



LinkAdapt 5G  
Enabling tomorrow's connectivity

# USER GUIDE

5G NR DONGLE

[retrofitfutures.uk](https://retrofitfutures.uk)

# Table of Contents

<b>1. Product Overview</b>	<b>1</b>
1.1 Product introduction	1
1.2 Product dimension & weight	1
1.3 Product specification	2
1.4 Product support and security	2
<b>2. Quick Installation</b>	<b>3</b>
2.1 Insert the SIM card	3
2.2 Plug the dongle into your computer	3
2.3 Confirm the LED indicator status	3
2.4 Check the Ethernet network status	4
2.5 Log in to the Web UI	4
<b>3. Web UI Introduction</b>	<b>5</b>
3.1 Web homepage	5
3.1.1 How to log in to the Web UI	5
3.2 5G Network	7
3.2.1 Status	7
3.2.2 Connection	8
3.2.3 Profile management	8
3.2.4 Network Settings	10
3.3 Sim card	11
3.4 System	17
3.4.1 General settings	17
3.4.2 Administrator	18
3.4.3 Firmware update	19
3.4.4 Backup and restart	20
3.4.5 Logs	21
3.4.6 Regulatory certification	21
<b>4. Regulatory Information</b>	<b>22</b>
4.1 Model:5G Dongle EU	22
4.1.1 DOC	22
4.1.2 Body-worn Operation	22
4.1.3 Support Period	22
4.1.4 EU Regulatory Compliance	22


# 1. Product Overview

## 1.1 Product introduction

This product is a multimode (LTE&5G) wireless dongle, which provides 5G & LTE Cat-19 DL and Cat-18 UL connectivity. With its compact dimension and light weight, it can be used to provide internet access on-the-go, as well as at home.

Model:5G Dongle EU	
LTE	B1, B3, B7, B8, B20, B28, B38, B39, B40, B41, B42, B43, B46, Roaming: B2, B4, B5, B12, B13, B17, B25, B26, B29, B48, B66
NR	n1, n3, n7, n8, n20, n28, n38, n40, n41, n77, n78, n79 Roaming: n2, n5, n12, n25, n48, n66

## 1.2 Product dimension & weight

Item	Description
Appearance	 <p>The technical drawing illustrates the product's dimensions and features. The main unit is shown from the top and bottom views. The top view indicates a length of 75mm and a width of 60.3mm. The side view shows a thickness of 7.88mm. The front view shows a USB Type C port and a Nano SIM slot. The back view shows a Trio color LED. The USB Type C port is shown in a separate view with a dimension of 45.3mm.</p>
Dimension	75 x 45.3 x 7.88mm
Weight	42g

# 1. Product Overview

## 1.3 Product specification

Item	Description
Chipset	Mediatek T750
Flash/Memory	LPDDR4X 8Gb/ NAND 8Gb
Status Indicator	Trio colors LED x1
I/O Interface	Nano-SIM USB Type-C
Power	USB Type-C 7.5W
Color	White
Platform Support	Windows 11, Windows 10, Linux, Chrome OS, MacOS, iPadOS
Management	Web GUI

## 1.4 Product support and security

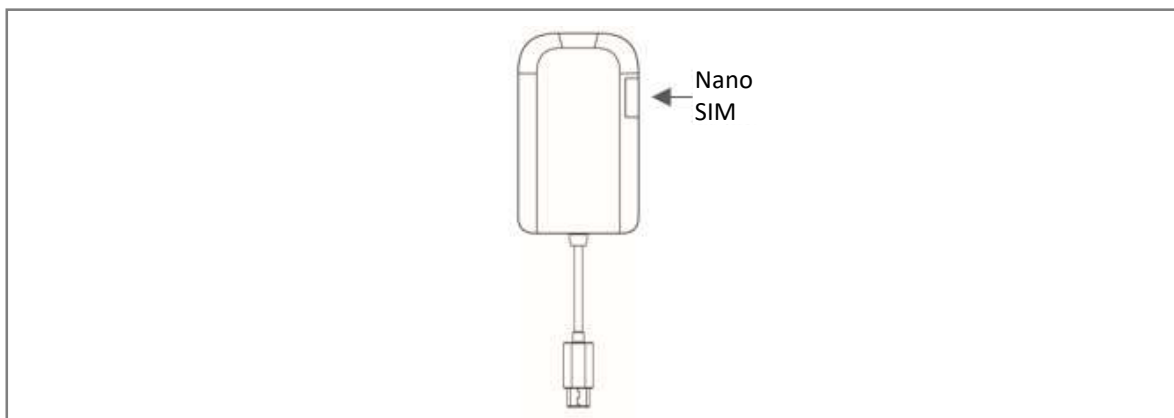
Up to date information on support and the support period of the device can be found at [retrofitfutures.uk/support](https://retrofitfutures.uk/support)

To report any vulnerability, please visit [retrofitfutures.uk/security](https://retrofitfutures.uk/security)

## 2. Quick Installation

### 2.1 Insert the SIM card

Lift the SIM door and insert the Nano-SIM into the slot. The gold contacts facing downward. Push the SIM card into slot smoothly with finger, do not use any tools.



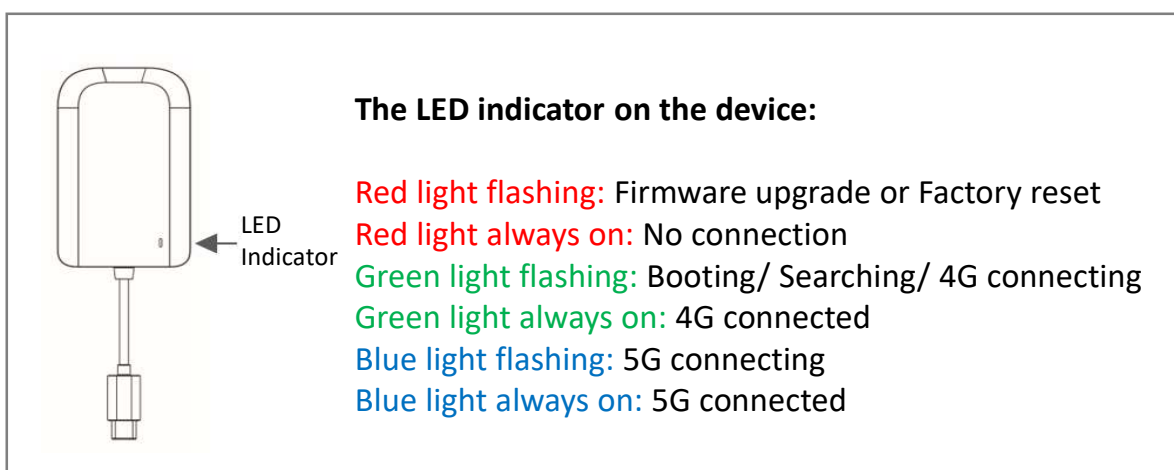
### 2.2 Plug the dongle into your computer

Plug dongle's USB type C cable to device (e.g. Notebook, etc.) Do not use it through other adapter or cable.



### 2.3 Confirm the LED indicator status

Check dongle's LED lighting, and wait for booting for 30~40 seconds.

