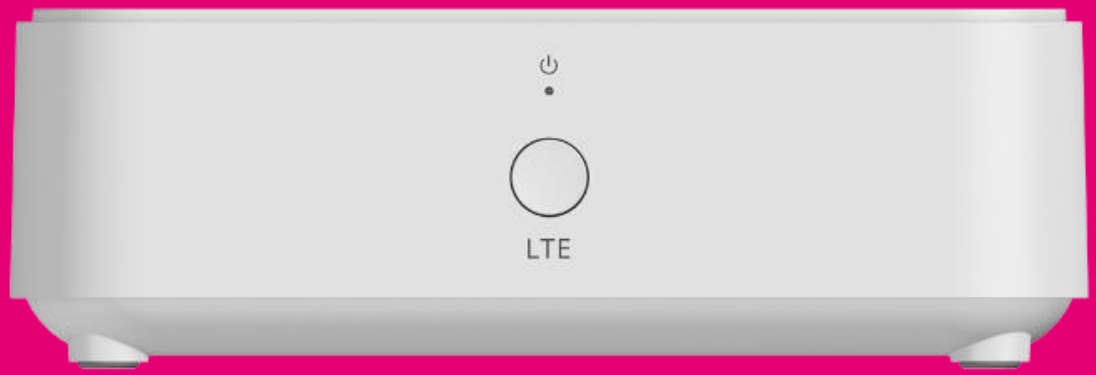
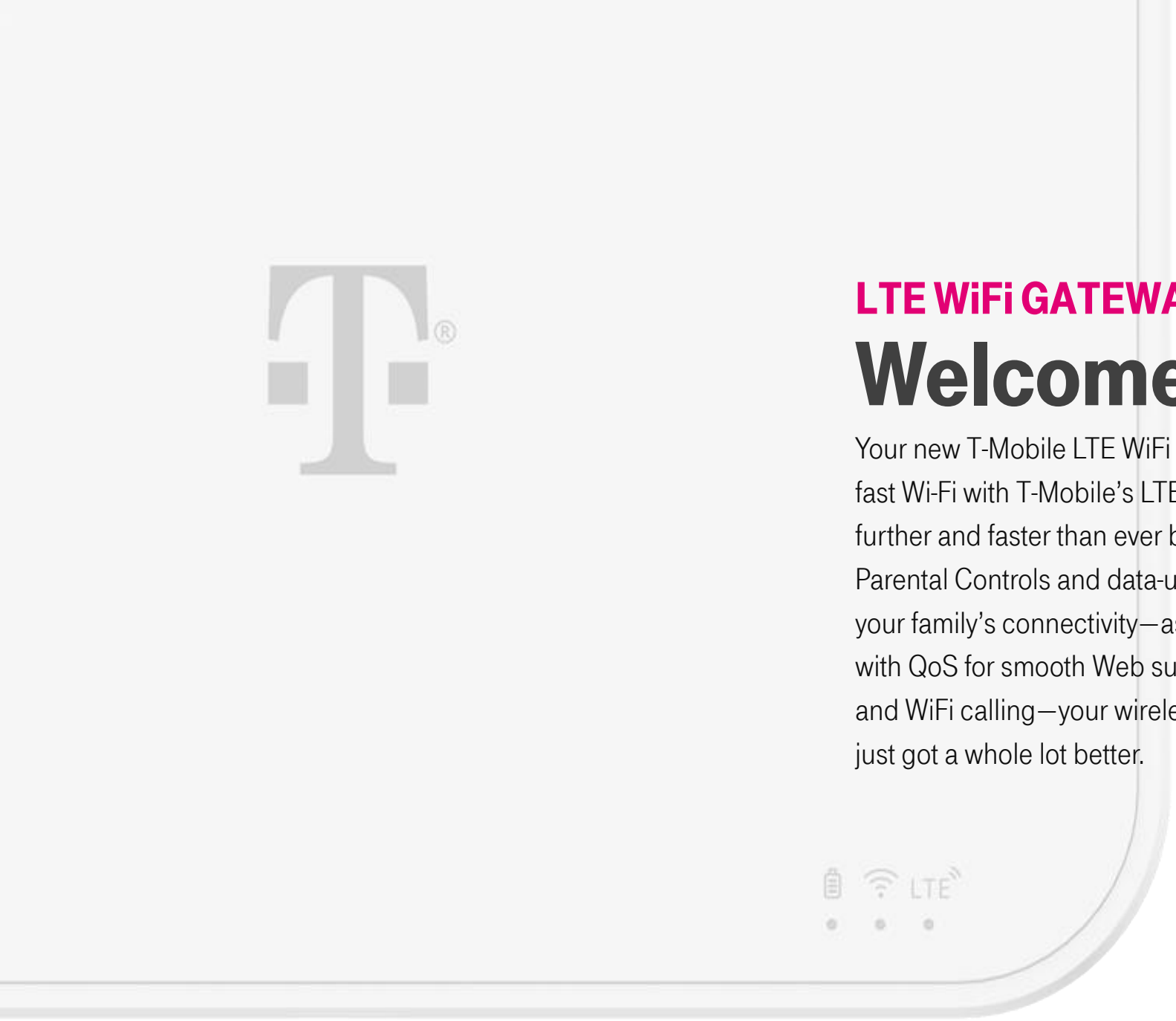
T··Mobile·
HOME
INTERNET

