# USER GUIDE

Smart 5G Hub

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# Safety and use

We recommend that you read this chapter carefully before using your device. The manufacturer disclaims any liability for damage, which may result as a consequence of improper use or any use contrary to the instructions contained herein.

## Conditions of use:

- Switch the device off when you are in health care facilities, except in designated areas. As with many other types of equipment now in regular use, devices can interfere with other electrical or electronic devices, or equipment using radio frequency.
- Switch the device off when you are near gas or flammable liquids. Strictly obey all signs and instructions posted in a fuel depot, petrol station, or chemical plant, or in any potentially explosive atmosphere.
- When this device is switched on, it should be kept at least 20 cm from the body.
- When the device is switched on, it should be kept at least 15 cm from any medical device such as a pacemaker, a hearing aid, or an insulin pump, etc.
- Do not let children use and/or play with the device and accessories.
- Do not attempt to open the Smart 5G Hub by yourself. Disassembling may result in damage to the Smart 5G Hub.
- Always handle your device with care and keep it in a clean and dust free place.
- Do not allow your device to be exposed to adverse weather or environmental conditions (moisture, humidity, rain, infiltration of liquids, dust, sea air, etc.). The manufacture's recommended operating temperature range of the Smart 5G Hub is 0°C (32°F) to 45°C (113°F).
- Do not open, dismantle, or attempt to repair your device yourself.
- Do not drop, throw, or bend your device.
- Do not paint it.
- Use only chargers and accessories which are recommended by EE Ltd. and its affiliates and are compatible with your device model. EE Ltd. and its affiliates disclaim any liability for damage caused by the use of other chargers.

Observe the following precautions:

- Do not burn or dispose of your device in household rubbish or store it at temperature above 45°C (113°F).

Device must be disposed of in accordance with locally applicable environmental regulations.

This symbol on your device and the accessories means that these products must be taken to collection points at the end of their life:
- Municipal waste disposal centers with specific bins for these items of equipment;
- Collections bins at points of sale.

They will then be recycled, preventing substances being disposed of in the environment, so that their components can be reused.

## In European Union countries:

These collection points are accessible free of charge.

All products with this sign must be brought to these collection points.

## In non-European Union jurisdictions:

Items of equipment with this symbol are not to be thrown into ordinary bins if your jurisdiction or your region has suitable recycling and collection facilities; instead they are to be taken to collection points for them to be recycled.

## Adaptor:

Mains powered adaptor will operate within the temperature range of: 0°C (32°F) to 45°C (113°F).

The adaptor designed for your device meets the standard for safety of information technology equipment and office equipment use. It is also complaint with the ecodesign directive 2009/125/EC.

Due to different applicable electrical specifications, an adaptor you purchased in one jurisdiction may not work in another jurisdiction. It should be used for this purpose only.

## Radio waves

Proof of compliance with international standards (ICNIRP) or with European Directive 2014/53/EU (RED) is required of all device models before they can be put on the market. The protection of the health and safety for the user and any other person is an essential requirement of these standards or this directive.

THIS DEVICE MEETS INTERNATIONAL GUIDELINES FOR EXPOSURE TO RADIO WAVES.

Your device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves (radio frequency electromagnetic fields) recommended by international guidelines. The guidelines were developed by an independent scientific organization (ICNIRP) and include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The World Health Organization has stated that present scientific information does not indicate the need for any special precautions for the use of mobile devices. They recommend that if you are interested in further reducing your exposure then you can easily do so by limiting your usage or keep the device away from the head and body.

Additional information about electromagnetic fields and public health are available on the following site: https://reurl.cc/dDdpNM

Your device is equipped with a built-in antenna. For optimal operation, you should avoid touching it or degrading it.

## Licenses

Operations in the 5.15-5.35GHz and 5.925~6.425GHz bands are restricted to indoor usage only.

| AT | BE | BG | CH | CY | CZ | DE |
|----|----|----|----|----|----|----|
| DK | EE | EL | ES | FI | FR | HR |
| HU | IE | IS | IT | LI | LT | LU |
| LV | MT | NL | NO | PL | PT | RO |
| SE | SI | SK | TR | UK(NI) | | |

We hereby point out that the end user warranty for infringement IPR is solely limited to the EU/EEA/Switzerland.

If and to the extent that the Product is exported, taken with, or used by end customer or end user outside the EU/EEA/Switzerland any responsibility, warranty or indemnification of manufacturer and its suppliers in regard to the Product expires (including any indemnification in regard to infringement IPR).

# General information

**Internet address:** https://ee.co.uk

**Contact via telephone**: EE mobile customers can dial 150, or alternatively call 07953 966 150 from a UK landline (8am – 6pm Monday to Sunday)

**Manufacturer**: EE Ltd.

**Address**: London, E1 8EE, UK

This radio equipment operates with the following frequency bands and maximum radio-frequency power (tolerance included):

5GNR: N1, N3, N7, N28: 23dBm

5GNR: N77, N78: 26dBm

LTE: B1, B3, B7, B20, B46: 23dBm

802.11a/b/g/n/ac/ax/be:

      2.4GHz-2.4835GHz<20dBm

      5.15GHz-5.25GHz<23dBm

      5.25GHz-5.35GHz<23dBm

      5.47GHz-5.725GHz<30dBm

      5.725GHz-5.835GHz<14dBm

      5.925GHz-6.425GHz<23dBm

# Power consumption

In operation: 31W

Network standby: 10.5W

Off mode: 0.37W

Elapsed time before going into standby mode: Less than 20 minutes.

## Regulatory compliance

Hereby, EE declares that the radio equipment type HH70C is in compliance with Radio Equipment Regulations 2017 and The Product Security and Telecommunications Infrastructure (Security Requirements for Relevant Connectable Products) Regulations 2023. The full text of the UK declaration of conformity is available at:

https://ee.co.uk/declaration-of-conformity

The support period of the device can be found at:

https://ee.co.uk/help/terms-and-conditions/general/software-support

Information on how to report security issues of the device can be found at:

https://ee.co.uk/help/terms-and-conditions/general/reporting-security-issues

## Disclaimer

There may be certain differences between the user manual description and the device's operation, depending on the software release of your device or specific operator services.

