

# Common problems and solutions for users



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The list of currently supported products is as follows

Product Name	Eport-E10	Eport-E20	Eport-E30	Eport Pro-EP10	Eport Pro-EP20
Product Picture	o ces	Epertado International Internation		• cez	( all

# Super Ethernet Port Product :

#### Ethernet Serial Server Product :

Product Type	HF5111B	HF5142B	HF5111A	HF5142A
Product Name				HIGH AND AND AND A

#### Wi-Fi Serial Server Product :

Product Type	Wport-W10	Wport-W20	HF2211	HF2221
Product Name	Wiport-W10 MAC ACCESSMENAS BRAIL (C. M.S.	Wport-W20 Michael Constant Michael Const		

## 3G、4G Serial Server:



## Remote IO Controller Class:

Product Type	HF6108	HF6208	HF6508
Product Name		HF6208	CONTRACTOR OF CONTRACTOR



1. HOW TO	D ENTER TH	E CLI COM	MAND MODE?						
answer : a ) s	serial mode。								
Steps 1 : Download SecureCRT Tool :									
http://gb	http://gb.hi-flying.com/download_detail_dc/downloadsId=22.html								
Steps 2 :	Set the actual	device serial p	arameters, baud rat	e and so o	n.				
Steps 3 :	Button bar to a	add "+++" bu	tton command.						
COM4	- SecureCRT			-	- 🗆	$\times$			
文件(F) 编辑(E)	查看(V) 选项(O)	传输(T) 脚本(S)	工具(L) 帮助(H)						
\$\$ \$\$ C \$\$ <b>\$</b>	✓ 菜单栏(M)	r 🕸 1	💿   🔤 🖕						
Serial-COM4	✓ 工具栏(T)		_			×			
EPORT> Show Restart	<ul> <li>✓ 会话标签页(B</li> <li>✓ 交互窗口(C)</li> </ul>	) r	SOCK FwUpgrade	DATA Debug		^			
EXIT EPORT>EXIT	<ul> <li>✓ 状态栏(S)</li> <li>✓ 按钮栏(U)</li> </ul>								
Serial-COM4	土甌(E) - SecureCRT			_	- 🗆	×			
文件(F) 编辑(E)	查看(V) 选项(O)	传输(T) 脚本(S)	工具(L) 帮助(H)						
🔊 🕄 🖓 🖓 🖇	3  🖻 🐔 🗛   😼	5 🥑 🚰 💥 1	'   🞯   🖪 🖕						
Serial-COM4						×			
EPORT> Show Restart Exit EPORT>Exit	SYS Reload	UART WIFI	SOCK FwUpgrade	DATA Debug		^			
映射按钮				×					
- 71/15									
动作 功能(E) 发送字符串	······································	发送字符 <b>串</b>	标签U						
发送字符串命 ☞ - 发送一个回 ☞ - 发送一个新	令 (本 (CR) / / p - <sup>- 3</sup> (行 (LF) / t - 2	暫停一秒 发送一个TAB	\e - 发送一个ESC \b - 发送一个退格						
清除(C)			确定 取消						
🥥 +++ 🕝 a	💿 STA 💿 W	ss 🥥 Ws 🔘	AT+Z 💿 AT+ 🎯 WSLC	2 🥥 10.2 🥥	10.1 Def	v au ∨			

Steps 4 : UI shows "EPORT>" which means module has entered the CLI command mode.



🝙 Serial-COM4 - SecureCRT	-	×
文件(F) 编辑(E) 查看(V) 选项(Q) 传输(T) 脚本(S) 工具(L) 帮助(H)		
19 30 G 49 10 🗈 🛍 H 😼 50 🔿 12 12 10 12 🕫 🗸		
Serial-COM4		×
EPORT>		^

Note:

Any serial port tools which can be sent "+++" must be a continuous packet of data, before and after can not have other data (such as enter and newline characters).

## **b** ) Telnet Mode.

Steps 1 : Input the IP address of the device (IP address can be searched by

IOTService tool),	port 23.			
http://192.168.0.12	1 - 未连接 - SecureCRT	_		$\times$
文件(F) 编辑(E) 查	看(V) 选项(O) 传输(T) 脚本(S) 工具(L) 帮助(H)			
1 🕄 🕄 🖓 🖓 💷	a 🛝 👫   😼 😼   🚰 💥 🏌   🞯   🔤 💂			
http://192.168.0.121	快速连接 X			×
	协议(P):			î
	主机名(H): 192.168.0.121			
	端口(O): 23 防火墙(F): None ~			
				~
🞯 +++ 🞯 a 🛛 😡		🕥 10	).1 Det	ai ~