User Guide



TM-RTL0102
LTE WiFi Gateway



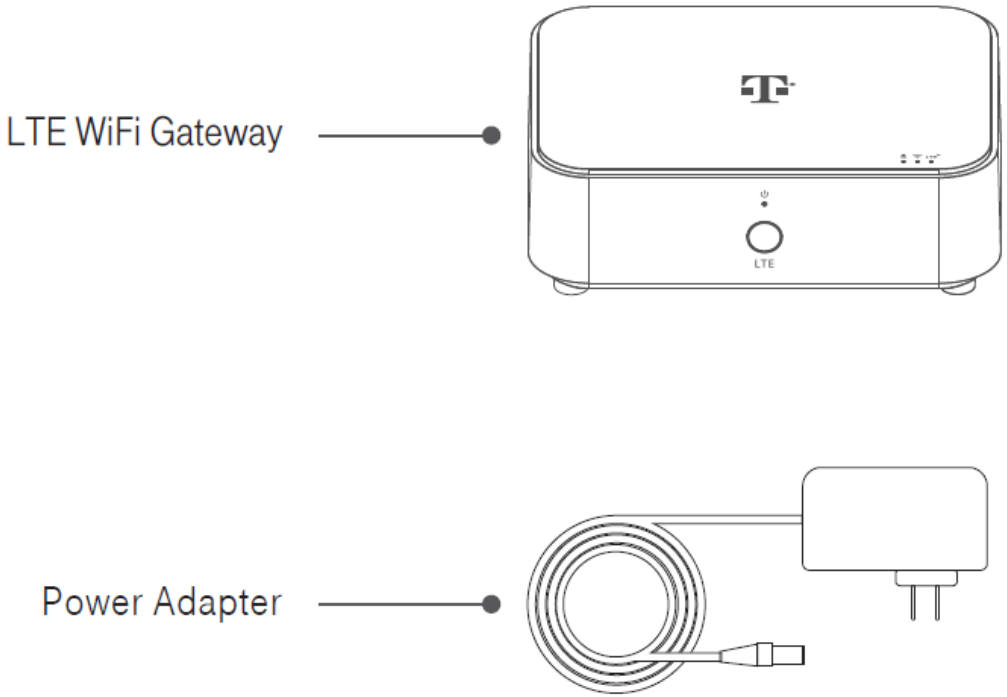
LTE WiFi GATEWAY

Welcome

Your new T-Mobile LTE WiFi Gateway is custom built for fast Wi-Fi with T-Mobile's LTE network that reaches further and faster than ever before. With easy-to-use Parental Controls and data-usage features to manage your family's connectivity—as well as dual-band WiFi with QoS for smooth Web surfing, streaming, gaming and WiFi calling—your wireless T-Mobile experience just got a whole lot better.

