

Dongle400

USB LTE Stick

User Manual

TABLE OF CONTENTS

CHAPTER 1: Introduction..... 4

Getting to Know Your Device.....4

Installing SIM Card.....4

Using Your Device.....6

 Logging into the Device Management Website.....7

 Setting Access Point Name Manually.....7

Restore Factory Settings.....8

Radio Frequency (RF) Energy.....8

CHAPTER 2: Device Configuration..... 9

Login to your Device..... 9

Home Page..... 10

Settings..... 11

 Internet.....12

 Network.....13

 Features.....14

 Management.....18

CHAPTER 3: Trouble Shooting.....27

Q&A.....27

CHAPTER 4: Health and Safety Information.....28

To the Owner..... 28

Using Notifications..... 28

Leagl Information..... 29

Thank You for Choosing Dongle400

The Dongle400 is a newly developed USB LTE Stick, when connected to the LTE Network, the device can provide flexible LTE access for users to enjoy high-speed Internet applications.

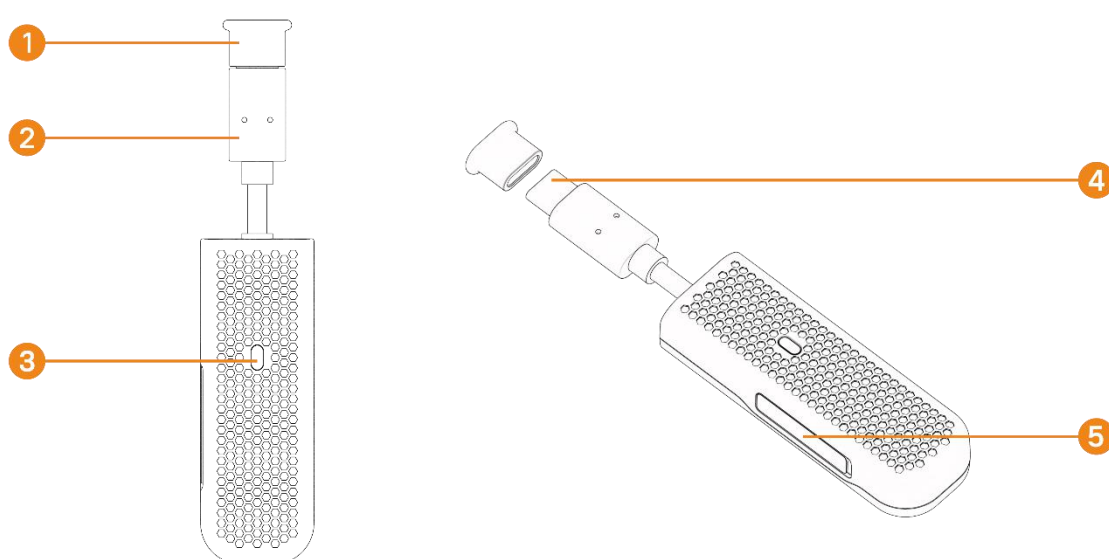
This guide will help you understand your new device and all the things you can do with it at home or abroad. So, let's get started.

CHAPTER 1: Introduction

Getting to Know Your Device

The following figure is only for your reference. The actual product may be different.

1. Type-C protection cover
2. USB cable
3. LED Indicator light
4. Type-C connector
5. SIM cover



LED Status	Describe
Solid Blue	Registered to 4G network without data connection
Blinking Blue	Registered to 4G network with data connection
Solid Green	Registered to 3G network without data connection
Blinking Green	Registered to 3G network with data connection
Solid Red	Not registered to any network or SIM card wrong
Blinking Blue and Red alternately	The device is upgrading

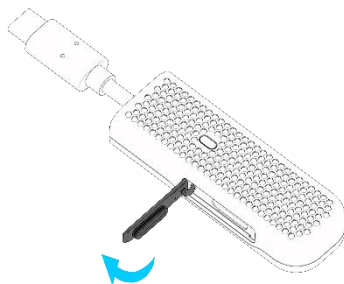
Installing SIM Card

Follow the instructions below to install the SIM card:

1. Power off the device
2. Remove the SIM card cover
3. Insert the SIM card into card slot in the correct position
4. Install SIM card cover

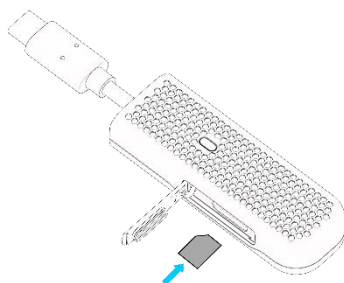
Step 1:

Open the SIM Card cover.



