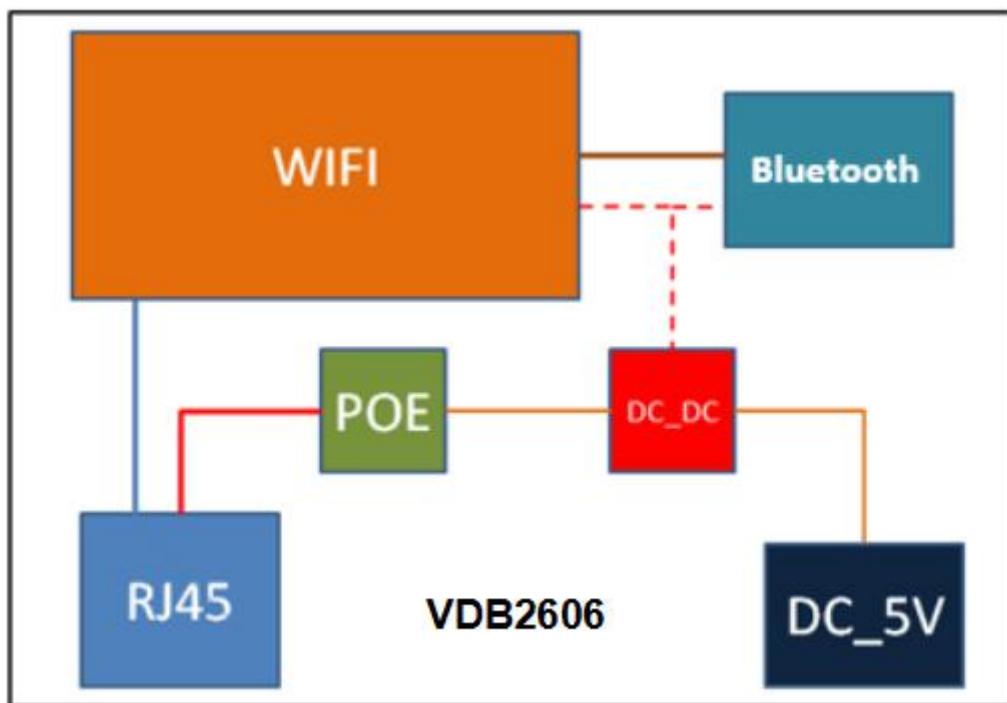
c. 把网关网口和 DC 头出线一侧对齐 D 型卡扣。

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



图 1.1.c/Figure 1.1.c: VDB2606 installing

1.3 应用程序框图 Application Block Diagram



框架图 Block Diagram

1.4 VDB2606 接口介绍 Interface Introduction

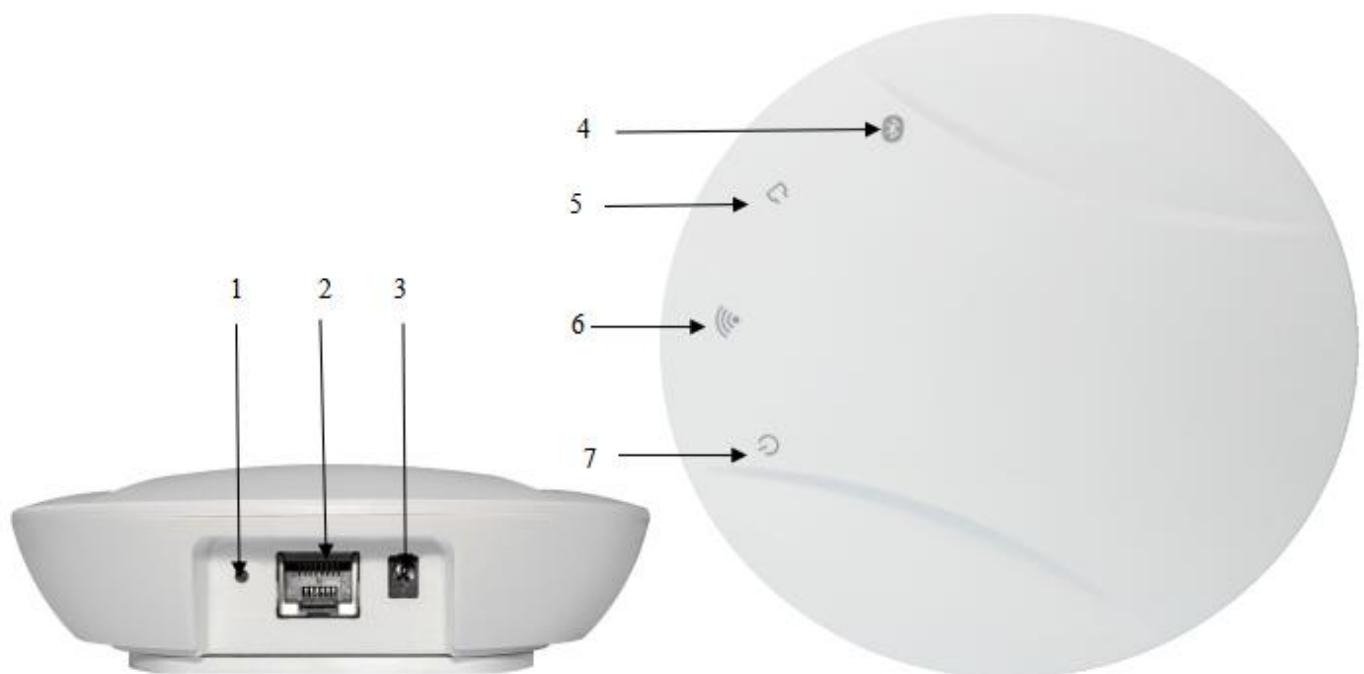


图 1.4Figure 1.4: VDB2606

1: WIFI 复位按键/Reset

2: 网口/Network Interface

3: DC 接口/Power Interface

4: 蓝牙指示灯 (蓝牙) /Bluetooth LED

5: 网口指示灯 (有线) /Network LED

6: WiFi 无线指示灯 (无线) /WiFi LED

7: 电源指示灯 (电源) /Power LED

1.4.1 网口/WAN/LAN Port

VDB2606 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 VDB2606 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.

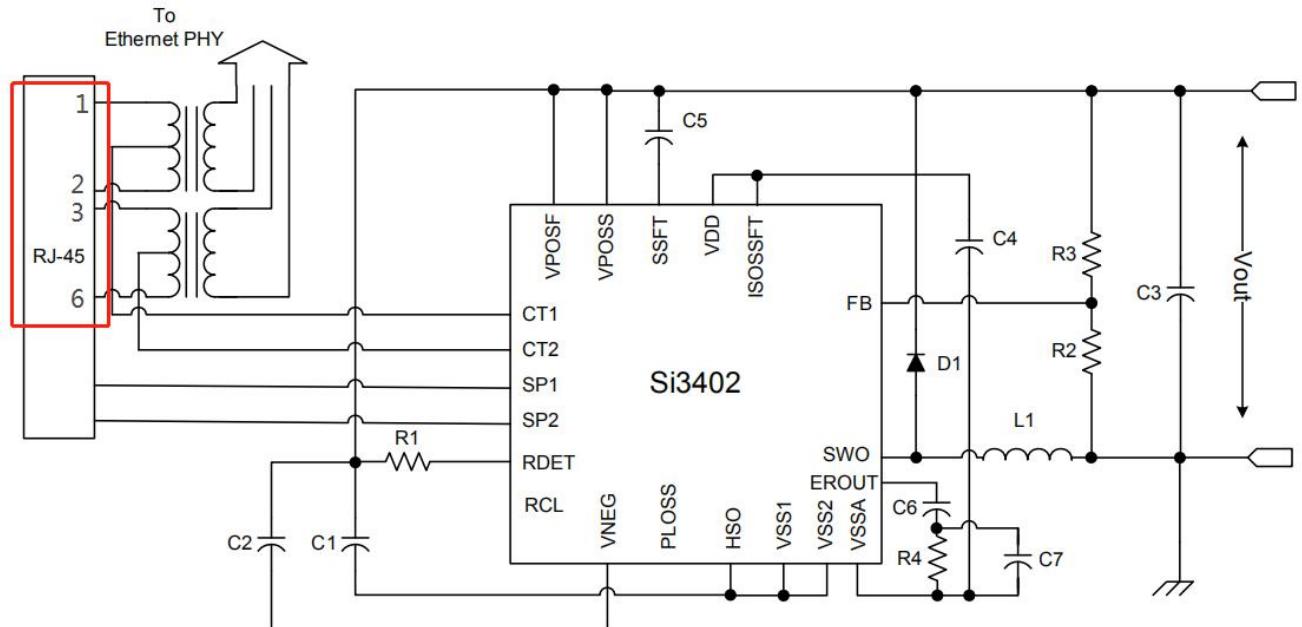


图 1.4.1/Figure 1.4.1: VDB2606 POE 网口接线图

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

1.4.2 DC 电源接口/Power Supply Port

VDB2606 电源接口支持 DC 输入，输入电压范围为 4.5V ~ 12.0V，电流大于 1000mA。电压接口采用 DC 电源插座，电源座孔径 3.5mm。针直径为 1.35 mm，针头为正极。

The VDB2606 power interface supports DC input, input voltage range is 4.5V to 12.0V, and the current is greater than 1000mA. The voltage interface adopts the DC power socket, and power seat aperture is 3.5mm. The needle diameter is 1.35 mm and is positive.

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。

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

1.4.3 复位按键/Reset

长按 VDB2606 的复位按钮 5 秒钟以上，VDB2606 内部的 WiFi 模块会恢复出厂设置。

The VDB2606 WiFi module will resume factory setting after pressing the reset button for more than 5 seconds.

1.4.4 指示灯/LED

电源：上电 LED 灯常亮/Power LED normally on when powered on

有线：上网网口插网线后 LED 灯常亮，传输数据时快闪/Network LED normally on when net cable is connected, and will flash fast when data transferring.

无线：上电 1-2 秒后，LED 灯常亮，传输数据时快闪/WiFi LED normally on after connecting to WiFi for 1-2sec, and will flash fast when data transferring.

蓝牙：上电 LED 灯闪烁/Bluetooth LED flashing once power on

1.5 应用场景/Application Scene

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

1) VDB2606 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。

VDB2606 Bluetooth module collects information about BLE sensor, such as Humidity and Temp., brightness, CO₂ density etc., once per second.

2) 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。

The cloud controlcenter send the command information to BLE control module or BLE switch through VDB2606 , 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 positioning

3) VDB2606 里的蓝牙模块收集附近 Beacon 的信息，包括 RSSI，MAC 等，一秒一次。

VDB2606 Bluetooth module collects information about Beacon nearby, including RSSI, MAC, etc., once per second.