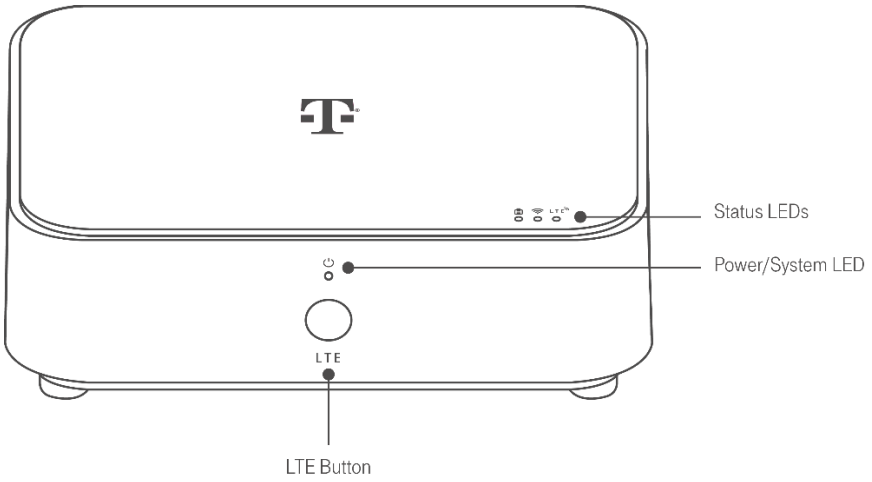
1. What's in the box

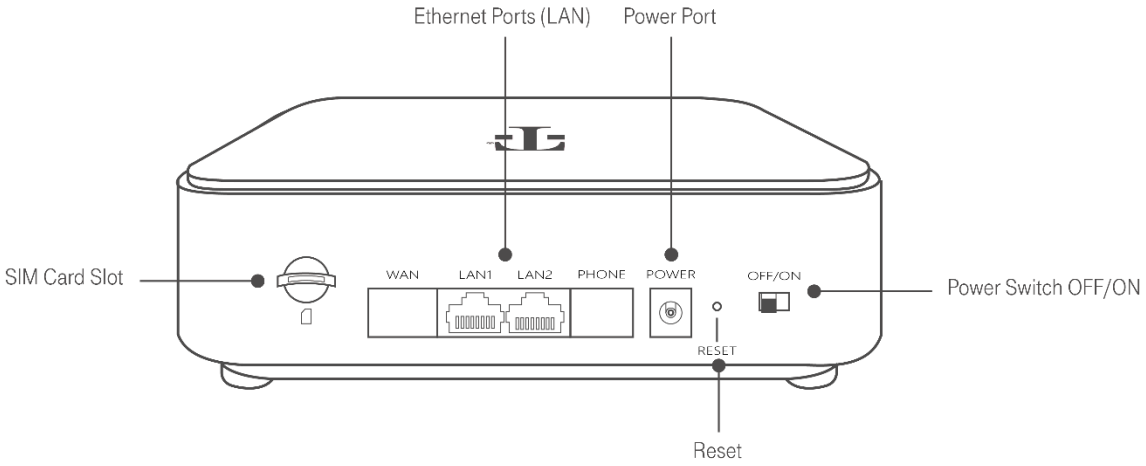
Contact T-Mobile if any item is missing or damaged.