Steps 2 : The default login name and password are both admin, then it shows "EPORT> " which means module has entered the CLI command mode

a 192.168.0.121 - SecureCRT	-	×
文件(F) 编辑(E) 查看(V) 选项(O) 传输(T) 脚本(S) 工具(L) 帮助(H)		
🖏 🕄 🖓 🎝 I 🖻 🛝 👬 I 😼 🛸 📑 🚰 💥 🏌 I 🞯 I 📰 💂		
192.168.0.121		×
login:admin password:		^
EPORT>		



# 2. HOW TO MODIFY THE FOLLOWING WEB PAGE AND DISPLAY IOTSERVICE DEVICE NAME ?

🕒 HF2211 🛛 🗙						9	– u	X
← → C ③ 192.168.0.121/index.html ☆ :								
							Eng	lish ∨
STATUS	Status System run	ning status overview						
SYSTEM SETTINGS	System S	State			Helper			
SERIAL PORT SETTINGS	Product N HF2211	lame	MAC F0FE6B53697	D	Product Name			
COMMUNICATION SETTINGS						-		×
Management (M) Setting (C)	Help (H)							
Begin 💥 Stop Config 🔍 Status 🚏 VirPath						Disconn	ected	
SN DevType MAC Address	HostName	IP	Position	VirPath	State	:	SW Ver	
1 HF2211 F0FE6B536970	Eport-HF2211	192.168.0.121	Local		Online	1.10g5	i	

# Answer : Modify by Cli instruction.

Steps 1 : Enter Cli instruction mode.

Steps 2 : Enter the following directory to modify the CustomerID to a custom value (available in the Cli command mode tab to display available commands or fill command, the command is case sensitive).



## **Results show :**

Restart the tool or refresh the page to see the effect.

🔛 I.O.T Service —						- 🗆 X			
!	Management (M) Setting (C) Help (H)								
	Begin 💥 Stop Config 🔍 Status 🚏 VirPath								
	SN	DevType	MAC Address	HostName	IP	Position	VirPath	State	SW Ver
	-	AAAAAA	F0FE6B536970	Eport-HF2211	192.168.0.121	Local		Online	1.10g5



← → C [① 192.168.0.121/index.html ☆]							
English v							
Status System running status overview							
SYSTEM SETTINGS	System State	System State					
SERIAL PORT SETTINGS	Product Name AAAAAA	MAC F0FE6B536970	System running status overview				



# 3. HOW TO MODIFY THE HOST NAME DISPLAYED ON THE ROUTER DHCP CLIENT ?

→ TENDA 11N无线路由器 ×							
← → C ① 192.168.0.1/advar	ice.asp						
上网设置	IP 地址	192.168.0.					
MAC克隆	MAC 地址	:			添加		
WAN速率控制	序号 :	IP地址	MAC地址	刪	除		
LAN口设置							
DNS设置							
DHCP服务器					刷新		
DHCP客户端列表	主机名	IP地	址 MAC地址	Ŀ	租约时间		
	Apple-PC	192. :	.68.0.108 64:76:E	A:AD:2A:6A	00:08:25		
	PC-20160705XLHZ	192. :	68.0.120 B8:EE:6	5:5C:5E:A3	00:09:18		
	DESKTOP-L1GRQ8P	192. :	68.0.123 50:7B:9	D:CD:50:0A	00:34:24		
	Eport-HF2211	192. :	68.0.121 FO:FE:6	B:53:69:73	00:35:38		
😭 I.O.T Service	,	400			-		
Management (M) Setting (C) Help (H)							
Begin 💥 Stop 🔅 Config 🔍 Status 🚏 VirPath							
SN DevType MAC Address HostNa	ime IP	Position	VirPath	State	SW Ver		
1 HF2211 F0FE6B536970 Eport-HF2	211 192.168.0.121	Local		Online	1.10g5		

# Answer : Through IOTService tools or Web pages.

# a ) IOTService Tools

🔝 Device Setting

System		SOCKET	
User:	admin	SOCKET Name:	vthrough 💌
Password:	admin	Protocol	
HostName:	BBBBB	11010001.	
DHCP:	Enable 🔻	Server Addr:	192.168.0.112
IP Address:	10.10.100.10	Server Port:	28987
Mask:	255.255.255.0	Local Port:	0
Gate Way:	10.10.100.254	Keep Alive:	
DNS:	10.10.100.254	Time Out:	0
Network Mode:	Router 👻	Rout:	netp 💌
UART		Buffer Size:	1500
UART No:	UART 1 💌	New SOCKET	SOCKET Del
Baudrate:	115200 🔻		



b ) Web Pages							
TENDA 11N无线路由器 × 凸 AAAAAA ×							
← → ℃ ③ 不安全   192.168.0.12	1/system.html						
System Settings Change the device system settings							
SYSTEM SETTINGS	Authentication						
SERIAL PORT SETTINGS	User Name	admin					
COMMUNICATION SETTINGS	Password	·····					
CUSTOM SETTINGS	CUSTOM SETTINGS Network Information						
OTHERS	Host Name	BBBBB					
	Network Mode	Router					

# **Results show :**

Restart the device after setup, login to the router to view the device hostname.