4) 蓝牙模块将收到 Beacon 信息，通过 UART 串口发给 VDB2606A 里面的 WIFI 模块，一秒一次。

Bluetooth module send the Beacon information to WiFi module through UART serial port, once per second.

5) WIFI 模块通过串口接收到蓝牙模块传过来的信息，并通过 WiFi、网线或者 4G 模块联网，传输到指定的 UDP 服务器，并能接受服务器返回的信息。

WiFi module transfers the Beacon information (received from BLE module by UART) to the specified UDP server through WiFi, Ethernet or 4G module, and accepts 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，定制性的功能开发（比如：结合灯具使灯亮起来、触发门铃等）。

Beacon locations can be displayed on the front page after the UDP server after analyzing and calculating the beacon information. UDP server can also delivered orders to the WiFi module, then sent it to the bluetooth module to develop different functions (such as lighting lamps, ringing door bell etc.).



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

说明: VDB2606 可通过网线或者 LTE 实现联网, 也可以通过 WiFi 连接无线路由实现联网。

Remark: VDB2606A can be connected to the Internet via the POE switch or the wireless router or LTE modem.

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 4.5-12.0V、POE 供电 DC 4.5V to 12.0V , POE Power Supply
平均电流/currents	200mA@5V
工作温度 /Operating Temperature	-20°C~70°C
物理接口/Physical interface	网口、DC 电源接口 WAN Port and Power Supply Port
WiFi	
Wifi 协议/WiFi Protocol	IEEE 802.11n, IEEE 802.11g, IEEE 802.11b



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传输速率/Data 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 Security	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	10m indoor
发射功率/Transmit Power	-20~+4dBm

接收灵敏度/Receiver sensitivity	-93dBm@1Mbps
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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

VDB2606 在 gateway 模式下，唯一的网口为 WAN，，PC 与 VDB2606 连接相同的上级路由，访问 VDB2606。

VDB2606 工作在 apcli 模式下，PC 通过与 VDB2606 连接相同的上级路由，访问 VDB2606。

下图是网络连接的拓扑图，VDB2606 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 VDB2606 的管理界面；

In the Gateway mode of VDB2606, the only network port is WAN,, PC and VDB2606 connect the same superior route, access VDB2606.

VDB2606 works in APCLI mode, where the PC accesses VDB2606 through the same superior route as VDB2606.

The following figure is the topology of the network connection. The WAN port of VDB2606 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 VDB2606 can be accessed through the browser on the PC.

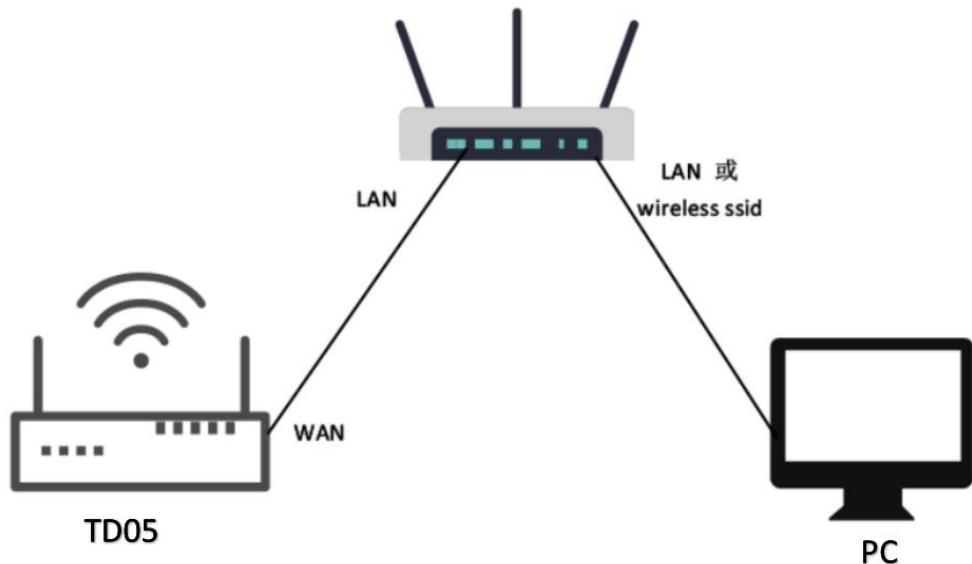


图 3.1.1.a 通过上级路由网段访问

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

下面假设此时路由器分配给 VDB2606 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 VDB2606 的 web 认证界面。如下图所示

It is assumed that the IP address assigned to VDB2606 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 VDB2606 can be entered. As shown in the figure below

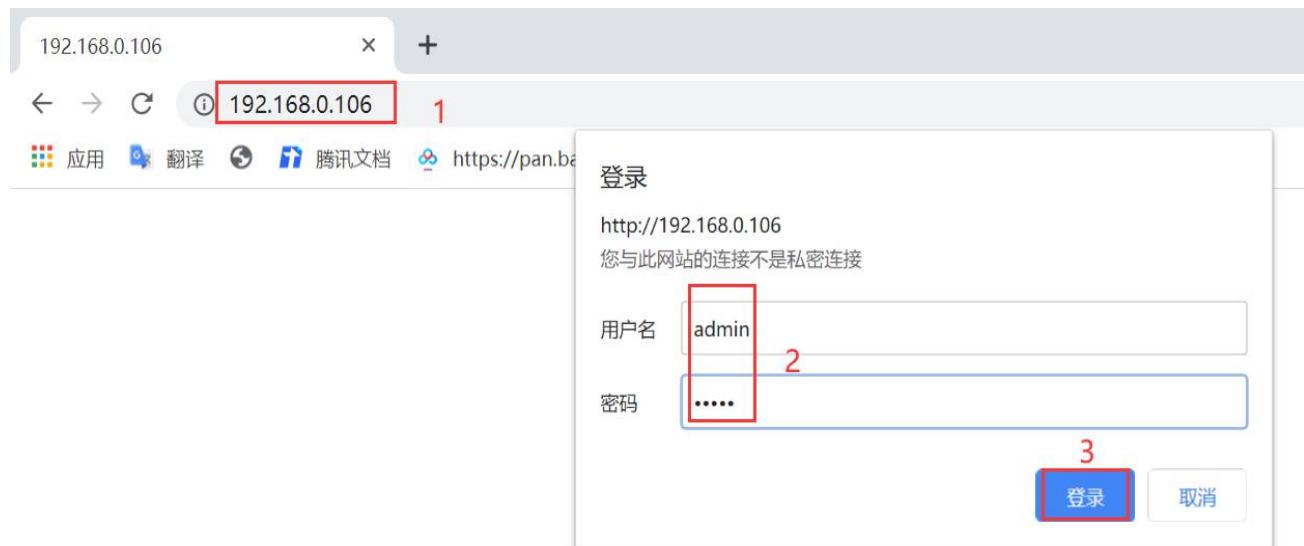


图 3.1.1.bVDB2606 的管理账号密码分别为 admin/admin。

Figure 3.1.1.b The password of VDB2606 is admin/admin.

3.1.2 通过局域网连接/Connect via LAN

VDB2606 在 gateway 模式下，PC 通过 VDB2606 的 WIFI 热点访问 WIFI 模块。

VDB2606 在 ap-cli 模式下，PC 可通过 VDB2606 的 WIFI 热点和唯一的网口访问 WIFI 模块。

通过以上方式连接 VDB2606 后，VDB2606 会分配 ip 地址给 PC。用户可在 PC 上，通过访问网关 IP，登录到 VDB2606 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 VDB2606 的 IP 网段，那么，可在 PC 上通过浏览器 10.10.10.254，来到 VDB2606 的管理界面。

VDB2606 in Gateway mode, the PC accesses the WIFI module through the WIFI hotspot of VDB2606.

VDB2606 In AP-CLI mode, THE PC can access the WIFI module through the WIFI hotspot of VDB2606 and the unique network port.

After connecting to VDB2606 in the above way, VDB2606 will assign the IP address to the PC. Users can log in to the administration interface of VDB2606 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 VDB2606, then the user can go to the management interface of VDB2606 through the browser on the PC at 10.10.10.254.

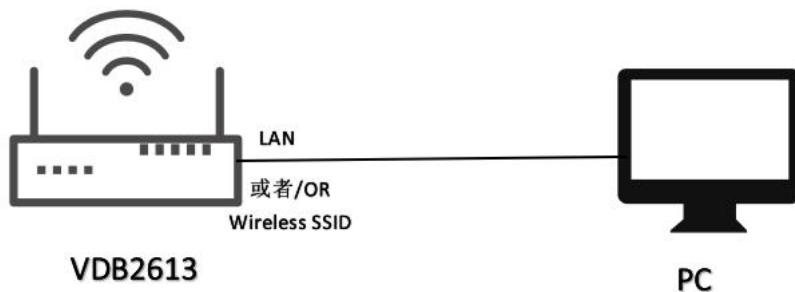


图 3.1.2.a 通过 VDB2606 局域网访问

Figure3.1.2.a Access via VDB2606 LAN

图 3.1.2.b 下图是 PC 上的访问截图

Figure3.1.2.b The following 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;



运作模式设置

您可以在此处设置适合您网络环境的运作模式

Bridge: 所有乙太网络埠、以及无线网络界面，皆被串连到单一的桥接器界面。

Gateway: 第一个乙太网络埠视为广域网络端。其他的乙太网络埠、以及无线网络界面，则串连到单一的桥接器界面，并视为局域网端。

AP Client 无线网络界面的客户端视为广域网络端。无线网络界面的基地台端、以及所有乙太网络埠，则串连到单一的桥接器界面，并视为发信网络端。

启用 NAT:

TCP Timeout:

UDP Timeout:

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；

点击“确定”，会立即生效，网络会重启，需要等待网络恢复；

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

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

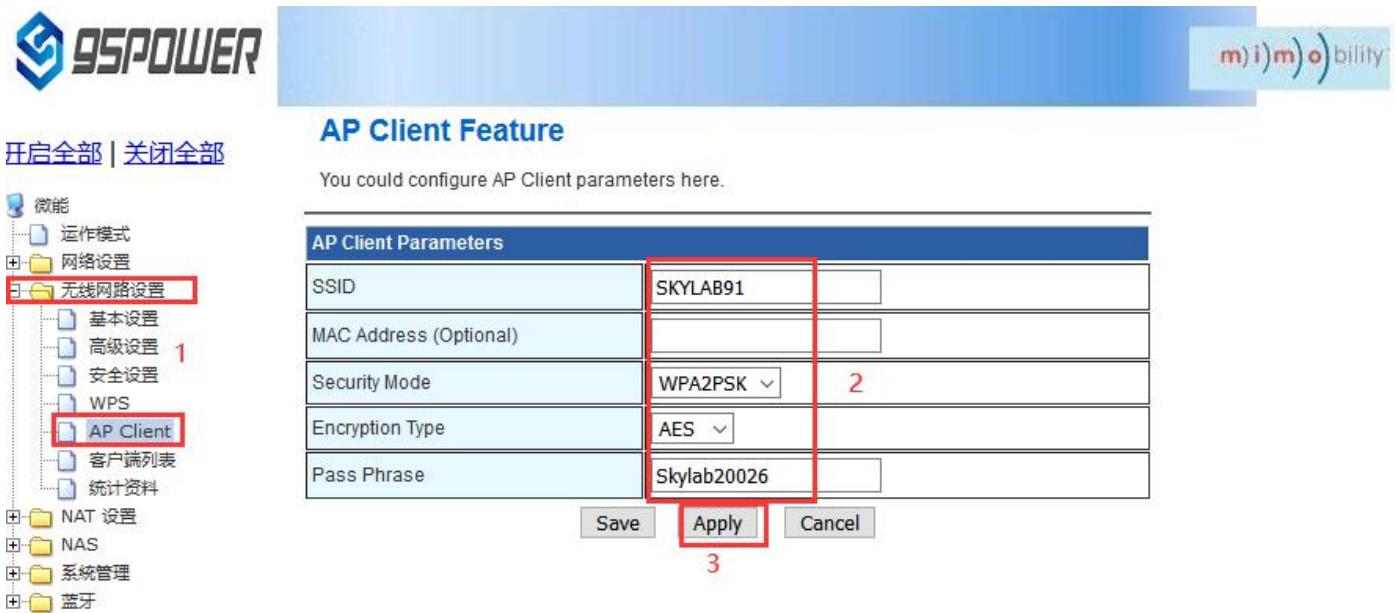
The system mode is configured as APCLI mode. Follow the operation as shown in the figure below and click "Save" to refresh



(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;



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

VDB2606 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 VDB2606 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;

局域网设置

您可以启用/停止以及设置所有的网络功能。

网络名称	Mediatek 3
IP 地址	172.16.10.254 在此处设置需要设置的IP
子网络遮罩	255.255.255.0
局域网 2	<input type="radio"/> 自用 <input checked="" type="radio"/> 借用
局域网 2 IP 地址	在此空白处点击，下方的 DHCP 参数会自动同步
局域网 2 子网络遮罩	
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

DHCP 配置

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
静态指定	MAC: [] IP: []
静态指定	MAC: [] IP: []
静态指定	MAC: [] IP: []
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 5

(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.

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 type="radio"/> 启用 <input checked="" type="radio"/> 停用
局域网 2 IP 地址	
局域网 2 子网络遮罩	
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

3.3.2 增设局域网网段/Add LAN segment

VDB2606 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 VDB2606. Lan2 is not enabled by default.

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

局域网设置

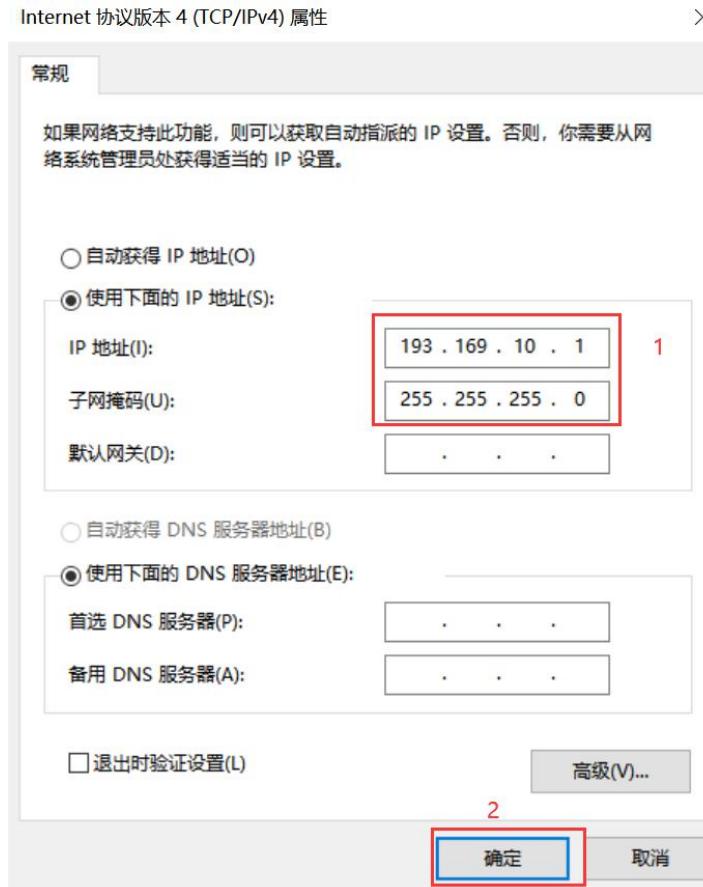
您可以启用/停止以及设置所有的网络功能。

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	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



(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

VDB2606 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。

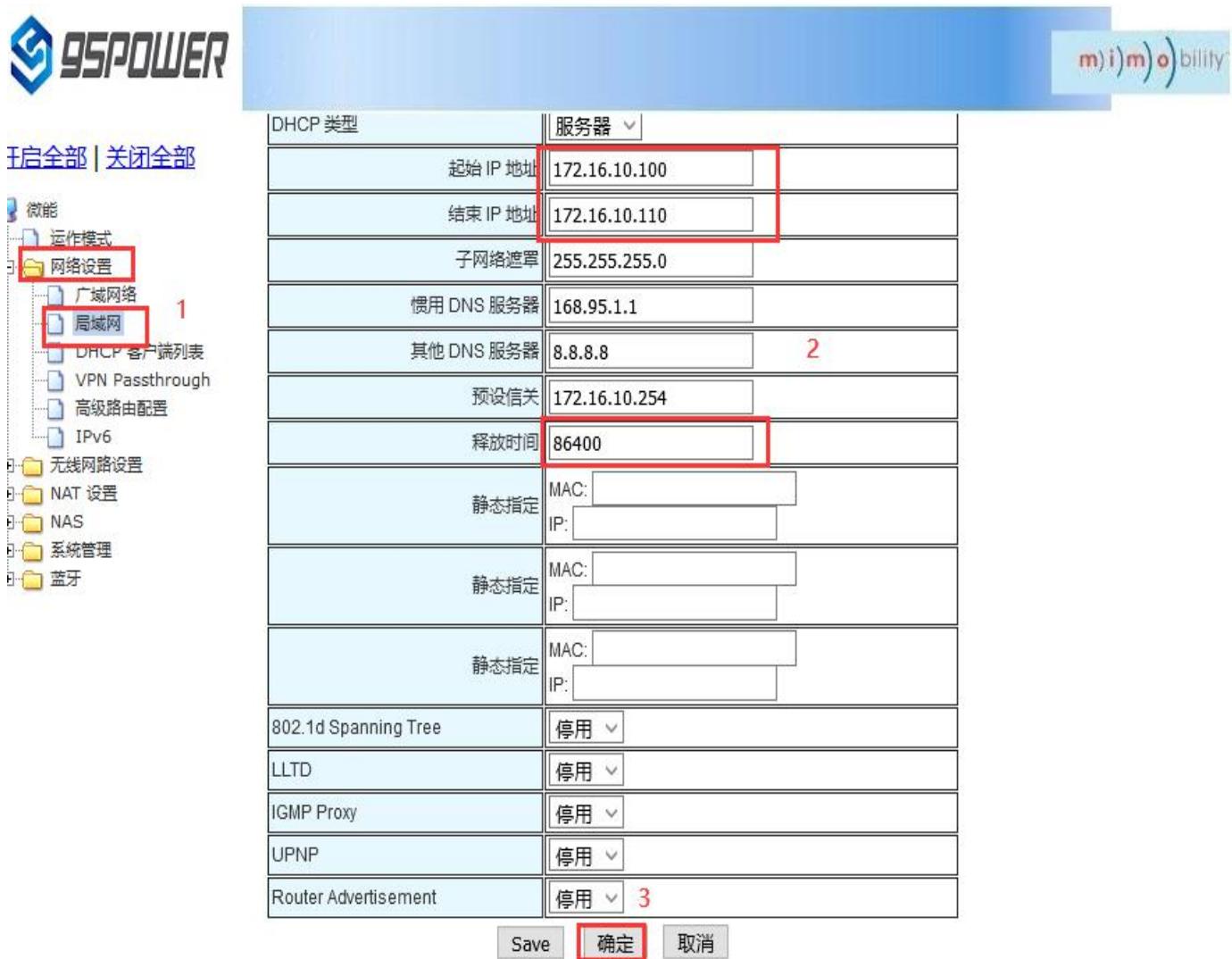
VDB2606 supports users to modify various DHCP parameters, including starting IP, ending IP, IP address lease time and other parameters, and also supports users to turn off DHCP function and use static IP connection.

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



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



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 VDB2606 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 VDB2606 and copy the MAC corresponding to PC. The following is the steps to view the DHCP list:



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DHCP 客户端列表

您可以在此检视所有 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 VDB2606，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 VDB2606, and the IP obtained is the binding IP address.



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DHCP 类型	服务器
起始 IP 地址	172.16.10.100
结束 IP 地址	172.16.10.110
子网络遮罩	255.255.255.0
使用 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: IP:
静态指定	MAC: IP:
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/