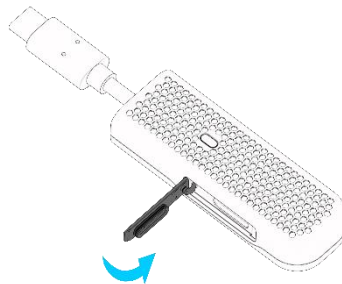
Step 2:

Insert the SIM card into the slot.



Step 3:

Close the SIM Card cover.



Notes:

Your modem only supports the nano-SIM card. You can get a standard nano-SIM card from your service provider.



DO NOT remove SIM card when the device is powered on since this may damage the card and the device. So once the SIM card has been inserted into the device when in use, the SIM card **MUST** remain in your device!

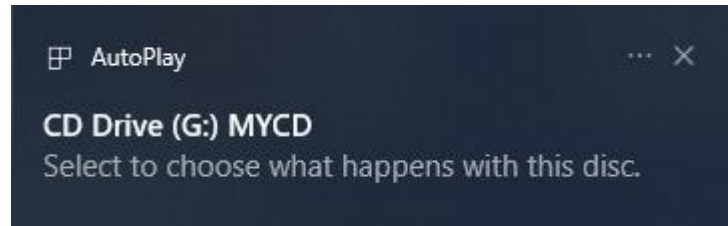
Do not bend or scratch your SIM card, and avoid exposing the SIM card to static electricity, water or dirt.

Using Your Device

1. Connect the device to your computer or laptop.
2. The software will be installed automatically and then you can use your device. When you use Windows OS, please according below step to operate.

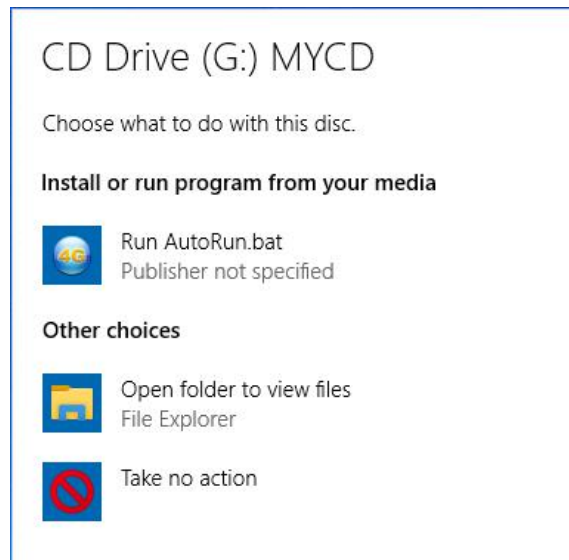
Step1

When you insert the device to your computer or laptop via USB first time, you'll see Windows' "AutoPlay" popup, click the popup and go to next.



Step2

Click “Run AutoRun.bat” to run the program.



Notes:

If there is no popup when insert the device to your PC, it may due to Autoplay function is forbidden by your PC, you can click the CD Drive by manual in your PC to run it.



Logging into the Device Management Website

1. Make sure the device is connected to your computer or laptop.
2. Open the browser, and enter <http://192.168.1.1> in the address bar.
3. You can login to check and modify configuration permission.

Setting Access Point Name Manually

If your computer or laptop cannot access the Internet, you can add a new Access Point Name (APN) manually.

1. Launch the Internet browser and enter <http://192.168.1.1> in the address bar.
2. Select Settings > Internet > Mobile Connection.
3. Click Add “New Profile”, enter the new APN information and then click “Apply”.

4. Click “Save” to set the new APN as the default APN.

Notes:

Contact your service provider to get the APN information.

Restore Factory Settings

You can restore the factory defaults that come with the device to reconfigure the device setting. Login to device Management Website to restore to factory default settings.