2. Getting to know your LTE WiFi Gateway

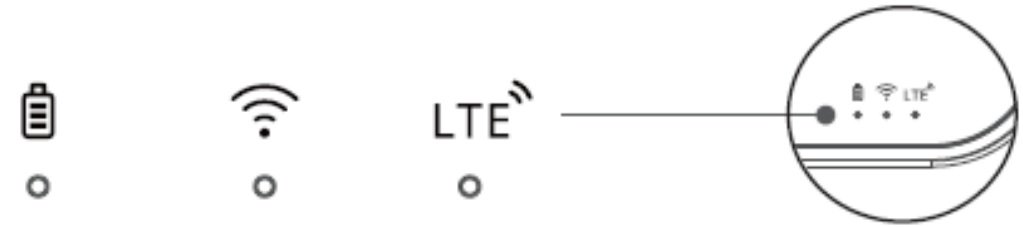
The WiFi gateway includes a battery which can power the WiFi gateway temporarily in case of emergency power loss.





LEDs

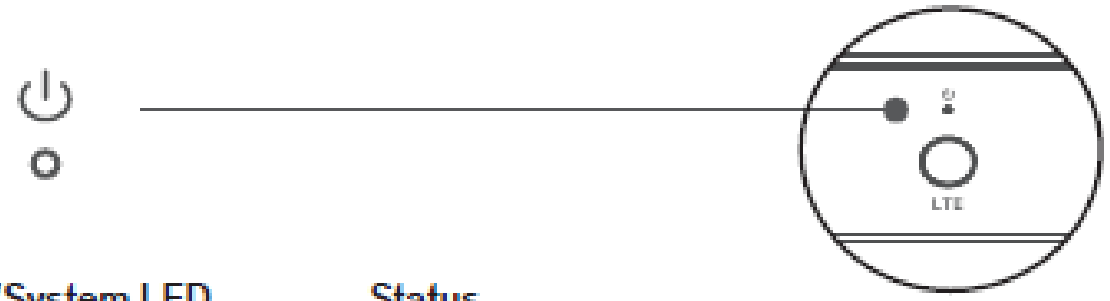
The LEDs indicate the WiFi gateway's power, connection and battery status.



Battery (LED 1)	WiFi (LED 2)	LTE (LED 3)	Power/System LED	Status
				Not Powered
			Flashing	Booting
				Error
				Ready
				LTE Ready
				LTE Error
				WiFi On
				WiFi Off
				WiFi Error
				50-100% Battery
				10-50% Battery
				Low Battery <10%
				No Battery

LTE Button

Press the LTE button on the front of the WiFi gateway to display the LTE signal strength.

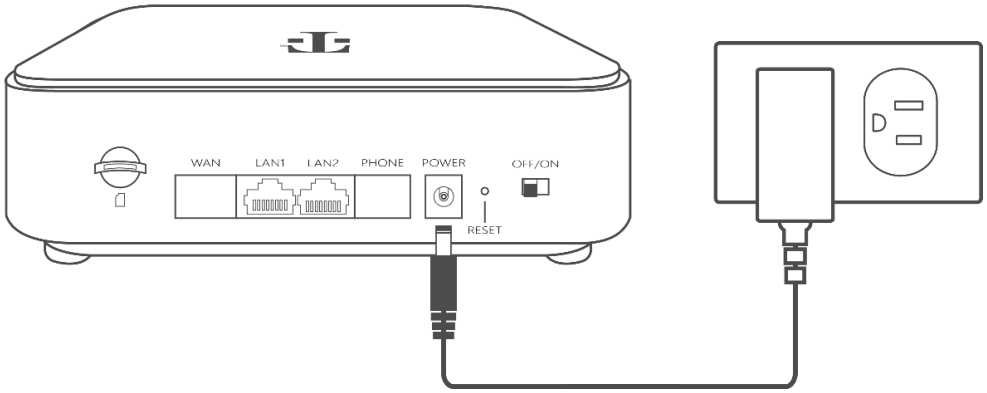


Power/System LED	Status
Flashing (5 sec)	Excellent LTE Signal
Flashing (5 sec)	Good LTE Signal
Flashing (5 sec)	Weak LTE Signal
	No Service

