

## HF2411&G43&EG41

## **Operation Guide**





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# 1.HF2411&G43&EG41

The HF2411 support LTE-TDD, LTE-FDD, WCDMA, TD-SCDMA, GPRS full network. 4G network support maximum download data rate 150Mbps, upload data rate 50Mbps.

The HF2411 support TCPIP protocol, with its RS232/RS485 interface, it make traditional UART device easy connecting to IOT.



## 1.1. HF2411

## 1.2. Gport-G43 EVK

Insert SIM card and use 9~12VDC adapter to power supply the EVK.



#### 1.3. Elfin-EG40

8PIN Header





### 1.4. Elfin-EG41

**8PIN Header** 



**4PIN Header** 



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## 1.5. EG40 Cable



## 1.1. EG41 Cable



## 2. SERIAL SETTING

### 2.1. Serial Tool SecureCRT

Download adddress: http://www.hi-flying.com/index.php?route=download/category&path=1\_4

Decompress file and find executable program, then open. Click quick start button it to create connection.



#### 2.2. Configure Serial Parameter

#### Protocol: Serial

Port: Actual connection port(search by "My PC"->"Device Manager"->"Port(COM and LPT)". As figure:

File Edit View Option	s Transfer Script Tools Help
59 <b>29 6</b> 7 89 89 (6)	
	Quick Connect     X       Protocol:     Serial       Pgrt:     COM1       Paud rate:     115200       Data bits:     8       Parity:     None       Stop bits:     1

Notes: The default serial data is as above and user can modify device working parameter by IOTService.



## **3. TEST EXAMPLE**

### 3.1. IOTService Tools

IOTService is used for config the module parameters by UART or remotely. Make module easy to use and check status. The download address is as following.

http://www.hi-flying.com/download-center-1/applications-1/download-item-iotservice

<b>∲</b>	HF 物联·改变生活	Home	IOT Module	Sear IOT Device	ch Support	News	Company	Q 中文 Cloud	Old Site Mall	
A → Do IOTServi	ownload Center > Applications > IOTSe i <b>ce</b>	rvice								
Date: 12	/03/2018 09:35:59									
			F	File List						
	Name		File Name		Download	Times	Date Up	date	Download	
	IOTService 2.3.00	10	Service 2.3.00.rar		144		12/03/2018 (	)9:33:18	*	

After download, click the following to update to latest version.

Software Setting			×
Remote Access		Communication	
Remote Access Enable:	Enable	VirPath UDP Port:	28987
IOTBridge Server Addr:	bridge.iotworkshop.com	VCOM Parameter Synch:	Enable 💌
Service Id:	7fa02726-79a		
Santice Name	Service Name	Others	
Service Iname:		Language:	English 💌
EMail Alarm		Start up to Tray:	Disable 🔻
EMail Alarm Enable:	Disable	Auto Upgrade:	Disable 🔻
SMTP Address:		Menu Tools:	Show 🔻
SMTP Port:		New Ver:	2.3.04h
EMail Account:			Upgrade
EMail Password:			
EMail Send List (eg. a@a.com	m;b@b.com):		
		Confirm	Cancel

#### **3.2. IOTService Introduction**

Step1: PC connect to device UART. Note that RS232/RS485/TTL UART is different.

	HF	物联・改	变生活	_
A 设备管理器		-		×
文件(F) 操作(A) 查看(V) 帮助(H)				
• + + III II II II				
🗸 🛁 DESKTOP-IHST023				
> 🔐 DVD/CD-ROM 驱动器				
> 😋 IDE ATA/ATAPI 控制器				
> 💻 Intel(R) Dynamic Platform and Thermal Framework				
> 📡 安全设备				
> 🛄 处理器				
> 🔜 磁曲驱动器				
> 🗘 存储控制器				
> 💼 打印队列				
/ 29 曲班				
> 標 端□ (COM 和 LPT)				
The USB Serial Port (COM11)				
> 💼 函件				
> 💻 计算机				
> 🛄 监视器				
>				
> 🕃 蓝牙				
> 🕼 人体学输入设备				
> <u>前</u> 软件设备				
> 🛶 声音、视频和游戏控制器				
> 2 鼠标和其他指针设备				
> 🟺 通用串行总线控制器				
> 🔄 图像设备				•

#### Step 2: Open IOTService UART tools

1.O.T Service				-	- 🗆 X
Management (M) Setting (C) Help (H)					* 中文
Serial Config	atus 🔛 VirPat	h			Connected
SN DevType MAC Address HostName	IP	Position	VirPath	Status	SW Ver

10.11 Service Serial       - □ ×         Image: Serial Serial Serial       Image: Serial Serial Serial       Image: Serial Serial Serial Serial       Image: Serial Serial Serial Serial       Image: Serial Se		♦ HF 物联·改变生活
Image: Construction       Image: Constend construction       Image: Cons	🔯 I.O.T Service Serial	×
PC Serial Para COM: ©OMA ♥ Baudrate: 115200 ♥ Data Bits: 8 ♥ Parity: NONE ♥ Stop Bits: 1 ♥ PART Para VART	Image: Close COM     Image: Close COM <td>Read Device Write Device Batch Set</td>	Read Device Write Device Batch Set
UART Para         SENDAT+WSMAC           UART No:         ■ Baudrate:         115200 ▼ Data Bits:         ● Parity:         NONE ▼ Stop Bits:         1 ♥           Flow Control:         Disable ▼ UART Protocol:         NONE ▼         Stop Bits:         1 ♥           HeartBeat Time:         0         HeartBeat Serial:          SENDAT-INEI           SOCKET         Socket         Server Addr:         Server Addr:         Server Port:         0           Connect Mode:         Arenges         Burst Time:         D00         Server Port:         SENDAT-HADDE           RecV:+ok=1,0         SENDAT-UCID         SENDAT-HADDE         SENDAT-HADDE         SENDAT-HADDE           Server Addr:         Server Port:         0         SENDAT-HADDE         SENDAT-HADDE           Connect Mode:         Arengist Code:         SENDAT-HADDE         SENDAT-HADDE         SENDAT-HADDE           HeartBeat Time:         Data Tag Code:         SENDAT-HADDE         SENDAT-HADDE         SENDAT-HADDE           Jata Tag:         Disable         Data Tag Code:         SENDAT-WEIP=A         SECV-+ok=1,115200,81,1NONE,NFC           SENDAT-WEIPA         RecV+-ok=1,110RC10PA         SENDAT-WEIPA         RECV+-ok=1,110RC10PA         SENDAT-WEIPA           IMEI:         86626204	PC Serial Para COM: COM4 V Baudrate: 115200 V Data Bits: 8 V Parity: NONE V Stop Bits: 1 V	SEND:+++ SEND:AT+PID RECV:+ok=EG41 SEND:AT+APN
UART No:       □ ■ Baudrate:       115200 ▼ Data Bits:       B ▼ Parity:       NONE ▼ Stop Bits:       1 ▼ RECV:-ok=262040283870         Flow Control:       Disable ▼ UART Protocol:       NONE ▼       Stop Bits:       1 ▼ RECV:-ok=40; 716.39         SOCKET	UART Para	SEND:AT+WSMAC
SOCKET       ReCV-+ok=36.626/04/283870         SOCKET Name:       A       Protocol:       DFF       Rout:       SEND.AT+HCCID         Server Addr:       Server Port:       Server Port:       RECV-+ok=1,0,         Server Addr:       Server Port:       Server Port:       SEND.AT+HEART=11         Connect Mode:       Always       Burst Time:       100       Server Port:       SEND.AT+HUARTM=1         RecV:+ok=1,0,ff       SEND.AT+HUARTM=1       RECV:+ok=1,0,ff       SEND.AT+HUART=1         Regist Mode:       Disable       Regist Code:       SEND.AT+HETP=A         Data Tag:       Disable       Data Tag Code:       RECV:+ok=A,1,0,ff         SEND.AT+NETP=A       RECV:+ok=A,1,0,ff       SEND.AT+NETP=B         RECV:+ok=A,1,0,ff       SEND.AT+NETP=B       RECV:+ok=A,1,0,ff         SEND.AT+NETP=B       RECV:+ok=A,1,0,ff       SEND.AT+NETP=C         RECV:+ok=A,1,0,ff       SEND.AT+NETP=C       RECV:+ok=A,1,0,ff         SEND.AT+NETP=C       RECV:+ok=A,1,0,ff       SEND.AT+NETP=C         RECV:+ok=B,1,0,ff       SEND.AT+NETP=C       RECV:+ok=A,1,0,ff         SEND.AT+NETP=C       RECV:+ok=A,1,0,ff       SEND.AT+NETP=C         RECV:+ok=A,1,0,ff       SEND.AT+NETP=C       RECV:+ok=B,1,0,ff         SEND.AT+NETP=C	UART No:     Uar_     Baudrate:     115200     Data Bits:     B      Parity:     NONE     Stop Bits:     1       Flow Control:     Disable     UART Protocol:     NONE     Image: Control in the ima	RECV:+ok=262040283870 SEND:AT+GVER RECV:+ok=4G_V1.639 SEND:AT+GSLQ RECV:+ok=0.0 SEND:AT+IMEI
SOCKET Name: A Protocol: DFF Rout: SERVer Rout: SERVer Port: SERVer Port: SERVer 10,   Server Addr: Server Port: 0 Server Port: SERVer 10, SERVer 10,   Connect Mode: Always Burst Time: B00 Server Port: SERVer 40,   HeartBeat Time: 0 HeartBeat Serial: RECV:+ok=1,0, SERVer 40,   HeartBeat Time: 0 HeartBeat Serial: RECV:+ok=1,0, SERVer 40,   Regist Mode: Disable Regist Code: SERVer 40, SERVer 40,   Data Tag: Disable Data Tag Code: SERVer 40, SERVer 40,   SIM Para IMEI: 86625040283870 ICCID: SERVer 40,   Status: Disconnect RSSI: 0 4G_V1.639 Refresh   ModuleSN: 262040283870 Welcome: EG41 HostName: Eport-EG41   APN: APN User: APN Passw Detail	SOCKET	RECV:+ok=866262040283870 SEND:AT+ICCID
Data Tag:       Data Tag Code:       Data Tag Code:       Data Tag Code:         SIM Para       SEND.at + NETP=       RECV:+ok=8,1.0ff         IMEI:       866262040283870       ICCID:       RECV:+ok=2,1.0ff         Status:       Disconnect       RSSI:       0       4G_V1.639       Refresh         Others       RECV:+ok=2,10ff       SEND.AT+NETP=C       RECV:+ok=2,1.0ff         ModuleSN:       262040283870       Velcome:       EG41       HostName:       Eport-EG41         APN:       APN User:       APN Passw       Detail       Detail	SOCKET Name:       A       Protocol:       OFF       Rout:       Image: Connect Mode:         Server Addr:       Server Port:       0       Image: Connect Mode:       0         HeartBeat Time:       000       Image: Connect Mode:       Image: Connect Mode: <td< td=""><td>RECV: SEND:AT+HEART=1 RECV:+ok=1,0, SEND:AT+UARTTM=1 RECV:+ok=1,50 SEND:AT+MODBUS=1 RECV:+ok=1,off SEND:AT+MART=1 RECV:+ok=1,115200,8,1,NONE,NFC SEND:AT+NETP=A BECV:-ok=1,aff</td></td<>	RECV: SEND:AT+HEART=1 RECV:+ok=1,0, SEND:AT+UARTTM=1 RECV:+ok=1,50 SEND:AT+MODBUS=1 RECV:+ok=1,off SEND:AT+MART=1 RECV:+ok=1,115200,8,1,NONE,NFC SEND:AT+NETP=A BECV:-ok=1,aff
SIM Para         RECV:+ok=8,1.0ff           IMEI:         866262040283870         ICCID:           Status:         Disconnect         RSSI:         0           4G_V1.639         Refresh         SEND.AT+WER           RECV:+ok=2,1.0ff         SEND.AT+WER           Status:         Disconnect         RSSI:         0           4G_V1.639         Refresh         SEND.AT+WER           RECV:+ok=Contect         SEND.AT+WOST           RECV:+ok=Eport-EG41         HostName:         Eport-EG41           APN:           APN User:         APN Passw             FG41         11.10c/2019-06-06 16:30)         Detail	Data Tag: Disable 💌 Data Tag Code:	SEND:AT+NETP=B
Others         RECV:+ok=Eport-EG41         SEND:AT+WEL           ModuleSN:         262040283870         Welcome:         EG41         HostName:         Eport-EG41           APN:           APN User:         APN Passw                 EG41         11.10c/2019-06-06 16:30 <td>SIM Para           IMEI:         866262040283870         ICCID:           Status:         Disconnect         RSSI:         0         4G_V1.639         Refresh</td> <td>RECV:+ok=B,1,off SEND:AT+NETP=C RECV:+ok=C,1,off SEND:AT+VER RECV:+ok=1.1.10c(2019-06-06 16:30) SEND:AT+HOST</td>	SIM Para           IMEI:         866262040283870         ICCID:           Status:         Disconnect         RSSI:         0         4G_V1.639         Refresh	RECV:+ok=B,1,off SEND:AT+NETP=C RECV:+ok=C,1,off SEND:AT+VER RECV:+ok=1.1.10c(2019-06-06 16:30) SEND:AT+HOST
ModuleSN:         262040283870         Welcome:         EG41         HostName:         Eport-EG41         RECV:+ok=EG41           APN:         ▼         APN User:         APN Passw	Others	RECV:+ok=Eport-EG41 SEND:AT+WEL
	ModuleSN:         262040283870         Welcome:         EG41         HostName:         Eport-EG41           APN:           APN User:         APN Passw             EG41         1.1.10c(2019-06-06 16:30)         Detail	RECV:+ok=EG41