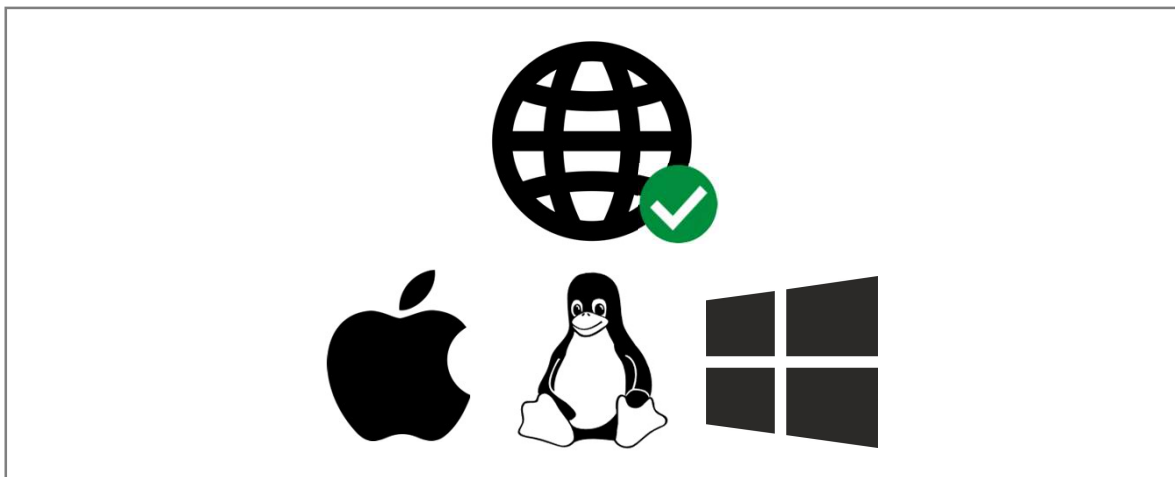


## 2. Quick Installation

### 2.4 Check the Ethernet network status

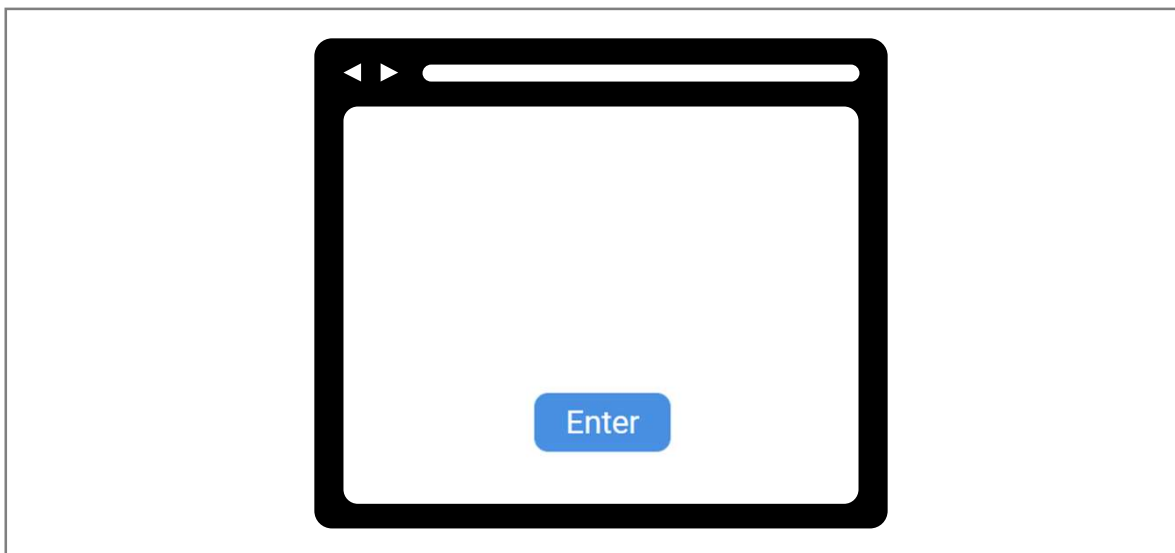
Check if your Ethernet network is connected.

(Note: 5G dongle supports Windows 11, Windows 10, Linux, Chrome OS, MacOS, iPadOS.)



### 2.5 Log in to the Web UI

For further network configuration, please log in to the Web UI. Enter `http://192.168.1.1` into your internet browser. You are now on your 5G dongle home page where you can check cellular profile, signal strength, SMS and system time.



## 3. Web UI Introduction

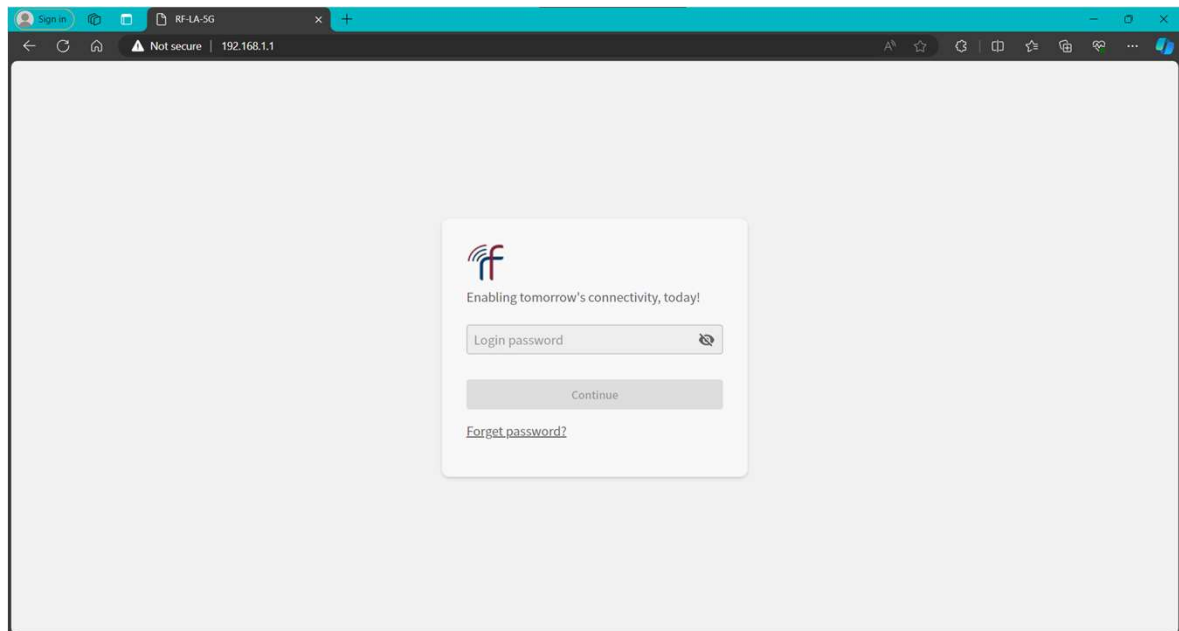
### 3.1 Web homepage

The Web User Interface is compatible with the following browsers:

- Google Chrome
- Mozilla Firefox
- Internet Explorer 11 or later.
- Safari 13 or later
- Microsoft Edge

#### 3.1.1 How to log in to the Web UI

- a. Open your web browser.
  - b. Type **http://192.168.1.1** into the address bar and press enter.
- The Home page will be shown in your browser as the screenshot below.

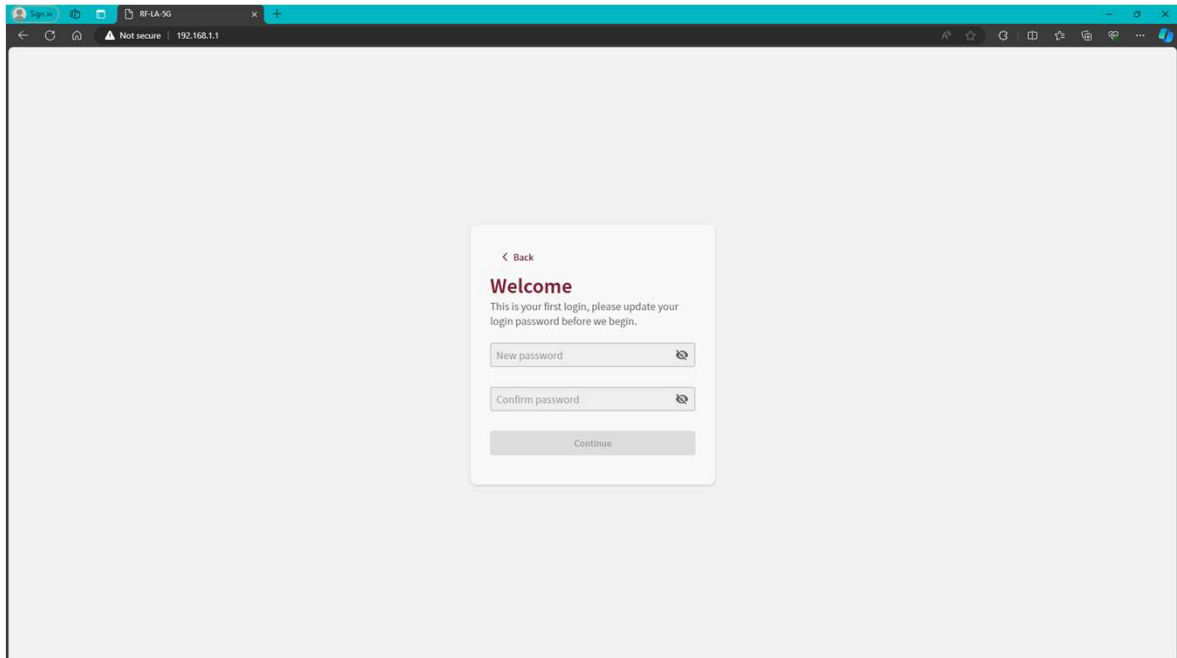


## 3. Web UI Introduction

c. On the Home page, enter the Login password and click 'Continue'.