Notes:

Reset function will delete all the device’s user-defined settings and restore Admin setting to factory default.

Radio Frequency (RF) Energy

Radio Type / Description	Transmitter Frequency	Maximum Output Power
WCDMA Band 1	1920-1980 MHz	22.90 dBm
WCDMA Band 2	1850-1910 MHz	23.25 dBm
WCDMA Band 4	1710-1755 MHz	22.95 dBm
WCDMA Band 5	824-829 MHz	22.91 dBm
WCDMA Band 8	880-915 MHz	23.22 dBm
LTE Band 1	1920-1980 MHz	22.13 dBm
LTE Band 2	1850-1910 MHz	21.61 dBm
LTE Band 3	1710-1785 MHz	21.96 dBm
LTE Band 4	1710-1755 MHz	21.39 dBm
LTE Band 5	824-829 MHz	23.04 dBm
LTE Band 7	2500-2570 MHz	22.04 dBm(EU) 22.16 dBm(US)
LTE Band 8	880-915 MHz	22.98 dBm
LTE Band 12	699-716 MHz	23.19 dBm
LTE Band 17	704-716 MHz	23.18 dBm
LTE Band 20	832-862 MHz	22.91 dBm

CHAPTER 2: Device Configuration

Login to your Device

Make sure to connect your device (tablet, PC, etc.). To configure your device, open your web browser and input the default URL:

Log in to <http://192.168.1.1> in your browser.

Congratulations! You have successfully logged in to your device.

Once you have logged in to your device via your web browser, you can see the Home page. Besides Home page there is settings page for the device:

"Settings" page is set to configure your device;

Please see the relevant sections of this manual for detailed instructions for your device.

Home Page

In this section you can see all internet status. The internet mode, network status, connection time and connection related parameters will be displayed.

[Home](#)[Settings](#)


4G



Internet Mode:	Mobile Data
Network Status:	Connected
Connection Uptime:	3 Mins
MAC Address:	A4:D4:B2:00:2A:DA
IP Address:	10.161.51.35
Subnet Mask:	255.255.255.248
Default Gateway:	10.161.51.36
Primary DNS Server:	221.11.1.67
Secondary DNS Server:	221.11.1.68
IPv6 Address:	2408:8471:b02:2c27:b5cf:307e:1249:44a7
IPv6 Primary DNS Server:	2408:8888::8
IPv6 Secondary DNS Server:	2408:8899::8



Settings

You can click “Settings” on the main page to configure the device.



Home

Settings

4G  

Internet

Network

Features

Management

PIN Management

Device Information

Statistics

System Log

Upgrade

Reboot & Reset

Device Information

Device Information

Device Name: Dongle 400

Software Version: RW_Dongle400_V1.0.0_B01

Hardware Version: RW_Dongle400_MB_V1.01

IMEI: 868621029251760

IMSI: 460016058382147

MAC: A4:D4:B2:00:2A:DA

RF Parameters

RSRP: -104dBm

RSSI: -78dBm

RSRQ: -11dB

SINR: 140dB

PCI: 59


Internet

Mobile Connection

In this section, you can configure your mobile data connection.



Note:

If you are unsure of your APN Settings, please contact your service provider. The device supports auto APN, which means you do not need to edit APN settings for most cases.



Home

Settings

4G  

Internet

Mobile Connection

Network

Features

Management

Mobile Connection

Mobile Data:

On

Data Roaming:

Disable

Carrier Name:

Unicom (Default)

Authentication Type:

CHAP

APN:

3gnet

User Name:

Password:

IP Type:

IPV4V6

New Profile

Apply

Network Mode:

Auto

Network Operator:

Auto

Apply

Mobile Data: To Enable/Disable Mobile connection

Data Roaming: To Enable/Disable Roaming connection

Carrier Name: APN Profile Name

Network Mode: Auto/4G/3G, it is suggested to select “Auto”

Network Operator: Auto/Manual, it is suggested to select “Auto”

Network

DHCP

In this section you can configure the DHCP settings.

Default value:

1. DHCP server is enabled
2. Gateway IP address: 192.168.1.1
3. DHCP IP Range: 192.168.1.100 to 192.168.1.200
4. DHCP lease time: 24 hours(86400 seconds)

Click “**Apply**” after configuring the new settings.