#### Main Menu:

Auto: Auto detect device UART parameters.

GetIn CMD: Enter AT command mode.

Quit CMD: Quit AT command mode.

Reload: Reload product, restore parameters to default.

Restart: Reset product

Upgrade: Upgrade product.

Read Device: Read product parameters.

Write Device: Write modified product parameters

Batch Set: For massproduction parameters setting.

#### **UART Information:**

UART No: UART number, for multiple UART product.

UART Protoco: UART protocol, Modbus TCP to RTU function.

HeartBeat Time: UART HeartBeat time

HeartBeat Serial: UART HeartBeat content.

#### **Socket Function:**



#### SOCKET Name: Socket name, choose A/B/C.

Protocol: Protocol, TCP/UDP/HTTP

Connect Mode: short or long connection.

Burst Time: When in long connection ,it is AT+TCPTO reconnection time. When for short conection, it is connection keep time.

Rout: UART channel

HeartBeat Time: HeartBeat time

HeartBeat Serial: HeartBeat content, support wildcard character.

Regist Mode: Register Mode

Regist Code: Register Content, support wildcard character.

Data Tag: Used for multiple data socket distinguishing.

#### **SIM Information:**

IMEI: Product IMEI

ICCID: Product ICCID

State: Product GPRS Status

RSSI: Product GPRS signal strength

#### Others:

Module SN: Product MAC

Welcome: Bootup information.

HostName: Product name shown in IOTBridge.

#### **Detail:**

SMS: Short message function.

- IOT En: Enable/Disable IOTBridge.
- IOT Time: IOTBridge Enable time. Save data flow

						6
	9   🕑			(Hd)		Ŀ
Close COM	Auto GetIn CMD	Quit CN	1D Reload Restart Upgrade	Read Device	Write Device	Batch 9
C Serial Para		1		SEND:AT+APN		
OM: COM4	Baudrate: 115200	Data Bi	ts: 8  Parity: NONE  Stop Bits: 1	RECV:+ok=,,	c	
OUT Para				RECV:+ok=26204	40283870	
ART Para				SEND:AT+GVER		
		115000		SEND:AT+GSLO	1.639	
UART No:	Baudrate	. 115200	Data Bits: 8 Parity: NONE Stop Bits: 1	RECV:+ok=0,0		
Flow Control:	Disable	UAR	🖞 Detail 🛛 🕹	SEND:AT+IMEI	52040283870	
HeartBeat Time:	0	Hear		SEND:AT+ICCID	2040203070	
			Network	RECV:		
OCKET			SMS ID: #SMS#	RECV:+ok=1.0.	=1	
SOCKET Name:	A	Proto	SMS Phone:	SEND:AT+UARTT	M=1	
			SMS Status:	RECV:+ok=1,50	110-1	
Server Addr:				RECV:+ok=1,off	03-1	
Connect Mode:	Always 👻	Burst	IOT En:	SEND:AT+UART=	1	
HeartBeat Time:		Heart	IOT Time: 00 : 00 ~ 23 : 59	SEND:AT+NETP=	200,8,1,NONE,NFC A	
				RECV:+ok=A,1,of	ff	
Regist Mode:	Disable	Regis		SEND:AT+NETP=	B	
Data Tag:	Disable 💌	Data		SEND:AT+NETP=	c	
		_	His Para Confirm Cancel	RECV:+ok=C,1,of	f	
<u>M Para</u>				RECV:+ok=1.1.10	)c(2019-06-06 16:30	))
IMEI: 86626	52040283870		ICCID:	SEND:AT+HOST		
Status Disco	ppect pcci.	0	4G V1 520	RECV:+ok=Eport	-EG41	
Status: Disco	KSSI:	U	40_v1.059 Retresh	RECV:+ok=EG41		
thers				SEND:AT+SMSID	· · · ·	
M. L.L. (N. 2000)	40282870			SEND:AT+IOTEN	·#,1,	
ModuleSN: 20204	40283870	Welcome:	HostName: Eport-E041	RECV:+ok=on,00	:00,23:59	

#### 3.3. Test Case One: IOTService UART Config

1.O.T Service Serial П ×  $(\mathbf{h})$  $( \bigcirc )$ ī (Ha)  $(\mathbf{X})$  $\bigcirc$ Close COM Auto GetIn CMI uit CM Read Dev Write Devi Batch Set PC Serial Para RECV: SEND:AT+HEART=1 сом: сом4 Baudrate: 115200 👻 Data Bits: 8 💌 Parity: NONE 💌 Stop Bits: 1 💌 RECV:+ok=1,0, DUT Para SEND:AT+UARTTM=1 RECV:+ok=1,50 SEND:AT+MODBUS=1 UART Para RECV:+ok=1|off SEND:AT+UART=1 RECV:+ok=1,115200,8,1,NONE,NFC SEND:AT+NETP=A UART No: 115200 Data Bits: 8 💌 Parity: NONE 🔻 Stop Bits: 1 💌 Baudrate: --NONE Flow Control: Disable UART Protocol -HeartBeat Time: 0 HeartBeat Serial RECV:+ok=A,1,TCP,test.server.iotworkshop.com ... 40432,long SEND:AT+NETP=B SOCKET RECV:+ok=B.1.off SEND:AT+NETP=C RECV:+ok=C,1,off SEND:AT+HEART=A TCP-CLIENT 💌 Α uart -SOCKET Name Protocol: Rout: Server Addr: test.server.iotworkshop.com Server Port 40432 RECV:+ok=A.0. SEND:AT+NREGSND=A RECV:+ok=A,link SEND:AT+NREGDT=A Always Connect Mode: -Burst Time: 0 HeartBeat Time: HeartBeat Serial: ... RECV:+ok=A RECV:+0K=A, SEND:AT+NREGEN=A RECV:+0k=A,off SEND:AT+NETPID=A Regist Mode: Disable -Regist Code: Data Tag: Disable -Data Tag Code: RECV:+ok=A, SEND:AT+NETPIDEN=A SIM Para RECV:+ok=A,off SEND:AT+NETPLK=A IMEI: 866262040283870 ICCID: RECV:+ok=A,off SEND:AT+VER Disconnect Status: RSSI: 0 4G V1.639 Refresh RECV:+ok=1.1.10c(2019-06-06 16:30) SEND:AT+HOST **Others** RECV:+ok=Eport-EG41 SEND:AT+WEL ModuleSN: 262040283870 EG41 HostName: Eport-EG41 Welcome: RECV:+ok=EG41 APN: -APN User APN Passw. 1.1.10c(2019-06-06 16:30) EG41 Detail Clear Send

Step 1: Open UART and do as following to read product parameters.