**Note: The password can be found on the bottom of your 5G dongle.  
Changing your password is required when you first time login.**

d. After entering the Web UI, you can configure your 5G dongle settings.





## 3. Web UI Introduction

### 3.2 5G network

#### 3.2.1 5G network status

Here you can see the 5G network status, including:

- SIM status
- Connection status
- Network name
- Network type
- RSRP
- RSSI
- Band
- Cell ID
- Profile name

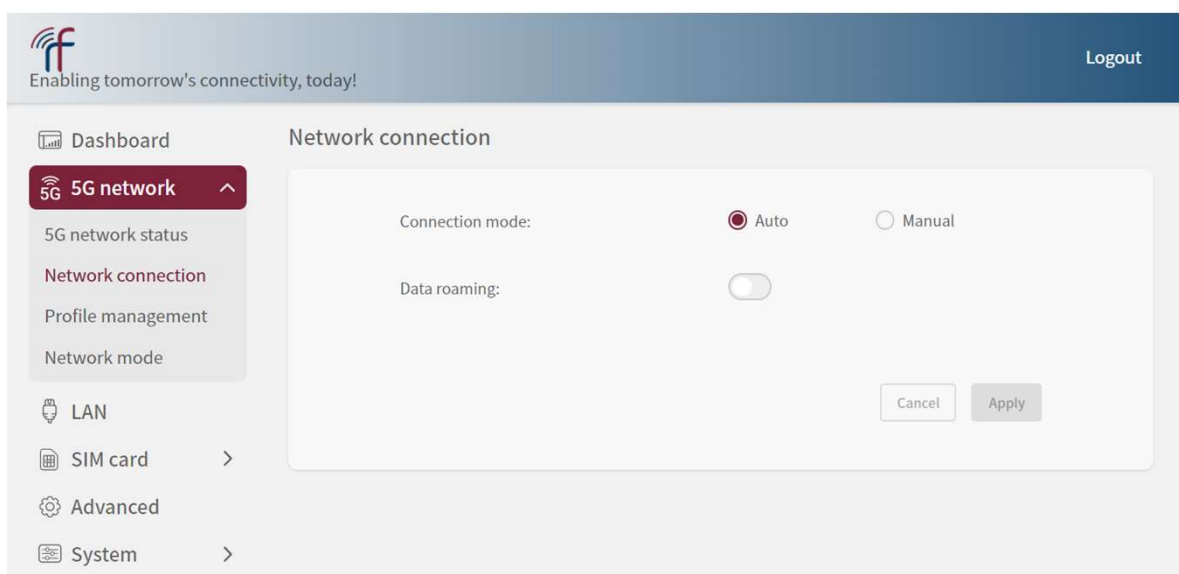
The screenshot shows a web interface for managing network settings. At the top, there is a header with a logo and the text "Enabling tomorrow's connectivity, today!" and a "Logout" button. The main content area is divided into a sidebar and a main panel. The sidebar contains a "Dashboard" link and a "5G network" section with sub-links: "5G network status" (selected), "Network connection", "Profile management", and "Network mode". Below these are "LAN", "SIM card", "Advanced", and "System" links. The main panel is titled "5G network status" and displays a table of network parameters. The table has two columns: the parameter name and its value. The values for "SIM status", "Network name", and "Profile name" are displayed in a light blue box. The values for "Connection status", "RSRP", "RSSI", "Band", "Cell ID", and "Network type" are displayed in a light orange box. A "Connect" button is located next to the "Connection status" value. The "Profile name" value is displayed in a dropdown menu.

SIM status:	SIM PIN verified
Connection status:	Disconnected <a href="#">Connect</a>
Network name:	Chunghwa
Network type:	4G
RSRP:	No service
RSSI:	No service
Band:	No service
Cell ID:	No service
Profile name:	Internet (Default) <a href="#">v</a>

## 3. Web UI Introduction

### 3.2.2 Network connection

- Network connection lets you configure connection mode and data roaming.
- Selecting connection mode **Auto** will establish an internet connection automatically.
- Selecting connection mode **Manual** will establish an internet connection manually. You will need to click the connect button on the **Status** page, to establish a data call.



### 3.2.3 Profile management

Profile management allows you to set up a new APN profile or edit/delete existing profiles that have been created.

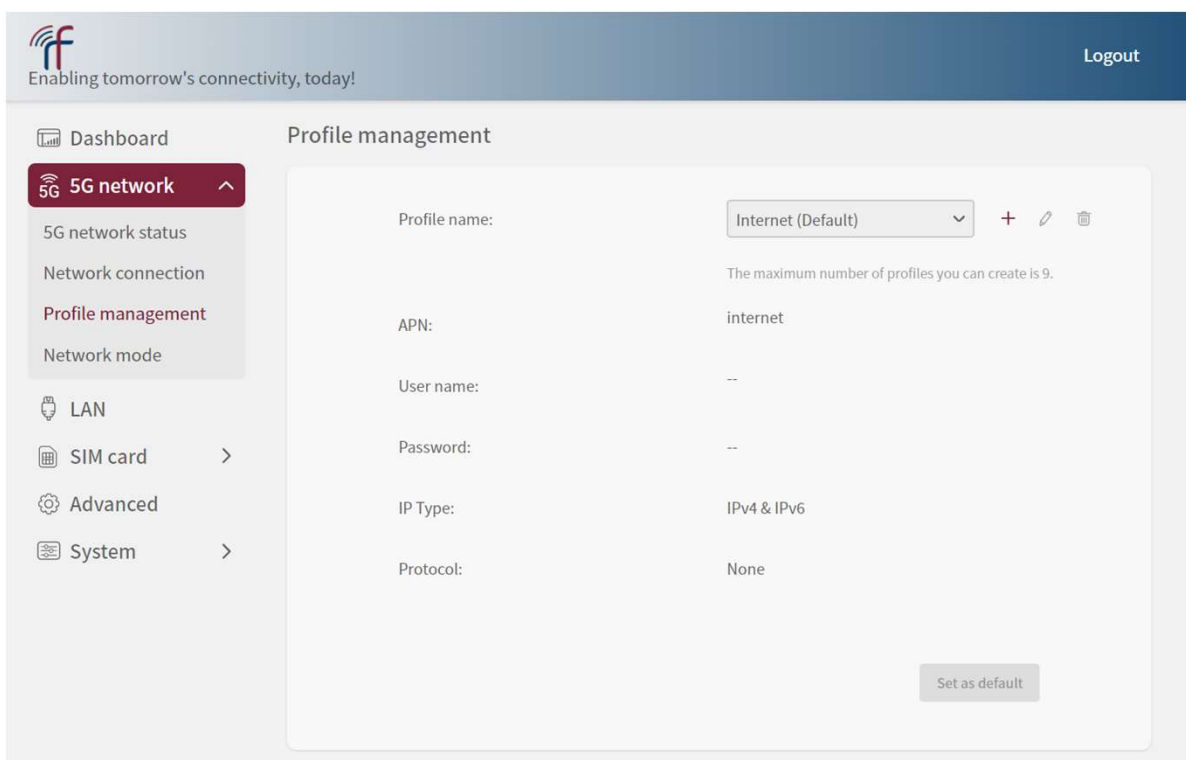
- How to add a new profile
  - 1) Click New.
  - 2) Input the connection settings for your network provider, a Profile name, Dial number and APN are mandatory.
  - 3) Click Save.
- How to delete a profile:
  - 1) Select the profile from the Profile name list.
  - 2) Click Delete.

(Note: The default profile cannot be deleted.)