- Internet ▶
- Network ▼
- DHCP**
- Features ▶
- Management ▶

DHCP

DHCP server: Enable ▼

IP address: 192. 168. .

DHCP IP range: to
192.168.1.100 to 192.168.1.200

DHCP lease time: seconds

[Apply](#)

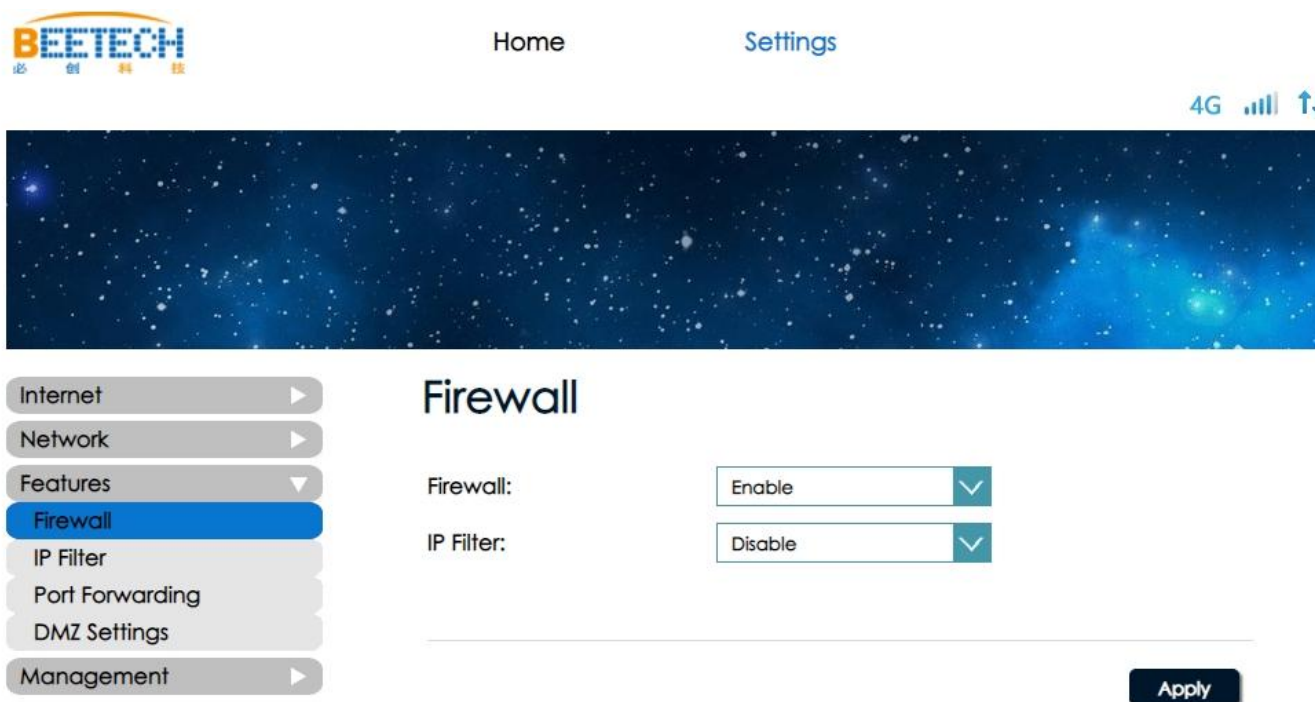
Features

Firewall

Your device's high-performance firewall feature continuously monitors internet traffic, protecting your network and connected devices from malicious internet attacks. In this section you can **"Enable"** or **"Disable"** for Firewall/IP Filter settings.

Note:

In order to enable IP Filter, the Firewall setting must be set to “Enable” first.




IP Filter




You can filter the packages by IP address, Protocol, Port number. IP Filtering's configuring includes LAN IP address, LAN port, WAN IP address, WAN port and Protocol functions.


- **Whitelist:** Set the websites that users are allowed to access. If the whitelist is empty, users will not be able to access the Internet.
- **Blacklist:** Set the websites that you do not want users to access.
- The value range of LAN/WAN Port is 1-65535.

- Settings will not take effect until the “**Apply**” button is clicked.