Step 2: The tools show the module parameters. Click [Write Device] to change parameter. The following set Socket A to our test server. and reboot

Test Server: test.server.iotworkshop.com

TCP Port: 40432

UDP Port: 40431

	♦ HF 物联·改变生活
1.O.T Service Serial	- 🗆 X
Image: Close COM     Image: Close COM <th>Read Device Write Device Batch Set</th>	Read Device Write Device Batch Set
PC Serial Para COM: COM4 V Baudrate: 115200 V Data Bits: 8 V Parity: NONE V Stop Bits: 1 V DUT Para	RECV: SEND:AT+HEART RECV:+ok=1,0, SEND:AT+UAR_TM=1
UART Para         UART No:       uar♥         Baudrate:       115200 ♥         Data Bits:       8 ♥         Parity:       NONE ♥         Stop Bits:       1 ♥         HeartBeat Time:       0         HeartBeat Serial:	RECV:+ok=100 SEND:AT+MDOBUS=1 RECV:+ok=0,off SEND:AT=UART=1 RECV:+kk=1,115200,8,1,NONE,NFC SEND:AT+NETP=A RECV:+ok=A,17CP,test.server.jotworkshop.com, 40962.jong
SOCKET         SOCKET Name:       A         A       Protocol:         TCP-CLIENT       Rout:         uart       Image: Connect Mode:         Always       Burst Time:         300         HeartBeat Time:       300         Regist Mode:       Disable         Data Tag:       Disable	SynDiat+NETP=B KECV:+ok=B,1.off SEND:AT+NETP=C RECV:+ok=C,1.off SEND:AT+HEART=A RECV:+ok=A,0, SEND:AT+NREGSND=A RECV:+ok=A,ink SEND:AT+NREGDT=A RECV:+ok=A,off SEND:AT+NREGEN=A RECV:+ok=A,off SEND:AT+NETPID=A RECV:+ok=A,
SIM Para           IMEI:         866262040283870         ICCID:           Status:         Disconnect         RSSI:         0         4G_V1.639         Refresh           Others         ModuleSN:         262040283870         Welcome:         EG41         HostName:         Eport-EG41	SEND:AT+NETPIDEN=A RECV:+ok=A,off SEND:AT+NETPIX=A RECV:+ok=A,off SEND:AT+VER RECV:+ok=I.1.10c(2019-06-06 16:30) SEND:AT+HOST RECV:+ok=Eport-EG41 SEND:AT+WEL RECV:+ok=EG41
APN:           APN User:         APN Passw           EG41         1.1.10c(2019-06-06 16:30)         Detail	Clear Send

Note: Default UART is 115200,8,N,1.

Step 3: Wait for network connection OK, then send UART data, the server will response the received data. The product is in throughput mode by power on, if want to send AT command, need to send "+++" and then "a" to enter command mode, AT+ENTM to change back throughput mod.e.





### 3.4. Test Case Two: IOTService Network Config

Step 1: Login IOTBridge(<u>http://bridge.iotworkshop.com/</u>) to register account.

① www.hi-flying.com									
			搜索				Q En	glish  旧站点	
🔩 🕇 🧰 🗤 🗤 🗤 🗤 🗤 🗤 🗤	首页	物联模块	物联设备	支持	新闻动态	公司	云平台	商城	

Step 2: Get UserId(device side)and ServiceId(IOTService side)

	I.O.T Bridge	ILO.J Bridge 直页									
♀ 首页	I.O.T Service	1.0.T Service									
団 我的 UserID				添加							
<b>全</b> 设备管理											
I.O.T Service		序号	Service ID	操作							
0 2045-000		1	ac9f94ff-b304-11e7-83f2-bf7237dd37c4	直石 款用 删除							
№ 我的信息 >		2	b4d70190-b304-11e7-83f2-fd3e6d6e9ad5	查若 幕用 制煌							
の通出		3	cbdf75c1-b304-11e7-83f2-bfe0f974d902	查石 <del>禁用</del> 翻除							
		4	e6e863ae-fa95-11e7-b9e9-1bd6fcf8cc21	查若							

Step 3: Input ServiceId in IOTService.

😭 I.O.T Service					_	- 🗆 🗙			
Management (M) Setting C) Too	ols (T) Help (	(H)							
Begin 💥 Stop 😳 Config 🔍 Status 🚏 VirPath									
SN DevType MAC Address Ho	stName	IP	Position	VirPath	State	SW Ver			
🔝 Software Setting						×			
Remote Access				Communication					
Remote Access Enable:	Enable			VirPath UDP Port:	2898	37			
IOTBridge Server Addr: bridge.iotworkshop.com			VCOM Parameter Synch:	Enal	ble 🔻				
Service Id:	e7-b9e9-1bd6fc	f8cc21	Others						
Service Name:	Service Nar	me		Language:	Engl	lish 🔻			

Step 4: Insert SIM card and power on device, wait for device connects to network. The UART tools also shows the network status.

	♦ HF 物联·改变生活
😫 I.O.T Service Serial	– 🗆 X
Image: Close COM     Image: Close COM <td>Read Device Write Device Batch Set</td>	Read Device Write Device Batch Set
PC Serial Para COM: COM4 V Baudrate: 115200 V Data Bits: 8 V Parity: NONE V Stop Bits: 1 V	RECV: SENDIATIGSU RECV: SENDIATIGSU RECV:+ok=0,0 SENDIATIGVER
UART Para	RECV: Read GVER failed!
UART No:     Uarr. ♥     Baudrate:     115200     ▼     Data Bits:     8     Parity:     NONE     Stop Bits:     1       Flow Control:     Disable     UART Protocol:     NONE     ▼       HeartBeat Time:     0     HeartBeat Serial:	SEND.AT + IMEI RECV: SEND.AT + ICCID RECV: SEND.AT + GSLQ RECV:- RECV:- SEND.AT + GSLQ
SOCKET	SEND:AT+GVER
SOCKET Name: A V Protocol: TCP-CLIENT V Rout: Uart V	SEND:AT+IMEI RECV:+ok=866262040283870
Server Addr: test.server.iotworkshop.com Server Port: 40432	SEND:AT+ICCID RECV:+ok=898600560913f7007772
Connect Mode: Always Time: 300	SEND:AT+GSLQ
HeartBeat Time: 0 HeartBeat Serial:	SEND:AT+GVER
Regist Mode: Disable 🔻 Regist Code:	RECV:+ok=4G_V1.639 SEND:AT+IMEI
Data Tag: Disable Data Tag Code:	RECV:+ok=866262040283870 SEND:AT+ICCID PECV4_ok=80860056001267007772
SIM Para	SEND:AT+GSLQ
IMEI: 866262040283870 ICCID: 898600560913f7007772	SEND:AT+GVER
Status: Connected RSSI: 25 4G_V1.639 Refresh	RECV:+ok=4G_V1.639 SEND:AT+IMEI RECV:+ok=866262040283870
<u>Others</u>	SEND:AT+ICCID RECV:+ok=898600560913f7007772
ModuleSN: 262040283870 Welcome: EG41 HostName: Eport-EG41	SEND:AT+GSLQ RECV:+ck=1.25
APN: APN User: APN Passw	·
EG41 1.1.10c(2019-06-06 16:30)	Clear Send

Step 5: Add MAC in the tools to bound account. (AT+WSMAC to get MAC address, usually it is the latter 12 character of the IMEI), recommend to use AT+IOTUID command to write UserId into the device. Prevent bounded by the other vicious customer.

🔛 I.O.T Service	- 🗆 X
Management (M) Setting ( <u>C) Help (H)</u>	* <sup>***</sup> 中文
Add Device X	
Serial Config MAC Address Delete	Connected
DevType         MAC Address           22 HF2411         262040283870           23 HF2411         262040590852           23 HF2411         262040590902           24 HF2411         262040590902           25 HF2411         26204059092           26 HF2411         26204059092           27 HF2411         262040590027           27 HF2411         262040590076           29 HF2411         262040590176           30 E641         262040283870           31 HF2411         262040283870           31 HF2411         262040285206           32 HF2211         F0FE6B536CF8	SW Ver           nline         1.0.50           ffline         1.34.04
33 EP20 F0FE6B2148D6 Confirm Close	ffline 1.34.7 PuZhong
34 EE10 ACCF23201236	ffline 1.32.4
35HF8104 F0FF6BF04D10	ffline 1.61.6

Step 6: Double click device entering the config page.

