

VDU2506 Datasheet

VDU2506 Datasheet

Document Information		
Title	VDU2506 Datasheet	
Document Type	Datasheet	
Document No.	WN-20110042	
Version & Date	V1.02	15-Dec-2020
Classification	Open	



Product List

Item	Model Number	Number	Remark
UWB TWR ranging anchor	VDU2506	1 pcs	
5V2A	TBD	1pcs	Optional
5V 2A DC Power Adapter			

95Power reserves all rights to this document and the information contained herein. Products, names, logos and designs described herein may in whole or in part be subject to intellectual property rights. Reproduction, use, modification or disclosure to third parties of this document or any part thereof without the express permission of 95Power is strictly prohibited.

The information contained herein is provided "as is" and 95Power assumes no liability for the use of the information. No warranty, either express or implied, is given, including but not limited, with respect to the accuracy, correctness, reliability and fitness for a particular purpose of the information. This document may be revised by 95Power at any time. For most recent documents, visit www.95Power.com.cn.

Copyright © 2020, V-Power Information Technology Co., Ltd.

95 Power ® is a registered trademark of V-Power Information Technology Co., Ltd. in China



Content

Cor	ntent	3
1.F	Product Induction	4
2.B	asic parameters	7
3. F	Product Dimension	9
4. I	nstallation	11
5. 0	Configuration	
	5.1network topology	
	5.1.1Access through the superior routing network segment	
	5.1.2 Connect via LAN	15
	5.2 Wan configuration	
	5.2.1 Wan port access to the Internet	
	5.2.2wireless internet	
	5.3LAN configuration	
	5.4Wireless parameter configuration	25
6、	Server information configuration	27
	6.1 Configure for TCP protocol communication	
	6.2 It is configured for UDP protocol communication	
	6.3 Configure for MQTT protocol communication	
7.S	System management configuration	
	7.1 Set up the WEB interface display	
	7.2 factory data reset; restore factory setting	
	7.3 Restart the system	
	7.4 upgrade system	
	7.5 Telnet test management	
8 P	ackage	
9 R	Reversion History	
10	Contact information	



VDU2506 Datasheet

1.Product Induction

VDU2506 is an UWB anchor based on TWR high precision ranging. It can receive tag broadcast package to calculate the distance and send command to tags at the same time, making it easy for bi-direction alert, electrical fence and distance keeping function, etc.

VDU2506 can be perfectly integrated with the indoor environment with white curved shell design. Its unique waterproof structure fits outdoor environment as well.





Figure 1.1 VDU2506 outlook

VDU2506 use 2 stage of Power Amplifers and single stage Low Noise Amplifer to enhance the transmit and receive performance. The coverage of VDU2506 can be more than 500 meters ranging with tags that using 2 stage PA or with another VDU2506. And the static precision is 0.3m in CEP95 condition.

VDU2506 support multiple power supply ways. Power over Ethernet way can reduce construction difficulty; DC 5V 1A power supply and WiFi network can reduce the network wiring cost; Also, the internal PCBA reserves 2-pin-2.54mm-pitch-JST battery connection interface for Li-battery power supply. And it can charge the battery with up to 800mA current, which is convenient to continue working in case of power failure.



VDU2506 supports up to 64GigaByte SD card(or TF card) conforming to the standard of SD-XC (Class 10) protocol, so that offline data storage(like history distance trajectory) can be restored for long time when the network is disconnected.

The application of VDU2506 is wide, both in indoor and outdoor ranging and position. And the TWR way can shift easizily from one dimension ranging to two dimension positioning. It can be used in construction sites, coal yards, mines, tunnels and other places to range and locate personnel and vehicles.