EE Ltd. shall not be held legally responsible for such differences, if any, nor for their potential consequences, which responsibility shall be borne by the operator exclusively.
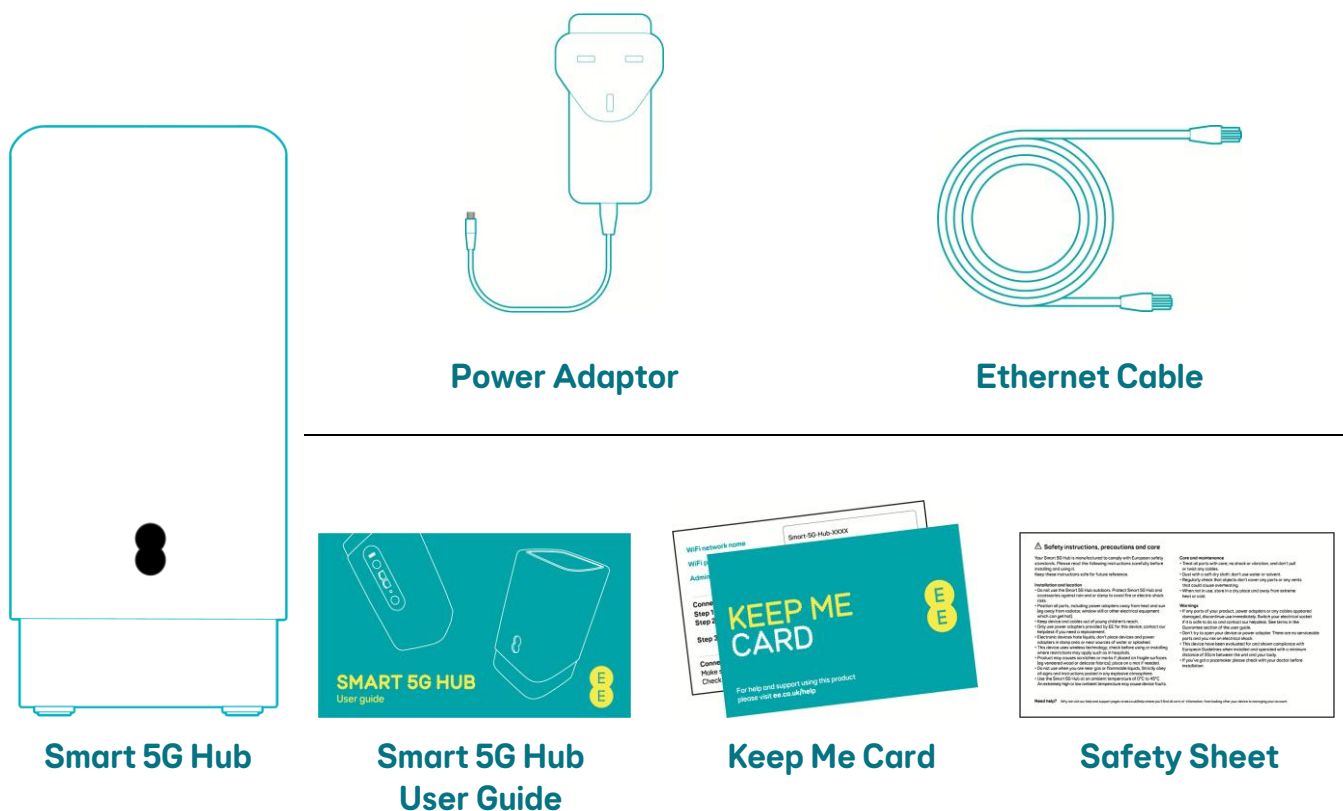
This device may contain materials, including applications and software in executable or source code form, which is submitted by third parties for inclusion in the device ("Third Party Materials"). All Third Party Materials in this device are provided "as is", without warranty of any kind, whether express or implied. The purchaser undertakes that EE Ltd. has complied with all quality obligations incumbent upon it as a manufacturer of mobile devices and devices in complying with Intellectual Property rights. EE Ltd. will at no stage be responsible for the inability or failure of the Third Party Materials to operate on this device or in interaction with any other device. To the maximum extent permitted by law, EE Ltd. disclaims all liability for any claims, demands, suits or actions, and more specifically – but not limited to – tort law actions, under any theory of liability, arising out of the use, by whatever means, or attempts to use, such Third Party Materials. Moreover, the present Third Party Materials, which are provided free of charge by EE Ltd., may be subject to paid updates and upgrades in the future; EE Ltd. waives any responsibility regarding such additional costs, which shall be borne exclusively by the purchaser. EE Ltd. shall not be held responsible for the lack of availability of any applications, as its availability depends on the country and the operator of the purchaser. EE Ltd. reserves the right at any time to add or remove Third Party Materials from its devices without prior notice; in no event shall EE Ltd. be held responsible by the purchaser for any consequences of such removal.

# 1. Overview

This device allows you to share a secure mobile broadband internet connection using WiFi or LAN. You can connect your WiFi enabled devices to it. (PCs, mobile gaming devices, smartphones, tablets, and more) To get the best signal, the ideal place for your Smart 5G Hub will be near a window. You may need to try a few different locations until you find the one with the best signal.
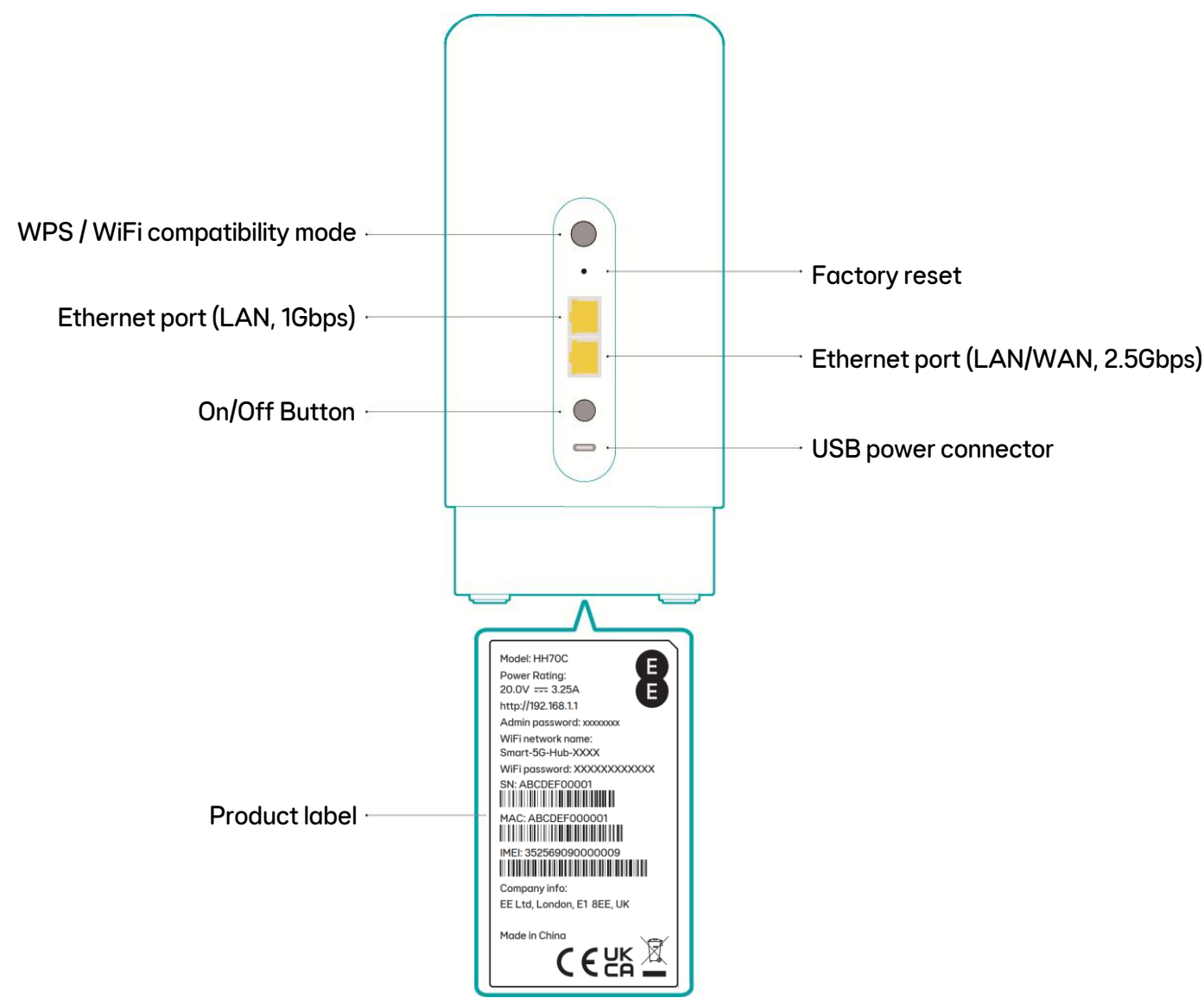
## 1.1 What's in the box