## 3. Web UI Introduction

- Setting as default:
  - 1) Select the profile from the Profile name list.
  - 2) Click Set default.

(Note: Once the new profile has been set as default, (Default) will be added next to the profile name.)



## 3. Web UI Introduction

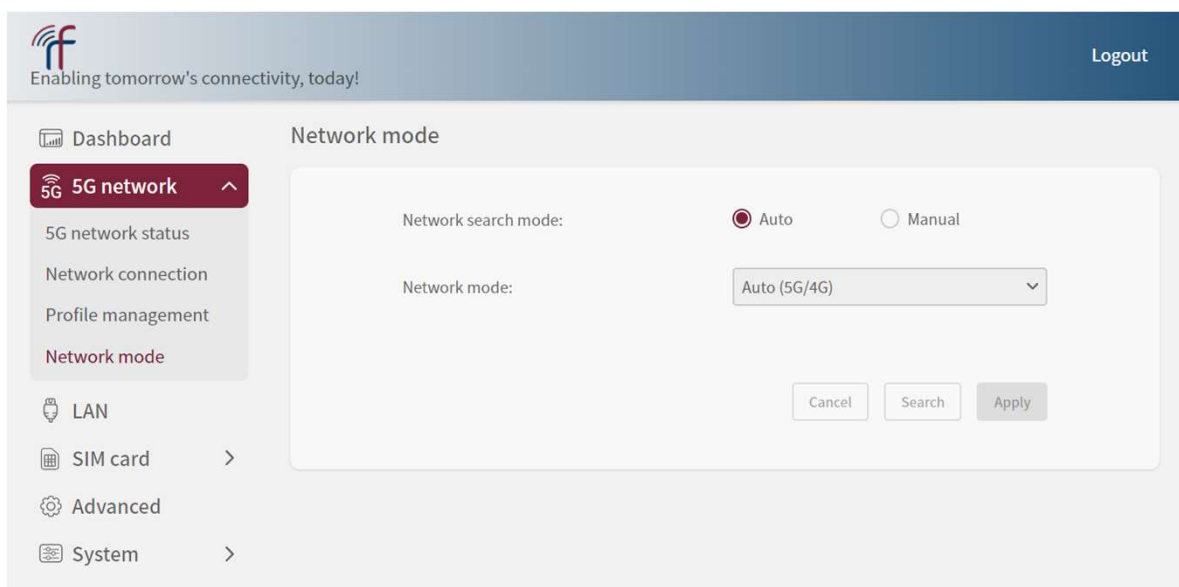
### 3.2.4 Network settings

You can set the **Network search mode** to either **Auto** or **Manual** and change the network mode to either Auto (5G/4G) or 4G only.

Ensure that you click **Apply** after making any changes.

If the **Network search mode** is set to **Manual** you can click **Search** to scan for networks and **Register** to connect to the network.

(Note: It is recommended that you keep the **Network search mode** set to **Auto**.)



The screenshot displays the '5G network' settings page in a web interface. The top header features the 'ff' logo and the tagline 'Enabling tomorrow's connectivity, today!' on the left, and a 'Logout' link on the right. A left-hand navigation menu includes 'Dashboard', '5G network' (highlighted with a red bar and an upward arrow), '5G network status', 'Network connection', 'Profile management', 'Network mode', 'LAN', 'SIM card', 'Advanced', and 'System'. The main content area is titled 'Network mode' and contains two settings: 'Network search mode' with radio buttons for 'Auto' (selected) and 'Manual', and 'Network mode' with a dropdown menu currently set to 'Auto (5G/4G)'. At the bottom right of the settings area are three buttons: 'Cancel', 'Search', and 'Apply'.

## 3. Web UI Introduction

### 3.3 SIM card

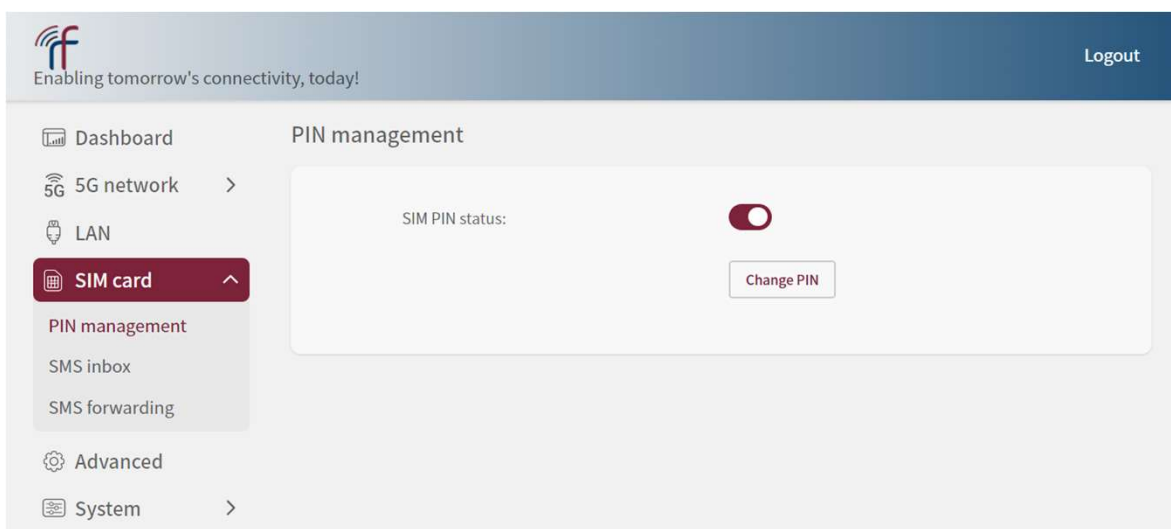
#### 3.3.1 PIN management:

##### a. How to enable a PIN

- When a PIN is disabled, click Enable. The PIN input page is displayed.
- Enter the PIN you want to set. Your PIN must be between 4-8 digits.
- Click Apply.
- Tick Remember SIM PIN to remember the pin code.

##### b. How to disable a PIN

- When a PIN is enabled, click Disable. The PIN input page is displayed.
- Enter the correct PIN.
- Click Apply.

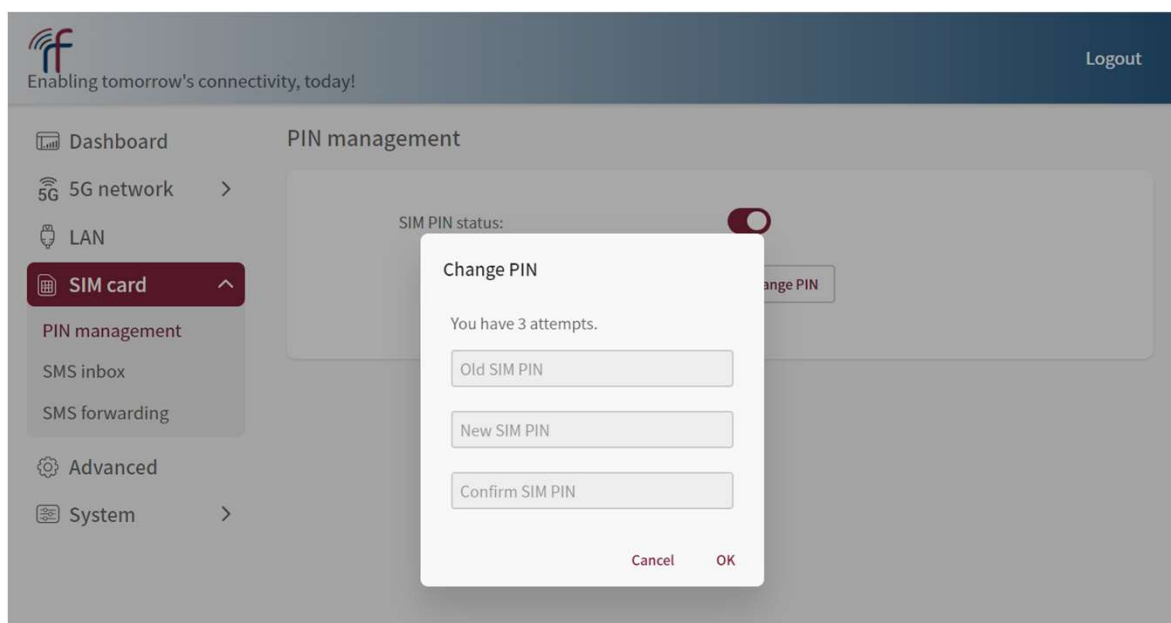


## 3. Web UI Introduction

### c. How to change the PIN

- When a PIN is enabled, click Change PIN. The PIN input page is displayed.
- Enter the Old PIN/New PIN/Confirm PIN.
- Click Apply

(Note: when a PIN code is entered incorrectly 3 times a PUK code is needed. You can obtain this from the Network Operator.)