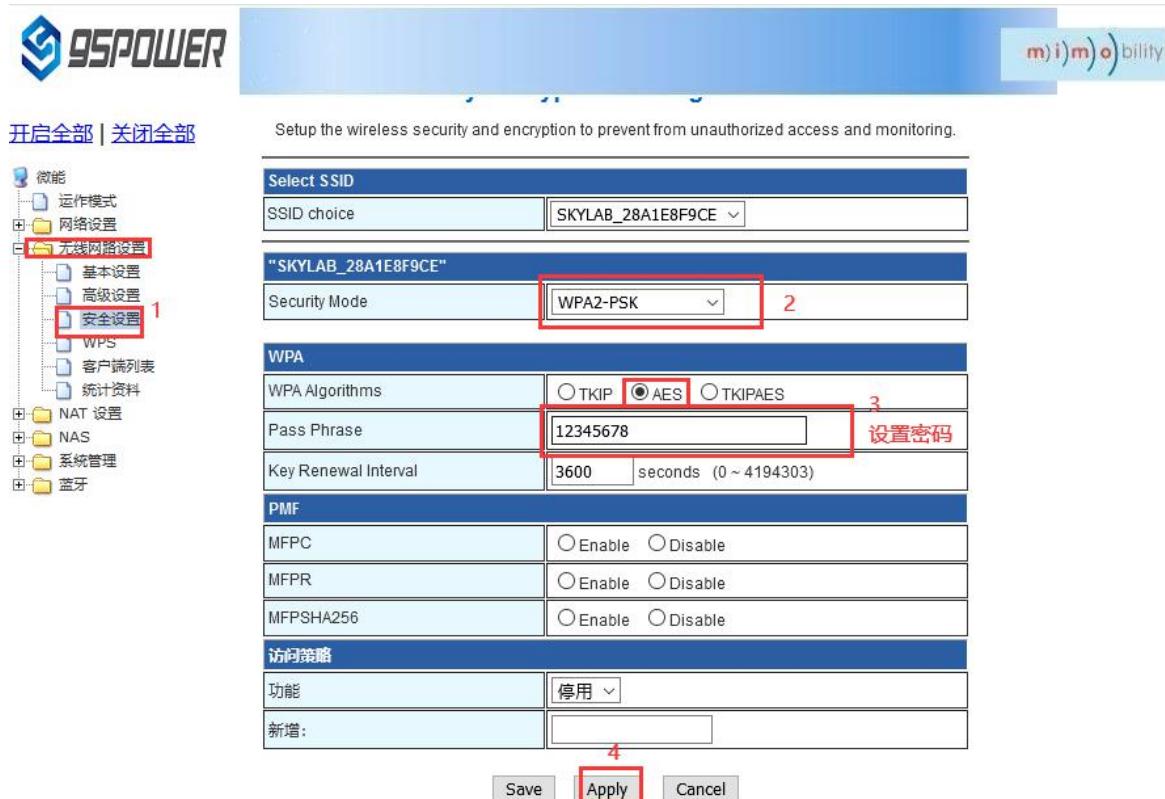
Modify WIFI hotspot name and set fixed channel

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:



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:



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 VDB2606 可以访问到。此外，VDB2606 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：

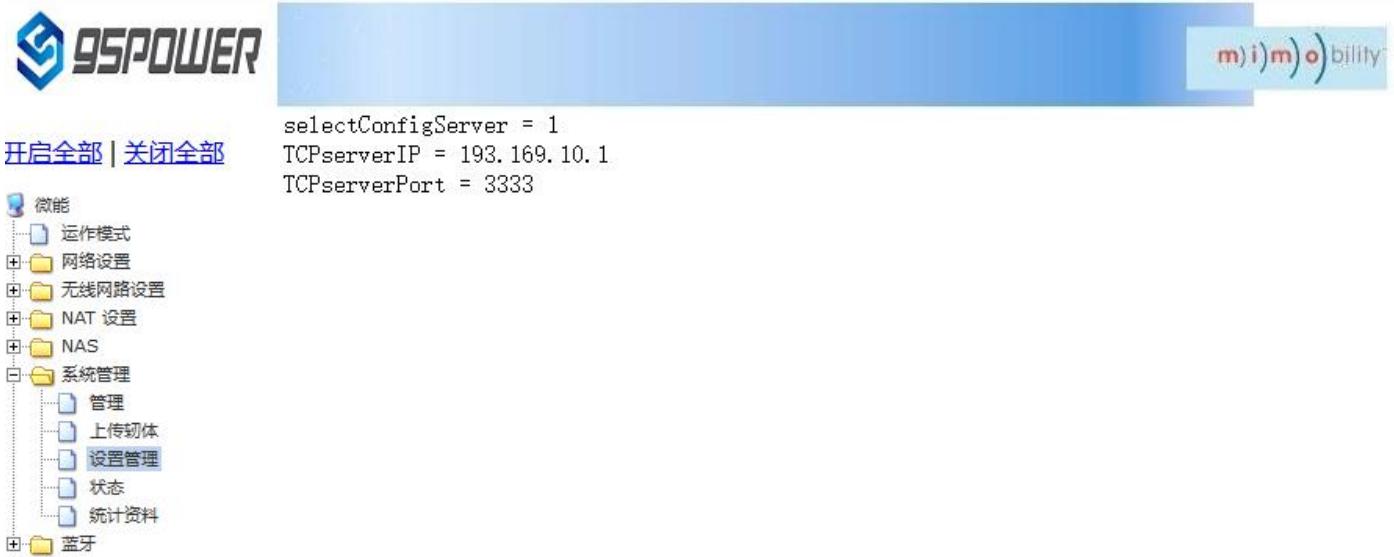
The user can configure the server address and port information through the Web interface, which requires VDB2606 to be accessible. In addition, the default Internet access mode of VDB2606 is UDP protocol. In the Web interface, you can customize the communication protocol, and the optional protocol is 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