**Power Adaptor**

**Ethernet Cable**

**Smart 5G Hub**

**Smart 5G Hub User Guide**
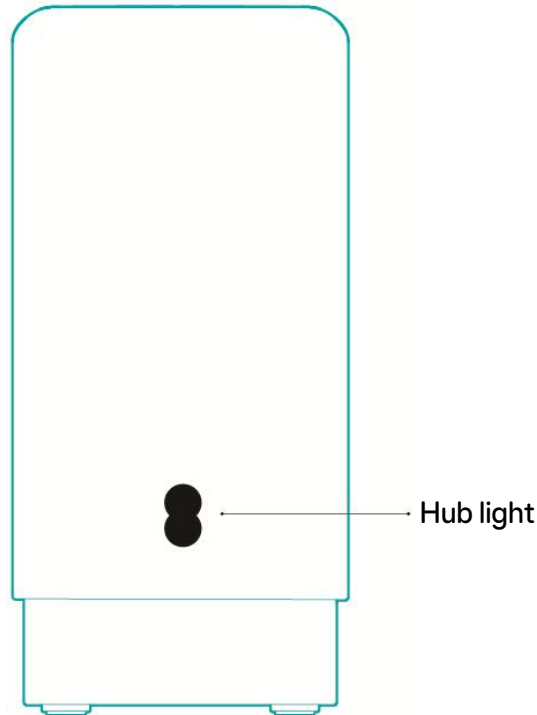
**Keep Me Card**

**Safety Sheet**

## 1.2 System requirements

This Smart 5G Hub is compatible with Ethernet LAN or WiFi devices which support 2.4GHz, 5GHz, or 6GHz modes (up to WiFi 7 standard). For WiFi Mesh compatibility, Mesh access points must support the Wi-Fi EasyMesh™ standard.

# 1.3  Getting to know your Smart 5G Hub

WPS / WiFi compatibility mode

Factory reset

Ethernet port (LAN, 1Gbps)

Ethernet port (LAN/WAN, 2.5Gbps)

On/Off Button

USB power connector

Product label

Model: HH70C
Power Rating:
20.0V === 3.25A
http://192.168.1.1
Admin password: xxxxxxxx
WiFi network name:
Smart-5G-Hub-XXXX
WiFi password: XXXXXXXXXXXX
SN: ABCDEF00001

MAC: ABCDEF000001

IMEI: 352569090000009

Company info:
EE Ltd, London, E1 8EE, UK

Made in China

# 1.4 What your Smart 5G Hub light means

Hub light

**No light**

Power is off.
Check the power connection and press the **On/Off** button to power on your Smart 5G Hub.

**Aqua**

Your Smart 5G Hub is connected to the internet.
If you can't get online, it might be your device. Try switching it off and on.

**Flashing Aqua**

Your Smart 5G Hub is connecting to the internet.
Give it at least one minute to connect. The light will turn aqua when your Smart 5G Hub is ready to use.

# Overview

**Red**

There's a problem somewhere.
Using the **On/Off** button, turn your Smart 5G Hub off and on again. If the light still doesn't turn aqua, use a paper clip to press your hub's factory reset button for 5 seconds.

**Flashing Red**

Your Smart 5G Hub is working, but isn't connected to the internet.
Check if your SIM is inserted correctly. You may be out of range of a signal, so try moving the hub to a different location in your property for a better signal.

**Flashing Green**

Your Smart 5G Hub is starting up.
Wait at least 3 minutes for it to turn aqua. If it stays green, turn your hub off and on again. If the light still doesn't turn aqua, use a paper clip to press your hub's factory reset button for 5 seconds.

**Orange**

Your Smart 5G Hub is disconnected from EE.
Log into your hub web UI (http://192.168.1.1) and press Connect on the **Status** > **Internet** page.

**Flashing Blue**

Your Smart 5G Hub WPS is active.
Connect your WiFi device or Mesh access point to the hub using WPS within 120 seconds.

**Flashing White**

You have received a text message.
Log in to the web UI (http://192.168.1.1) to read your text messages.

# 2. Set up your Smart 5G Hub

## 2.1 Insert the SIM card

To insert the EE nano SIM card to the device, lift the SIM slot cover and insert the nano SIM into the SIM slot in the correct orientation illustrated until it clicks into place.

For more help setting up, visit  https://ee.co.uk/simstart .

**Note**: Push the SIM into the slot smoothly with your finger. Do not use any tools, as this may damage the SIM.
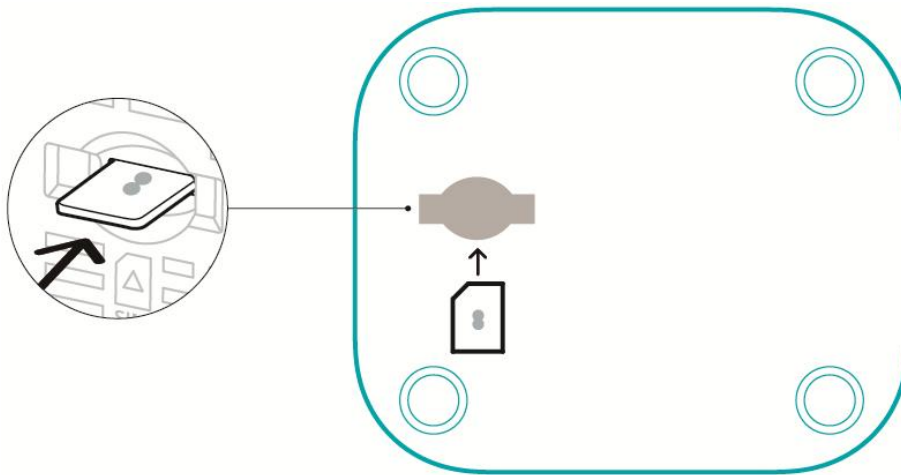
## 2.2 Powering up the Smart 5G Hub

To power up the Smart 5G Hub, connect it to your power adaptor and plug into a power outlet. Press the **On/Off** button to power on.

When the light on the front of the Smart 5G Hub is solid aqua the internet connection is available.
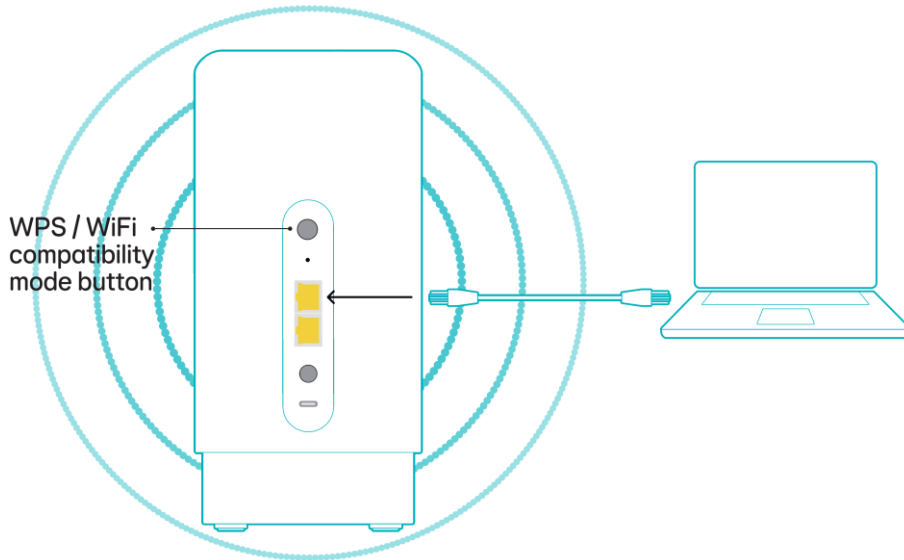
**Note**: To ensure your Smart 5G Hub works and performs as intended, it is recommended you use the power adaptor provided with your Smart 5G Hub.