VDU2506 PCBA support UART to USB transfering for debug use. It support TTL to UART 485 transfering for industrial machines. It also support WiFi and Ethernet connection to TCP/IP or UDP server, making it easy to build a TWR positioning system. The PCBA can be directly installed to customer's machine, and support secondary development. We can supply 4.3 inch display screen and its demo software(not free). And we also supply 2 ranging module by overlaying anothor PCBA on VDU2506 PCBA and its demo software. In this way the stability can be enhanced or the tag's direction can be determined.



VDU2506 Datasheet



Figure1.2 VDU2506 PCBA



2.Basic parameters

Power Supply		
POE	POE 48V	
DC Power Adapter	Input: DC 5V 2A	
Battery supply	Li+ rechargable Battery 3.4~4.3V,charge current 800mA	
UWB		
Supported protocol	IEEE802.15.4-2011 UWB	
Frequence	Default 3.9936GHz(with PA)	
	support all channels ch1-5(Without PA)	
Tx POWER	Max 21dBm @CH2(Double PA)	
Rx Sensitivity	-105dBm @110Kbps	
Data rate	Default 6.8Mbps,support 110Kbps,850kbps	
Data storage	Support data storage without network	
WiFi		
Wifi Protocol	IEEE 802.11n, IEEE 802.11g, IEEE 802.11b	
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	
Rx Sensitivity	HT40 MCS7 : -70dBm@10% PER(MCS7)	
	HT20 MCS7 : -73dBm@10% PER(MCS7)	
	54M: -77dBm@10% PER	
	11M: -89dBm@ 8% PER	
Tx Power	IEEE 802.11n: 14dBm @HT40 MCS7	
	15dBm@HT20 MCS7	
	IEEE 802.11g: 15dBm	
	IEEE 802.11b: 18dBm	
Wireless security	WPA/WPA2, WEP, TKIP, and AES	
Workig mode	Bridge、Gateway、AP Client	
BLE	Default off 30s after power on	
Supported Protocol	BLE4.2	



95Power Information Technology Co., Ltd

	802.15.4	
Frequency	2400MHz-2483.5MHz	
Tx POWER	-20~+4dBm in 4dB step	
Rx Sensitivity	-96dBm	
Positioning performance		
Accuracy	<30cm	
Anchor distance	Default <200m, <500m if using tags with double PA	
Data uploading	100M Ethernet	
	WiFi 2.4G	
Environment		
Op. temperature	-20℃~70℃	
Storage temperature	-40°C~85°C	
Waterproof	IP67	
Dimension	178.0mmx94mmx58.0mm±2mm	



3. Product Dimension



Figure 3.1 Main Body Size (Unit mm)



VDU2506 Datasheet



Figure 3.2 Holder Size



4. Installation

Anchor needs to be installed more than 2.5m off the ground. And the anchor distance is relevant with tags' and anchors' broadcasting power. Single stage PA with max gain support max 200m distance. Double stage PA with max gain support max 500m distance.



Figure 4.1 Anchor installation location and tag's best position area

Basic Requirement: 1m<a<200m ,1m<b<200m ,3.5m> H>2.5

Note that the anchor should keep more than 15cm away from ceilings or walls

Install steps:

(1) Using the expansion screws and fix the holder on the wall (You can change the screws depend on the wall material).



Screw pack

Holder





(2) For cylinder install, please thread the hold hoop through the oval groove of the holder as shown in the

figure.



(Note:Hoop length depending on the cylinder diameter, and the thickness should be less than 3mm, width should be less than 13mm)

(3) After fixing the holder, put the anchor stuck to the holder from top to bottom





(4) After installing the anchor, plug the DC 5mm power adapter or POE netcable. If the signal LED light as the right figure , the anchor start to work normally.

5. Configuration

5.1 network topology

5.1.1Access through the superior routing network segment

In the Gateway mode of VDU2506, the only network port is WAN, PC and VDU2506 connect the same superior route, access VDU2506.

VDU2506 works in AP Client mode, where the PC accesses VDU2506 by net-cable connection directly .

The following figure is the topology of the network connection. The WAN port of VDU2506 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 VDU2506 can be accessed through the browser on the PC.