HomeSettings

4G   



Internet▶

Network▶

Features▼

Firewall

IP Filter

Port Forwarding

DMZ Settings

Management▶

IP Filter

Status:

Blacklist

- Whitelist: Set the websites that users are allowed to access. If the whitelist is empty, users will not be able to access the Internet.
- Blacklist: Set the websites that you do not want users to access.
- The value range of LAN/WAN Port is 1-65535.
- Settings will not take effect until the "Apply" button is clicked.

LAN IP Address	LAN Port	WAN IP Address	WAN Port	Protocol	Status	Options
<div>Add</div>						

Apply

COPYRIGHT © 2021 | Open Source Notice

Port Forwarding

In this section you can enable external computers to access FTP or other services provided by the LAN.

IP address: Assigned to each device connected to a computer network that uses the Internet Protocol for communication.

LAN/WAN port: The part of the computer that provides services. It is a single part and the value range of LAN/WAN Port is 1-65535.

Protocol: Protocols applied by services.



- Internet ▶
- Network ▶
- Features ▼
- Firewall
- IP Filter
- Port Forwarding**
- DMZ Settings
- Management ▶

Port Forwarding

-IP address: Designate a computer located at the LAN to provide services.

-LAN/WAN port: The port of the computer that provides services. It is a single port and the value range of LAN/WAN Port is 1-65535.

-Protocol: Protocols applied by services.

-Note: Settings will not take effect until the "Apply" button is clicked.

Name	WAN Port	LAN IP Address	LAN Port	Protocol	Status	Options
------	----------	----------------	----------	----------	--------	---------

Add

Apply

Example: How to setup Port Forwarding for port 21 (FTP server)

This will enable to provide access to others to your FTP server in your LAN through WAN.

Step 1: Assign a static IP to your local computer that is hosting the FTP server.

Step 2: Login to the Gateway and go to Settings / Features / Port forwarding.

Step 3: Enter WAN Port to 21;


Enter LAN IP Address to be the static IP of computer;


Enter LAN port to 21;

Step 4: Click Apply to activate.

DMZ Settings

DMZ allows outside network to connect in and communicate with internal LAN devices via this WAN interface.

HomeSettings4G↑↓



Internet

Network

Features

Firewall

IP Filter

Port Forwarding

DMZ Settings

Management

DMZ Settings

DMZ status:

Disable

DMZ IP address:

192.168.1.100

Apply

COPYRIGHT © 2021

Open Source Notice

IP Address: Give a static IP address to the DMZ Host when Enabled radio button is checked. Be aware that this IP will be exposed to the WAN/Internet.

Management

PIN Management

In this section you can enable or disable PIN of SIM card.

Please be aware you can only input 3 times the wrong PIN number, otherwise the SIM card will be locked.

Note:

You will need to request the PUK code to your carrier.



Home

Settings

4G



- Internet ▶
- Network ▶
- Features ▶
- Management ▼
- PIN Management**
- Device Information
- Statistics
- System Log
- Upgrade
- Reboot & Reset

PIN Management

PIN operation:

PIN code:

Remaining attempts: 3

Apply

PIN required

PIN code:

Remaining attempts:3

☐ Disable PIN verification

For your convenience,it is recommended that you disable PIN verification;otherwise,you will have to enter the PIN each time your device is turned on.

[Apply](#)[Go To Home](#)

Device Information

In this section you can check the basic information of the device. Please contact your carrier for more information.



- Internet ▶
- Network ▶
- Features ▶
- Management ▼
- PIN Management
- Device Information**
- Statistics
- System Log
- Upgrade
- Reboot & Reset

Device Information

Device Name:	Dongle 400
Software Version:	RW_Dongle400_V1.0.0_B01
Hardware Version:	RW_Dongle400_MB_V1.01
IMEI:	868621029251760
IMSI:	460016058382147
MAC:	A4:D4:B2:00:2A:DA

RF Parameters

RSRP:	-104dBm
RSSI:	-78dBm
RSRQ:	-11dB
SINR:	140dB
PCI:	59

Device Name: Name of the device for identification purpose.

Software Version: Software version currently loaded in the device.

Hardware Version: Hardware version currently loaded in the device.

IMEI: The unique identification number that is used to identify the 4G-LTE module.