On/Off button

17
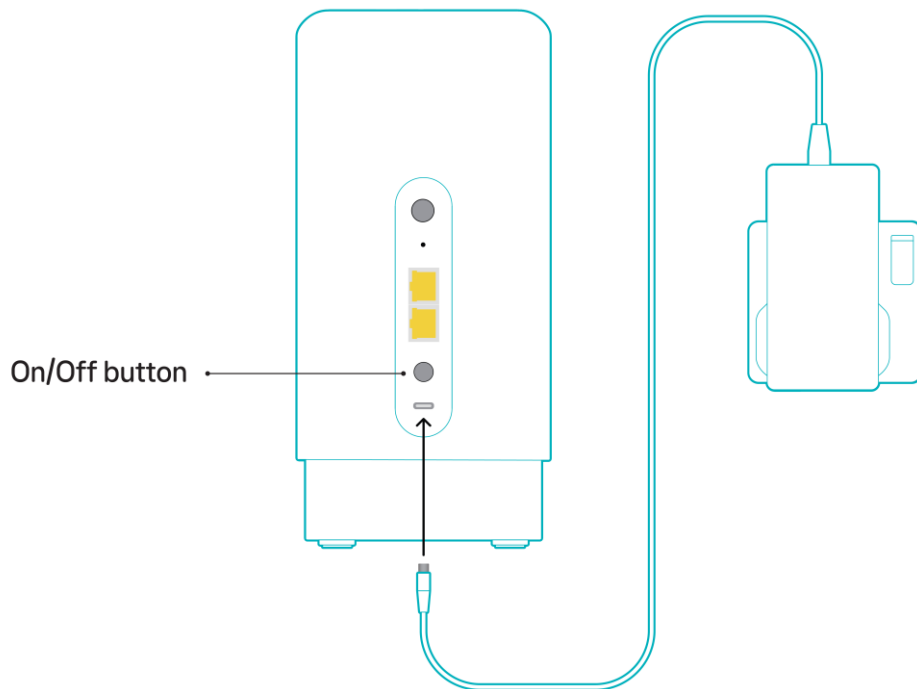
## 2.3 Connect your devices to your Smart 5G Hub

You can connect to the internet via your Smart 5G Hub either wirelessly or wired.



For wired (Ethernet) access, connect the supplied Ethernet cable between one of the Ethernet ports on the Smart 5G Hub and the Ethernet port on your computer.

To connect your devices to the internet using WiFi, search for the Smart 5G Hub WiFi network name (SSID) and use the WiFi password printed on the bottom of the hub or Keep Me Card.

Alternatively, if your device has a camera, scan the QR code on the Keep Me Card to quickly connect.

If your device supports WPS, press the **WPS** button on the back of the hub for 1 second and follow your device's instructions to connect.

You can use the WPS button to pair a Wi-Fi EasyMesh™ access point to the Smart 5G Hub. Press the WPS button for 1 second then press the WPS/pairing button on the access point to complete the pairing process.

**WiFi compatibility mode**

Your Smart 5G Hub WiFi is secured using the latest technology (WPA2/WPA3 Transition mode), however there is a possibility that some older devices might have issues connecting to a WiFi network running with this security type. If you have problems connecting you can enable the WiFi compatibility mode on your hub by following the instructions below.
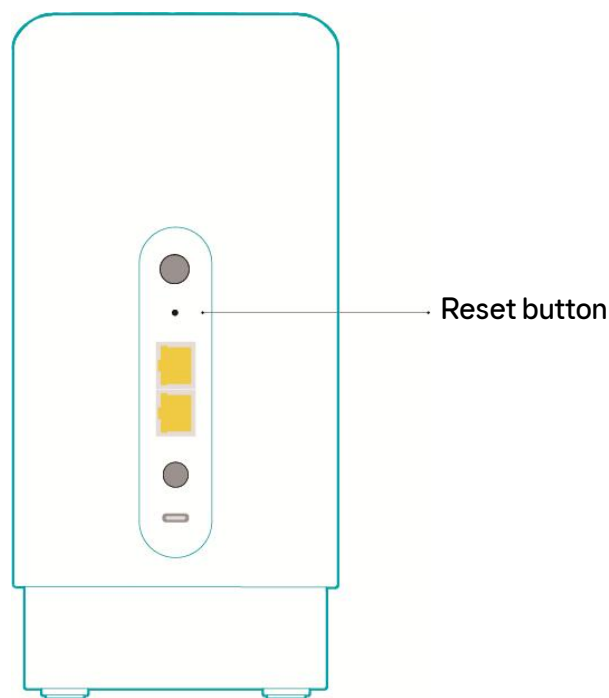
# Set up your Smart 5G Hub

1. Press and hold the **WPS** button on the back of the hub for 5 seconds until the hub light flashes blue 4 times.

2. Search for the Smart 5G Hub WiFi network name (SSID) that ends with "-Comp" (for example "Smart-5G-Hub-XXXX-Comp") and use the WiFi password printed on the bottom of the hub or Keep Me Card.

It is recommended that new devices should continue to be connected to the main WiFi network name if you have enabled WiFi compatibility mode.

**How to reset your Smart 5G Hub**

Use a paperclip to gently press and hold the **Reset** button on the rear of the Smart 5G Hub for more than 5 seconds. The Hub light will flash green while the Hub is restarted. Note that any custom settings will be reset back to factory defaults.

Reset button

# 3. Smart 5G Hub - Web user interface (UI)

The web user interface (UI) is compatible with Microsoft Edge, Mozilla Firefox, Safari (12 or later), and Google Chrome web browsers.

## 3.1 How to access your Smart 5G Hub web user interface via your Smart 5G Hub

To access your Smart 5G Hub web user interface:

1. Make sure your device is connected to the Smart 5G Hub wired or wireless network – see section 2.3 - Connect your devices to your Smart 5G Hub.

2. Open the web browser on your device and input http://192.168.1.1 or http://smart5g.hub/ into the address bar. Then press the **Enter** key. The Smart 5G Hub's Home page opens as follows:
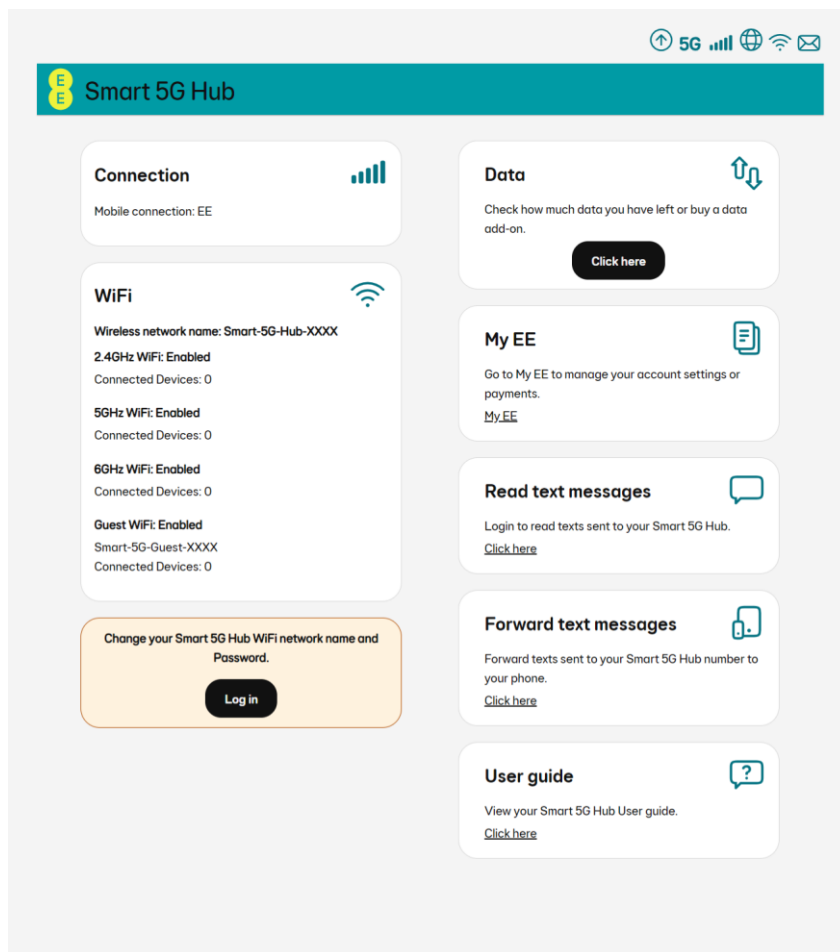
On the home page, you can view your Smart 5G Hub connection status, signal strength, wireless details and number of connected devices. There are also links to check and top-up data and to access your My EE account settings and read SMS.