⑦ TENDA 11N无线路由器 × □ AAAAAA ×								
← → C ① 不安全   192.168.0.1/advance.asp								
DHCP客户端列表 主机名 IP地址 MAC地址 租约时间								
	GSOV2 JDKCMT3XMF	192.168.0.119	14:2D:27:FD:F8:E9	00:31:53				
	FWR310	192. 168. 0. 101	28:2C:B2:D2:E5:97	00:33:12				
	android-db4fa32bc344f65f	192. 168. 0. 117	C0:9F:05:05:1A:1A	00:35:13				
	you	192. 168. 0. 113	70:EF:00:3F:DF:93	00:35:13				
	DESKTOP-L1GRQ8P	192. 168. 0. 123	50:7B:9D:CD:50:0A	00:38:29				
	unknown	192.168.0.102	10:BF:48:E6:F3:97	00:44:29				
	dongyindeiPhone	192. 168. 0. 122	BC:9F:EF:04:37:D2	00:48:36				
	iPad	192, 168, 0, 109	E0:66:78:14:F1:C0	00:54:04				
	vivo-¥66	192.168.0.106	70:D9:23:28:1A:52	00:55:55				
	iPhone	192.168.0.104	84:41:67:50:F7:78	00:56:30				
	ORVIBO_COCO_E10	192. 168. 0. 100	AC:CF:23:6C:38:50	00:57:20				
	BBBBB	192, 168, 0, 121	F0:FE:6B:53:69:73	00:59:52				



X

# 4. HOW TO MODIFY THE HF2211 DEVICE AS A STATIC IP ADDRESS ?

Answer : Through IOTService tools or Web pages which is similar to other industrial products.

#### a ) IOTService TOOLS

Steps 1 : HF2211 Ethernet interface directly connected to the router LAN port, PC is also connected to the router.

Steps 2 : Open the IOTService tool to modify the configuration, restart after the modification is effective.

System	SOCKET	WiFi	
User: admin	SOCKET Name: vthrough 💌	Mode:	AP
Password: admin	Protocol: UDP-CLIENT V	AP SSID:	HF2211_6970
HostName: BBBBB		AP Key:	
DHCP: Disable 🔻	Server Addr. 192.168.0.112	STA SSID:	
IP Address: 192.168.0.50	Server Port: 28987	STA Key:	
Mask: 255.255.255.0	Local Port: 0		Scan
Gate Way: 192.168.0.1	Keep Alive: 60		
DNS: 192.168.0.1	Time Out: 0		
Network Mode: Router 💌	Rout: netp 🔽		
UART	Buffer Size: 1500		
UART No: UART 1 💌	New SOCKET SOCKET Del		
Baudrate: 115200 💌			
Data Bits: 8	LAN-		
Stop Bits: 1	IP Address: 10.10.100.254		
Parity: NONE 💌	Maskr 255 255 0	Confirm	Cancel Detail
Flow Control: Half-Duplex	255.255.255.0	Export	Import
Buffer Size: 8192	DHCP:	F-Set Update	F-Set Clear VirPath

## b ) Web Pages

Steps 1 : WIFI connects to HF2211 device hotspot, hotspot name starts with "HF2211\_".

Steps 2 : Input IP "10.10.100.254" in browser, restart the following modified WAN parameters.



STATUS	System Sett Change the device syste	ings em settings	
SYSTEM SETTINGS	Authentication		Helper
SERIAL PORT SETTINGS	User Name	admin	Web login username
COMMUNICATION SETTINGS	Password	•••••	
CUSTOM SETTINGS	Network Information	tion	
OTHERS	Host Name	BBBBB	
	Network Mode	Router	
	WAN Settings		
	DHCP	OFF	
	WAN IP	192.168.0.50	
	Subnet Mask	255.255.255.0	
	Gateway	192.168.0.1	
	DNS	192.168.0.1	

Note:

You can also use the network cable directly connected to the PC and HF2211, but the HF2211 network port with different wireless operating mode IP address will be different (AP mode network port is LAN port, direct connection LAN IP is 10.10.100.254, STA mode network port is WAN port, directly connected with Auto IP: 169.254.173.207).

# **Results show :**

😫 I.O.T Service — 🗆								
Management (M) Setting (C) Help (H)								
Begin 💥 Stop 😳 Config 🔍 Status 🚏 VirPath								
3N DevType MAC Address HostName IP Position VirPath	State	SW Ver						
1 AAAAAA F0FE6B536970 BBBBB 192.168.0.50 Local	Online	1.10g5						



# 5. HOW TO SAVE THE MODIFIED PARAMETERS AS FACTORY PARAMETERS ?

Answer : Through the IOTService tool or web page factory parameters save function, so that even after the factory reset to restore the current saved parameters, otherwise it will restore the most primitive parameters of the device.