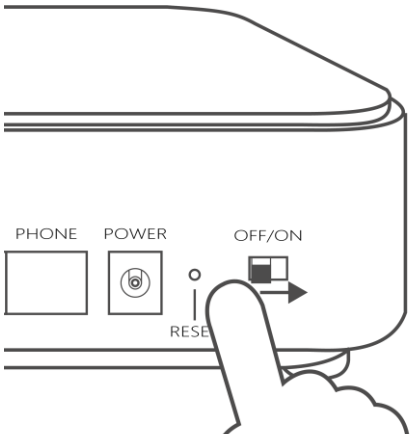
3. Installation

If you are replacing an existing router, disconnect it from your network first.

1. Plug the WiFi gateway into a power outlet using the included power adapter.



2. Switch the WiFi gateway's power switch on, then head to 4. Configure your LTE WiFi Gateway to setup your WiFi security.



3.1 Positioning your WiFi gateway

For the best wireless signal transmission between the WiFi gateway and your network devices:

- Place the WiFi gateway in a central area.
- Keep the WiFi gateway away from metal obstructions and away from direct sunlight.
- Keep the WiFi gateway away from 802.11g or 20MHz only WiFi devices, 2.4GHz computer peripherals, Bluetooth devices, cordless phones, transformers, heavy-duty motors, fluorescent lights, microwave ovens, refrigerators, and other industrial equipment to prevent signal interference or loss.

3.2 Setup requirements

To configure your wireless network via computer, you need a computer that meets the following system requirements:

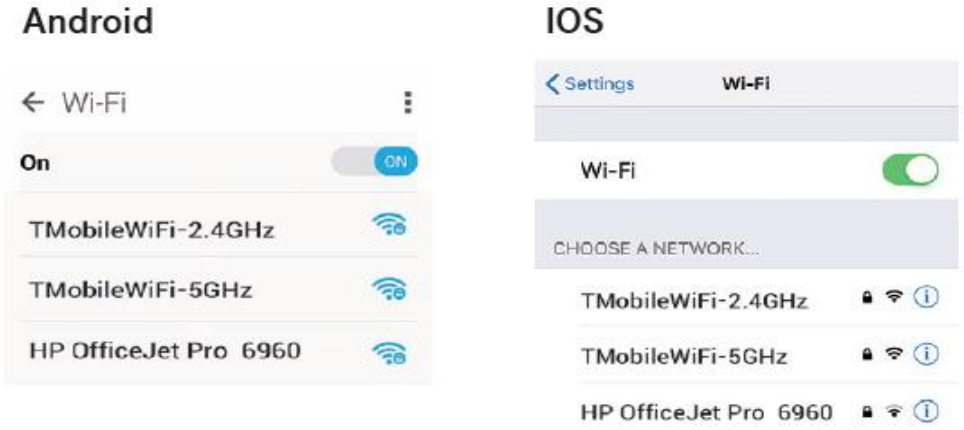
- Ethernet RJ-45 (LAN) port (10Base-T/100Base-TX/1000BaseTX)
- IEEE 802.11a/b/g/n/ac wireless capability
- An installed TCP/IP service
- Web browser such as Internet Explorer, Firefox, Safari, or Google Chrome

4. Configure your LTE WiFi Gateway

You can configure your WiFi gateway's network settings using the Web User Interface (Web UI) by computer or mobile app. First connect to your WiFi gateway, then access the Web UI, as shown below. Your WiFi gateway is pre-set with the WPA2 security, but you should immediately change the default WiFi password, as well as the Web UI login password.