3. Click the **Log in** button and enter the admin password found on your Keep Me Card (or on the label on the base of your Hub). Note that you will need to change your log in password the first time you log in to your Hub.

**Forgotten your password?**

If you cannot remember your password, you can reset it to factory default by gently pressing the **Reset** button with a paperclip for more than 5 seconds. The hub light will flash green.

Note: It is recommended that you change your Smart 5G Hub wireless network name (SSID) and password after you first log in. You can change these settings on the Basic WiFi page (**Settings** > **WiFi** > **Basic**).

# 3.2 Status bar icons

Status bar is located on the top right corner of the web user interface.

The meaning of the icons in the status bar is described in the following table:

| Description | Icon |
|---|---|
| Firmware update | ⊕ New firmware is available. Log in to the web user interface and navigate to **Device** > **Firmware update** to update your device. |
| Network type | **4G** or **5G** will be displayed, depending on the network available. **No service** No service will be displayed when there is no network available or if the SIM is disconnected. |
| Signal indicator | ▁▁▂▃ ▁▁▂▃ ▁▁▂▃ ▁▃▃▃ ▁▃▄▅ ▁▃▄▅ From no signal to maximum signal strength. |
| Connection status | ⊗ Disconnected ⊕ Connected |
| WiFi status | 🛜 WiFi is enabled. 🛜 WiFi is disabled. |
| SMS | ✉ New message / Unread message(s) in the inbox. ✉ SMS inbox has exceeded the limit of 100 messages and is full. |

# 4. Status

On the Status page, you can view basic information about your Smart 5G Hub.
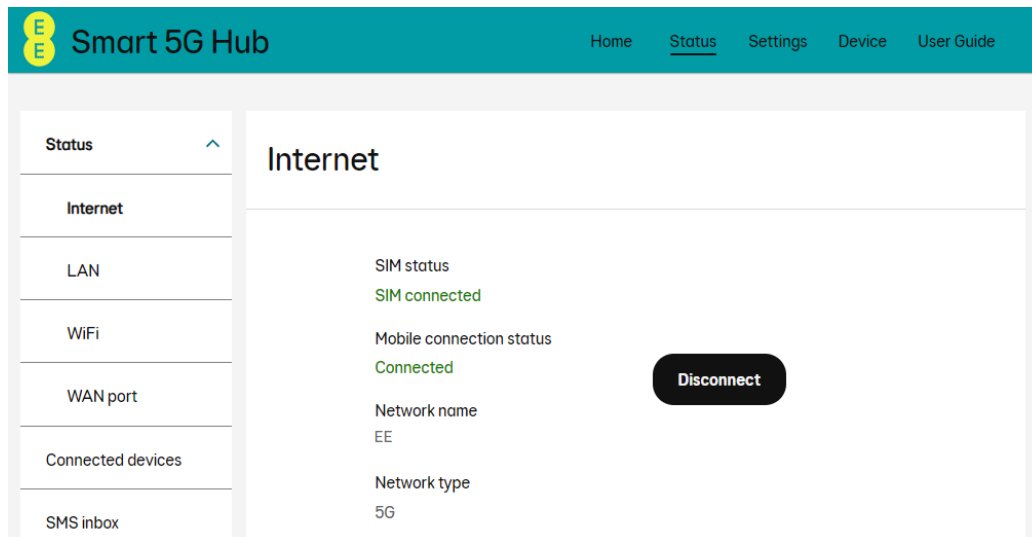


## 4.1 Internet / LAN / WiFi / WAN port

Your device and connection information including internet, LAN (Ethernet), WiFi, and WAN port can be found here.

On the **Internet** page, you will find information on your SIM, cellular internet connection and network information (including signal strength and IP address).

On the **LAN** page, you will find information on your Ethernet LAN ports including the IP addresses of connected devices.

On the **WiFi** page, you will find information on your WiFi network including the Wireless network name (SSID), WiFi channels, security, Multi-Link Operation (MLO) and number of connected devices for each band. You can change your WiFi settings by pressing **Change**.

On the **WAN port** page, you will find information on WAN devices connected to the LAN/WAN port. You can see the current WAN connection status, WAN priority mode (4G/5G or WAN port) and IP address details for the WAN interface.

# 4.2 Connected devices

All connected and blocked devices will be shown on this page. You can also manage blocked devices here, or see additional information on your connected devices.

The page also displays WiFi mesh access points connected to the Smart 5G Hub and their current connection status.



In the Connected devices table, click manage ✎ to view additional information on the device. You can change the Device name here or restrict internet access and block devices.

**Note**: You cannot block the device that is currently logged into the web user interface.

If you want to allow a blocked device to connect to the Smart 5G Hub, click the **Unblock** button.

**WiFi mesh access points:**

This table displays WiFi mesh access points (APs) that have been connected to the Smart 5G Hub. The mesh access point connection status/signal quality is visible here. Click on the Manage ✎ to display additional information about the mesh AP. You can also rename the mesh AP here.

# 4.3 SMS inbox

**How to read an SMS message**: Click the content of the message you wish to read.

**How to delete an SMS message**: Tick the box or boxes on the right column of the inbox for the message(s) that you wish to delete. Click the **Delete** button.

**How to delete all SMS messages**: Click the tickbox at the top of the column to select all messages. Click the **Delete** button.

# 5. Settings

## 5.1 Quick setup

### SIM

You can make changes to basic connection settings in the **SIM** page and enabled/disable data roaming. Selecting connection mode **Auto** will establish an internet connection automatically. Selecting connection mode **Manual** will establish an internet connection by clicking the Connect button on the **Status** > **Internet** page.

## WiFi

Quick setup



**Enable Mesh**: Enable or disable Mesh. If enabled, then only WiFi settings compatible with Mesh WiFi will be available to be selected on this page.

# WiFi security

On the **WiFi security** page, you can setup your WiFi security settings and change the WiFi password.

Quick setup

## 5.2 How to add a Mesh access point

You can connect a Wi-Fi EasyMesh™ access point to create a mesh network using either Ethernet or WiFi.

### Add a Mesh access point via Ethernet

To add a new WiFi mesh access point (AP) to the Smart 5G Hub network using Ethernet, power on the AP and wait until it has started up. Connect an Ethernet cable to one of the Smart 5G Hub LAN ports and then to an Ethernet port on the AP. After 2 minutes, check the **Status > Connected devices** page. The access point should be listed under WiFi mesh access points in a Connected status.

### Add a Mesh access point via WPS

To add a new WiFi mesh access point (AP) to the Smart 5G Hub network using WiFi, power on the AP and wait until it has started up. Press the WPS button on the Smart 5G Hub and then press the WPS button on the AP. After 2 minutes, check the **Status > Connected devices** page. The access point should be listed under WiFi mesh access points in a Connected status.

**Note**: Please consult your WiFi mesh access point user guide for details on the lights shown on the AP to indicate mesh connectivity.

# 5.3 Setup

## Network connection

Selecting a Connection mode **Auto** will establish an internet connection automatically. Selecting Connection mode **Manual** will establish an internet connection by clicking the **Connect** button on the **Status** > **Internet** page.

Network connection

Connection mode ?

Auto

Manual

Data roaming

Cancel    Apply

## Profile management

Profile management allows you to set up a new APN profile or edit/delete existing profiles that have been created. Up to 15 profiles can be created.