I.O.T Service								_	>
nagement (M) Se	etting (C)	) Helj	p (H)						) p
Serial Config		Config		Status 🔛 VirP	ath			Cor	nect
DevType MAC A	ddress	Host	tName	IP	Position	VirPa	th Status	SW Ver	
HF2411 2620405	590852	Eport-	HF2411	117.132.196.57	China.Shaanxi		Online	1.0.50	
HF2411 2620405	590902	Eport-	HF2411	221.178.127.13	China.Shaanxi		Online	1.0.50	
HF2411 2620405	590092	Eport-l	HF2411	221.178.127.99	China.Shaanxi		Online	1.0.50	
HF2411 2620405	590845	Eport-	HF2411	223.104.255.181	China.Shaanxi		Online	1.0.50	
HF2411 2620405	590027	Eport-	HF2411	221.178.125.53	China.Shaanxi		Online	1.0.50	
HF2411 2620405	589938	Eport-	HF2411	221.178.124.54	Remote		Online	1.0.50	
HF2411 2620405	590076	Eport-	HF2411	221.178.127.216	China.Shaanxi		Online	1.0.50	
HF2411 2620405	592114	Eport-	HF2411	221.178.126.32	China.Shaanxi		Online	1.0.50	
EG41 2620402	283870	Eport-	EG41	223.104.210.6	China.Shangh		Online	1.1.10c	
	195 /05	l in a set		718 704 753 149	L bina Shaanyi		( Jaluac	1.0.50	
HF2411 2020402	536CE8	Eport-	HE2211	58 33 115 200	Remote		Offline	1.34.04	
2 HF2211 F0FE6B5	536CF8	Eport-	HF2211	58.33.115.200	Remote		Offline	1.34.04	
Device Status	536CF8	Eport-	HF2211	58.33.115.200	Remote		Offline	1.34.04	
HF2211   202040, HF2211   F0FE6B5 Device Status	536CF8	Eport-	HF2211	58.33.115.200	Remote	SOCK	Offline	1.34.04	
HF2411 202040. HF2211 F0FE6B Device Status	536CF8	Eport-I	HF2211	58.33.115.200	26204028	sock sago sock	ET Name:	1.34.04	
HF2411 202040, HF2211 F0FE6BS Device Status	536CF8	Eport-I	HF2211	58.33.115.200	26204028 2898600560913f700	SOCK 13870 SOCK 17772 Proto	ET Mame: col:	A	-CLIE
HF2411 202040, HF2211 F0FE6BS Device Status	536CF8	Eport-	GSM Mod ICCI IME	58.33.115.200 JuleSN: D: E	26204028 398600560913f700 86626204028	SOCK 3870 SOCK 7772 Proto 3870 Status	ET Name: col:	A TCP- Co	-CLIE
HF2411 202040, HF2211 F0FE6BS Device Status	536CF8	Eport-	HF2211 Moc ICCI IMEI Con	58.33.115.200	26204028 398600560913f700 86626204028 Connecte	SOCK 3870 SOCK 7772 Proto 3870 Status d(22) Serve	ET	A TCP- Co	-CLIE
HF2211 FOFE6BS	536CF8	Eport-	GSM Moc ICCI IMEI Coni IP Ai	58.33.115.200	26204028 398600560913f700 86626204028 Connecte 223.104.	SOCK 3870 SOCK 7772 Proto 3870 Status d(22) Server 210.6 Recv	ET Offline ET Col: s: r IP: Bytes: 0	A TCP Co Recv Frames: (	-CLIE nnec
HF2411 202040, HF2211 F0FE6BS Device Status	5336CF8	Eport-	GSM Moc ICCI IMEI Coni	58.33.115.200 JuleSN: D: & I: nect: ddress: 4G	26204028 26204028 298600560913f700 86626204028 Connecte 223.104. V1.639 Upgrad	SOCK 33870 SOCK 7772 Proto 33870 Status d(22) Server 210.6 Recv I de Send	ET ET Name: col: :: r IP: Bytes: 0 Bytes: 0	A Recv Frames: ( Send Frames:	-CLIE nnec D
Product ID:	5336CF8	Eport-	GSM Moc ICCI IMEI Coni IP Ar	58.33.115.200 JuleSN: D: & l: nect: ddress: 4G	26204028 26204028 298600560913f700 86626204028 Connecte 223.104. V1.639 Upgrad	SOCK SOCK SOCK Proto Sarro Status d(22) Server 210.6 Recv I de Send Fail B	ET ET Name: col: :: r IP: Bytes: 0 Bytes: 0	A Recv Frames: ( Send Frames: 0	-CLIE nnec
Product ID: Software Version:	5336CF8	EG41	GSM Moc ICCI IMEI Coni IP Ar	58.33.115.200	26204028 26204028 298600560913f700 86626204028 Connecte 223.104. V1.639 Upgrad	SOCK 38870 SOCK 7772 Proto 38870 Status d(22) Server 210.6 Recv I de Send Fail By	ET ET Name: col: :: r IP: Bytes: 0 Bytes: 0 ytes: 0	A TCP Co Recv Frames: ( Send Frames: 0	-CLIE nnec D
Product ID: Software Version: RTC Time:	1 NTP Dis	EG41 I.1.10c sabled	GSM Moc ICCI IMEI Con IP Ar	58.33.115.200 JuleSN: D: & & I: nect: ddress: 4G. T T T T T T T T T T T T T	26204028 26204028 398600560913f700 86626204028 Connecte 223.104. V1.639 Upgrad	SOCK SOCK SOCK SOCK Proto I3870 Status d(22) Serve 210.6 Recv I de Send Fail By	ET ET Name: col: :: r IP: Bytes: 0 Bytes: 0 ytes: 0	A TCP Co Recv Frames: ( Send Frames: 0	-CLIE nnec
Product ID: Software Version: RTC Time:	1 NTP Dis 0-Day	EG41 I.1.10c sabled 0:4:39	GSM Moc ICCI IMEI Con IP Ar UAR Cor	58.33.115.200	26204028 26204028 398600560913f700 86626204028 Connecte 223.104. V1.639 Upgrad	SOCK SOCK SOCK SOCK Proto- SServe 210.6 Recv I Recv I Fail By	ET ET Name: col: :: r IP: Bytes: 0 Bytes: 0 ytes: 0	A TCP Co Recv Frames: ( Send Frames: 0	-CLIE nnec
Product ID: Software Version: RTC Time:	1 NTP Dis 0-Day	EG41 I.1.10c sabled 0:4:39	GSM Moc ICCI IMEI Coni IP Ar UAR Cor Rec	58.33.115.200	26204028 26204028 398600560913f700 86626204028 Connecte 223.104. V1.639 Upgrad	SOCK SOCK SOCK SOCK Proto Status d(22) Serve 210.6 Recv I Send Fail By 2	ET ET Name: col: :: r IP: Bytes: 0 Bytes: 0 ytes: 0 reload	A TCP Co Recv Frames: ( Send Frames: 0	-CLIE nnec
Product ID: Software Version: RTC Time: Longitude:	1 NTP Dis 0-Day 121.6206	EG41 1.1.10c sabled 0:4:39	GSM Moc ICCI IMEI Coni IP Ar UAR Cor Rec Sen	58.33.115.200 JuleSN: D: & & I: nect: ddress: 4G_ T T RT No: fig: 115200,8,1,NOI v Bytes: 4 d Bytes: 5	26204028 26204028 398600560913f700 86626204028 Connecte 223.104. V1.639 Upgrad	SOCK SOCK SOCK SOCK Proto Status d(22) Serve 210.6 Recv I Send Fail By 2	ET ET Name: col: :: r IP: Bytes: 0 Bytes: 0 ytes: 0 Reload	A TCP Co Recv Frames: ( Send Frames: 0 Fail Frames: 0	-CLIE nnec

Step 7: Can modify the parameters.

			HF 物联·改变
Device Setting			
System		SOCKET	
Welcome:	EG41	SOCKET Name:	A
HostName:	Eport-EG41	Protocol:	TCP-CLIENT
Longitude:	0.0	Server Addr:	test.server.iotworkshop.com
Latitude:	0.0	Server Port:	40432
		Connect Mode:	Always
IOT Time:	0: 0 ~ 23: 59	Burst Time:	300
UART		Rout:	uart
UART No:	UART 1	HeartBeat Time:	
Baudrate:	115200 💌	HeartBeat Serial:	
Data Bits:	8	Regist Mode:	Disable
Stop Bits:	1	Regist Code:	
, Davitar		Data Tag:	Disable
Parity:	INOINE	Data Tag Code:	
Flow Control:	Disable		
UART Protocol:	NONE	Network	
HeartBeat Time:	0	APN:	
HeartBeat Serial:		APN User:	
		APN Password:	
Confirm	Cancel	SMS ID:	#SMS
		SMS Phone:	
Import	VirPath	SMS Status:	1
Export	Script	Sino otatasi	

Step 8: Use our test server to check device function.





### 3.5. Test Case Three: Throughput Via SecureCRT

Step 1: Open SecureCRT(Baudrate default:115200), Input "+++" (device will response with "a") and then "a" (device will response with "+ok") to enter AT command mode.

偏 serial-com4 - SecureCRT	-		×
<u>File Edit View Options Transfer Script Tools Window H</u> elp			
🏗 🕄 🆏 Enter host <alt+r> 🛛 🗳 🏦 🛃 🛃 🕈 🎇 🕴 🖉 🕅</alt+r>			;
Session Manager 🛛 🖳 🗙 🗣 serial-com4 x 🗢 serial-com10			4 Þ
🞝 🖓 🖄 🛦 🗈 💦 👘 🔭 🖬			^
Filter by session name <alt at+netp="A,1,TCP,test.server.iotworkshop.com,40432,long&lt;/td"><td></td><td></td><td></td></alt>			
Sessions A +ok			
💻 10.10.100.254			
<b>—</b> 10.10.100.254-2323			
<b>18.108.28.112</b>			
💻 192.168.0.1			
💻 192.168.1.208			
💻 192.168.83.103			
💻 192.168.83.105			
💻 192.168.83.110			
💻 192.168.83.124			
💻 ftp.hi-flying.com			
🚍 ftp.hi-flying.com (1) 🗸 📗			¥
Default 🔽 🔍 +++ 🕒 a 🕒 STA 🥥 WSSSID 🔵 WSKEY 🔘 AT+Z 🐑 AT+CGSN 🐑 DEVICE 🌑 PRODUCT 🐑 +++a 🔘 AT+MO	ODE 🥥 IN	IEI	

AT+UART to query or change setting.