a) IOTService Tools

🔡 Device Setting			×
System		SOCKET	WiFi
User:	admin	SOCKET Name:	Mode: AP 💌
Password:	admin		AP SSID: HF2211_6970
HostName:	BBBBB	Protocol:	AP Key:
DHCP:	Disable 💌	Server Addr: 192.168.0.112	STA SSID: HF2211
IP Address:	192,168.0.50	Server Port: 28987	STA Key:
Mask:	255.255.255.0	Local Port: 0	Scan
Gate Way:	192.168.0.1	Keep Alive: 60	
DNS:	192.168.0.1	Time Out:	
Network Mode:	Router -	Rout: netp 💌	
UART		Buffer Size: 1500	
UART No:	UART 1 🔻	New SOCKET SOCKET Del	
Baudrate:	230400 💌		-
Data Bits:	8 🗸		
Stop Bits:	1 💌	IP Address: 10.10.100.254	
Parity:	NONE	Maala 055 055 055 055 055 055 055 055 055 05	Confirm Cancel Detail
Flow Control:	Half-Duplex 🔻	Mask. 255.255.255.0	Export Import
Buffer Size:	8192	DHCP: Enable	F-Set Update F-Set Clear VirPath

# **b** ) Web Pages

そ TENDA 11N无线路由器 × ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲	<b>0</b> − □ ×						
← → C (1) 192.168.0.50/others.h	- → C ① 192.168.0.50/others.html						
		English v					
STATUS	Others change the device other settings						
SYSTEM SETTINGS	Backup/Restore Configuration	Helper					
SERIAL PORT SETTINGS	Backup Backup	Backup/Restore Configuration					
COMMUNICATION SETTINGS	Restore + Choose File						
CUSTOM SETTINGS	Upgrade						
OTHERS	Firmware + Choose File						
	Factory Settings						
	Set Set						
	Clear Clear						
	Reload/Restart						

#### Note :



The saved factory parameters can also be cleared by the Clear button.



# 6. CAN PING EQUIPMENT IP BUT WHY NOT OPEN WEB CONFIGURATION PAGE ?

Answer : There may be the following situations.

a ) Upgrade the new program but did not update the corresponding page, the latest firmware and web page upgrade file can contact Hi-flying, enter IP / hide.html login to the internal web page, the first [select file] to upgrade the application, the second [ Select File] to upgrade external web pages.

←	$\rightarrow$ G	<b>(i)</b>	192.168.2.105/hide.html

Upgrade application
选择文件 未选择任何文件
Upload
Upgrade customized webpage
选择文件 未选择任何文件
Upload

b) Browser version, the device supports IE10, Chrome, Firefox and other browsers, but does not support 360 browser, IE version less than 10. Because some versions do not support, Google Chrome is optimally recommended.



# 7. AFTER SETTING THE STATIC IP OF THE DEVICE, BUT FORGET THE PARAMETERS SET BEFORE THE DEVICE AND THE NETWORK ENVIRONMENT HAS CHANGED, HOW TO RESTORE ?

Answer : There are several ways.

a) Long press the device's Reset button for more than 3 seconds until release, which will restore the factory settings, the device will automatically restart.

**b** ) The serial port enters Cli order, Reload resumes the factory setting.

Serial-COM4 -	SecureCRT			_	$\times$
文件(E) 编辑(E)	查看(V) 选项( <u>0</u> )	传输(工) 脚本( <u>S</u> )	工具(L) 帮助(H)		
X X 🖓 🖓 🖇	)  🖻 🖺 👫   😼	5 🦪 🕈 🕉 1	😨   🖃 🖕		
Serial-COM4					×
EPORT>EPORT> Show Restart Exit	SYS Reload	UART WIFI	SOCK FwUpgrade	DATA Debug	^
EPORT>Reload Restart					

c) Network cable directly connected to the PC and equipment, use the broadcast search method to find the current static IP device to modify. Modify the PC into the same network segment and restart the device, you can use the tool to re-configure the device.

🔝 I.O.T S	ervice							- 🗆 X
<u>M</u> anageme	ent (M)	Setting (C)	Help (H)					
Be	gin 🖇	Software Sett Default Settin	ng Ctrl-M	Status	VirPath		1	Disconnected
SN DevT	ype M	Add Device	Ctrl-I	IP	Position	VirPath	State	SW Ver
	Ļ	BroadCast S	can					
		<u>L</u> anguage	•					
🔛 I.O.T Se	ervice							- 🗆 🗙
<u>M</u> anageme	ent (M)	Setting (C)	Help (H)					
Be	gin 义	🔇 Stop 【	Config	Status 🐺	/irPath		(	Disconnected
SN DevT	ype MA	C Address	HostName	IP	Position	VirPath	State	SW Ver
1	🕈 Broad	Cast Scan			>	×		
	SN	DevTyp	e MAC	Address	IP			
1		HF2211	F0FE6B53	36970 10.1	0.101.10			