**How to add a new profile:**

1. Click **New** and input the connection settings for your network provider.

2. Click **Save** to apply settings.

**How to delete a profile:**

1. Select the profile from the Profile name dropdown.

2. Click **Delete** (note that the default profile cannot be deleted).

# Settings

**Setting as default:**

1. Select the profile from the Profile name dropdown.

2. Click **Set default**. Once the new profile has been set as default (Default) will be shown next to the profile name.

## Profile management

**Profile name**

Internet (Default) ⌄

Dial number

*99#

APN

everywhere

IP Type

IPv4v6 ⌄

Username (Optional)

eesecure

Password (Optional)

••••••

Protocol

PAP ⌄

Note: The maximum number of profiles you can create is 15.

Cancel    Set default    Delete    Save    Edit    **New**

## Network settings

You can set the **Network search mode** to either **Auto** or **Manual**.

It is recommended that the network mode is set to **4G/5G**, however **4G only** and **5G (SA)** modes are available for advanced configuration.

# 5.4 WiFi

## Basic

**Enable Mesh**: Enable or disable the WiFi mesh feature. If Mesh is enabled, some WiFi options may be limited to ensure compatibility.

**Enable WiFi**: Enable or disable each WiFi band. Note that changes made here will also affect the Guest WiFi feature.

**Enable compatibility SSID**: Some older devices might not support the default WPA2/WPA3-Personal Transition security mode. Tick **Enable compatibility SSID** to enable a second SSID running WPA2-Personal mode. You can identify this SSID with a "-Comp" suffix.

**Wireless network name (SSID)**: This is the name of your WiFi network. The SSID can be between 1 and 32 characters, but must not contain the characters ?, ", $, [, \, + and cannot start/end with a space.

**SSID broadcast**: If you choose to disable this, the SSID will no longer be visible and you will need to set up a connection to the SSID manually on your device. You will need to know the exact SSID and password to connect.

**Security**: Set the WiFi security mode. It is recommended that **WPA2/WPA3-Personal Transition** or **WPA3-Personal** mode is set for the best security.

**Encryption**: Set the security encryption type here.

**WiFi password**: The WiFi password should be at least 12 characters with a combination of numbers, upper case and lower case letters and non-repeating characters.

# Settings

## Basic

**Enable Mesh** ❓

☑

**Enable WiFi** ❓

☑ 2.4GHz

☑ 5GHz

☑ 6GHz

**Enable Compatibility SSID** ❓

☐

**Wireless network name (SSID)**

Smart-5G-Hub-XXXX

SSID broadcast     🔛

**2.4GHz and 5GHz**

Security

WPA2/WPA3-Personal Transition ⌄

Encryption

AES ⌄

**6GHz**

Security

WPA3-Personal ⌄

Encryption

AES (SAE) ⌄

**WiFi password**

Your new password:
- Needs to contain 8 or more characters.
- Should not be an easily guessed dictionary word.
- Should include 1 lowercase letter AND uppercase letter AND a number.
- Should not include repeating characters (i.e. 'AA', '11', 'bb').

••••••••••••    Show

Cancel     Apply

## Advanced

**Channel**: Select Auto and the Hub will select the best channel automatically, or select a WiFi channel from the dropdown manually.

**802.11 mode**: Select from the available options in the dropdown menu. For best performance **802.11be** is recommended.

**Bandwidth**: You can select from the available options through the dropdown menu. For 2.4GHz this is set to Auto (20/40 MHz). For 5GHz it is set to 160MHz and for 6GHz this is set to 320MHz by default.

Advanced

Enable Mesh ?

✓

**2.4GHz**

Channel

Auto

802.11 mode

802.11be

Bandwidth

Auto (20/40 MHz)

**5GHz**

Channel

Auto

802.11 mode

802.11be

Bandwidth

160 MHz

**6GHz**

Channel

Auto

802.11 mode

802.11be

Bandwidth

320 MHz

Cancel    Apply

## Guest network

The guest network is a temporary wireless network for guest users. You can set a duration you want the network to transmit. Devices connected to the guest network will not be able to communicate with each other, but will have full access to the internet.

**Guest network**: You can enable or disable the guest wireless network.

**Wireless network name (SSID)**: This is the name of the guest WiFi network. The SSID can be between 1 and 32 characters in length.

**Duration**: Set a duration the guest network will transmit. The default value is 1 day. Note that if the Hub is restarted, the timer will also be restarted.

**Security**: Set the WiFi security mode. For 2.4 and 5GHz this is set to **WPA2-Personal** for maximum compatibility. Set to **WPA2/WPA3-Personal Transition** or **WPA3-Personal** for the best security.

**Encryption**: Set the security encryption type here.

**WiFi password**: The WiFi password should be at least 12 characters with a combination of numbers, upper case and lower case letters and non-repeating characters.

**Time remaining**: This is the time remaining for your guest network to transmit. Click **Extend for 4 hours** to add some additional time.


**Note**: For security, the Guest network will not be transmitted by any WiFi mesh access points.

# Settings

## Guest network

**Enable Guest network**

☑

**Wireless network name (SSID)**

Smart-5G-Guest-XXXX

**Duration**

1 day ⌄

**2.4GHz and 5GHz**

Security

WPA2-Personal ⌄

Encryption

AES ⌄

**6GHz**

Security

WPA3-Personal ⌄

Encryption

AES (SAE) ⌄

**WiFi password**

Your new password:
• Needs to contain 8 or more characters.
• Should not be an easily guessed dictionary word.
• Should include 1 lowercase letter AND uppercase letter AND a number.
• Should not include repeating characters (i.e. 'AA', '11', 'bb').

••••••••••••        Show

Note: For security the Guest network will not be enabled over the WiFi Mesh.

Cancel        Apply

01days | 00hrs | 00mins | 00secs
Time remaining

Extend by 4 hours

# WPS

**WPS**: Enable WiFi Protected Setup (WPS) and click Start WPS to start connecting a WPS compatible device to the Hub. WPS will be disabled if WiFi security is set to WPA3-Personal or if SSID broadcast is turned off.



# 5.5 Security

## SIM PIN management

**How to enable a PIN:**

1. Click **SIM PIN status**, enter the current PIN.

2. Click **Apply**.

**How to disable a PIN:**

1. When a PIN is enabled, click **SIM PIN status**.

2. Enter the current PIN and click **Apply**.

**How to change the PIN:**

1. When a **PIN** is enabled, click **Change SIM PIN**.

2. Enter the **Old SIM PIN**, **New SIM PIN** and **Confirm SIM PIN** and click **Apply**.

If a SIM PIN is entered incorrectly 3 times, the SIM PUK code will need to be entered. EE customers can call 150, or alternatively call 07953 966 150 (8am - 6pm Monday to Sunday).



# 5.6 Advanced settings

## WAN port

Your Smart 5G Hub can be connected to a WAN modem or router via the LAN/WAN port on the back of the Hub to supply a primary or backup internet connection. Follow the instructions below according to your specific WAN internet service.

**Connecting to Fibre/PPPoE WAN**

1. Connect the Fibre/PPPoE modem's Ethernet cable to the LAN/WAN port on the back of the Smart 5G Hub.
2. Log on to the Hub web UI in a web browser (http://192.168.1.1) and navigate to **Settings > Advanced settings > WAN port**.

# Settings

3. If the default Username and Password is not displayed, it may be necessary to enter these credentials for your PPPoE connection – set **WAN auto detect** to disabled, **Use LAN/WAN port as WAN** to be enabled. Set **Connection mode** to **PPPoE**. Enter the PPPoE **Username** and **Password** for your service and click **Apply.**

4. To verify the PPPoE connection is successful, navigate to **Status > WAN port**, the **Connection status** should be <span style="color:green">**Connected**</span> and the light on the front of the Hub should be solid aqua.