Step 2: Input "AT+NETP=A,1,TCP,test.server.iotworkshop.com,40432,long" to set socket A, and "AT+Z" to reboot.

```
AT+NETP=A,1,TCP,test.server.iotworkshop.com,40432,long
+ok
```

Step 3: Wait for network connecting OK. Then send UART data to device, the test server will response with data in defined format(Protocol type, port number and data as following picture).





#### 3.6. Test Case Four: Heartbeat and Resister Packet

Step 1: Set the parameter as following..

AT+HEART=A,10,%IMEI	//Enable heartbeat for 10 seconds upload its IMEI.
AT+NREGEN=A,on	//Enable Register Packet
AT+NREGSND=A,link	//Send Register packet when connection established.
AT+NREGDT=A,%VER	//Register content is software version

	🕁 н	F 物联・	改变生活
🗟 I.O.T Service Serial		-	□ ×
Image: Colore COM       Auto     GetIn CMD     Quit CMD     Reload     Restart     Upgrade	Read Device	Write Device	Batch Set
PC Serial Para COM: COM4 V Baudrate: 115200 V Data Bits: 8 V Parity: NONE V Stop Bits: 1 V DUT Para UART Para UART No: Baudrate: 115200 V Data Bits: 8 V Parity: NONE V Stop Bits: 1 V	RECV:+ok=89860 SEND:AT+HEART RECV:+ok=1,0, SEND:AT+UARTTI RECV:+ok=1,50 SEND:AT+MODBI RECV:+ok=1,off SEND:AT+IJARTE	0560913f7007772 =1 M=1 US=1	<u> </u>
Flow Control:     Disable     VART Protocol:     NONE       HeartBeat Time:     0     HeartBeat Serial:	RECV:+ok=1,1152 SEND:AT+NETP= RECV:+ok=A,1,TC 40432,long	200,8,1,NONE,NFC A P,test.server.iotwo	rkshop.com,
SOCKET Name: A v Protocol: TCP-CLIENT v Rout: uart v Server Addr: test.server.iotworkshop.com Server Port: 40432	RECV:+ok=B,1,of SEND:AT+NETP= RECV:+ok=C,1,of SEND:AT+HEART RECV:+ok=A,0, SEND:AT+NREGS	f C f =A ND=A	
HeartBeat Time:     10     HeartBeat Serial:    %IMEI       Regist Mode:     Link     Regist Code:    %Ell       Data Tag:     Disable     Data Tag Code:	RECV:+ok=A,link SEND:AT+NREGD RECV:+ok=A, SEND:AT+NREGE RECV:+ok=A,off SEND:AT+NETPID	N=A D=A	=
Bill Para         ICCID:         898600560913f7007772           IMEI:         866262040283870         ICCID:         898600560913f7007772           Status:         Connected         RSSI:         19         4G_V1.639         Refresh	RECV:+ok=A, SEND:AT+NETPID RECV:+ok=A,off SEND:AT+NETPLH RECV:+ok=A,on SEND:AT+VER RECV:+ok=1,1,10	2EN=A <=A	n
Others         Others           ModuleSN:         262040283870         Welcome:         EG41         HostName:         Eport-EG41           APN:           APN User:              APN Passw               Detail            EG41         1.1.10c(2019-06-06 16:30)              Detail	SEND:AT+HOST RECV:+ok=Eport SEND:AT+WEL RECV:+ok=EG41	EG41	√/ ▼ Send

Step 2: Reboot it. The device will output UART data as following.

🍇 察康 i ech	con串山大师VI.I 间体中义	绿巴光费版	-	L X	1
Эт	echcon	接收区			
通信设置		2018-08-17 06: 39: 18, 069 上由依	マケモロ		information when bootun
串口号	сощ7 🗸	47 70 6F 72 74 2D 45 47 31 30	ME	<b>vverc</b> 载	ne mormation when bootup
波特室	115200 ~	2018-08-17 06:39:33.127 54 43 50 3A 31 31 32 2E 36 35 2E 36 31 21 30 31 32 04 44 41 54 41 34 01 04 001	2E 33 35 3	译 BA 31	
校验位	None $\checkmark$	31 39 31 32 04 44 41 54 41 34 01 04 08	4.11	Register	packet version
数据位	8位 ~	2018-08-17 06-39-30-966 54 43 50 3A 31 31 32 2E 36 35 2E 36 31	2E 33 35 3	14 31	
停止位	1位 ~	31 30 31 32 04 44 41 54 41 3A 38 36 38 36 36 31 34 35 36 32 0A 00	35 37 35 3	80 32 He	artbeat packet IMEI
	开启	2018-08-17 06: 39: 44. 680心跳包: IMET和 54 43 50 3A 31 31 32 2E 36 35 2E 36 31	2E 33 35 3	BA 31	
接收设置 ☑ 加入明 ☑ 十六述 □ 根据与 □ 自动排 □ 暂停排	时间戳 注制显示 □ 存加入时间戳并换行 ● 10 使行显示 ◎ 10 保存数据 清除接收区	31         39         31         32         03         44         134         35         36         31         31         32         22         36         35         22         36         35         24         36         38         36         38         36         38         36         38         36         38         36         38         36         38         36         38         36         38         36         38         38         36         38         36         38         36         38         36         38         36         38         36         31         31         32         22         36         35         22         36         31	2E 33 35 3 35 37 35 3 2E 33 35 3 35 37 35 3	8A 31 8A 31 8A 31 80 32	
发送设置 ☑ 十六述 □ 循环发 发送间隔	性制发送 试 1000 m.s 青除发详区	发送区	^	发送	
进制转换	TTTTTTT A MA BA	统计区	V		
□发送図	☑ 接收区	RX: 496	复位	更新	
To 字符	串 To 16进制	TX: 0	夏位	帮 助	

Example 1:



Register Code Requirement: FFFFFFFFA+IMEI+0F

Setting Parameter: %FF%FF%FF%FF%FA%IMEI%0F

Upload real data: FF FF FF FF FA 38 36 38 35 37 35 30 32 36 36 31 34 35 36 32 0F

Example 2:

Heartbeat Content: %TIME;%HOST;%DATE;%IMEI;%IMSI;%GPS;

Upload real data::

165036;Eport-HF2411;20190211;862285030465284;460011352509105;121.623046,31.221429;

#### 3.7. Test Case Five: Virtual COM

Step 1: Add device to IOTService according to Case Two.

	🗄 I.O.T Service — 🗆 🗙							
M	Management (M) Setting (C) Tools (T) Help (H)							
	Begin	💥 Stop	🗭 Config 🤇	🔪 Status  🦞	VirPath			Connected
S	N DevType	MAC Address	HostName	IP	Position	VirPath	State	SW Ver
	1 HF2211	F0FE6BE0C80C	2-1	221.4.163.98	Remote		Online	1.31
	2 HF2211	F0FE6BE0C100	2-4	221.4.163.98	Remote		Online	1.31
	3 HF2211	F0FE6BE0C790	2-3	221.4.163.98	Remote		Online	1.31
	4 HE2211	E0EE6BE0C028	2.2	202 104 28 51	Remote		Online	1.21
	5 HF2411	285030465284	HF2411	112.64.68.19	China.Shanghai		Online	1.0. 5
	6IHF2421	FOFF6B8832AC	Eport-HE2421	117.132.195.230	Remote		Offline	1.10b

Step 2: Click into the config page, fill the Vircom Socket ID with C(A/B/C all can be used for virtual COM, must choose off socket to use for virtual COM).

<b>1</b> 0	Device Setting				$\times$	<u>10.7</u> 1	/irPath List			$\times$
	System		SOCKET							<b>^</b>
	Welcome:	G43	SOCKET Name:	C	-		VirPath Edit	VBath D3D	×	
	SleepEn:	Disable 💌	Protocol: OF	F 🗸	·		Virtual Virtuodigii	VPaul D2D		
	Sleep Time:		Server Addr:				ocket ID:		<b></b>	
	Longitude:	0.0	Server Port:				Serial Port:	COM1		
	Latitude:	0.0	Connect Mode:	ways 💌		тс				
	IOT Time:	0 ~ 23: 59	Burst Time:				Rout:	uar		
ſ	UART		Rout: ua	rt 🔻						
	UART No:	UARI 1	HeartBeat Time:			7				
	Baudrate:	115200	HeartBeat Serial:			e				
	Data Bits:	8 🔻	Regist Mode:	sable 🔻	]/	5.		Confirm	Cancel	
	Stop Bits:	1	Regist Code:		/					
	Parity:	NONE	Data Tag:	sable 🔹 🔻		-				
	Flow Control	Dicabla	Data Tag Code:	/		:d				-
	now control.	Uisable •								
	UART Protocol:	NONE	Confirm	Cancel		_			Add VPath	Close
	HeartBeat Time:	0		VirPath		-				
	HeartBeat Serial:		Import	Export						
	Parity: Flow Control: UART Protocol: HeartBeat Time: HeartBeat Serial:	NONE   NONE  NONE  Olisable  Olisabl	Data Tag:	Cancel VirPath Export		Ed	_		Add VPath	Clo

Step 3: Wait for VirtualCom Connect.

							4	HF	物联·改变生活
ľ	🔐 I.	.O.T Servi	ce						– 🗆 X
l	<u>M</u> ar	nagement	(M) Setting (C	) Tools (T) He	elp (H)				
Begin 💥 Stop 💮 Config 🔍 Status 🚏 VirPath						Connected			
l	SN	DevType	MAC Address	HostName	IP	Position	VirPath	State	SW Ver
L	1	HF2211	F0FE6BE0C80C	2-1	221.4.163.98	Remote		Online	1.31
L	2	HF2211	F0FE6BE0C100	2-4	221.4.163.98	Remote		Online	1.31
L	3	HF2211	F0FE6BE0C790	2-3	221.4.163.98	Remote		Online	1.31
L	4	HF2211	F0FE6BE0C928	2-2	202.104.28.51	Remote		Online	1.31
L	5	HF2411	285030465284	HF2411	112.65.48.94	China.Shangha	C/Connect	Online	1.0.15
10.1									

Step 4: Use virtual com to communicate.