Access through the superior routing network segment

It is assumed that the IP address assigned to VDU2506 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 VDU2506 can be entered. As shown in the figure below

192.168.0.106 × + ← → C [*] ① 192.168.0.106 1 Ⅲ 应用 ◎ 翻译 ③ 節 勝讯文档 • https://pan.base	登录 http://192.168.0.106 您与此网站的连接不是私密连接 用户名 admin 2
	密码 3 登录 取消

The password of VDU2506 is admin/admin.

5.1.2 Connect via LAN

VDU2506 in Gateway mode, the PC accesses the WIFI module through the WIFI hotspot of VDU2506.

VDU2506 In AP-CLI mode, THE PC can access the WIFI module through the WIFI hotspot of VDU2506 and the unique network port.

After connecting to VDU2506 in the above way, VDU2506 will assign the IP address to the PC.Users can log in to the administration interface of VDU2506 on a PC by accessing the gateway IP.The default IP address network segment is 10.10.10.0/254. Assuming that the user has not modified the IP network segment of VDU2506, then the user can go to the management interface of VDU2506 through the browser on the PC at 10.10.10.254.



Access via VDU2506 LAN

The following is a screenshot of the access on PC:



5.2 Wan configuration

5.2.1 Wan port access to the Internet

(1) The system works in gateway mode by default;



95Power Information Technology Co., Ltd

95POWER APSoC	× +	
\leftrightarrow > C \textcircled{a}	0 💋 10.10.254	
🗎 火狐官方站点 🧕 新手上路	🗎 常用网址 🜐 京东商城	
S 95POWER		m)i)m)o)bility
田启全部 关闭全部	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	
 □ 运作模式 □ 运作模式 □ 运作模式 □ 运作模式 □ 运作模式 □ Ξ □ 无线网路设置 □ AX 设置 □ NAS □ 系统管理 □ 至牙 	○ Bridge: 所有乙大网络埠、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,并视为发域网络端。 定用 NAT 启用 ~ TCP Timeout: 180 UDP Timeout: 180	

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) Wan for dynamic address allocation;

🗐 95POWER		m)i)m)o)bility
	广域网络设置 您可以依您的环境选择适当的联机模式,并侦对不同的联机模式设置参数。 广域网络联机模式: 动态(自动取得) ~	2
	DHCP 模式 网络名称 (optional) MAC 复制 Enabled	

(3) Check the status



🗐 95POWER			m)i)m)o)bi
开启全部 关闭全部	无线存取节点状态 让我们可以看到Ralink SoC ³	平台的状态。	
	系统信息		
	SDK版本	W0271.1.0	
	系统正常运行时间	22 hours, 34 mins, 2 secs	
T NAS	系统平台	RT2880 embedded switch	
🗄 😋 系統管理	运作模式	Gateway Mode	
	Internet配置		
	联机型态	DHCP	
	广域网络IP地址		
2 统计资料	子网络遮罩		
2田			
	主要域名服务器		
	次要域名服务器		
	MAC 位址	30:EB:1F:07:1B:A3	
3	局域网		
	本地P地址	10.10.10.254	
	本地网络遮罩	255.255.255.0	
	MAC 位址	30:EB:1F:07:1B:A2	
1			

5.2.2wireless internet

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



(2) The WAN is configured for dynamic address assignment;



VDU2506 Datasheet



(3) Configure superior AP information;



5.3LAN configuration

5.3.1Change the LAN IP address



The default LAN segment of VDU2506 is 10.10.10.254/24. Customers can modify the LAN IP address according to their needs. The following steps are described:

(1) 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 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		
局域网 2 IP 地址	在此空白处点击, 7	下方的
局域网 2 子网络遮罩	DHCP参数会自动同	步
MAC 地址	(null)	
DHCP 类型	服务器	
起始 IP 地址	t 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	异 168.95.1.1	
其他 DNS 服务器	§ 8.8.8	
预设信关	172.16.10.254	