IMSI: The international mobile subscriber identity used to uniquely identify the 4G-LTE module.

MAC: A unique number that identifies the device.



Statistics


In this section you can easily monitor your data usage. Please note that upload, download and total

data usage will be reset when the device is restored to default factory settings.



HomeSettings

4G  



Internet

Network

Features

Management

PIN Management

Device Information

Statistics

System Log

Upgrade

Reboot & Reset

Bandwidth Monitoring

Monthly traffic starts to count time:	1day
Monthly flow package:	0B
Remaining traffic this month:	0B
Upload Data:	1019.04KB
Download Data:	347.23KB
Total Data Usage:	1.33MB
Last cleared history time:	2021-08-24 14:21:11

The statistics of mobile traffic statistics are for reference only. The actual traffic is subject to the information provided by the SIM card operator.

Traffic configuration

Clear History

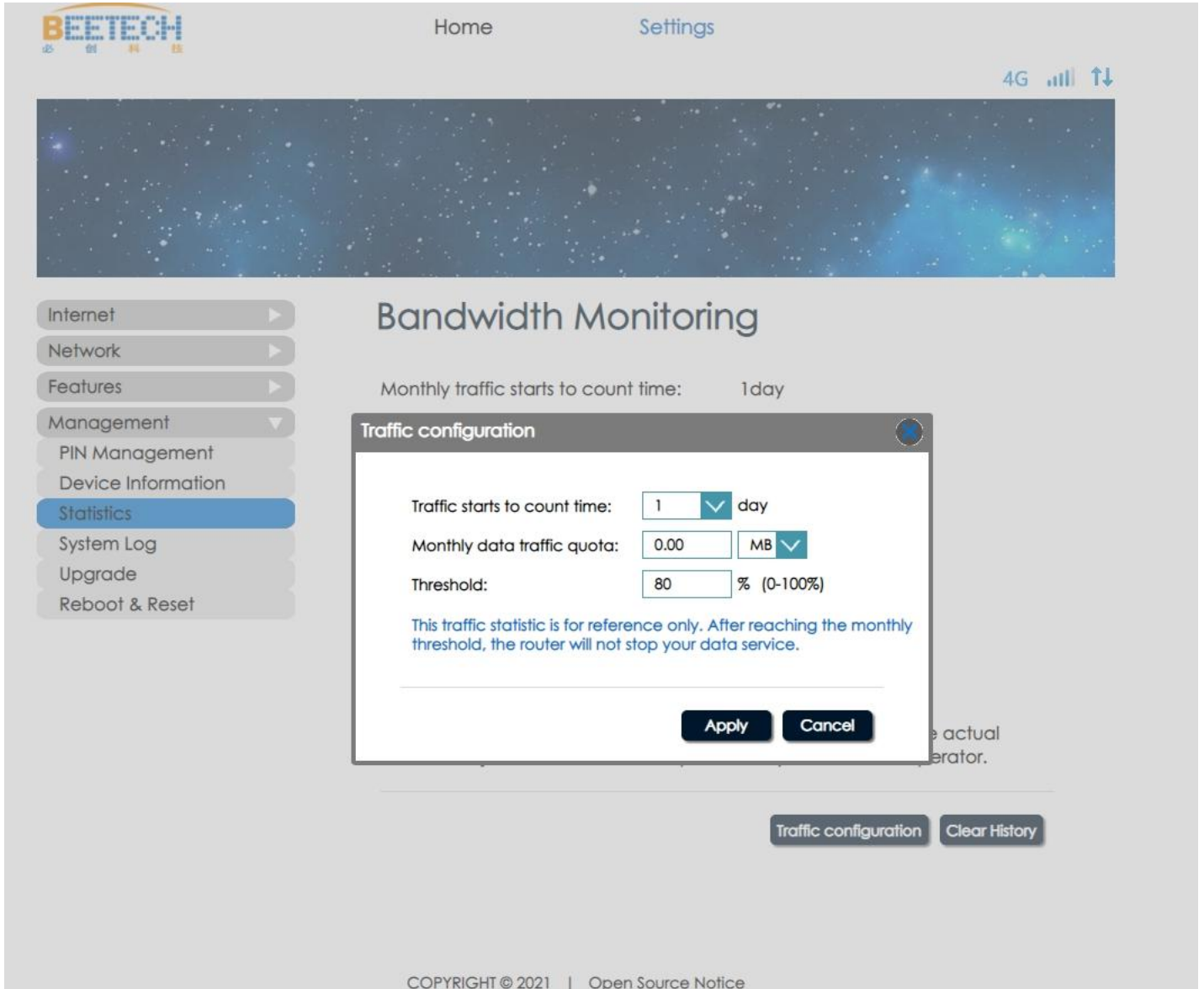
COPYRIGHT © 2021

|

Open Source Notice

Clear history: Click it to clear the history statistics.

Traffic configuration: Click to configure data traffic plan as below.



System Log

In this section, you can configure and export the system log, it logs device anomalies.



- Internet ▶
- Network ▶
- Features ▶
- Management ▼
 - PIN Management
 - Device Information
 - Statistics
 - System Log**
 - Upgrade
 - Reboot & Reset

System Log

- | | | |
|--|-----------------------------------|---|
| <input type="checkbox"/> main process: | <input type="text" value="none"/> | ▼ |
| <input type="checkbox"/> router: | <input type="text" value="none"/> | ▼ |
| <input type="checkbox"/> dialup: | <input type="text" value="none"/> | ▼ |
| <input type="checkbox"/> web server: | <input type="text" value="none"/> | ▼ |
| <input type="checkbox"/> device_control: | <input type="text" value="none"/> | ▼ |
| <input type="checkbox"/> Upgrade: | <input type="text" value="none"/> | ▼ |

[Export](#)[Config](#)

Upgrade

In this section you can manually check if there is new firmware for your device to update. When there is a new version, it will display a “**new**” icon in the WebUI, and you can select the icon to proceed with the upgrade. You can also check the current software and hardware information in this page. Your device can automatically detect firmware updates through change “Status” to enable.



- Internet ▶
- Network ▶
- Features ▶
- Management ▼
- PIN Management
- Device Information
- Statistics
- System Log
- Upgrade**
- Reboot & Reset

Auto Update

Status:

Disable [Apply](#)

Manual Update

Update Type: Online Update

Current Software Version: RW_Dongle400_V1.0.0_B01

Current Hardware Version: RW_Dongle400_MB_V1.01

[Check for update](#)

Online Update operation:

Click the button “**Check for update**” to confirm if there is an update available. It will guide you to confirm if you want to proceed with the update.

Reboot & Reset

In this section you can reboot your device or reset it to factory default settings.



Internet ▶

Network ▶

Features ▶

Management ▼

PIN Management

Device Information

Statistics

System Log

Upgrade

Reboot & Reset

Reboot & Reset

Rebooting the device will takes about 60 seconds.

Click the button below to reboot.

[Reboot](#)

Click the button below to reset the device to its factory settings.

[Reset](#)

Reboot: click it to reboot your device.

Reset: click it to reset your device.

CHAPTER 3: Trouble Shooting

If you are having trouble with your device, here are a few trouble-shooting tips:

1. Restore factory settings via webUI.
2. If the device is not responsive, you can re-plug the device.

Q&A

Q: What to do if there is no service?

A: The possible reasons are an unstable network signal, or a hardware problem.

You can try the following solutions:

1. If you are inside a building or near a structure that may be blocking the signal, change the position or location of the device. For example, try moving the device close to a window.
2. Check the hardware for any loose parts or damage.

Q: Data connection failed.

A: You may be on a not network or limited coverage area, try to move to a different location or a better network coverage area.

CHAPTER 4: Health and Safety Information

To the Owner

- Some electronic devices, such as the electronic system of vehicles, are susceptible to electromagnetic interference sent by your device if inadequately shielded. Please consult the manufacturer of your device before using if necessary.
- Operating your device may interfere with medical devices like hearing aids and pacemakers. Please always keep them more than 20 centimeters away from such medical devices when they are turned on. Turn your device off if necessary. Consult a physician or the manufacturer of the medical device before using your device.
- Be aware of the usage limitation when using your device at places such as oil warehouses or chemical factories, where there are explosive gases or explosive products being processed. Turn off your device if required.
- The use of electronic transmitting devices is forbidden in aircrafts, at gas stations, and in hospitals. Please observe and obey all warning signs and power off your device in these conditions.
- Do not touch the inner antenna area; it will affect your device's performance.
- Store your device out of the reach of little children. Your device may cause injury if used as a toy.
- Do not touch the metallic parts of your device when the device is operating as this may cause burns.