🔚 serial-com2 - SecureCRT	🕞 Serial-COM4 - SecureCRT			
File Edit View Options Transfer Script Tools Window Help	<u>File Edit View Options Iransfer Script Tools Window H</u> elp			
🏗 🗱 🅼 🗶 Enter host «Alt+R» 🔰 🗈 🏦 🦓 🚰 🎇 🕴 🖉 🔚	🏪 💱 🖏 🖬 Enter host <alt+r></alt+r>			
Session Manager 🛛 🔻 ✔ serial-com2 🗙	Session Manager # × Verial-COM4 ×			
🕼 🕞 🖄 🐇 🛬 🔃 🗙 🐨 🦓 👔 at+++200000000344444111111222222ffffffddssss	🕼 💭 🖄 🐇 🖻 🖭 🗶 🚰 👬 📜 000344444111111222222F			
Filter by session name <alt+1></alt+1>	Filter by session name <alt+1></alt+1>			
Sessions	serial-com1 ^			
~ _ сом	💭 serial-com 10			
<b>2</b> 10.10.100.254	second-com11			
192.168.1.28	serial-com12			
192.168.83.110	🖳 serial-com13			
192.168.83.111	💭 serial-com14			
serial-com1	serial-com15			
serial-com10	serial-com19			
serial-com11	serial-com2			
senal-com12	serial-com20			
senal-com13	serial-com21			
senai-comit	serial-com22			
senai-comis	serial-com26			
senai-com 19 P	Default 👻 曼 +++ 🔘 a 🜑 STA 🔘 WSSSID 🔘 WSKEY 🌑 AT+Z 🌑 AT+CGSN 🌑 DEVICE 🌑 PRODUCT 💮 K_S			
Default • • • • • • • • • • • • • • • • • • •				
Send commands to active session	Send commands to active session			
00034444111111222222f	441111122222211111005			

### 3.8. Test Case Six: SMS Throughput

Step 1: Enter AT command mode, and set SMS parameters. AT+SMSID=#SMS#,0,135647584XX.

Step 2: Reboot and wait for network connected, UART send "#SMS#123457" to module, the phone will receive the SMS data "123457".

Step 3: Phone send "aaaaaa", product will send out "#SMS#aaaaaa"

					•	١F	物	联・改	变生	舌
🕞 Serial-COM4 - SecureCRT										
<u>File</u> <u>Edit</u> <u>V</u> iew <u>Options</u> <u>I</u> ransfer	<u>S</u> cript Too <u>l</u> s <u>W</u> indow <u>H</u> elp	<b>ul</b> l 中国移注	动 🗢			17:02		@ 1 Ø	100% 🛑	+
Enter host <alt+r></alt+r>	🐚 💦 🏔 🖂 🖙 🛠 📍 🞯 🖪	<83			(					
Session Manager 🛛 🗛 🗙	Serial-COM4 ×				185 2	135-199	>			
🚚 🕞 🦓 🐰 🗈 🖍 🗙 😁 🗥 "	+ERR=-1				42	试在7153年				
Filter by session name <alt+1></alt+1>	AT+SMSID=#SMS#.0.135647 <del>52458</del>				\$	天 17:01				
serial-com20 🔨	+ok	1234	457							
serial-com21	AT+Z									
💻 serial-com22	+ok							a	aaaaa	
💻 serial-com26	HF2411a+ok						-			
💻 serial-com27	#SMS#123457				_	/	•			
💻 serial-com29	+ERR=-1			/						
Serial-COM3		-								
Serial-COM4	+ERR=-1									
Serial-COM5	ATEN									
💻 serial-com7	+ERR=-1									
💻 serial-com8	AT+ENTM									
10.10.254	+0K	-								
10.10.100.254	#SMS#aaaaaaa	$\left[ O^{\circ} \right]$	A)	() )	豆信/彩				$\bigcirc$	
10.10.100.254-2323				-					-	1
192.168.1.201			A		2				W	
192.168.100.254							1	1 . T		1
192.168.83.110		QV	VE	: F	7 R	Y	U	141	O P	L
192.168.83.124								~~~~		1
serial-com16		A	S	D	F	G	н	JK	L	
serial-com 19			$\square$	_	$\square$					
serial-com26			7	x	С	V	B	м м		L
senai-com29 v		-	_		<u> </u>	Ľ.				
Default 🔹 🔍 +++ 🖉 a 🕥 STA 🔍 V	VSSSID 🥥 WSKEY 🌑 AT+Z 💿 AT+CGSN 🥃 DEVICE 🌑 PR	123	۲	₽		spac	ce		return	L
Send commands to active session										
#SMS#123457										
<b>-</b>										

### 3.9. Test Case Seven: HTTP Request

Step 1: Browser open <u>http://XX.XX.XX.2:8080/InductionOfScreenDemo/screen?id=1</u>, got the response as following:



Step 2: Input the HTTP parameters as the following steps.

	🚽 🕁 F	IF 物联・i	收变生活
😫 I.O.T Service Serial		-	
Image: Close Conv     Auto     Getin CMD     Quit CMD     Reload     Restart     Upgrade	Read Device	Write Device	Batch Set
PC Serial Pare COM: COM4 ▼ Baudrate: 115200 ▼ Data Bits: 8 ▼ Parity: NONE ▼ Stop Bits: 1 ▼	SEND:+++ SEND:AT+PID RECV:+ok=EG SEND:AT+AP		
UART Para	RECV:+ok=	۱. ۲	
UART No:       □ar ▼       Baudrate:       115200 ▼       Data Bits:       8 ▼       Parity:       NONE ▼         Flow Control:       Disable       ▼       UART Protocol:       NONE ▼          HeartBeat Time:       0       HeartBeat Serial:	RECV:+ax=2620 SEND:/T+GVER RECV+ok=4G_V SEND:AT+GSLQ B:CV:+ok=0,0 SEND:AT+IMEI	40283870 11.639	
SOCKET	RECV:+ok=8662 SEND:AT+ICCID	62040283870	
SOCKET Name:       A       Protocol:        HTP       Rout:       uart         Server Addr:       11       .222       Server Port:       8080         Connect Mode:       Always       But       Http Setup       X         HeartBeat Time:       0       He.       Type:       POST       Version:       1.1         Regist Mode:       Disable       Reg       Path:       /InductionOfScreenDemo/screen       Host:10.       .11:8080	RECV: SEND:AT + HEAR: RECV: + ok=1,0, SEND:AT + UART RECV: + ok=1,50 SEND:AT + MODE RECV: + ok=1,10 SEND:AT + UART RECV: + ok=1,11 SEND:AT + NETP: RECV: + ok=4,1,0 SEND:AT + NETP: RECV: + ok=4,1,0 SEND:AT + NETP:	F=1 FM=1 BUS=1 =1 5200,8,1,NONE,NFC Ff Ff FB #	
SIM Para	SEND:AT+NETP	π =C	
IMEI: 866262040283870 Status: Disconnect RSSI: 0	RECV:+ok=C,1,o SEND:AT+VER RECV:+ok=1.1.1 SEND:AT+HOST RECV:+ok=Epor	# 0c(2019-06-06 16:30) t-EG41	
Others Confirm Cancel	SEND:AT+WEL		
ModuleSN:         262040283870         Welcome:         EG41         HostName:         Eport-EG41           APN:         APN User:         APN Passw			
EG41 1.1.10c(2019-06-06 16:30)		Clear	Send

#### Protocol: HTTP

Server Addr: Server address, IP or domain name.

Server Port: Server port.

Type: HTTP Type, GET or POST.

Version: HTTP Version, 1.1.

Path: HTTP path

HTTP header input: Input HTTP header. Usually is Host information.

Path: /InductionOfScreenDemo/screen	
Host:101. 2:8080 Connection: keep-alive	

Step 3: Reboot and wait for SOCKA connection.

			<u></u>	<b>/ HF</b> 物联·改变生活
🔛 Device Status				×
System Product ID: EG41 Software Version: 1.0.45 RTC Time: NTP Disabled Un Time: 0 Druc 04220	GSM ModuleSN: ICCID: IMEI: Connect: IP Address: UART UART No: Config: 115200,8,1,	262040283870 898600810919f7041841 866262040283870 Connected(22) 223.104.212.191 4G_V1.639 Upgrade	SOCKET SOCKET Name: Protocol: Status: Server IP: Recv Bytes: 0 Send Bytes: 0 Fail Bytes: 0	A TTP HTTP Connected Recv Frames: 0 Send Frames: 0 Fail Frames: 0
Longitude: 121.629379272 Latitude: 31.233777999	Recv Bytes: 4 Send Bytes: 7 Fail Bytes: 0	Recv Frames: 2 Send Frames: 2 Fail Frames: 0	Reload Restart	Edit

Step 4: UART send data id=1, and got response of the server.

🧱 大傻串口调试软件-3.0AD	QQ:6972972	- 0	×
端 □: COM4 ▼ 波特率: 115200 ▼ 数据位: 8 ▼ 校验位: 元 ▼ 停止位: 1 ▼ 状态 ◆ 关闭串口 发送 ◆ ◆ 接收 清空接收区 16进制 停止显示 ▼ 自动清	发帧数     3       发字节数     12       收帧数     3       收字节数     15       清空计数     关于程序       文件行数     1       当前发送行     1       >     五示保存时间	[2019:04:03:15:33:17][发送]id=1 [2019:04:03:16:33:17][接收]{"id":1,"count":9999} HTTP response	
保存数据 更改文件 data.txt	<ul> <li>✓ 帧换行</li> <li>● 关键字过滤接收</li> <li>关键字</li> <li>→ id=1</li> </ul>		^

Note:

Refer to "4G\_2G DTU products function" for more detail.