S 95POWER

A REAL PROPERTY AND	DITOT SCE
开启全部 关闭全部	起始
3 微能	结束
	子!
	惯用 DN:
	其他 DN:
	3
	1
■ · · · · · · · · · · · · · · · · · · ·	1
田 🔁 系統管理 田 🔁 蓋牙	
	1
	802.1d Spanning Tree

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:
静态指定	MAC:
静态指定	MAC:
802.1d Spanning Tree	停用 ~
LLTD	停用 ~
IGMP Proxy	停用 ~
UPNP	停用 ~
Router Advertisement	停用 ~ 5

m)i)m)o)bility

m)i)m)o)bility



(2) 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.





m)i)n)o)bility

5.3.2Add LAN segment

Lan2 can be added to LAN segment in VDU2506. Lan2 is not enabled by default.

(1) Follow the steps below to set up LAN2



开启全部 关闭全部

🚽 微能 □ 运作模式 □ 🕤 网络设置) 广域网络 1] 局域网 DHCP 客户端列表 VPN Passthrough □ 高级路由配置 IPv6 □ 🗀 无线网路设置 🗄 🚞 NAT 设置 E 🔁 NAS 🗄 🧰 系統管理 ⊡ 🚞 蓋牙

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	● 启用 ○ 停用	2
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	

S 95POWER

王启全部 | 关闭全部



DHCP 类型	服务器 ~
起始 IP 地址	172.16.10.100
结束 IP 地址	172.16.10.200
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:
静态指定	MAC:
静态指定	MAC:
802.1d Spanning Tree	停用 ~
LLTD	停用 ~
IGMP Proxy	停用 ~
UPNP	停用 ~
Router Advertisement	停用 ~ 3

m) i) m) o) bility



(3) 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.

Internet 协议版本 4 (TCP/IPv4) 属性		×
常规		
如果网络支持此功能,则可以获取自z 络系统管理员处获得适当的 IP 设置。	胡指派的 IP 设置。否则,你需要从网	
 自动获得 IP 地址(O) 使用下面的 IP 地址(S): IP 地址(I): 子网掩码(U): 默认网关(D): 	193.169.10.1 1 255.255.255.0 .	
自动获得 DNS 服务器地址(B)		
首选 DNS 服务器(P):		
备用 DNS 服务器(A):		
□ 退出时验证设置(L)	高级(V) 2 确定 取消	
	⑦ 월 193.169.10.254	
95P <u>开启全部 关闭全部</u> ② 微能 □ 运作模式 □ □ 反作模式 □ □ 天线网路设置 □ □ 无线网路设置 □ □ 入线网路设置 □ □ NAS □ □ 系統管理 □ □ 蓝牙	OWER APSoC 选择语言 Simple Chinese V 确定 犹态 统计 管理	

5.3.3 configuration DHCP

o bility



VDU2506 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) The following steps are to close the DHCP service

MAC 地址

DHCP 类型

IGMP Proxy

LLTD

UPNP

802.1d Spanning Tree

Router Advertisement

95POWER m)i)m)o)bility 局域网设置 <u>E启全部</u> 关闭全部 您可以启用/停止以及设置所有的网络功能。 微能) 运作模式 局域网设置 一网络设置 1 广域网络 网络名称 Mediatek 1 」局域网 IP 地址 172.16.10.254 DHCP 客户端列表 VPN Passthrough 子网络遮罩 255,255,255,0 高级路由配置 局域网 2 IPv6 ● 启用 ○ 停用 - - 无线网路设置 局域网 2 IP 地址 193.169.10.254]-- 🧰 NAT 设置 - NAS 局域网2子网络遮罩 255.255.255.0

2

~

3

取消

(null)

停用

停用 ~

停用 ~

停用 ~

停用 ~ 确定

Save

停用 ~

Here are the steps to set the DHCP server parameters:

(1) Set according to the steps shown in the diagram

- 🗀 系統管理

)- 🗀 蓋牙



😂 95POWER			m)i)m)o)bility
PARCHUR INTER	DHCP 类型	服务器 ~	
<u>王启全部 关闭全部</u>	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	
	惯用 DNS 服务器	168.95.1.1	
DHCP 客户端列表	其他 DNS 服务器	8.8.8.8 2	
	预设信关	172.16.10.254	
	释放时间	86400	
B	静态指定	MAC:	
▶ [_] 系統管理 ▶ [_] 蓋牙	静态指定	MAC:	
	静态指定	MAC:	
	802.1d Spanning Tree	停用 ~	
	LLTD	停用 ~	
	IGMP Proxy	停用 ~	
	UPNP	停用 ~	
	Router Advertisement	停用 ~ 3	
	Save	e 确定 取消	

5.3.4Bind IP address

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) You can first check the DHCP list of VDU2506 and copy the MAC corresponding to PC.The following is the steps to view the DHCP list:





(2) Bind THE IP address of PC through the following method. After binding, the PC is connected to VDU2506, and the IP obtained is the binding IP address.

	DHCP 类型	服务器 ~	
吕ح职 关闭 王郎	起始 IP 地址	172.16.10.100	
微能	结束 IP 地址	172.16.10.110	
□ 运作快式 □ 网络设置	子网络遮罩	255.255.255.0	
	惯用 DNS 服务器	168.95.1.1	
DHCP 客户端列表	其他 DNS 服务器	8.8.8.8	
····································	预设信关	172.16.10.254	
IPv6	释放时间	86400	
□ 元线网路设置 □ NAT 设置 □ NAS	静态指定	MAC: 3C:95:09:67:A1:5D IP: 172.16.10.100	
▲ 系統管理 ▲ 蓝牙	静态指定	MAC:	
	静态指定	MAC:	
	802.1d Spanning Tree	停用 ~	
	LLTD	停用 ~	
	IGMP Proxy	停用 ~	
	UPNP	停用 ~	
	Router Advertisement	停用 ~ 3	

5.4Wireless parameter configuration

5.4.1

VDU2506 Datasheet

Modify WIFI hotspot name and set fixed channel





网络模式	11b/g/n mixed mode ~
网络名称 (服务集合标识符)	SKYLAB_28A1E8F9C目
广播网络名称 (服务集合标识符)	◎ 启用 ○ 停用
AP Isolation	○启用.●停用
基本服务集合标识符	30:EB:1F:07:1B:A2
频率 (频道)	2452MHz (Channel 9) ~ 切换通信信道
高吞吐量实体模块	
运作模式	● 混合模式 ○ Green Field
频道带宽	○ 20 ● 20/40
保护间隔	○长 ●自动
MCS	Auto ~
反转方向权限(RDG)	● 停用 ○ 启用
延伸频道	2432MHz (Channel 5) V
空时分组编码(STBC)	○ 停用 ◉ 启用
聚合MAC业务数据单元 (A-MSDU)	● 停用 ○ 启用
自动单一区块确认	○ 停用 ● 启用



<u>王启全部</u> 关闭全部



至今版另来口你识付	30.ED. IF.07. IB.Az
频率 (频道)	2452MHz (Channel 9) V
高吞吐量实体模块	
运作模式	●混合模式 ○ Green Field
频道带宽	○ 20 ● 20/40
保护间隔	○长 ◉自动
MCS	Auto ~
反转方向权限(RDG)	●停用 ○启用
延伸频道	2432MHz (Channel 5) V
空时分组编码(STBC)	○停用 ◉启用
聚合MAC业务数据单元 (A-MSDU)	●停用 ○启用
自动单一区块确认	○停用 ◉启用
拒绝单一区块确认要求	● 停用 ○ 启用
HT Disallow TKIP	O Disable
HT LDPC	Disable OEnable
其它	
高吞吐量传送数据流	2 ~
高吞吐量接收数据流	2 ~
Save	e 确定 取消