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

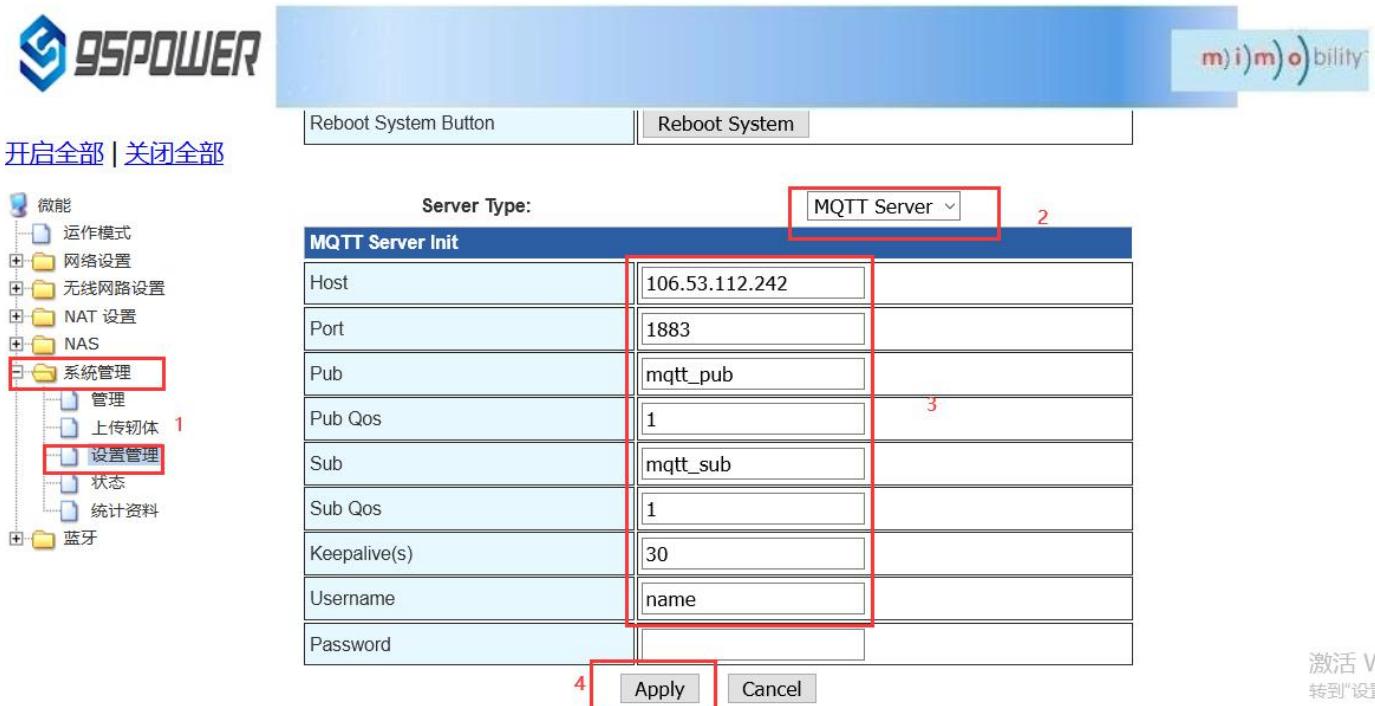
配置为 UDP 协议方式通信，配置截图如下所示：

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





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





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```
selectConfigServer = 2
Mqtt_host = 106.53.112.242
Mqtt_port = 1883
Mqtt_pub = mqtt_pub
Mqtt_pub_qos = 1
Mqtt_sub = mqtt_sub
Mqtt_sub_qos = 1
Mqtt_keepalive = 30
Mqtt_username = name
Mqtt_password =
```

激活 V
去配置>

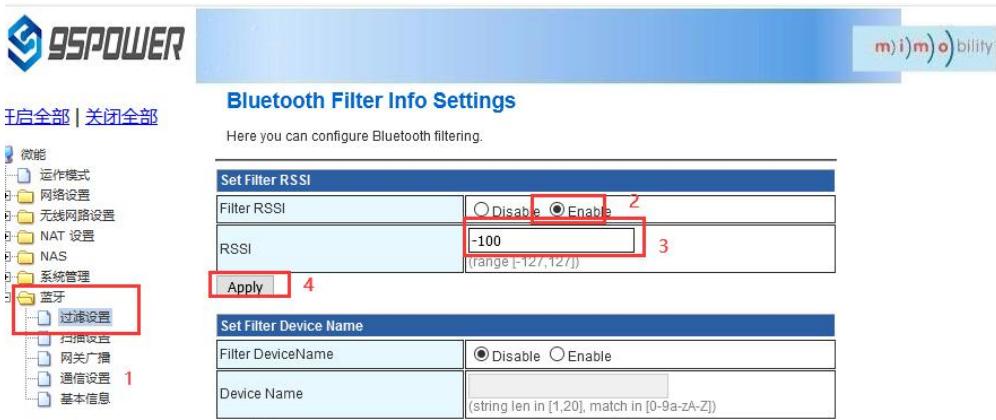
5、设置蓝牙信息/ Set bluetooth information

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.

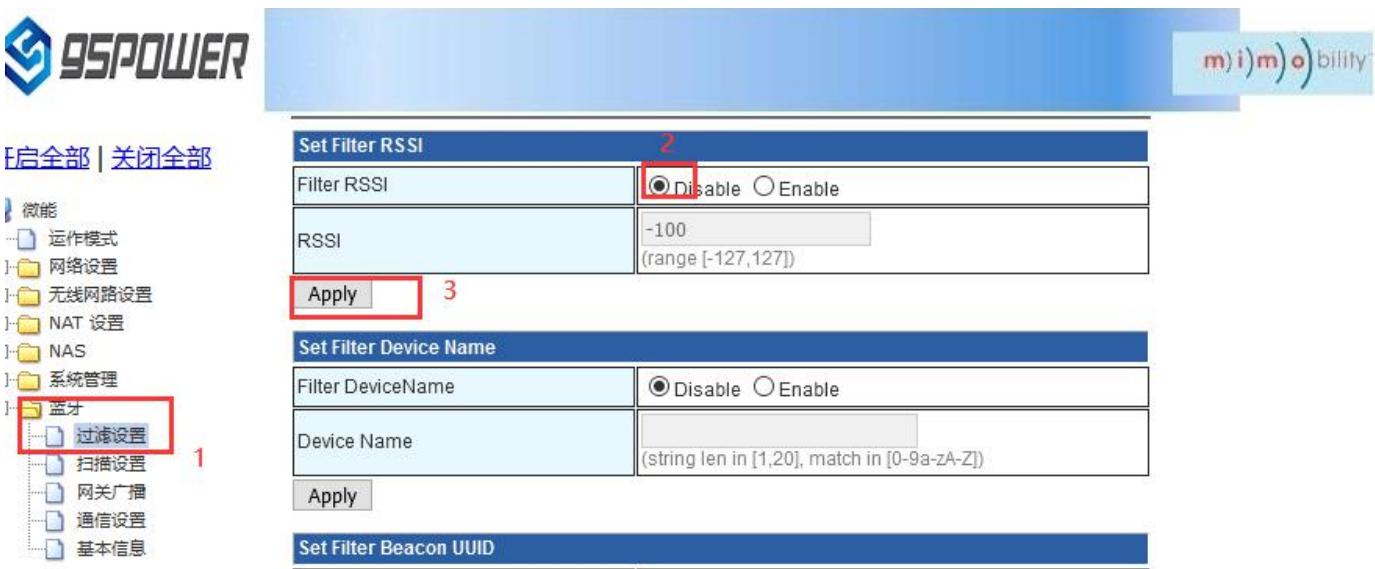
5.1 配置蓝牙的过滤信息/Configure Bluetooth filtering information

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;

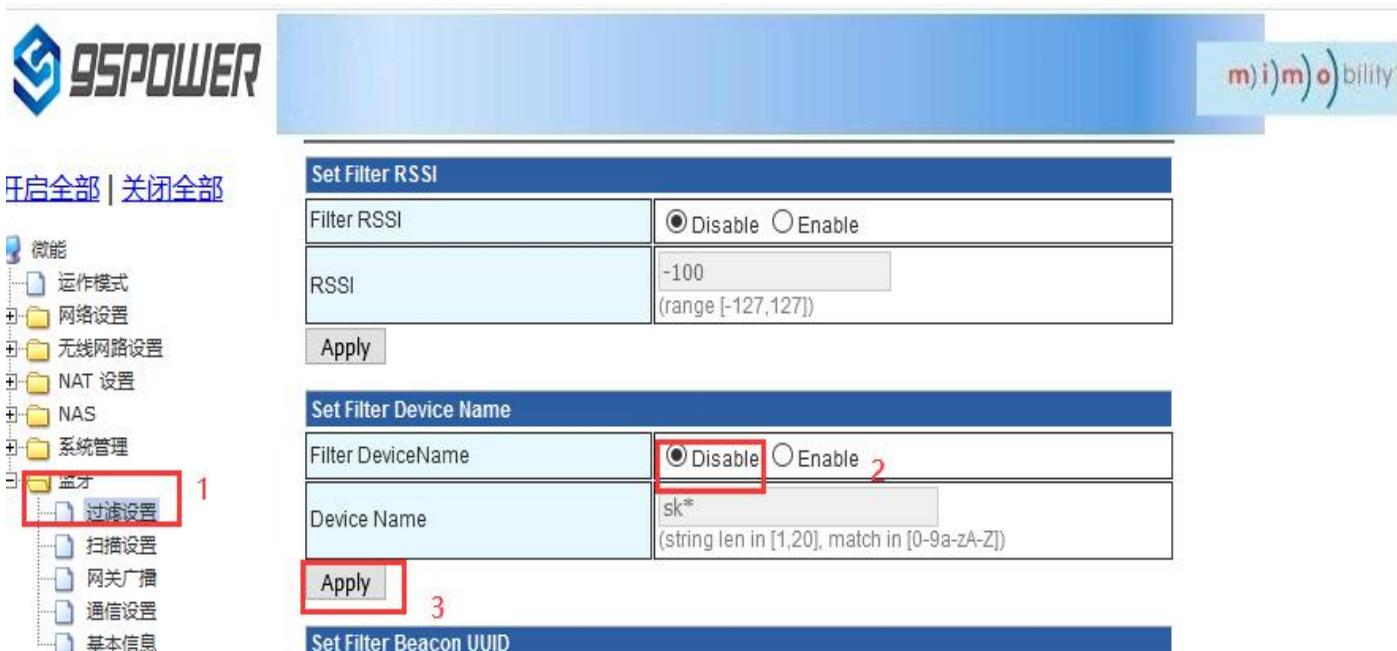


5.1.2、设置/取消扫描过滤的设备名称/ Set/unscan filter device name

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



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



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



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Set Filter RSSI	
Filter RSSI	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
RSSI	-100 (range [-127,127])
Apply	

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

Set Filter Beacon UUID	
Filter Beacon UUID	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Beacon UUID	1231111111111111111111112222222222 (String len is 32, match in [a-fA-F0-9])
Apply	

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



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Set Filter RSSI	
Filter RSSI	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
RSSI	-100 (range [-127,127])
Apply	

Set Filter Device Name	
Filter DeviceName	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Device Name	
Apply	

Set Filter Beacon UUID	
Filter Beacon UUID	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Beacon UUID	1231111111111111111111112222222222 (String len is 32, match in [a-fA-F0-9])
Apply	

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 'Set Filter RSSI' section with 'RSSI' set to 'Disable'. The 'Set Filter Device Name' section has 'Device Name' set to 'Enable' with value '004C'. The 'Set Filter Beacon UUID' section has 'Beacon UUID' set to 'Disable'. The 'Set Filter Company ID' section has 'Company ID' set to 'Enable' with value '004C'. A red box highlights the 'Enable' radio button in the 'Set Filter Company ID' section, labeled '2'. A red box highlights the 'Apply' button at the bottom, labeled '3'.