#### 3.10. SMS AT Command

All AT command support using SMS to set. AT+Z do reboot operation, so it won't response.





#### 3.11. UART Upgrade

There is MCU firmware and 4G core module firmware. Get the latest firmware from the following link.

🔡 I.O.T Service Se	rial								-	□ ×
								(Hd)		R
Close COM	Auto GetIn CMD	Quit CMD	Reload	Restart	Upgrade			Read Device	Write Device	Batch Set
PC Serial Para	Baudrate: 115200	✓ Data Bits: 8	▼ Pa	rity: NONE 🔻	Stop Bits: 1	-		RECV:+ok=EG41	<u> </u>	
DUT Para								RECV:+ok=EG41		
UART Para								SEND:AT+APN RECV:+ok=		
UART No:	uar 💌 Baudra	ate: 115200 ·	- Data E	Bits: 8 🔻	Parity: NONE	▼ S	top Bits: 1 💌	SEND:AT+WSMA RECV:+ok=2620	AC 40283870	
Flow Control:	Disable	▼ UART Protoco	ol: NC	NE 🔽				RECV:+ok=4G_V	1.639	
HeartBeat Time:	0	HeartBeat Se	rial:					SEND:AT+GSLQ BECV:+ok=0.0		
SOCKET								SEND:AT+IMEI RECV:+ok=8662	62040283870	
SOCKET Name:	A 🔻	Protocol:	OFF	-	Rout:		-	SEND:AT+ICCID RECV:		
Server Addr:					Server	Port:		SEND:AT+HEAR	Γ=1	
Connect Mode:	Always	Burst Time:						SEND:AT+UART	「M=1	=
HeartBeat Time:		HeartBeat Ser	ial:					SEND:AT+MODE	3US=1	
Regist Mode:	Disable	Regist Code:						SEND:AT+UART	=1	
Data Tag:	Disable	<ul> <li>Data Tag Cod</li> </ul>	e:					RECV:+ok=1,115 SEND:AT+NETP:	5200,8,1,NONE,NFC =A	
SIM Para								RECV:+ok=A,1,o SEND:AT+NETP:	ff =B	
IMEL 866	262040283870		ICCI	D.				RECV:+ok=B,1,o SEND:AT+NETP:	ff =C	
Status: Disc	connect RSSI	0		/G V1	630	[	Refrech	RECV:+ok=C,1,o SEND:AT+VER	ff	
Status.	K33			40_01	4G Fir	nware	Refresh	RECV:+ok=1.1.1	0c(2019-06-06 16:30)	
<u>Others</u>								RECV:+ok=Epor	t-EG41	
ModuleSN: 262	040283870	Welcome: EG	41		HostName:	Eport-E	G41	SEND:AT+WEL RECV:+ok=EG41		
APN:	-	APN User:			APN Passw					-
EG41 1.1.10c(2	2019-06-06 16:30)	MCU Firmwar	e				Detail		Clear	Send

http://www.hi-flying.com/download-center-1/firmware-1/download-item-hf2411-firmware-v1-0-11

#### 3.10.1. MCU Firmware

Load the firmware.

	🔶 H	IF 物联·	改变生活
😫 I.O.T Service Serial		_	
Close COM Auto Getin CMD Qui eMb Restart Upgrade	Read Device	Write Device	Batch Set
PC Serial Para COM: COM4 ▼ Baudrate: 115200 ▼ Data Bits: 8 ▼ Parity: NONE ▼ Stop Bits: 1 ▼	SEND:+++ SEND:AT+PID RECV:+ok=EG41		
UART Para			
UART No: Baudrate: 57600 V Data Bits: 8 V Parity: NONE V Stop Bits: 1 V			
Flow Control: Disable VART Protocol: NONE V			
HeartBeat Time: HeartBeat Serial:			
SOCKET SOCKET			
SOCKET Name:     A       Server Addr:			
SIM Para			
IMEI: ICCID: RSSI: Refresh			
Others			
ModuleSN:         Welcome:         HostName:           APN:         APN User:         APN Passw			
Detail		Clear	Send

#### Reboot after upgrade success.

율 I.O.T Service Serial		-	
Close COM Auto Getlo CMD Ouit CMD Relaad Restart Upgrade	Read Device	Write Device	Batch Set
PC Serial Para COM: COM4 ♥ Baudrate: 115200 ♥ Data Bits: 8 ♥ Parity: NONE♥ Stop Bits: 1 ♥ DUT Para UART Para UART No: ♥ Baudrate: 57600 ♥ Data Bits: 8 ♥ Parity: NONE♥ Stop Bits: 1 ♥ Flow Control: Disable ♥ UART Protocol: NONE♥ HeartBeat Time: ♥ @ Upgrade	SEND:AT+Z SEND:+++ SEND:+++ RECV:a SEND:a RECV:+ok SEND:AT+E RECV:+ok SEND:AT+PID RECV:+ok=EG41 X ECV:	DE	
SOCKET         SOCKET Name:       A ▼ Pr         Server Addr:			
SIM Para       IMEI:     ICCID:       Status:     RSSI:         Refresh			
Others			
ModuleSN:     Welcome:     HostName:       APN:     APN User:     APN Passw         Detail		Clear	Send



#### 3.10.2. 4G Firmware

After the device connect to network(Show connected), input the 4G download address(Get the latest download address from our website.). The firmware size is about 5MB, it takes about 2 minutes to upgrade.W

http://download.iotworkshop.com/iotbridge/firmwares/HF2411/4G V1.926H 2b33fa3777a460 af4400df1fd3cf442c.bin

1.O.T Service Serial		_	
Image: Close COM     Auto     Getin CMD     Quit CMD     Reload     Restart     Upgrade	Read Device	Write Device	Batch Set
PC Serial Para COM: COM4 ♥ Baudrate: 115200 ♥ Data Bits: 8 ♥ Parity: NONE ♥ Stop Bits: 1 ♥ DUT Para	SEND:AT+Z SEND:+++ SEND:+++ RECV:a SEND:a		
UART Para	RECV:+ok		
UART No: 💌 Baudrate: 57600 💌 Data Bits: 8 💌 Parity: NONE 💌 Stop Bits: 1 💌	RECV:+ok		
Flow Control: Disable VART Protocol: NONE	RECV:+ok=EG41		
HeartBeat Time: H 📓 Upgrade	ECV:	ADE	
SOCKET Device Firmware 4G Firmware	END:AT+GVER ECV:+ok=4G_V	1.639	
SOCKET Name: A  Pr Now is : 4G_V1.639 Read			
Server Addr: URL: "HF2411/4G_V1.926H_2b33fa3777a460af4400df1fd3cf442c.bin			
Connect Mode: Always Bu			
HeartBeat Time: He			
Regist Mode: Disable Re Upgrade Close			
Data Tag: Enable Da			

#### 3.12. Remote OTA Upgrade

Currently only support MCU remote OTA update, later will support 4G upgrade

Step 1: Remote upgrade is using our IOTBridge cloud, download firmware from our IOTBridge. Bound device to account as the previous steps.

#### 3.11.1. MCU Firmware

Step 2: Login http://bridge.iotworkshop.com/, upload firmware in IOTBridge.

← → C 🔺 不安全   bridge.i	C 🛕 🖓 😤   bridge lotworkshop.com/addFirmware.html					
🔜 应用 📙 汉纲 📕 工作 📕 购物	18 📑 有人科技 🍃 百日	1 🤶 百歳地図 🌔 21	ICREFA 🗅 谷歌郎神 🔕 八八月			
наносе	I.O.T Bridge			kyo4229 English 🔻		
D Home	😰 Firmware Manage	/ 🗴 Upload Firmware				
My UserID						
🍰 Device Manage		ModuleType	HF2411	*		
B Firmware Manage		Version	1.0.5			
LO.T Service		Туре	APP	-		
A∥ My Info ∨		Description	Description			
🕑 Exit		Firmware	HF2411_V1.0.5_UPGARDE.bin Select Firmware	<i>à</i>		
				Preservation		

Step 3: Copy the download link as following.

				🕁 HF	物联・改变生活
на при	I.O.T Bridge				kyo4229 English 💌
D Home	😣 Firmware Manage / 🕮 Firm	ware Info			
My UserID	FirmwareName	HF2411_V1.0.5_UPGARDE.bin	Туре	APP	
a Device Manage	ModuleTurne	HE2411	Unicadilizer	hro4220	
B Firmware Manage	mounerpe		o prosectore	NUTLES	
I.O.T Service	Version	1.0.5	State	启用	
A₂ My Info ∽	Time	2018-11-30 15:01:58	Md5	af199ff81e66b7ec879b30c9b1e9d02c	
🖒 Exit					ê.
	FilePath	/alidata/www/download_center/iotbridge/firmwares/HF2411/HF2411_V1. 0.5_UPGARDE_5f2882cdf173aa6c718585261faa9ca3.bin	Description		
	Download	http://download.iotworkshop.com/iotbridge/firmwares/HF2411/HF2411_V1.0.5_UP	GARDE_5f2882cdf173aa6c718585261faa9ca3.bin		Сору

#### Step 4: Copy the download link into the IOTService tools. And do upgrade operation.

I.O.T Service		- • × •
Begin Stop Config Status Vir	Path	东
SN         DevType         MAC Address         HostName         IP           2         HF2211         F0FE6BB82E88         Eport-HF2211         T02246.121.150         Ch           1         EG10         ACCF20123404         Gport-EG10         112.65.61.35         Ch           3         G10         575023903232         Gport-G10         122.97.179.232         Re	Position VirPath State ina.Jinan Offline ina.Shanghai Online mote Offline	SW Ver 1.31 1.4.11 1.03.28 HF-LPB100
Succession Customer Firmware Setting DevType Firmware Version Upload	Thee	Firmware URL
Firmware Info Input URL: Firmware Info		× Submit
Firmware Name:	Туре:	
DevType: Upload Time:	Version: MD5:	
Firmware URL: Descript:		Info Delete Add Close
	Confirm	Cancel
🔛 I.O.T Service		– 🗆 X