93.169.10.254/index.shtml

5.4.2Set hotspot encryption/unencryption

Here is the step-by-step diagram for setting up an open hot spot:

m)i)m)o)bility

m)i)m)o)bility



😂 95POWER			m)i)m)o)bility
<u>开启全部 关闭全部</u>	Wireless Securit Setup the wireless securit	y and encryption Settings	ring.
□ 运作模式	Select SSID		
□ □ 网络设置 □ □ 元线网路设置	SSID choice	SKYLAB_28A1E8F9CE V	
	"SKYLAB_28A1E8F9CE"		
·····································	Security Mode	Disable ~ 2	
 □ 客户端列表 □ 统计资料 	访问策略		
田 🗀 NAT 设置	功能	停用 ~	
田 🗀 系統管理	新增:		
亩 蓋牙		Save Apply Cancel	

Here is the configuration diagram for setting up a password connection:

S 95POWER			m)i)m)o)bility
开启全部 关闭全部	Setup the wireless security and en	ncryption to prevent from unauthorized access and monitoring.	
3 微能	Select SSID		
□ 运作模式 □ □ □ 网络设置	SSID choice	SKYLAB_28A1E8F9CE ~	
	"SKYLAB_28A1E8F9CE"		
	Security Mode	WPA2-PSK 2	
	WPA		
□ 新計資料	WPA Algorithms		
田· 🔁 NAT 设置 田· 🛅 NAS	Pass Phrase	12345678 设置密码	
 豆 (三) 系統管理 豆 (三) 蓋牙 	Key Renewal Interval	3600 seconds (0~4194303)	
	PMF		
	MFPC	O Enable O Disable	
	MFPR		
	MFPSHA256	O Enable O Disable	
	访问策略		
	功能	停用 ~	
	新增:		
	s	ave Apply Cancel	

6 Server information configuration

The user can configure the server address and port information through the Web interface, which requires VDU2506 to be accessible. In addition, the default Internet access mode of VDU2506 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:

6.1 Configure for TCP protocol communication

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

S 95POWER			m) i)m) o) bility
开启全部 关闭全部	汇出设置		
⑦ 微能 □ 运作模式 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	汇出按钮	江出	
	汇入设置		
白····································	设置档位置	浏览 未选择文件。	
□······· 系統管理 ····································		汇入 取消	
·····································	装入原厂默认值		
	装入默认值按钮	装入默认值	
	Reboot System		
	Reboot System Button	Reboot System	
	Server Type:	TCP Server v	
	TCP Server Init		
	TCP Server Init IP Setting	193.169.10.1	
	TCP Server Init Port Setting	3333	
	3	Apply Cancel	







6.2 It is configured for UDP protocol communication

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



6.3 Configure for MQTT protocol communication

S 95POWER				m) i)m)o) bility-
开启全部丨关闭全部	Reboot System Button	Reboot System		
	Server Type: MQTT Server Init	MQTT	ſServer ∽ 2	
🗈 💼 网络设置 🖻 🫅 无线网路设置	Host	106.53.112.242		
田 🧰 NAT 设置	Port	1883		
系統管理	Pub	mqtt_pub		
·····································	Pub Qos	1	3	
	Sub	mqtt_sub		
·····································	Sub Qos	1		
亩 🧰 蓝牙	Keepalive(s)	30		
	Username	name		
	Password			海洋 い
	4	Apply Cancel		16以10 V 转到"设置



开启全部 | 关闭全部



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 =

m)i)m)o)bility

激活 V



7.System management configuration

7.1 Set up the WEB interface display

VDB2613 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) Select the language to be switched. Take Switching to English as an example. In figure 2, select English.