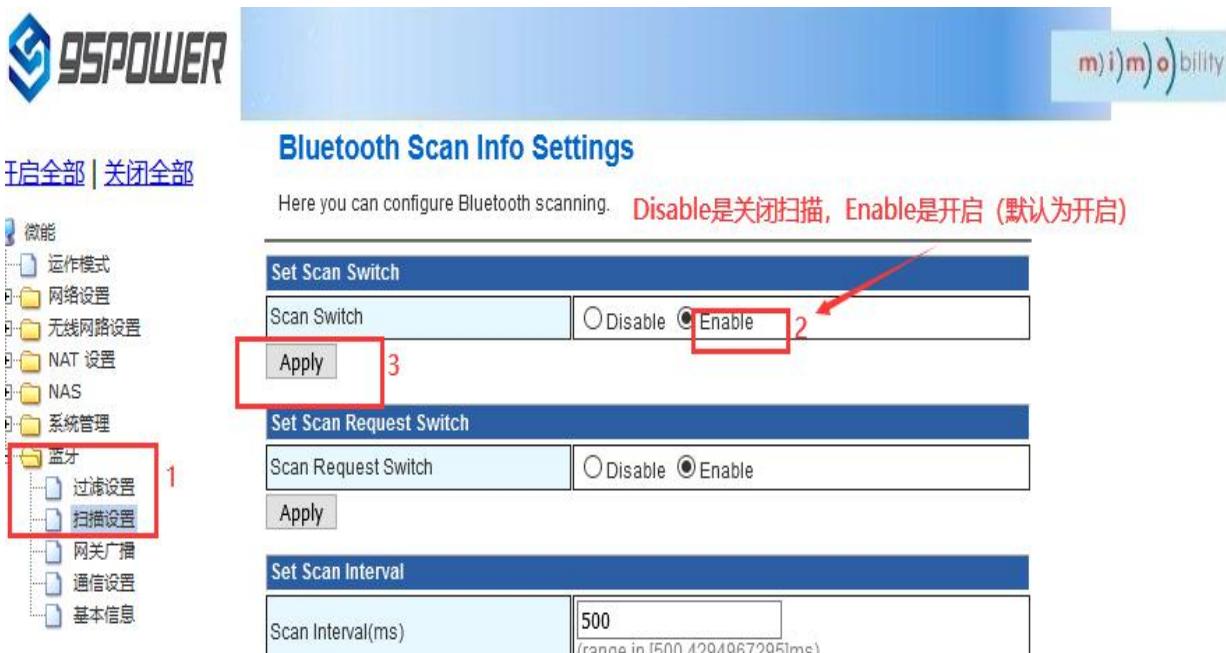
取消扫描过滤 CompanyId 的设置 / Unset the scan filter CompanyId

The screenshot shows the 'Set Filter RSSI' section with 'RSSI' set to 'Disable'. The 'Set Filter Device Name' section has 'Device Name' set to 'Disable'. The 'Set Filter Beacon UUID' section has 'Beacon UUID' set to 'Disable'. The 'Set Filter Company ID' section has 'Company ID' set to 'Disable' with value '004C'. A red box highlights the 'Disable' radio button in the 'Set Filter Company ID' section, labeled '2'. A red box highlights the 'Apply' button at the bottom, labeled '3'.

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:



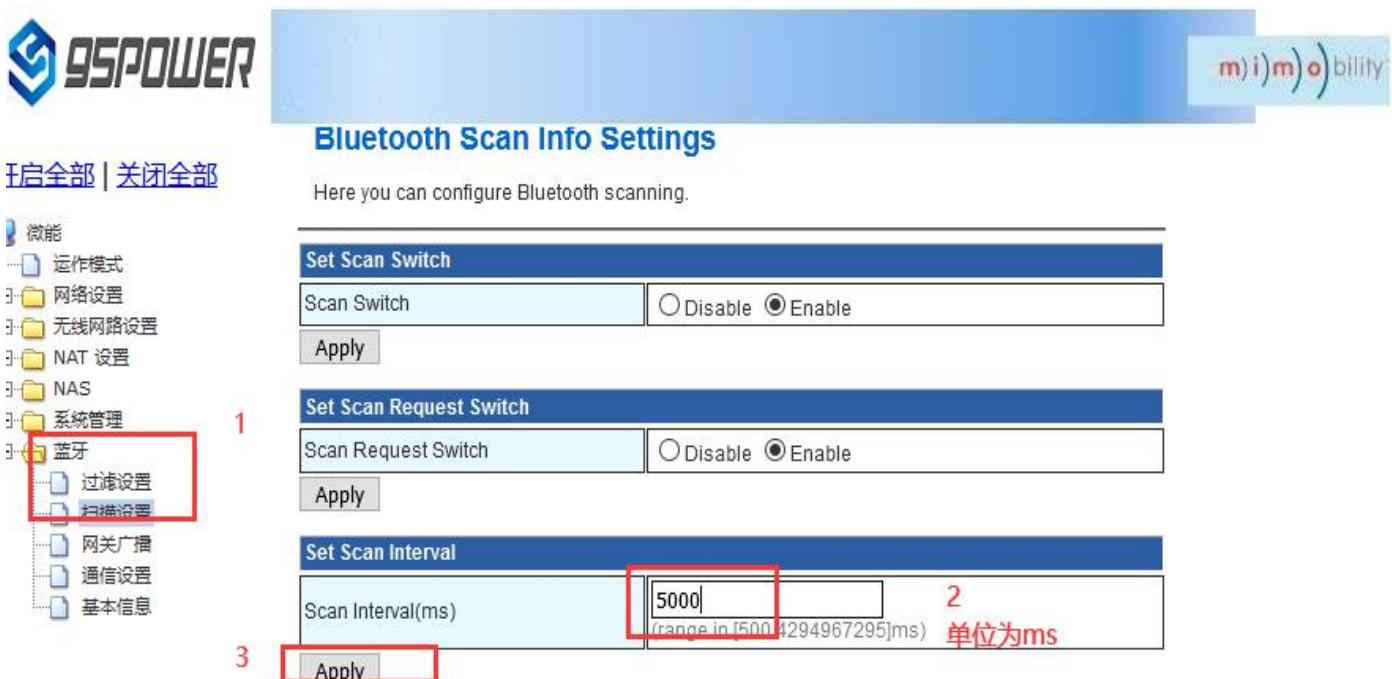
5.2.2、设置是否启动扫描请求 / Sets whether to start a scan request

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.

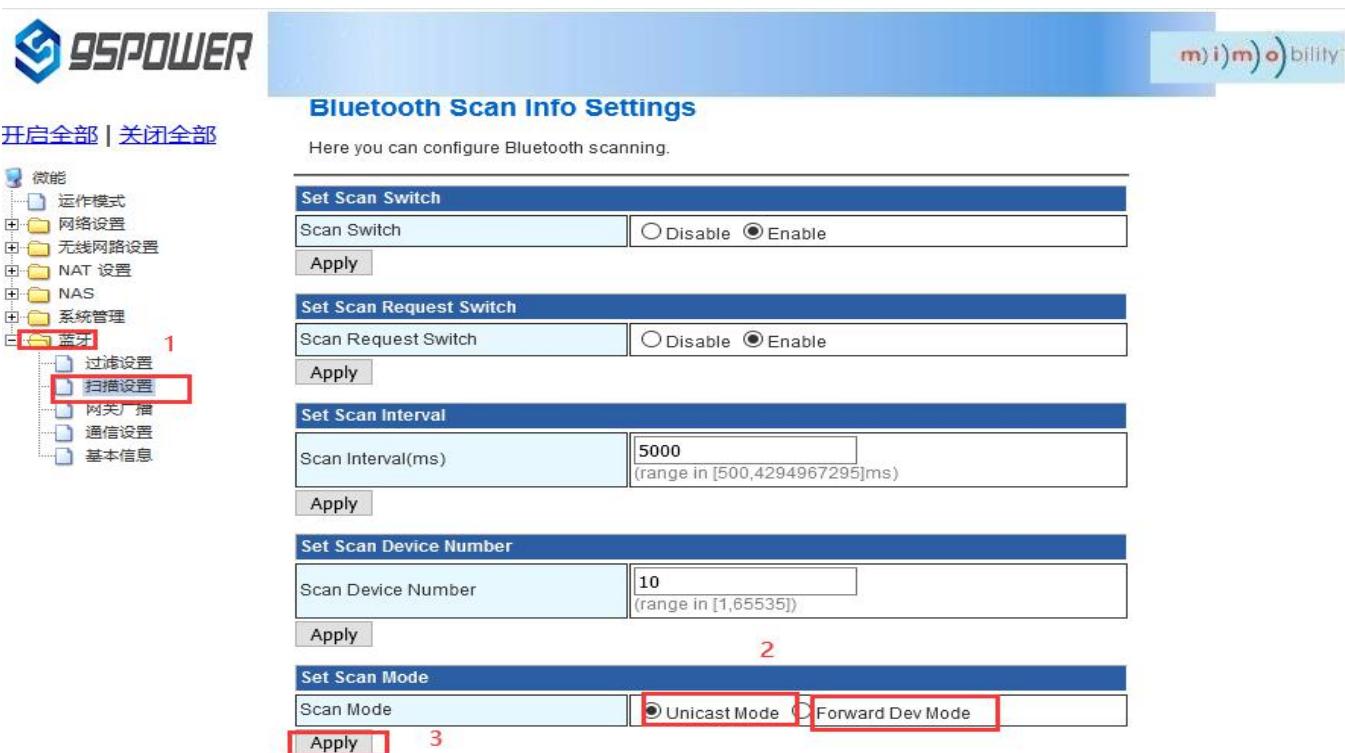


5.2.5、设置扫描单广播通用设备模式还是转发工卡模式。

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.



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The Gateway Broadcast Info Settings

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

Set Gateway Broadcast Switch

Gateway Broadcast Switch Disable 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.



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The Gateway Broadcast Info Settings

Here you can configure the gateway broadcast information.

Set Gateway Broadcast Switch

Gateway Broadcast Switch Disable Enable

Apply

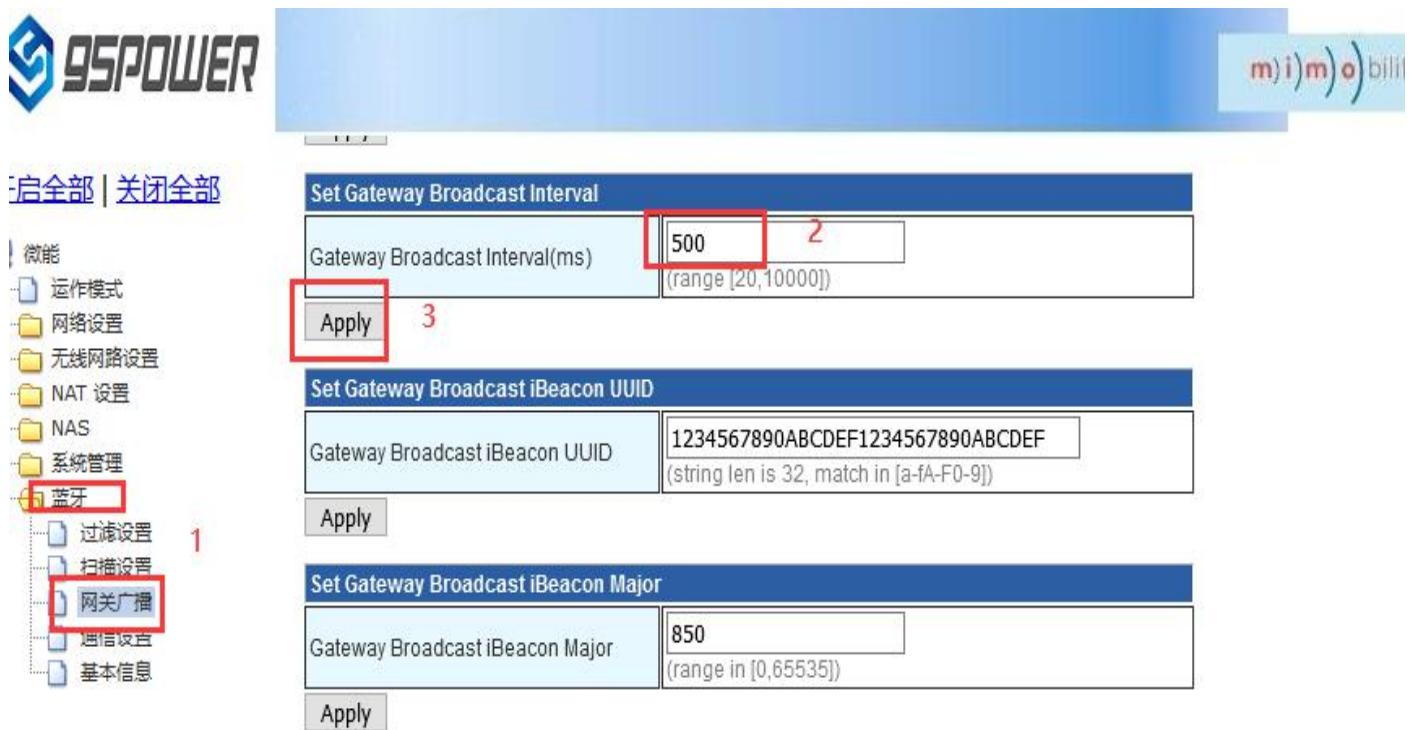
Set Gateway Broadcast Name

Gateway Broadcast Name 2 (string len is [1,20], match in [0-9a-zA-Z])

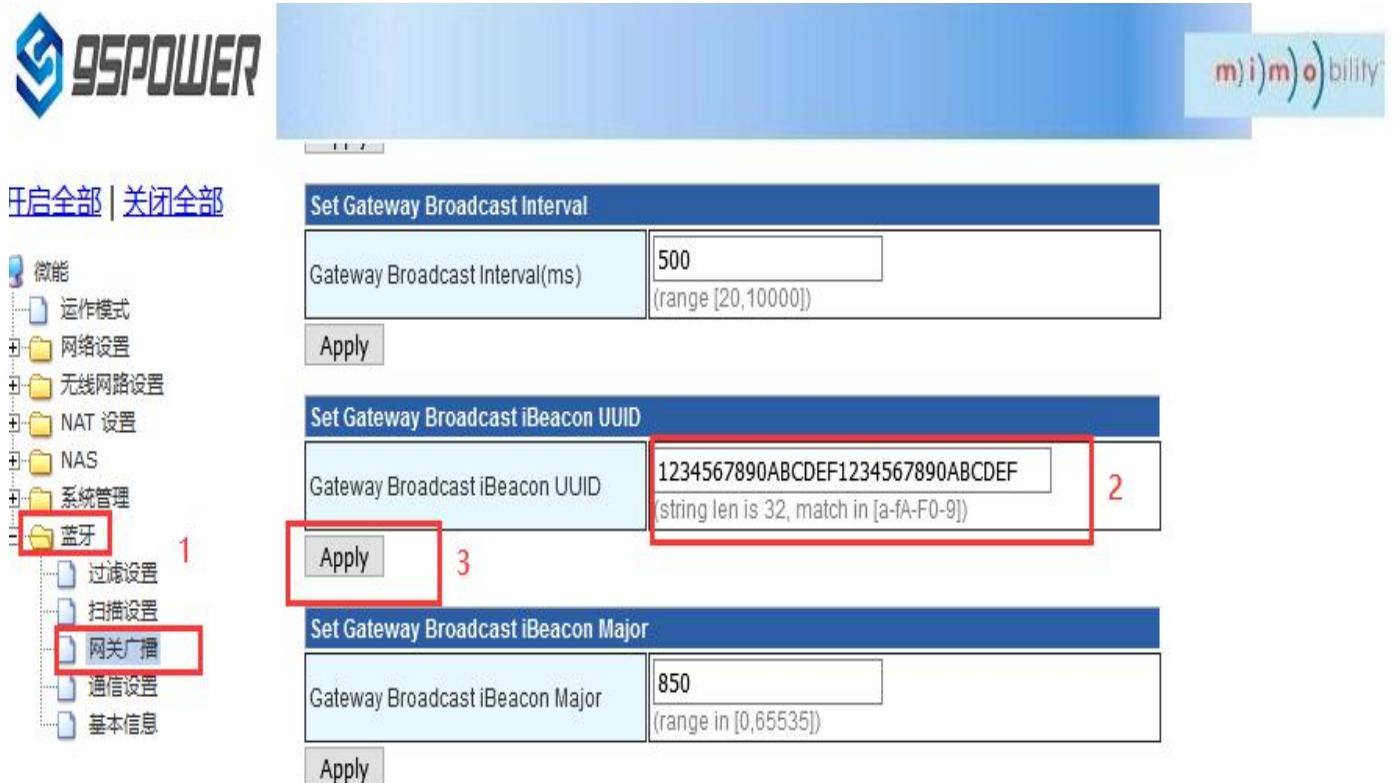
Apply 3

Set Gateway Broadcast Interval

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



5. 3. 4、设置网关广播的 iBeacon UUID / Set the iBeacon UUID for the gateway broadcast



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

The screenshot shows the 'Set Gateway Broadcast iBeacon Major' configuration screen. The 'Gateway Broadcast iBeacon Major' field contains the value '0 2'. A red box highlights the '0' and '2' values, and another red box highlights the 'Apply' button below it. The number '3' is also present near the 'Apply' button.

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