## Connecting to DHCP WAN

1. Connect the DHCP modem/router Ethernet cable to the LAN/WAN port on the back of the Smart 5G Hub.
2. Log on to the Hub web UI in a web browser ([http://192.168.1.1](http://192.168.1.1)) and navigate to **Settings > Advanced settings > WAN port**.
3. Verify that the Connection mode is displayed is **DHCP**. Note that if the DHCP WAN is not automatically detected, set **WAN auto detect** to disabled, **Use LAN/WAN port as WAN** to enabled, **Connection mode** to **DHCP** and click **Apply**.
4. To verify the DHCP connection is successful, navigate to **Status > WAN port**, the **Connection status** should be <span style="color:green">**Connected**</span> and the light on the front of the Hub should be solid aqua.

## Connecting with a Static IP

1. Connect the WAN modem/router's Ethernet cable to the LAN/WAN port on the back of the Smart 5G Hub.
2. Log on to the Hub web UI in a web browser ([http://192.168.1.1](http://192.168.1.1)) and navigate to **Settings > Advanced settings > WAN port**.
3. Set **WAN auto detect** to disabled, **Use LAN/WAN port as WAN** to enabled. Set **Connection mode** to **Static IP**.
4. Enter the **IP address, Subnet mask, Default gateway** and Primary/Secondary **DNS server** for your service and click **Apply**.
5. To verify the static IP connection is successful, navigate to **Status > WAN port**, the **Connection status** should be <span style="color:green">**Connected**</span> and the light on the front of the Hub should be solid aqua.

# Settings

**Changing WAN priority**

By default, if a WAN port connection is available, the WAN port will provide internet connectivity to the Smart 5G Hub. If the WAN port connection fails, then internet connectivity will be provided by the 4G/5G connection as a backup service. The priority can be changed, so that the 4G/5G connection provides primary internet connectivity, and the WAN port can be used for backup connectivity in case of a loss of the 4G/5G connection.

To change the WAN priority:

1. Log on to the Hub web UI in a web browser ([http://192.168.1.1](http://192.168.1.1)) and navigate to **Settings > Advanced settings > WAN port**.
2. Set the **WAN priority** dropdown to **4G/5G** or to **WAN port** depending on the priority you want to set (the other type will be used as the backup connection) and click **Apply**.

**MAC clone:** If your service provider requires a specific MAC address to authenticate, enter the required MAC address in the Host MAC address field and press Clone to replace the current MAC address.

# Settings

## LAN

Local area network (LAN) settings are configured here. The default **Gateway address** is 192.168.1.1.

The default Subnet mask is 255.255.255.0.

The **DHCP server** is enabled by default and will automatically assign IP addresses to devices in the network. Addresses will be assigned between the **Start IP address** and **End IP address**.

**Enable NAT** (Network Address Translation) to translate the private LAN traffic to the WAN interface and back. This setting should remain enabled to connect to the internet normally through the Smart 5G Hub.

LAN

Gateway address

192.168.1.1

Subnet mask

255.255.255.0

DHCP server

Start IP address

192.168.1.2

End IP address

192.168.1.253

DHCP lease time

24 hours

Enable NAT

Cancel        Apply

# Bandwidth control

If you want to control the bandwidth (speed) of devices connected to your Smart 5G Hub enter a maximum value in Mbps for **Downlink bandwidth limit** and/or **Uplink bandwidth limit**.

If you set the value to 0, there will be no limit set.

Remember to enable the **Bandwidth control** toggle to control the bandwidth of devices.



# WAN Ping

To improve security, the **WAN ping** option is disabled and the Smart 5G Hub will not respond to any incoming ping requests from the internet.

## LAN IP Filter

By default, any device connected to your Smart 5G Hub is allowed to access the internet. You can use the LAN IP filter to allow or block specific devices from accessing IP addresses on the internet.

Create a **Block** rule for IP addresses you do not want a device to access. If you set **Allow**, then only IP addresses that match the rules will be accessible, all other addresses will be blocked.

A maximum of 32 rules can be created.

**LAN IP filter**

**LAN IP filter**

Block ⌄

+ Add

| LAN IP address | LAN port(s) | WAN IP address | WAN port(s) | Protocol | Operation |
|---|---|---|---|---|---|
| 192.168.1.100 | 43 | 8.8.8.8 | 80 | TCP | 🖉 🗑 |

Cancel    **Apply**

Please note:

• Use Block to set IP addresses that you do not want users to access.

• Use Allow to set IP addresses that can only be accessed by users.

• A maximum of 32 rules can be created.

## MAC filter

By default, any device can connect to your Smart 5G Hub. You can use the MAC filter to only allow or block specific devices from accessing your Smart 5G Hub.

Set MAC filter to Block or Allow and then click **+** to add a device MAC address to the MAC filter rule.

**Block**: Set devices that are blocked from accessing the network. All other devices are allowed.

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# Settings

**Allow**: Set devices that are allowed to access the network. All other devices are blocked. The Allow list cannot be empty.

Note that personal devices that use MAC randomisation may not be controlled by the MAC filter if the device MAC address changes.

## MAC filter

**MAC filter**

Block ⌄

+ Add

| Device | MAC address | Operation |
|--------|-------------|-----------|
| My Laptop | 00:20:C6:D3:20:20 | ✏️ 🗑️ |

Cancel  Apply

Please note:

• Use Block to set devices that are blocked from accessing the network. All other devices are allowed.

• Use Allow to set the devices that are allowed to access the network. All other devices are blocked.

• A maximum of 32 rules can be created.

• If your device uses MAC randomisation, MAC filter rules may stop working.

## DMZ

When an IP address is set to be a DMZ (Demilitarized Zone) host on the local network, it is exposed to the internet. External users will then have access to all services. Note that clients in the DMZ may be exposed to internet traffic, so use this feature with caution.

DMZ

DMZ ⬤

**DMZ host IP address**

192.168.1.100

Note: If external users can't access certain network services provided by the Local Area Network (LAN), use the DMZ function to set the client that provides the required network services as the DMZ host. External users will then have access to all services. Note that clients in the DMZ will be exposed to WAN traffic and may be insecure.

Cancel    Apply

## UPnP

With UPnP enabled, the applications or host devices on the local network can freely communicate with each other and establish network services for data sharing, communications and entertainment.

UPnP

Enable UPnP ⬤

Note: Universal Plug and Play (UPnP) is a set of networking protocols that allows devices connected to your Smart 5G Hub to discover each other and establish functional network services for data sharing, communications, and entertainment.

# Port forwarding

Port forwarding allows external users to connect to services inside the local network (LAN). Click **+** to create a new Port forwarding rule, and specify the LAN IP address, LAN ports, WAN ports and Protocol type for traffic to be forwarded.

## Port forwarding

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | + Add |

| Name | WAN port(s) | LAN IP address | LAN port(s) | Protocol | Status | Operation |
|---|---|---|---|---|---|---|
| My Laptop | 8080 | 192.168.1.100 | 8080 | TCP | ⬤ | ✏ 🗑 |

Note: This setting allows external users to connect to Local Area Network (LAN) services using Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP) and other protocols. Please note that some network providers may block port forwarding features.

# Parental control

This feature enables you to control when specific devices are allowed to access the internet during the day and week. Website URLs can also be blocked via Website restrictions.

Note that personal devices that use MAC randomisation might not be protected by a Parental control rule if the device MAC address changes.

**To set a Parental control rule:**

1. Click **Set** in the operations column for the connected device.
2. Enter the start and end time the device will be allowed online, or tick **All day** for access throughout the day.
3. Select the days of the week the device will be allowed online.
4. Enable Website restrictions and enter the URL or name of any websites you want to specifically block from access, click **+** to add each site.
5. Click **Apply** to save changes.
6. **Status** to enabled and set the device **Enable** toggle to apply the Parental control rule.