# 8. HOW TO UPGRADE THE PROGRAM?

#### Answer : There are several ways.

#### a) External webpage mode.

⑦ TENDA 11N无线路由器 × □ AAAAAAA ×									
← → C ③ 192.168.0.121/others	← → C ③ 192.168.0.121/others.html								
	0.1								
STATUS	Others								
SYSTEM SETTINGS	Backup/Restore Configuration	He							
SERIAL PORT SETTINGS	Backup Backup	Uplo							
COMMUNICATION SETTINGS	Restore + Choose File								
CUSTOM SETTINGS	Upgrade								
OTHERS	Firmware + Choose File								
b ) Internal web page	approach.								
→ TENDA 11N无线路由器 ×	192.168.0.121/hide.htm ×	_							
← → C <b>③</b> 192.168.0.12	1/hide.html								
Upgrade application	7								
选择文件 未选择任何文件									
Upload									
Upgrade customized webpage									
选择文件 未选择任何文件									

c) IOTService tools, upgrade with IOTService tools need to register IOTBridge account (see IOTService tool instructions), part of the product firmware has been stored on our server. Just log in to the account you can perform local or remote device upgrade action. Contact Hi-flying to get this support, follow-up IOTBridge will open the firmware user upload feature to facilitate the management of user-customized firmware.

Upload

						WORKSHOP
🗟 I.O.T Service						- 🗆 X
Management (M) Setting (C) Help (H)						
Begin 💥 Stop 💮 Config 🔍 Sta	atus 🐺 V	ïrPath				Connected
SN DevType MAC Address HostName	IP	Position		VirPath	State	SW Ver
1 AAAAAA F0FE6B536970 Eport-HF2211 192.1	68.0.121	Local			Online	1.10g5
2 HF5111B F0FE6B3DDA Eport-HF5111B 124.6	4.108.89	China.Beijing			Offline	1.10
3 HF2221 F0FE6B5DE760 Eport-HF2221 116.2	31.252.239	China.Shanghai	TCP-SER	VER/,Disconnect	Offline	1.10c
4 HF2421 F0FE6B7BD3 Eport-HF2421 112.6	4.189.2	Douteo MAC			Offline	1.10d New Ver
5 E10 F0FE6B3A42FE Eport-E10 116.2	31.252. Copy	Device MAC			Offline	1.10
6 HF5111B F0FE6B3DDB Eport-HF5111B 116.2	31.252. Devi	ce Table Filter			Offline	1.10c
7 E10 F0FE6BA04AEF Eport-E10 116.2	31.252. Refre	esh		ENT/192.168.0.12	Offline	1.10
	Dele	te Selected Devic	е	_		
	Upgr	ade Firmware Se	lected			
	Upgr	ade Firmware All				

d ) Upgrade Tools, you can use this tool to batch upgrade all devices in the LAN, upgrade applications, web pages, configuration parameters and scripts. Please contact Hi-flying for this support.

🗟 Upgrade Tool V1.5	а				– 🗆 ×
Management Setting					
Start Scan	Stop Scan		测试数量	: () 成功数量: (	0 失败数里: 0 清零
SN DevType	MAC Address	IP	SW Ver	Status	- Setting
1 AAAAAA	F0FE6B536970	192.168.0.121	1.10g5		Auto Upgrade Upgrad APP Upgrad Web Upgrad Cfg Reload Upgrad Script Product Type: E10 Customer ID:



# 9. WHY IOTSERVICE TOOL CAN NOT FIND THE DEVICE?

Answer : There are several possibilities.

a) In the LAN environment, the device that searches for the router above the network is not supported at present. That is, the network is as shown in the following figure. The PC1 can not search the upper-level device. If the network environment itself can communicate with the external network, the PC1 can be configured remotely using IOTService. If you do not Unicom extranet, this environment can only be configured by the tool installed on the PC2.



b) LAN environment, set the IP of the device but may not be in the same network segment with the router, through IOTService broadcast search function can be modified to the same network segment and then configure.

🔛 I.O.	T Service						– 🗆 🗙
<u>M</u> anage	ement (M)	Setting (C) Help	(H)				
	Begin 📡	🔇 Stop 🍈 🔿	config 🔍 Status 🕻	VirPath			Disconnected
SN D	evType MA	C Address Ho	stName IP	Position	VirPath	State	SW Ver
	🔝 Broad	Cast Scan			×		
	SN	DevType	MAC Address	IP			
	1	HF2211	F0FE6B536970	10.10.101.10			

c) LAN environment, the device IP can PING, but IOTService tools still can not search the device. Make sure the computer is enabled to only one network card, all other cards are disabled, including the virtual network adapter.



d) Remote environment, IOTService set the account information, you can see all the devices under the current account. When the device shows online state, the first double-click the device may be timeout error, you can directly double-click again to enter.

# **10.WHY RS232 CAN NOT COMMUNICATE?**

Answer : Check the serial port parameters, check the serial port cable, serial cable requires 2-3 cross. It is recommended to use the serial cable we provide.