The screenshot shows the 'Set Gateway Broadcast iBeacon Minor' configuration screen. The 'Gateway Broadcast iBeacon Minor' field contains the value '999'. A red box highlights the '999' value and the 'Apply' button below it. The number '3' is also present near the 'Apply' button.

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

The screenshot shows the 'Gateway Broadcast iBeacon' configuration page. On the left, the navigation tree highlights '蓝牙' (Bluetooth) and '网关广播' (Gateway Broadcast) under the '蓝牙' category. The main area contains four configuration sections:

- Set Gateway Broadcast iBeacon UUID:** The value is set to '1234567890ABCDEF1234567890ABCDEF' (string len is 32, match in [a-fA-F0-9]).
- Set Gateway Broadcast iBeacon Major:** The value is set to '0' (range in [0,65535]).
- Set Gateway Broadcast iBeacon Minor:** The value is set to '0' (range in [0,65535]).
- Set Gateway Broadcast iBeacon Measured power:** The value is set to '-78' (range in [-127,127]).

Red boxes and numbers are overlaid on the interface to indicate specific steps:

- A red box surrounds the '网关广播' item in the navigation tree, labeled '1'.
- A red box surrounds the 'Gateway Broadcast iBeacon' section, labeled '2'.
- A red box surrounds the 'Apply' button at the bottom, labeled '3'.

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 'Set APP Parameters' configuration page. The navigation tree highlights '蓝牙' (Bluetooth) and '通信设置' (Communication Settings) under the '蓝牙' category. The main area contains three configuration sections:

- Service UUID:** The value is set to 'FED76543211234567890098765432112' (string len is 32, match in [a-fA-F0-9]). A red box highlights this field, labeled '2'.
- Write UUID:** The value is set to 'ABCDEF1234567890ABCDEF1234567892' (string len is 32, match in [a-fA-F0-9]). A red box highlights this field.
- Notify UUID:** The value is set to 'ABCDEF1234567890ABCDEF1234567891' (string len is 32, match in [a-fA-F0-9]). A red box highlights this field.

Red annotations provide additional context:

- '设置与APP通信的服务UUID' (Set service UUID for communication with APP) is written next to the Service UUID field.
- '设置蓝牙与APP通信的写特征UUID' (Set Bluetooth write characteristic UUID for communication with APP) is written next to the Write UUID field.
- '设置蓝牙与APP通信的通知特征UUID' (Set Bluetooth notification characteristic UUID for communication with APP) is written next to the Notify UUID field.
- '以上三个值不能相互相同' (The three values above cannot be the same) is written below the fields.