(1) Check the switching effect





7.2 factory data reset; restore factory setting

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



7.3 Restart the system

Here are the steps to restart the system



95 POWER			m) i) m) o) bility:
	设置档位置	浏览 未选择文件。 汇入 取消	
● ○ 网络设置 ● ○ 无线网路设置 ● ○ 无线网路设置 ● ○ NAT 设置 ● ○ NAS	装入原厂默认值 装入默认值按钮	装入默认值	
 日 → 系統管理 → 管理 1 → 上传韧体 → ひ 投置管理 → ひ 状态 	Reboot System Reboot System Button	Reboot System 2	
□ ○ # □ 统计资料	Server Type:	TCP Server ~	
e 🔁 ma	TCP Server Init		
	TCP Server Init IP Setting	10.10.101	
	TCP Server Init Port Setting	3333	
	3	Apply Cancel	激活 V

7.4 upgrade system

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

(1) 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.

😂 95POWER		m)i)m)o)bility
 田白白白白白白白白白白白白白白白白白白白白白白白白白	固件更新 與新Ralink SoCl面供获得新功能。上传更新Flash需要大约1分钟的时间请耐心等候。警告!不正常的Image将中断系统的运作。 回作更新 位置: 浏览 (v 0271.1.0)95Power_uImage_SKW92B_20200928) 確定 2 月 月 位置: 浏览 (v 0271.1.0)95Power_uImage_SKW92B_20200928) 確定 2 月 月 位置: 浏览 未选择文件。 確定 レpdate Bluetooth Location: 浏览 未选择文件。 Apply	



(2) 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

😂 95PDWER			m) i)m) o) bility
 开启全部 关闭全部 微能 ご作模式 ご作模式 がお設置 た线网路设置 へろはの路での MAT 设置 NAT 设置 への がな がな 	固件更新 更新Ralink SoC固件获得新功能。上传更新Flach需常的Image将中断系统的运作。 固件更新 位置: 浏览 确定 角確定 確定	要大约1分钟的时间清耐心等候,警告!不可 ing firmware d don't remove usb device resented	E
● _ 蓝牙	Update Bluetooth Location: 浏览 未 Apply	选择文件。	

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





7.5 Telnet test management

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

(1) Select Telnet protocol, host name 10.10.10.254, port default 23;

快速连接		×
协议(2): 主机名(11): 端口(2):	Telnet ✓ 10.10.10.254 23 防火墙(E):	~
□ 启动时显示	快速连接(W) 🛛 保存会话 □ 在标签页 	(V) 中打开(T) 取消



 $(\ensuremath{\textbf{2}})$ After entering the administrative terminal, use the command detection

✓ 10.10.10.254 (6)					4
BusyBox v1.12.1 (2020-09-0 Enter 'help' for a list of # ping 10.10.10.100 PING 10.10.10.100 (10.10.1 64 bytes from 10.10.10.100 64 bytes from 10.10.10.100 64 bytes from 10.10.10.100 64 bytes from 10.10.10.100 AC 10.10.10.100 ping stat 3 packets transmitted, 3 p round-trip min/avg/max = 4	7 19:21:03 CST) built-in comma 0.100): 56 data : seq=0 ttl=128 : seq=1 ttl=128 : seq=2 ttl=128 istics ackets received .100/4.866/5.60	built-in s nds. bytes time=4.900 time=5.600 time=4.100 , 0% packet 0 ms	shell () ms) ms) ms : loss	ash)	
"■	Telnet	16.3 24	র্নি. ৪০ঈা	VT100	大百 数字



8 Package



Accessories	Quantity	Remark
DC power supply	12/box (each base station/1)	Customers do not need to use POE power supply
Mounting screws	12 packs (each base station/1 pack)	Required options
Plastic rack	12 (each base station/1)	Required options

9 Reversion History

Version	Remark	Maker	Date
V1.01	Initial Release	Rowen	2020/11/23
V1.02	Update software configuration guide	Sherman	2020.12.10

10 Contact information

95Power Information Technology Co., Ltd

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