Pin Number	Name	Description
2	RXD	Receive Data
3	TXD	Send Data
5	GND	GND
7	RTS	Request to Send
8	СТЅ	Clear to Send

# 11. WHY RS232 FLOW CONTROL FUNCTION CAN NOT BE USED?

Answer : Check the serial port parameters and the serial cable. Serial cable requires 2-3 cross, 7-8 cross. The serial cable we provide is 2-3 cross, and 7-8 cross does not cross, such as the need for 7-8 cross.Please in advance contact us.



Levice Setting						*
System		SOCKET		WiFi		
User:	admin	SOCKET Name:	vthrough 💌	Mode:	AP	-
Password:	admin	Protocol:	UDP-CLIENT	AP SSID:		HF2211_6970
HostName:	Eport-HF2211	Server Addr:	192 168 0 112	AP Key:		
DHCP:	Enable 🔻	Server Port	20007	STA SSID:		
IP Address:	10.10.101.10	Server Fort.	28987	STA Key:		
Mask:	255.255.255.0	Local Port:	0		Scan	
Gate Way:	10.10.101.254	Keep Alive:	60			
DNS:	10.10.101.254	Time Out:	0			
Network Mode:	Router 👻	Rout:	netp 💌			
UART		Buffer Size:	1500			
UART No:	JART 1 🔻	New SOCKET	SOCKET Del			
Baudrate: 1	115200 🔻					
Data Bits: 8	3 🔻	LAN				
Stop Bits: 1	1 💌	IP Address:	10.10.100.254			
Parity:	NONE 🔻	Mask:	255.255.255.0	Contirm	Cancel	Detail
Flow Control: F	FlowCtrl 🔻	DHCP.	Enable	Export	Import	VirPath
Buffer Size:	8192	brior.		F-Set Update	F-Set Clear	viii dui

# 12.WHY RS232 CAN COMMUNICATE, BUT RS485 CAN NOT COMMUNICATE ?

Answer : Check the serial port parameters, RS485 communication. The serial port needs to be set to half-duplex mode, as shown below.

🕈 Device Setting				×
System		SOCKET	WiFi	
User:	admin	SOCKET Name: vthrough	Mode:	AP
Password:	admin	Protocol: UDP-CLIENT	AP SSID:	HF2211_6970
HostName:	Eport-HF2211	Server Addr: 192 168 0	AP Key:	
DHCP:	Enable 💌	Server Port 28	987 STA Kor	
IP Address:		Local Part		
Mask:				Scan
Gate Way:	10.10.101.254	Keep Alive:		
DNS:	10.10.101.254			
Network Mode:	Router	Rout:		
UART		Buffer Size: 1	500	
UART NO:	UART 1 👻	New SOCKET SOCKET Del		
Baudrate:	115200 -			
Ston Bits:		LAN		
Parity:	NONE	IP Address: 10.10.100.	254 Confirm	Cancel
Flow Control:	Half-Duplex V	Mask: 255.255.25	i5.0 Export	Import
Buffer Size:	Disable	DHCP: Enable	F-Set Update	F-Set Clear VirPath
	FlowCtrl Half-Duplex			

# 13. HOW TO ENABLE STA MODE ROAMING FUNCTION OF HF2211 ?

Answer : Enter the Cli command mode, and following is the command to enable



roaming function. Take effect after restart. The parameters are as follows. Roaming: Enable / disable roaming function.

ScanRssi: scan threshold, the unit of percentage value, the current signal strength below is the set value, start the scan.

ScanInterval: scan interval, in seconds, scan for a period of time whether there is a stronger signal strength AP of the same name.

ReconnectRssi: reconnection signal strength threshold. The current signal strength is lower than ScanRssi. Start the scan, when scanning to the proportion of signal with stronger strength, the switch is connected to a new AP. The switching process may take some time.

EPORT/WIFI>Roaming Enable

SET-OK EPORT/WIFI>Roaming Enable Roaming:Enable ScanRssi:40 ScanInterval:5 ReconnectRssi:60 EPORT/WIFI>Roaming Enable 50 6 70 SET-OK EPORT/WIFI>Roaming Roaming:Enable ScanRssi:50 ScanInterval:6 ReconnectRssi:70

# 14. HOW TO HIDE THE HF2211 AP HOTSPOT?

Answer : Enter Cli command mode and enable hidden SSID.

EPORT/WIFI>HideSSID On SET-OK



# 15. HOW TO SET THE HEARTBEAT PACKET (SEND DATA REGULARLY) FUNCTION ?

Answer : Through the IOTService tools, Web page settings.

a )IOTService tool, the device supports TCP client to send heartbeat packets by default, the heartbeat packet interval is keepalive value (same as keepalive packet time in the bottom).