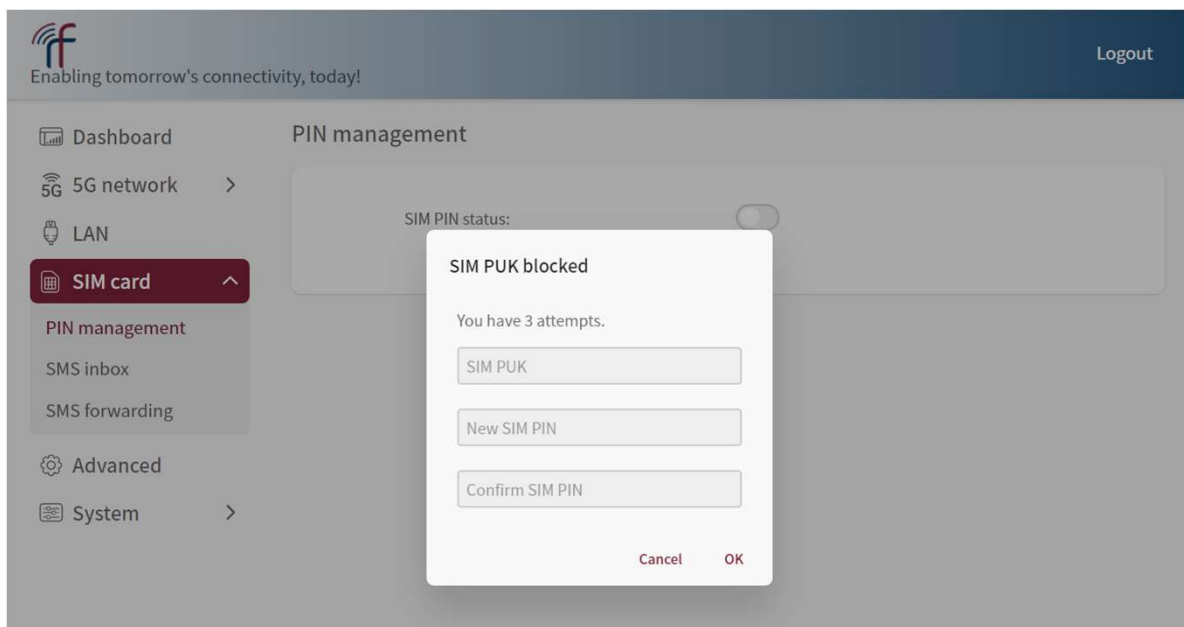


## 3. Web UI Introduction

### d. How to verify PUK

- Enter correct PUK code, then enter the new PIN.
- Click Apply to confirm the new PIN code.

(Note: when a PUK code is entered incorrectly 10 times, SIM will be locked permanently.)



## 3. Web UI Introduction

### 3.3.2 SMS inbox

#### a. How to read an SMS

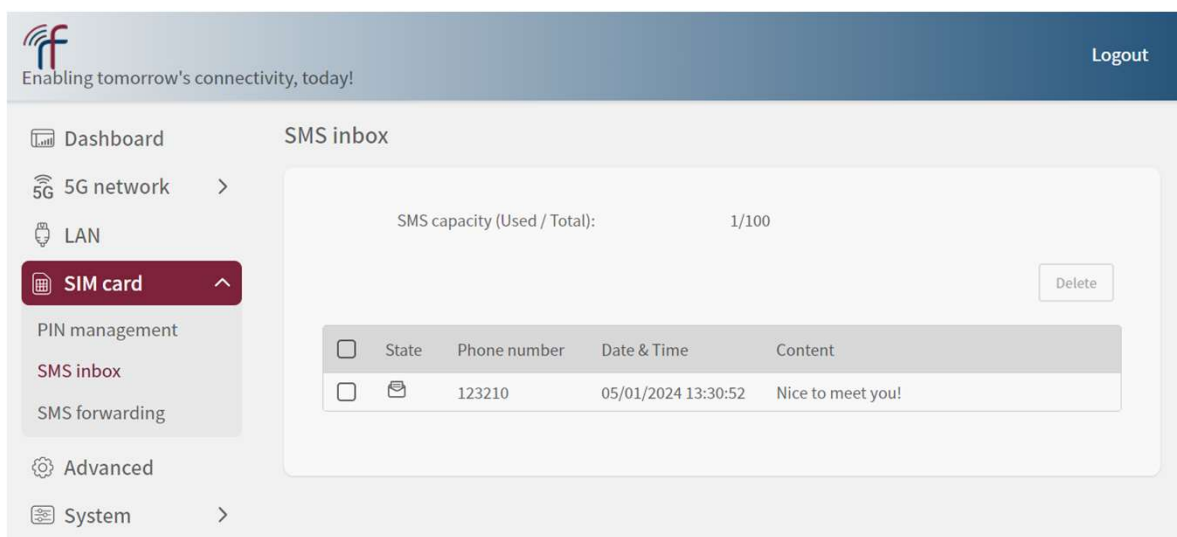
- Left-click the content of the message you wish to read.

#### b. How to delete an SMS

- Find the message you wish to delete in the Inbox.
- Tick the box in the far-right column for the message(s) that you wish to delete.
- Click Delete.

#### c. How to delete all SMS

- Left-click at the top of the column to select all.
- Click Delete.

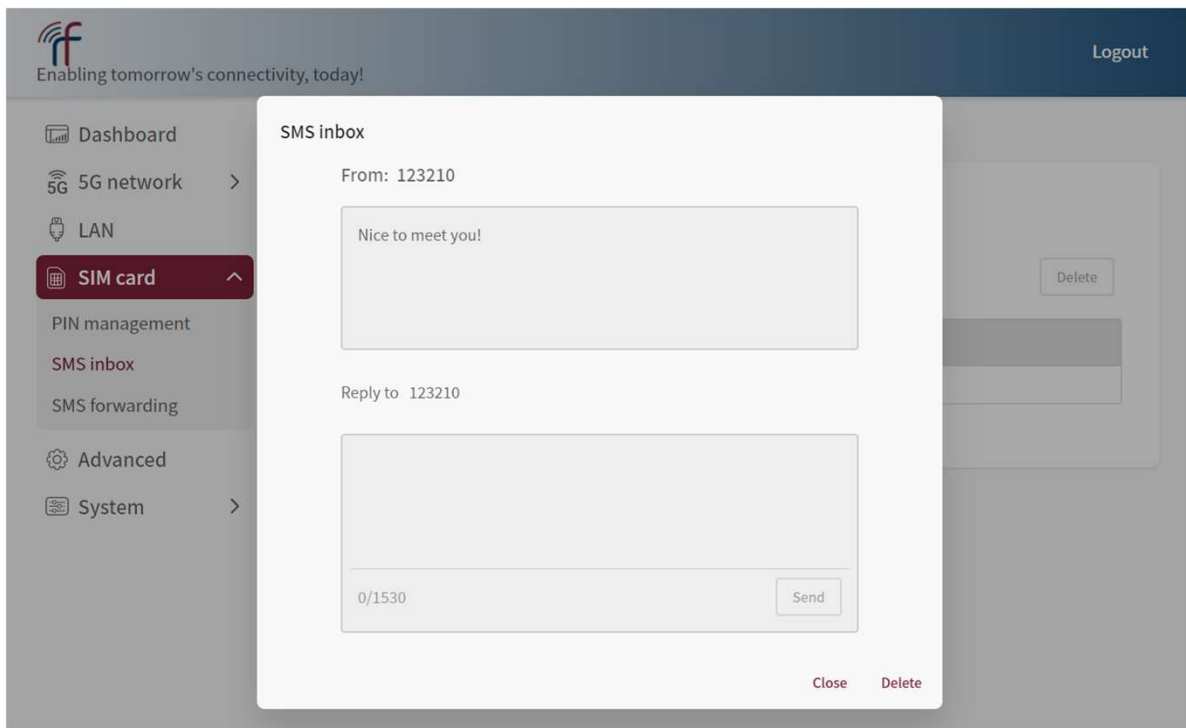




## 3. Web UI Introduction

### d. How to reply to an SMS

- Left-click the content of the message you wish to read.
- Write the reply message in the reply text box.
- Click Send.