Red boxes and numbers are overlaid on the interface to indicate specific steps:

- A red box surrounds the '通信设置' item in the navigation tree, labeled '1'.
- A red box surrounds the 'Set APP Parameters' section, labeled '2'.
- A red box surrounds the 'Apply' button at the bottom, labeled '3'.

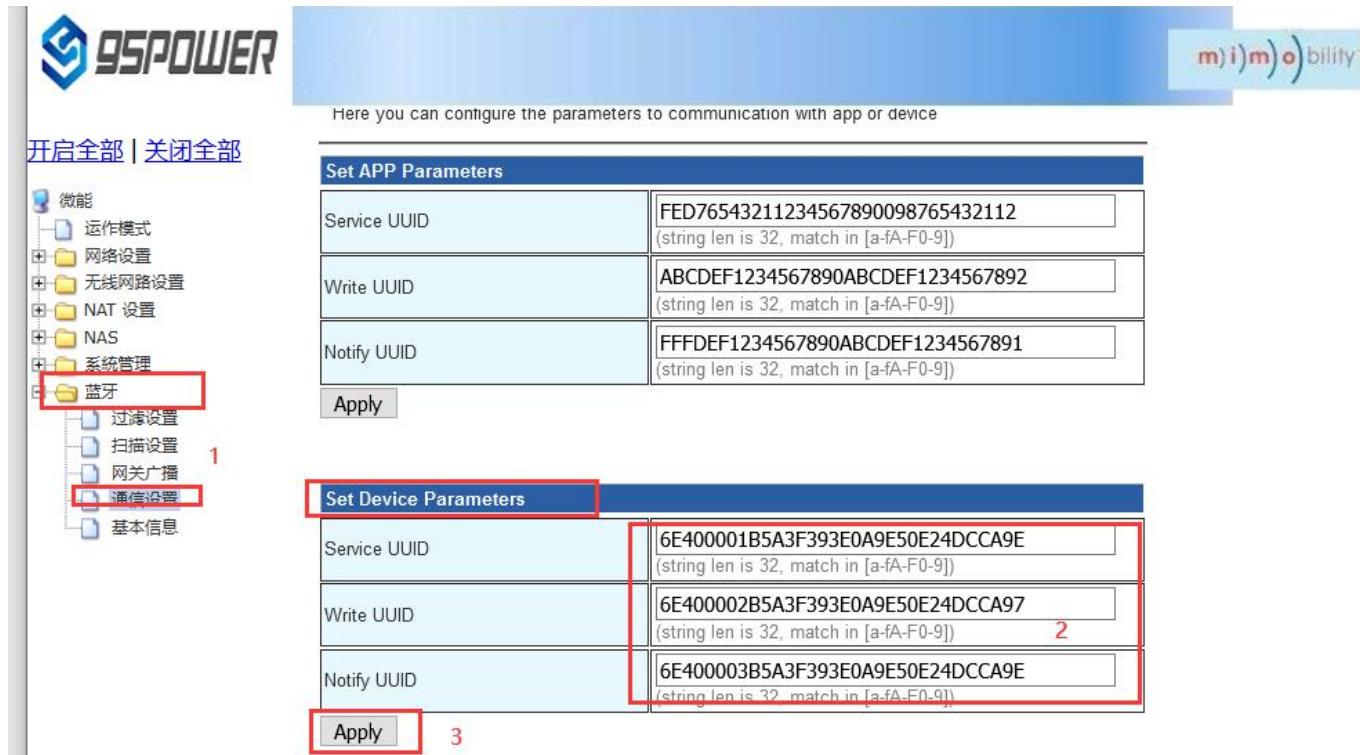


点击“通信设置”，查看设置情况。设置成功后，需要重启网关，使配置生效。下面是重启网关的操作

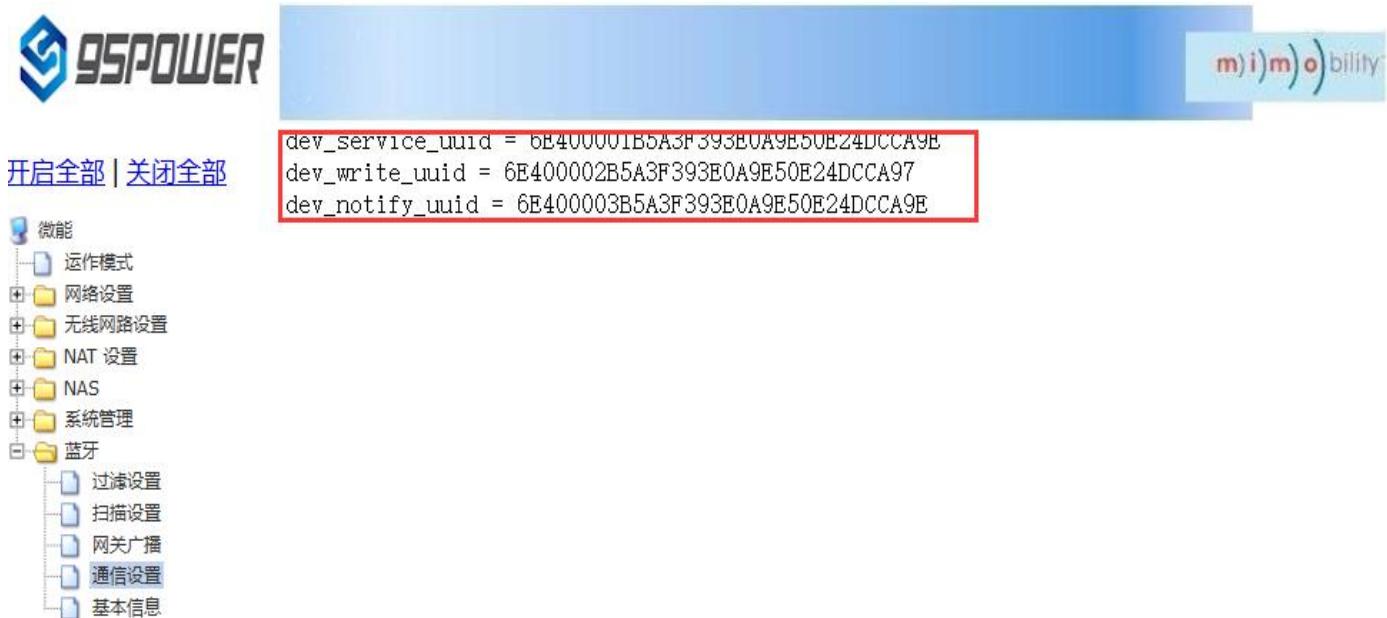
Click "Communication Settings" to view the Settings. After the setup is successful, you need to restart the gateway for the configuration to take effect. Here is how to restart the gateway



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

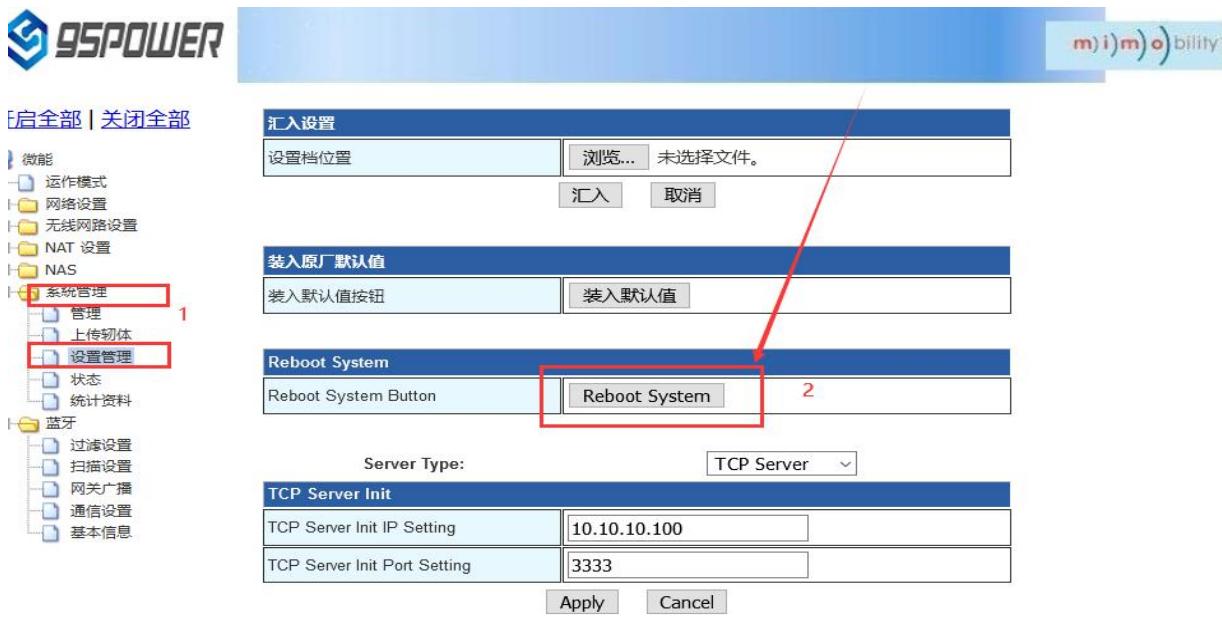


点击 apply 后，会跳转界面，如下所示： / After clicking Apply, the interface will jump to, as shown below:



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



激活 Wind
转到“设置”以进

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

VDB2606 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：

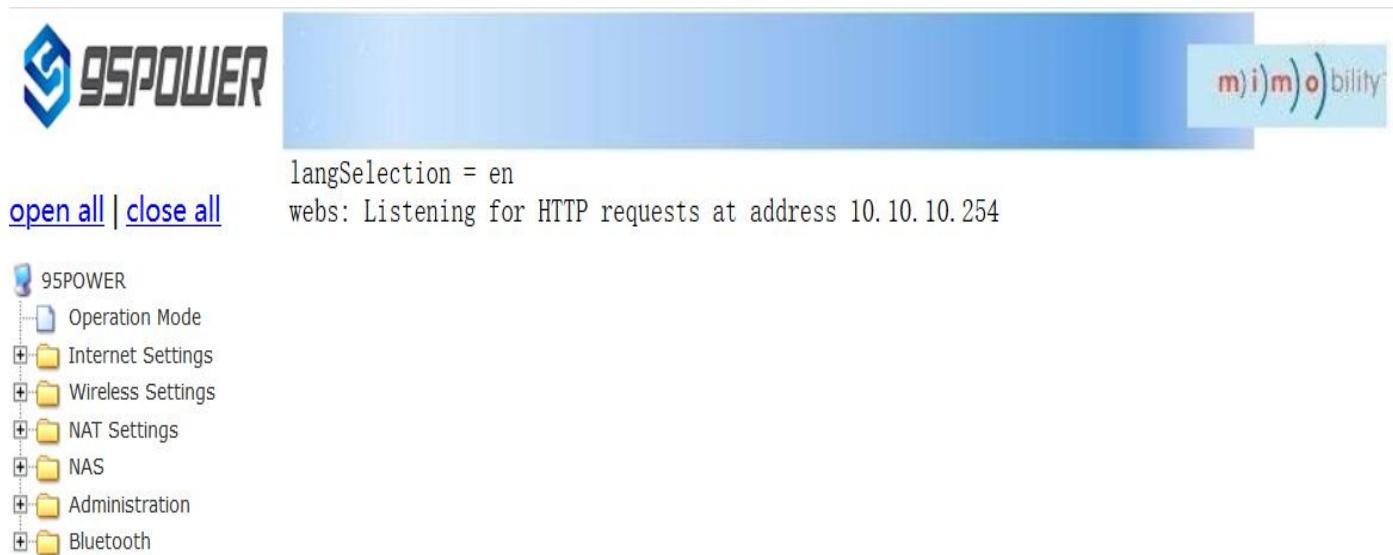
VDB2606 web pages support simplified Chinese, traditional Chinese, English display, default for simplified Chinese display. Customers can switch the displayed language according to their needs. The operation steps are as follows:

(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



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.



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



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.



(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



(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.



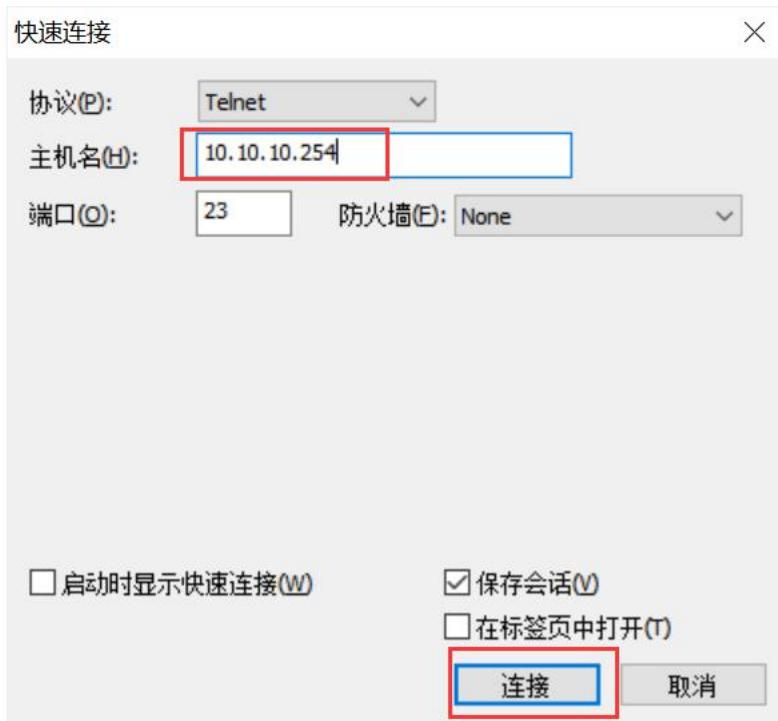
6.5 telnet 测试管理 / Telnet test management

下面介绍使用 SecureCRT 工具配置 Telnet 的过程。

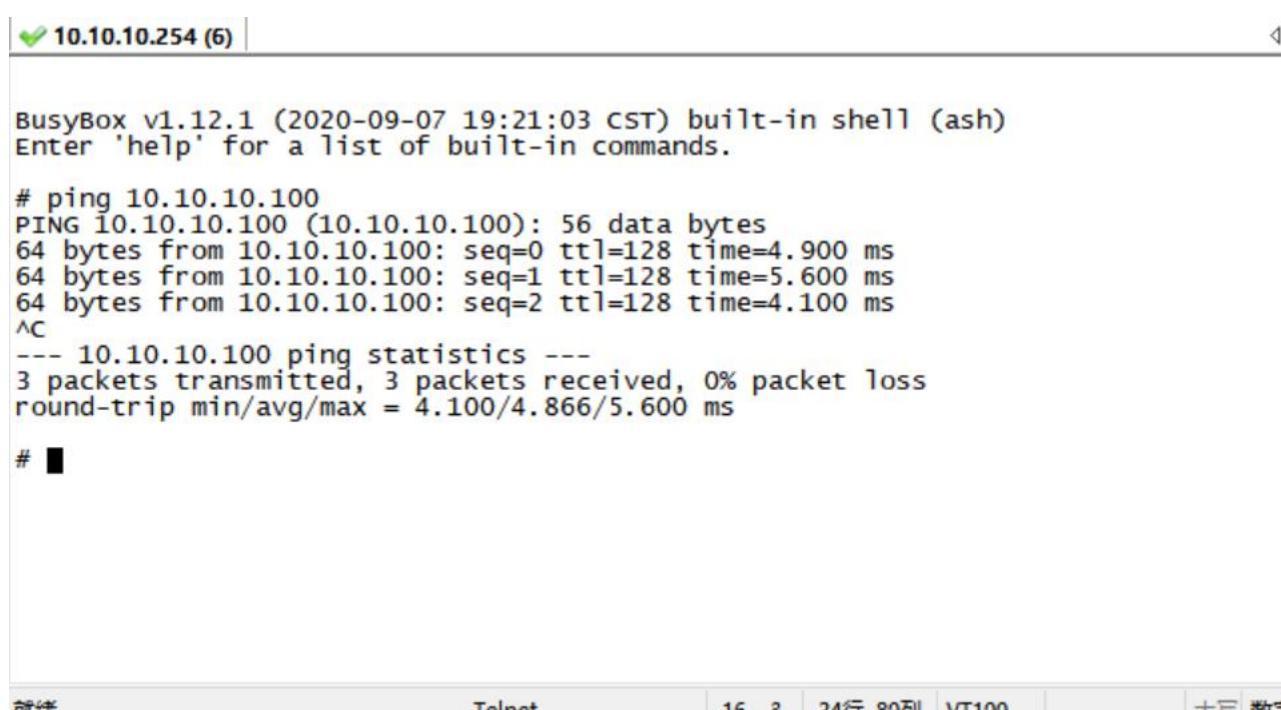
The following describes the process of configuring Telnet using the SecureCRT tool.

(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



```
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

#
```



深圳市微能信息科技有限公司
95Power Information Technology Co., Ltd.

Bluetooth Gateway Datasheet
Module No.: VDB2606

7. 联系方式

95Power Information Technology Co., LVDG

深圳市微能信息科技有限公司

地址：深圳市龙华区工业东路利金城工业园**9栋6楼**

Address: 6 Floor, Building 9, Lijincheng Scientific & Technical Park, Gongye East Road, Longhua District, Shenzhen

Tel: 86-755 23779409

Fax: 86-755 23779409

E-mail: sales@95power.com.cn

Website: www.95power.com.cn