10.1	.O.T Servi	ce							_		×
<u>M</u> ai	nagement	(M) Setting (C	) Tools (T) He	elp (H)							
	Begin	💥 Stop 🗧	🔅 Config	Status 🚏	VirPa	ath				Conn	ected
SN	DevType	MAC Address	HostName 🔺	IP		Position	VirPath	State		SW Ve	r
2	HF2211	F0FE6BB82E88	Eport-HF2211	112.246.121.150	Chin	na.Jinan		Offline	1.31		
1	EG10	ACCF20123404	Gport-EG10	112.65.61.35	Chir	a Shanqhai		Online	1.4.11		
3	G10	575023903232	Gport-G10	122.97.179.232	Rem	Copy Devi	ce MAC	Offline	1.03.28	3	
						Device Tab Refresh Delete Sele	ole Filter ected Device				
						Upgrade F Upgrade F	irmware Selected irmware All				
						Upgrade V F-Setting L	Veb Selected ocal				
						Application	n 🕨				



#### 3.11.2. 4G Firmware

Step 1: Add device to account, and click the 【Upgrade】 button. It will take about 2minutes to upgrade. Ater upgrade success, it will restart.

🔛 Device Status				>
System	GSM ModuleSN:	262040076977	SOCKET SOCKET Name	* C 🔽
HEZATI	ICCID:	89860118802305380338	Protocol:	TCP-CLIENT
	IMEI:	866262040076977	Status:	Connected
ALL ALL	Connect:	Connected(21)	Server IP:	
	IP Address:	112.64.68.41	Recv Bytes: 0	Recv Frames: 0
		4G_V1.742 Upgrade	Send Bytes: 26	i88 Send Frames: 224
Product ID: HI	2411 UART		Fail Bytes: 0	Fail Frames: 0
Software Version: 1	.1.7b UART No:	UART 🔫		
RTC Time: NTP Disa	abled Config: 9600,8	3,1,NONE		
Up Time: 0-Day 3:	45:22 Recv Bytes: 0	Recv Frames: 0	Releas	4
Longitude: 121.63157	6538 Send Bytes: 6	Send Frames: 1	Reida	Edit
Latitude: 31.22709	0835 Fail Bytes: 0	Fail Frames: 0	Restar	rt

Step 2: Check the software version.

🕈 Device Status				×
System	GSM		SOCKET	
A CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE	ModuleSN:	262040076977	SOCKET Name:	C 💌
1422411	ICCID:	89860118802305380338	Protocol:	TCP-CLIENT
	IMEI:	866262040076977	Status:	Connected
Alter St. C.	Connect:	Connected(27)	Server IP:	
	IP Address:	112.65.48.176	Recv Bytes: 0	Recv Frames: 0
		4G_V1.786 Upgrade	Send Bytes: 12	Send Frames: 1
Product ID: HF2411	UART		Fail Bytes: 0	Fail Frames: 0
Software Version: 1.1.7b	UART No:	UART 💌		
RTC Time: NTP Disabled	Config: 9600,8,1	,NONE		
Up Time: 0-Day 0:1:3	Recv Bytes: 0	Recv Frames: 0	Palaad	
Longitude: 121.631576538	Send Bytes: 6	Send Frames: 1	Reload	Edit
Latitude: 31.227090835	Fail Bytes: 0	Fail Frames: 0	Restart	

## 3.13. Massproduction Config

Step 1: Config the first product.

	♣ HF 物联·改变生活
🔛 I.O.T Service Serial	– 🗆 X
Image: Close COM     Image: Close COM <td>Read Device Write Device Batch Set</td>	Read Device Write Device Batch Set
PC Serial Pa COM: COM4 ▼ Baudrate: 115200 ▼ Data Bits: 8 ▼ Parity: NONE ▼ Stop Bits: 1 ▼ DUT Para	SEND:AT+UART=1 RECV:+ok=1,11520(8,1,NONE,NFC SEND:AT+NETP= RECV:+ok=4,117TP,1.1.1,9090,long
UART Para         UART No:       □ar. ▼         Baudrate:       115200 ▼         Data Bits:       8 ▼         Parity:       NONE         Flow Control:       Disable         UART Protocol:       NONE         HeartBeat Time:       0         HeartBeat Serial:	SELUZAT + NEW-B RECV:+ok=0,1,6f SEND_AT-NETP=C RECV:+k=C,1,6ff SEND_AT+HEART=A RECV:+ok=A,0, SEND_AT+NREGSND=A FECV:+ok=A,link
SOCKET	SEND:AT+NREGDT=A RECV:+ok=A,
SOCKET Name:       A       Protocol:        HTTP       Rout:       uart         Server Addr:       1.1.1.1       Http Setup       X       X       X       X         Connect Mode:       Always       Burst T       Http Setup       X       X       Y         HeartBeat Time:       0       HeartB       Postic       Version:       1.1       Y         Path:       /adfadsf       Path:       /adfadsf       123123123       123123123         SIM Para       Data Tag       Disable       Version:       Version:       1.1       Version:	SENDAT+NREGEN=A RECV:+ok=A <sub>0</sub> ff SENDAT+NETPID=A RECV:+ok=A, SENDAT+NETPIDEN=A RECV:+ok=A,off SENDAT+NETPIX=A RECV:+ok=A,off SENDAT+HTPIP RECV:+ok=POST SENDAT+HTPURL = RECV:+ok=Adfad5,1.1 SENDAT+HTPHEAD
IMFI: 866262040283870	RECV:+ok=123123123
Status: Disconnect RSSI: 0	SEND:AT+VER RECV:+ok=11.10c(2019-06-06 16:30)
Others	RECV:+ok=Eport-EG41
ModuleSN:         262040283870         Welcome:         EG41         HostName:         Eport-EG41           APN:         APN User:         APN User:         APN Passw	SEND:AT+WEL RECV:+ok=EG41
EG41 1.1.10c(2019-06-06 16:30) Detail	Clear Send

Step 2: The config information will be saved in the following file. This file can be used for massproduction product config. May also direct modify this file.

共享 查看					
- > 这台电脑 >	系统 (C:) > Hi-Flying > IOTService	IOTService_V2 → data			
	名称	修改日期	类型 フ	大小	
	hisTmp	2019-06-04 14:51	文件夹		
	新建文件夹	2019-05-15 17:48	文件夹		
	📄 atcmd.txt 🛛 🖊	2019-06-11 15:52	文本文档	1 KB	
šites on MSN	C(Hi-Flying)/OTService// File Edit View Soleth Construction Context File Construction Construction Construction Construction IOTService Construction IOTService Construction	JTService_V2(data)atcmd.txt - E	ditPlus <u>B</u> rowser <u>Emmet M</u> > <u>A<sub>0</sub></u> <u>G</u> + <u>i</u> <u>E</u>   <u>A<sup>0</sup></u> <u>Hx</u>   <u>Hx</u>   <u>NOFE,NFC</u> 1.1,9690,long .1 <crlf><crlf></crlf></crlf>	∲ <mark>≔ 18 √ 1 0 0 2 2 2 4</mark>	X

Step 3: 点击批量配置,可快速连续配置产品。

* Lozo 1 o 1	
I.O.T. Service Serial         Image: Close COM         Auto         Getin CMD         Quit CMD         Reload         Restart         Upgrade         PC Serial Para         COM4         Baudrate:         115200         Data Bits:         8         Parity:         NONE         Stop Bits:	Read Device Write Device Batch
DUT Para JART Para UART No: Baudrate: 115200 V Data Bits: 8 V Parity: NONE V Stop Bits: 1 V Flow Control: Disable V UART Protocol: NONE V HeartBeat Time: 0 HeartBeat Serial:	SEND:AT+NETPID=A RECV:+ok=A, RECV:+ok=A,off SEND:AT+NETPICBN=A RECV:+ok=A,off SEND:AT+NETPICKA RECV:+ok=A,off SEND:AT+HTPIC RECV:+ok=SOST SEND:AT=NFURIL
SOCKET SOCKET Name: A  Protocol Alert Alert Alert Alert Connect Mode: Always Burst Tir HeartBeat Time: 0 HeartBe Regist Mode: Disable Regist Code: Disable Di	RECV:+ok=G41ad51,11 SEND:AT+HTPHEAD RECV:+ok=123123123 SEND:AT+VER RECV:+ok=1.1.10c(2019-06-06 16:30) SEND:AT+HOST RECV:+ok=Eport-EG41 SEND:AT+WEL RECV:+ok=EG41 SEND:+++
Data Iag:     Disable     ▼     Data Iag Code:       IMPara     IMEI:     866262040283870     ICCID:       Status:     Disconnect     RSSI:     0     4G_V1.639     Refresh	SEND:AT+UART=1,115200,8,1,NONE,NFC RECV:+ok SEND:AT+NETP=A,1,HTTP,1.1.1.9,090,long RECV:+ok SEND:AT+HTPTP=POST RECV:+ok SEND:AT+HTPURL=/adfadsf,1.1 RECV:+ok
Others         Velcome:         EG41         HostName:         Eport-EG41           APN:	SEND:AT +HTPHEAD=123123123< <crlf><crl RECV:+ok SEND:AT+CFGTF RECV:+ok</crl </crlf>



# **APPENDIX A: REFERENCES**

### A.1. Test Tools

IOTService Configure Software: http://www.hi-flying.com/index.php?route=download/category&path=1\_4