System							×
Telnet: Enable V	UART No:		CKET		WiFi		
Teinet Port: 23	UART Brotocol:		CKET Name:	noto 🖛	Mode:	AP	-
Telnet Echo: Enable 💌			oner Hume.	net I	AP SSID:		HF2211_6970
Embedded Web: Enable 💌	Frame Length:	16 Pro	itocol:	TCP-CLIENT	AP Key:		
Web Port: 80	Frame Time:	100 Ser	rver Addr:	192.168.0.123	STA SSID:		
NTP: Disable 👻	Tag Enable:	sable 🔻 Ser	rver Port:	9000	STA Key:		
NTP Server:	Tag Start:	0 Loo	cal Port:			Scan	
NTP Port: 123	Tag End:	0 Ke	ep Alive:	60			
NTP GMT: 0	SW Flow Control:	sable Tim	ne Out:	0			
SOCKET		Ro	ut	uart			
SOCKET Name:	Xon:						
Security:	Xoff:	13 But	ter Size:	8192			
Security Key:	Cli Getin: Serial-St	ring 👻	New SOCKET	SOCKET Del			
	Serial-String:	+++					
Connect Mode:	Cli Wait Time:	300 LAN					
Connect mode.		IP /	Address:	10.10.100.254	Confirm	Cancel	
Stop Serial:		Ma	sk	255.255.255.0	Export	Import	Detail
HeartBeat. Enable 💌	His	Para DH	ICP:	Enable 💌			VirPath
HeartBeat Serial: AAAAAB	Cancel				F-Set Opdate	F-Set Clear	
b ) Web Pages						θ –	_ ×
AAAA	AA X						
← → C ③ 192.168.0.121/socket.h	itml						፼ ☆ :
	change the device socke	t settings					
SYSTEM SETTINGS				under L A dat	Helper		
STSTEWISETTINGS				Hetp +Add	neipei		
SERIAL PORT SETTINGS	Basic Settings				Basic Setting	gs	
COMMUNICATION SETTINGS	Name	netp					
CUSTOM SETTINGS	Buffer Size	8192					
	Keep Alive(s)	60					
OTHERS	Timeout(s)	0					
	Protocol Settings						
	Protocol	Tcp Client		•			
	Local Port	8899					
	Server	192.168.0.123					
	Server Port	9000					
	Connect Mode	Always		¥			
	Heart Beat	ON					
	Heart Beat Code	АААААВ					

Note :

- 1. The heartbeat packet up to 12 bytes.
- 2、 If you need to send hexadecimal data, the characters are separated by



Setup Detail			
System			
Telnet:	Enable 💌	UART No:	UART 1
Telnet Port:	23	UART Protocol:	NONE
Telnet Echo:	Enable 💌	Frame Length:	16
Embedded Web:	Enable 🔻	Frame Time:	
Web Port:	80	Tog Epoble:	Dischlo
NTP:	Disable 💌	Tay Ellable.	Disable
NTP Server:		Tag Start:	
NTP Port:	123	Tag End:	
NTP GMT:	0 💌	SW Flow Control:	Disable 🔻
SOCKET		Xon:	
SOCKET Name:	netp 💌	Xoff:	
Security:	Disable 🔻		Querial Obia a
Security Key:		Cil Geun.	Senai-Sunng
		Serial-String:	+++
Connect Mode:	Always 💌	Cli Wait Time:	300
Stop Serial:			
HeartBeat:	Enable 💌	Confirm	His Para
HeartBeat Serial:		Cancel	Tho Fara

spaces, as shown below.

3. heartbeat package function can also be achieved through the script to meet the special needs, such as the following functions can be achieved through the script. Please see "HIS script" application documentation.

# A.1. Demands

When netp socket channel has conneted, serial port will send "netp connected". "netp disconnected" when the network is shut down.

When netp Socket channel is normal, it send "hearbeat data" in every 30 seconds.

#### Result Show

Result Show .						
🎉 TCP&UDP测试工具 - [192.168.0.121:8899]		- 🗆 🗙	10vez e acrovez	35000 36000 1 3	LA VLOODE /15	
↓© TCP&QUDPBHTIF - [192.168.0.121.8899]         ○ Operate(②) View(ゾ) Windows(Ŭ) Help(H)         ③ CreateConn ③ CreateServer   ⑧ Streete         □ CreateConn ④ CreateServer   ⑧ Streete         □ □ [S8.0.121.8899         □ □ Server: Mode         □ ⊕ 192.168.0.123.9900         □ □ 192.168.0.121.8899	Language er & Origonal DisconnAll DisconnAll DisconnAll Disconnell 12:102.108.0.121-8899 2:102.0.121-8899 DestFor: 19:2108.0.121- 19:210-	- X X Seed Step Clear Option	Setup Detail System Telnet Port Telnet Echo: Embedded Web: Web Port NTP: NTP Perver: NTP Port NTP GMT: SOCKET SOCKET SOCKET SocKET Connect Mode: The Seturity	Enable V Enable V Enable V Enable V Bol Disable V Disable V Disable V	UART UART No: UART Protocot: Frame Length: Frame Time: Tag Enable: Tag Start: Tag Enable: SW Flow Controt: Xon: Xont: Cli Getin: Serial-String: Cli Wait Time:	X VART 1 V NONE V 18 100 Disable V 0 0 0 0 0 0 0 0 0 0 0 0 0
			Stop Serial: HeartBeat: HeartBeat Serial:	Enable V AA BB CC DD EE FF	Confirm	His Para