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## Parental control

Status

| Device name | Device information | Enable | Operation |
|---|---|---|---|
| My Laptop | IP address: 192.168.1.3<br>MAC address: 00:20:C6:D3:20:20 | | Set |

Please note:

• Blocking a URL may not block the associated app. For example, adding www.facebook.com may not block the specified device from using the Facebook app.

• If your device uses MAC randomisation, Parental control rules may stop working.

# SMS forwarding

SMS forwarding allows you to forward SMS messages sent to your Smart 5G Hub to another mobile phone.

1. Enable **SMS forwarding to mobile phone**.

2. Enter the phone number you wish to have messages forwarded to.

3. Click **Apply**. Now all incoming SMS messages will be forwarded to that phone number automatically.

## SMS forwarding

SMS forwarding to mobile phone

**Recipient's number**

07700900000

Please Note: This feature forwards SMS text messages to a recipient's mobile number.

Cancel    Apply

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# Passthrough mode

With Passthrough mode enabled, routing functions on the Smart 5G Hub are disabled, and the 4G/5G WAN IP address will be forwarded over the Ethernet LAN interface to a connected router or other device with WAN support.

Note that Enabling Passthrough mode will disable the Smart 5G Hub firewall, NAT and WiFi features, and these will not be configurable via the Web user interface.

Set the **Passthrough allocation** and **Subnet mode** in accordance with your WAN device instructions.

Disable **Passthrough mode** to revert the Smart 5G Hub to normal router operations.

# 6. Device

## 6.1 Device information

You can view your Smart 5G Hub IMEI, My number, Serial number and Software version here.

**Device information**

Device name

Smart 5G Hub

IMEI

XXXXXXXXXXXXXX

My number

XXXXXXXXXX

Serial number

XXXXXXXXXX

Software version

HH70C_V01.03

## 6.2 Device management

### Login password

Enter your current password and confirm new password. Your chosen password must be between 8-64 characters long.

Note that for security purposes it is recommended your password should contain a mixture of upper-case letters, lower-case letters and numbers. The password should not be easily guessed, or a word from the dictionary.

Login password

Current password

Show

New password

Your new password:
- Needs to contain 8 or more characters.
- Should not be an easily guessed dictionary word.
- Should include 1 lowercase letter AND uppercase letter AND a number.
- Cannot match the current password.

Show

Confirm password

Show

Cancel    Apply

# System time

**Automatically adjust to daylight saving time**: Daylight saving time will be set automatically but this can be overridden by changing this setting.

**Time zone**: Change the local time zone here.

**Current date and time**: This will show your current time according to the selected time zone.

System time

Automatically adjust to daylight saving time

Time zone

(UTC+00:00) London

Current date and time
20-02-2024 05:54:26

Cancel    Apply

# Backup & restore

Backup and restore function will backup and restore device settings including private data and private settings such as WiFi passwords, Login password, APN settings and SMS forwarding rules. SMS messages will not be backed up.

**How to backup the Hub configuration:**

1. Click **Backup** to save the configuration file.

2. On Windows and Mac OS these will be saved in the Downloads folder by default and the file name will be **configure.bin**.

**How to restore the backup configuration:**

1. Click **Browse** to select the previously backed up configuration file.

2. Click **Restore**.

⚠ Do not power off the Smart 5G Hub during the configuration restoration process.

## Restart & reset

**Restart**: Click **Restart** to reboot the Smart 5G Hub. Current settings will be maintained.

**Reset**: Click **Reset** to reset all settings back to factory default settings. Note that any custom settings you have applied will be reset, so backup a device configuration file as instructed above if you want to restore settings later.

⚠ Do not power off the Smart 5G Hub during the reset process.

# 6.3 Firmware update

Click **Check for updates**. Your Smart 5G Hub will check if there is an update available. If new firmware is found, you may click Download to begin the update. Please note that your Internet connection will not be available during the update process.

Enable **Allow automatic updates** to allow EE to automatically update the device when a new update is available. If this option is disabled, you can still update the device via Check for updates.

Enable **Update notification icon** to display an update icon in the user interface status bar (top right) when an update is available.

⚠️ Do not power off the Smart 5G Hub during the update process.

## Firmware update

The current version is

HH70C_V01.03

Allow automatic updates ⬤

Update notification icon ⬤

**Check for updates**

Note: Do not power off your Smart 5G Hub during the update process as this may damage it. Internet connectivity may be unavailable during the update process.

# 6.4 System log

System log contains a list of important events that have occurred since your Hub was last turned on or restarted. The events include successful/failed login attempts, login password changes, restart/reset events and configuration restore and firmware updates.

Click **Save log** to save a log file locally (as a CSV file called system.log).

### System log

| Time | Event |
|---|---|
| 30/06/23 08:22 | Login successful from XX.XX.XX.XX.XX.XX My Laptop |
| 30/06/23 07:59 | Login successful from XX.XX.XX.XX.XX.XX My Laptop |
| 01/01/20 00:00 | Smart 5G Hub started |
| 30/06/23 07:51 | Smart 5G Hub configuration restored |
| 01/01/20 00:10 | Login successful from XX.XX.XX.XX.XX.XX My Laptop |
| 01/01/20 00:05 | Login successful from XX.XX.XX.XX.XX.XX My Laptop |
| 01/01/20 00:01 | Login successful from XX.XX.XX.XX.XX.XX My Laptop |
| 01/01/20 00:01 | Login successful from XX.XX.XX.XX.XX.XX My Laptop |
| 01/01/20 00:00 | Smart 5G Hub started |
| 01/01/20 04:57 | Login successful from XX.XX.XX.XX.XX.XX My Laptop |

Save Log

# 7. Warranty

Your device is warranted against any defect of malfunctioning which may occur in conditions of normal use during the warranty period of twenty-four (24) months[1] from the date of purchase as shown on your original invoice.

Accessories sold with your device are also warranted against any defect which may occur during the first twelve (12) months[1] from the date of purchase as shown on your original invoice.

In case of any defect of your device which prevents you from normal use thereof, you must immediately inform your vendor and present your device with your proof of purchase.

If the defect is confirmed, your device or part thereof will be either replaced or repaired, as appropriate. Repaired device and accessories are entitled to a one (1) month warranty for the same defect. Repair or replacement may be carried out using reconditioned components offering equivalent functionality.

This warranty covers the cost of parts and labor but excludes any other costs.

This warranty shall not apply to defects to your device and/or accessory due to (without any limitation):

- Non-compliance with the instructions for use or installation, or with technical and safety standards applicable in the geographical area where your device is used;
- Connection to any equipment not recommended in the EE user manual;
- Modification or repair performed by individuals not authorized by EE Ltd. or its affiliates or your vendor;
- Modification, adjustment or alteration of software or hardware performed by individuals not authorized by EE Ltd.;
- Inclement weather, lightning, fire, humidity, infiltration of liquids or foods, chemical products, download of files, crash, high voltage, corrosion, oxidation.

Your device will not be repaired in case labels or serial numbers (IMEI) have been removed or altered.

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[1] The warranty period may vary depending on your country.

# Warranty

There are no express warranties, whether written, oral or implied, other than this printed limited warranty or the mandatory warranty provided by your country or jurisdiction.

In no event shall EE Ltd. or any of its affiliates be liable for indirect, incidental or consequential damages of any nature whatsoever, including but not limited to commercial or financial loss or damage, loss of data or loss of image to the full extent those damages can be disclaimed by law.

Some countries/states do not allow the exclusion or limitation of indirect, incidental or consequential damages, or limitation of the duration of implied warranties, so the preceding limitations or exclusions may not apply to you.

# 8. Contact information

**Internet address**: ee.co.uk

**Calling from EE mobile**: 150

**Calling from a landline or another provider**: 07953 966 150

**Contact address**: EE Ltd, London E1 8EE, UK