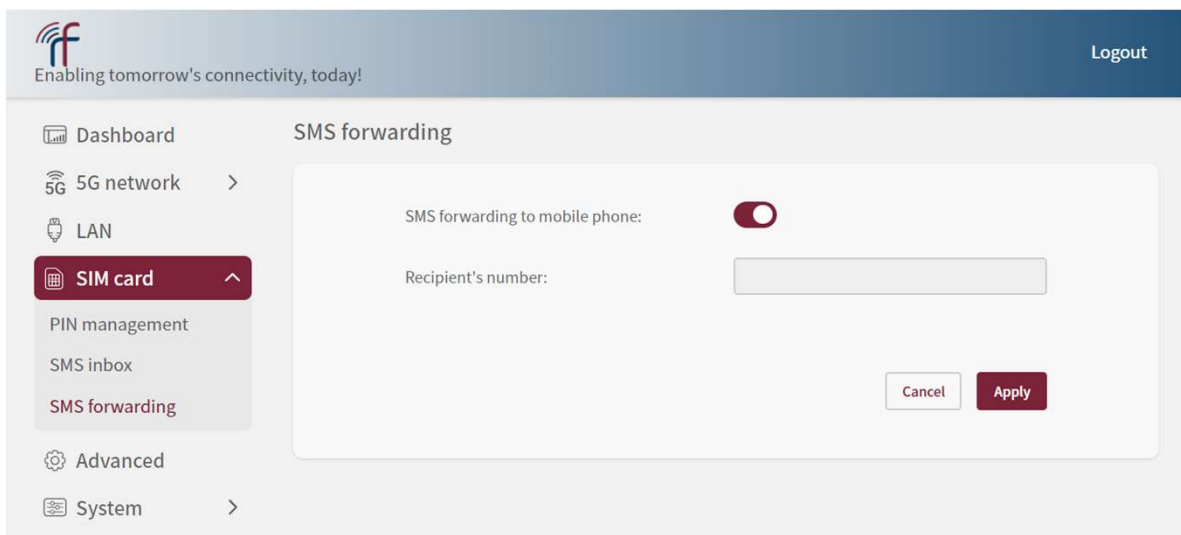


## 3. Web UI Introduction

### 3.3.3 SMS forwarding

SMS forwarding allows you to forward SMS messages that have been sent to your 5G Dongle to another mobile phone.

- Enable SMS forwarding to mobile phone.
- Enter the phone number you wish to have messages forwarded to.
- Click Apply.
- After clicking Apply, all incoming SMS will be forwarded to that mobile phone number automatically.



The screenshot displays a web interface for configuring SMS forwarding. The top header features a logo on the left and a 'Logout' link on the right. A left sidebar contains a menu with items: 'Dashboard', '5G network', 'LAN', 'SIM card' (highlighted with a red background and an upward arrow), 'PIN management', 'SMS inbox', 'SMS forwarding', 'Advanced', and 'System'. The main content area is titled 'SMS forwarding' and contains a configuration box. Inside this box, there is a toggle switch for 'SMS forwarding to mobile phone:' which is currently turned on. Below this is a text input field for 'Recipient's number:'. At the bottom right of the configuration box are two buttons: 'Cancel' and 'Apply'.