# **16. VPN MODE 1 TO MANY TESTS**

Answer : Through the IOTService tools and SecureCRT tools

a) Through the serial port tool, send +++ into cli mode to open each VPN

```
mode HF2421, and set the test VPN server address: 112.124.43.15
```

EPORT>SYS EPORT/SYS>Net EPORT/SYS/Net	work work>			
Show VPN Lan EPORT/SYS/Net	DHCP PortForward Mode work>	DNS EthMode Quit	HostName Traffic	APN Traffic
	EPORT/SYS>Net EPORT/SYS/Net Input NAT Ser Input User Na Input Passwor SET-OK	work work>VPN Ena ver Address: me[]:hiflyin d:test123	ble 112.124.43.15 g	

When set-ok appears, it reboots, indicating that the VPN setting is successful. The same HF2421 is also configured the same way. After the setting is successful, sys / network is queried for the following figure.

5 5	
EPOKT/STS/Network>vpit	
EPORT/SYS/Network>VPN	
Enable	
Server:112.124.43.15	
Local IP:192.168.18.4	
EPORT/SYS/Network>	

# **b** ) Open IOTService tools

The computer connects to the Ethernet network interface of the device 1 through the wifi or network cable of the device 1, and opens the IOTService tool to search for the device, as shown in the figure.

0

✿ I.O.T 服务软件									
管理 (M) 设置 (C) 帮助 (H)									
自动服务       〇       设备编辑       〇       设备状态       受 虚拟通道									
序设备类型 MAC地址	主机名	IPt他址	位罟	虚拟诵道	状态	软件版本			
1 HF2421 F0FE6B883514 Ep	ort-HF2421 10	0.10.100.254	本地		在线	1.10g			
2 HF2211 F0FE6B5DB5A0 Ep	ort-HF2211 10	01.81.240.177	中国上海		离线	1.09] 新版本			
3 HF2211 F0FE6B5DBC Ep	ort-HF2211 10	01.81.240.177	中国.上海		离线	1.09j 新版本			
4 HF2211 F0FE6B536E24 Ep	ort-HF2211 11	16.231.252.239	中国.上海	COM2/UDP,未连接	离线	1.10c			
5 HF2211 ACCF23FF6080 Ep	ort-HF2211 10	01.81.240.177	中国.上海		离线	1.10c			
6 HF2211 F0FE6BAD7A04 Ep	ort-HF2211 10	01.88.239.205	中国.上海		离线	1.20			

Then enter the device editing interface, set the device 1 as a server.



连接名称:	netp 💌
协议:	TCP-SERVER -
服务器端地址:	0.0.0.0
服务器端口号:	0
本地端口号:	8899
TCP保活间隔:	60
TCP接收超时:	0
连接到:	uart1 💌
缓冲区大小:	8192
新建连接	删除连接

Settings the device 2 as follow (at this time, the computer is connected to the wifi or Ethernet port of the device 2, same as step b), and use it as a client



After setting, restart the HF2421 and view the information via SecureCRT The server shows the client IP can be successful when successful connection, you can carry out transparent transmission of data.



===SOCK Status=== SOCK Name:netp State:Connected Client IP:192.168.18.3 Recv Bytes:0 Recv Frames:0 Send Bytes:0 Send Frames:0 Failed Bytes:0 Failed Frames:0

The client shows that it is connected and reads the correct Server ip

	===SOCK Status=== SOCK Name:netp						
ſ	State:Connected Server IP:192.168.18.2						
	RECV Bytes:32 RECV Frames:10 Send Bytes:14 Send Frames:5 Failed Bytes:0 Failed Frames:0						
	===WIFI Status=== Mode:AP AP SSID:HF2421_D408						

This two devices through the serial port to each other for data transmission.

(Note: One server can allow multiple client devices to connect, enabling one-to-many communication.)

# **17.HW TO MAKE IOTSERVICE START AUTOMATICALLY?**

Answer :

# a ) Win7&10: Enter into the following directory:

C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Startup.

## **b** ) Put IOTService startup icon into this directory.

	icrosoft > Windows > Start Menu > Programs > Startup 🗸 🖑			搜索"Startup"	Q
➡ 性速访问		修改日期	类型	大小	
	📓 desktop.ini	2016-07-16 19:45	配置设置	1 KB	
OneDrive	📄 IOTService	2017-11-28 13:36	快捷方式	3 KB	
图片					