Using Notifications

- Please use original or authorized accessories only. Using any unauthorized accessories may affect your device's performance, and violate related national regulations about telecom terminals.
- Avoid using your device near or inside metallic structures or establishments that can emit electromagnetic waves; it may influence signal reception.
- Please keep your device dry and store in a shady and cool place.
- Do not use your device immediately after a sudden temperature change. In such case, it will

produce moisture inside and outside your device. Wait until it becomes dry.

- Handle your device carefully. Do not drop, bend, or strike it; your device may get damaged.
- No dismantling by non-professionals and only qualified technicians can undertake repair work.
- An operating temperature range of $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$ and humidity range of 5% - 95% are recommended.

Legal Information

FCC Caution

FCC ID: 2A23ODONGLE400

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modification warning: Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA).

CE Caution

USB Port

This product shall only be connected to a USB interface of version USB 2.0.

Proper Use

As described in this guide, your device can be used only in right location. If possible, please do not

touch the antenna area on your device.

EU DECLARATION OF CONFORMITY

Hereby, Beetech Inc. declares that the radio equipment type Dongle400 is in compliance with Directive 2014/53/EU.

Declaration of RoHS Compliance

We declare that Dongle400 manufactured by Beetech Inc. meets the requirements of RoHS Directive 2011/65/EU and its amended directive (EU) 2015/863.

Specific Absorption Rate (SAR) This device complies with the directives relating to radio frequency exposure, when it is used near the head or at a minimum distance of 5mm from the body. According to ICNIRP guidelines, the SAR limit is 2.0 watts/kg for head and body, and 4.0 watts/kg for limb on average for 10g of cellular tissue absorbing the majority of frequencies.

Maximum values for this model:

- SAR body: 1.54 (W/kg) ==> authorized limit value: 2 (W/kg)
- SAR limb: 3.04 (W/kg) ==> authorized limit value 4 (W/kg)

This equipment may be operated in all European countries.

ISED Caution

IC ID: 27682-DONGLE400

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:


"Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

EU DECLARATION OF CONFORMITY

It is hereby declared that following designated product:

Product Type:	LTE USB Modem	Product colour image 
Brand:	Beetech	
Model No:	Dongle400	
Product Description:	LTE USB Modem	
Hardware version:	SLT773_V1.01_PCB	
Software version:	RW_Dongle400_V1.0.0_B01	

Complies with the essential protection requirements of Directives on Radio Equipment Directive 2014/53/EU, Restriction of the Certain Hazardous Substances in electrical and electronic equipment (Directive 2011/65/EU), Eco-design Requirements for Energy-Related Products (Directive 2009/125/EC) and their amendments.

The assessments were based on the following regulations and standards:

Requirement	Standard	Report No.	Assessment Body
Health and safety	IEC 62368-1:2014 and/or EN 62368-1:2014+A11:2017 EN 50566:2017 EN 62209-2:2010+A1:2019 EN 50665:2017	SRTC2021-9003(R)-0105 SRTC2021-9004(R)-21072601(H)	PHOENIX Test Lab (Notified body 0700)
EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) Draft ETSI EN 301 489-52 V1.1.2(2020-12)	SRTC2021-9003(R)-0104	
Radio Spectrum	ETSI EN 301 908-1 V 13.1.1(2019-11) ETSI EN 301 908-2 V 13.1.1(2020-06) ETSI EN 301 908-13 V 13.1.1(2019-11)	SRTC2021-9004(R)-21072601(B) SRTC2021-9004(R)-21072601(C)	

This declaration is the responsibility of the manufacturer:

WuXi Beetech Data Communications Co., Ltd.
Office 1-101, No.58 Fei Hong Road, Liang Xi District, Wu Xi JiangSu China

Authorised person signing for the company:

Gao CaiXia

Gao CaiXia
Deputy General Manager

Name in block letters & position in the company

Wu Xi & 2021.09.14
Place & Date