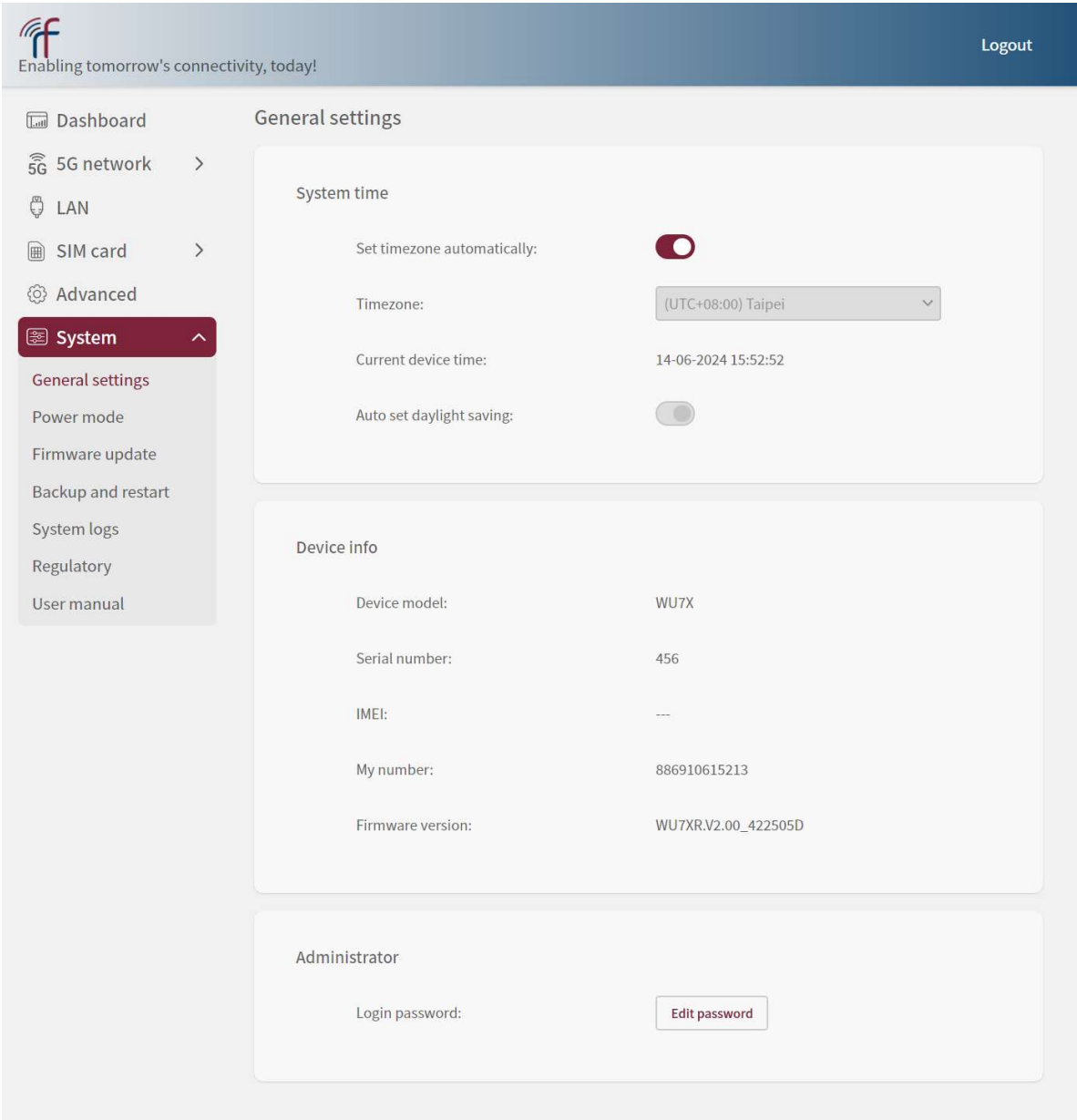
# 3. Web UI Introduction

## 3.4 System

### 3.4.1 General settings

You can view following information

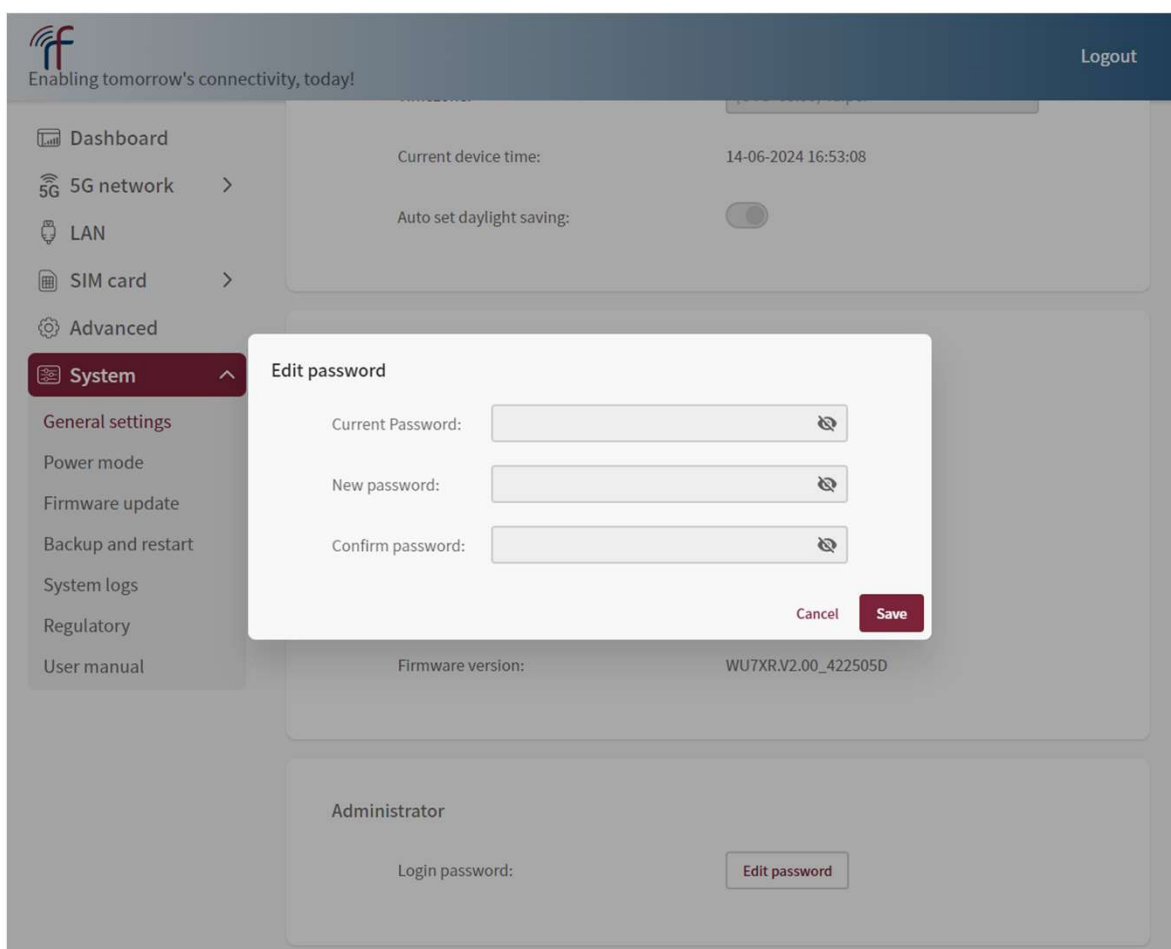
- System time
- Device info



## 3. Web UI Introduction

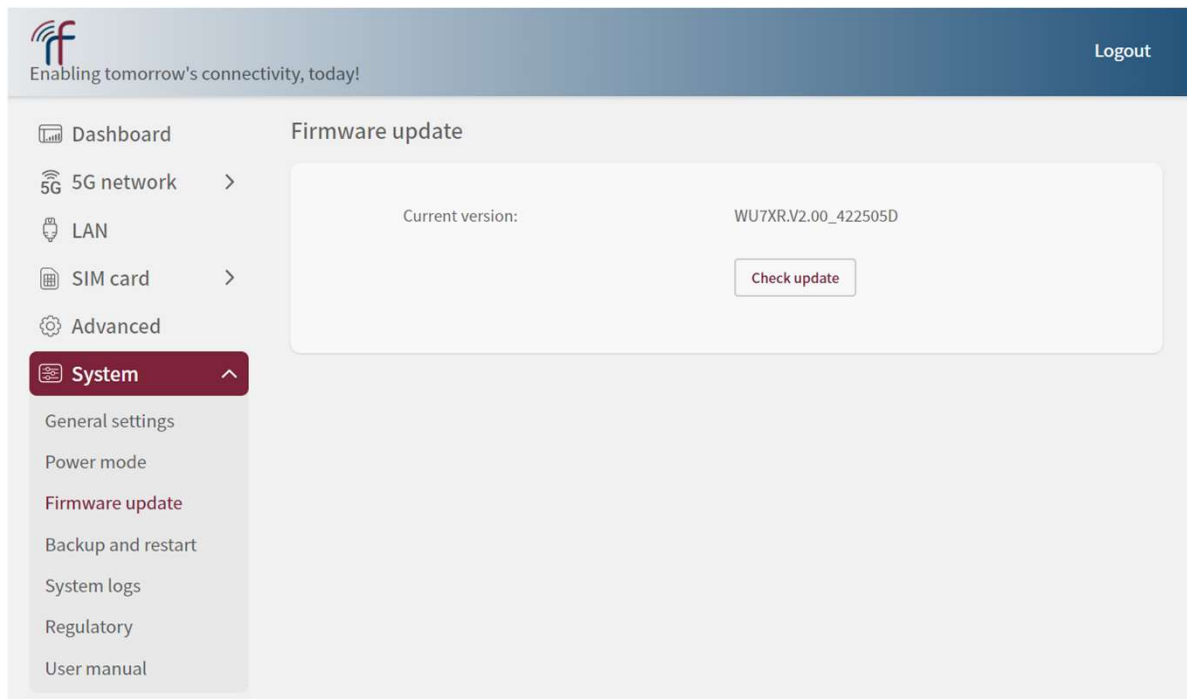
### 3.4.2 Administrator

- a. To change admin password, click “Edit password”. You will find the following dialog.
- b. Click save after entering current password followed by the new password.



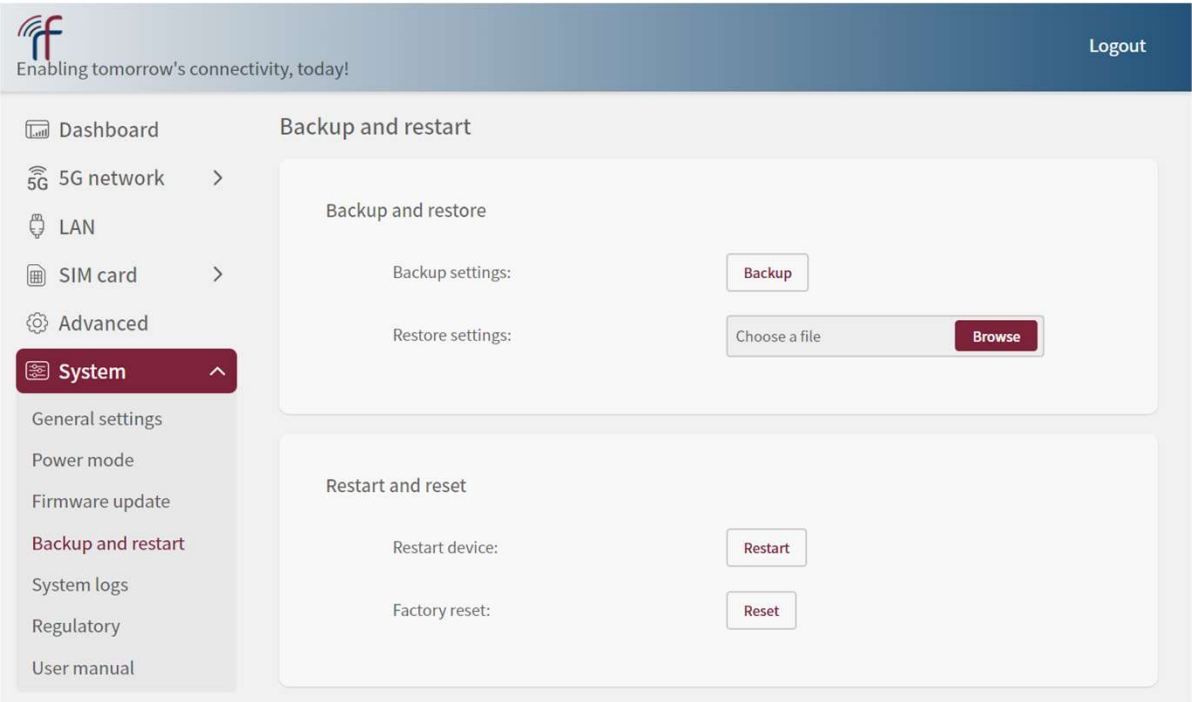
# 3. Web UI Introduction

## 3.4.3 Firmware update

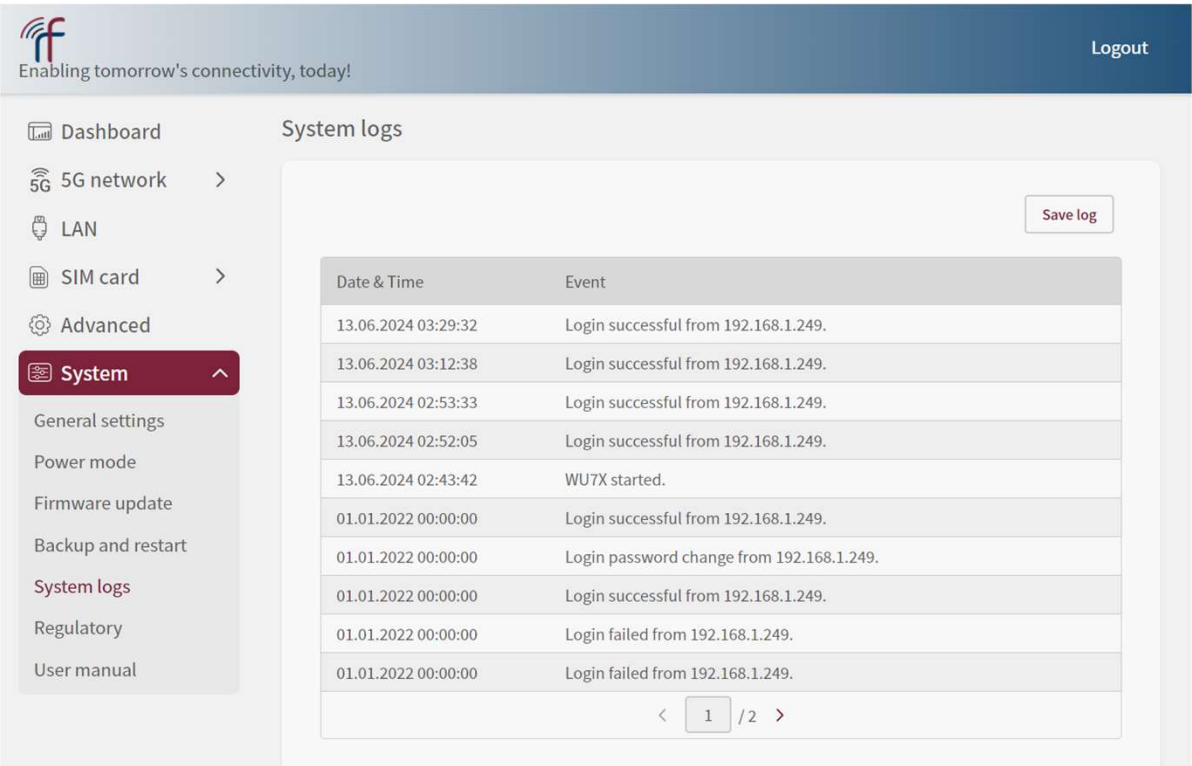


# 3. Web UI Introduction

## 3.4.4 Backup and restart

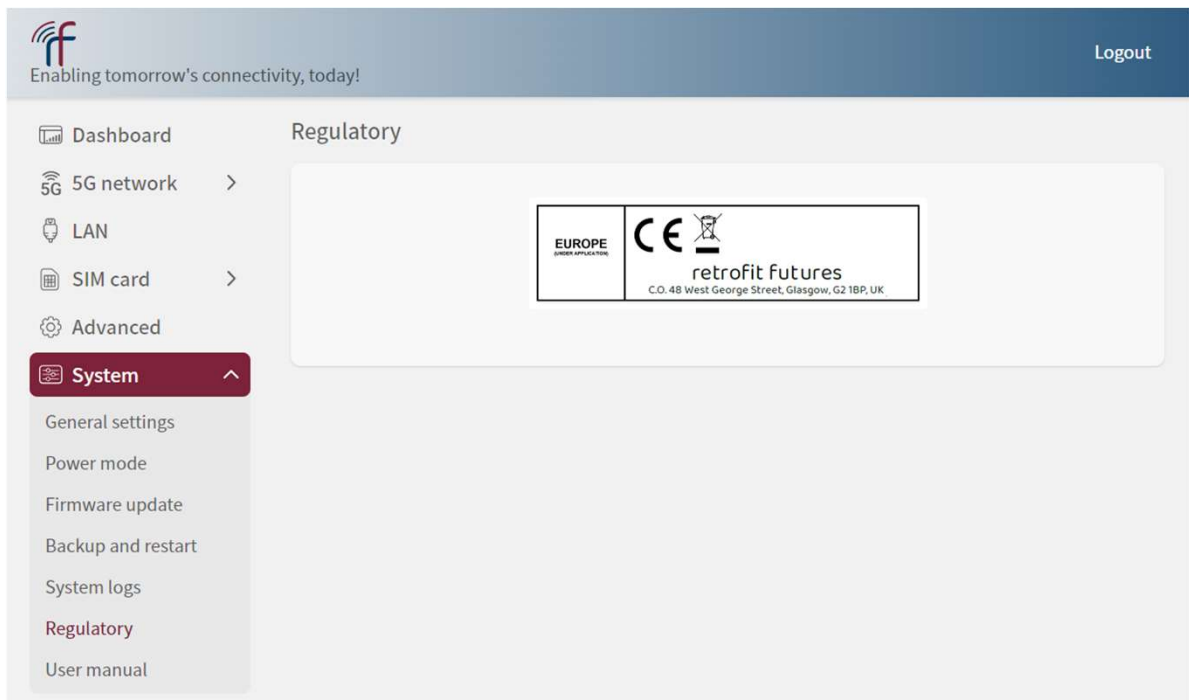


## 3.4.5 System logs



# 3. Web UI Introduction

## 3.4.6 Regulatory



## 4. Regulatory Information

### 4.1 Model: RF-LA-5G

#### 4.1.1 DOC

This device complies with Directive 2014/53/EU and 2011/65/EU issued by the Commission of the European Community.

Hereby, we declare that the radio equipment type RF-LA-5G Dongle is in compliance with Directive 2014/53/EU and 2011/65/EU. The full text of the EU declaration of conformity is available at Web UI: <http://192.168.1.1> > System > Regulatory.

#### 4.1.2 Body-worn Operation

A minimum separation distance of 5 mm must be maintained between the user's body and the device, including the antenna during body-worn operation to comply with the RF exposure requirements in Europe.

#### 4.1.3 Support Period

The support period of the device can be found at <https://retrofitfutures.uk/support>

To report a security issue of the device please visit <https://retrofitfutures.uk/security>

#### 4.1.4 EU Regulatory Compliance

The frequency and maximum transmitted power list is below:

Frequency Band	Max. Power(dBm)
LTE FDD Band 1	24
LTE FDD Band 3	24
LTE FDD Band 7	24
LTE FDD Band 8	24
LTE FDD Band 20	24
LTE FDD Band 28	24
LTE TDD Band 38	24
LTE TDD Band 40	24
LTE TDD Band 41	24
LTE TDD Band 42	24
LTE TDD Band 43	24



## 4. Regulatory Information

Frequency Band	Max. Power(dBm)
NR n1	24
NR n3	24
NR n7	24
NR n8	24
NR n20	24
NR n28	24
NR n38	24
NR n40	24
NR n41	27
NR n77	27
NR n78	27



RF-LA-5G

**retrofit futures**

C.O.48 West George Street, Glasgow, G2 1BP, UK

retrofitfuturesuk © 2024 Retrofit Futures Ltd - All Rights Reserved.