4.1 Connect by Smartphone

1. On your smartphone, scan available WiFi networks.



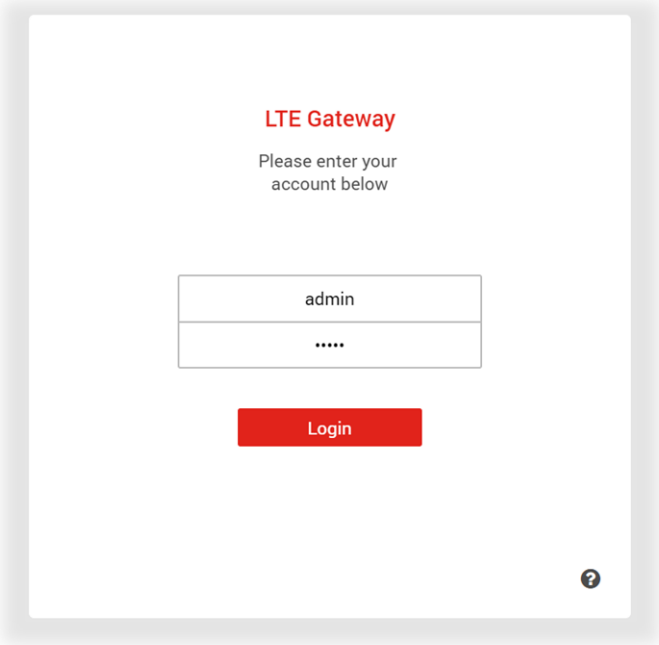
2. Select either of the T-Mobile networks named:

TMobileWiFi-2.4G
or
TMobileWiFi-5G

3. Enter the unique password found on the white sticker on the back of your WiFi gateway.

Login to the Web User Interface

1. Log in using the default username: **admin** and password: **admin**



2. Go to **Basic > Network > WiFi** to change your WiFi password and **Expert > Device Settings > Administration** to change your Web UI login password, and remember to save your settings.
3. Check **5. Basic Settings** and **6. Expert Settings** in this guide for more information.

4.2 Connect by computer

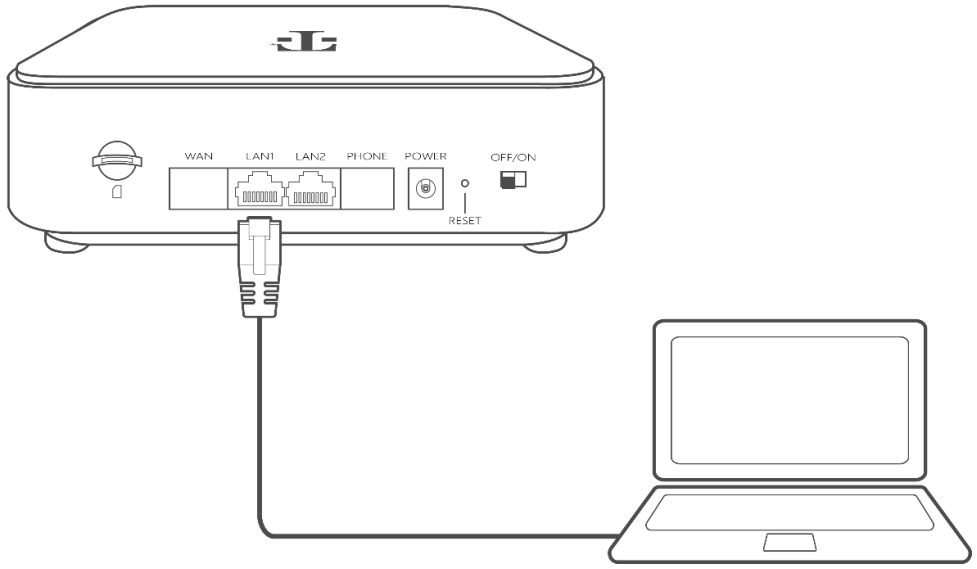
4. On your computer, scan available WiFi networks.

5. Select either of the T-Mobile networks named:

   TMobileWiFi-2.4G
   or
   TMobileWiFi-5G

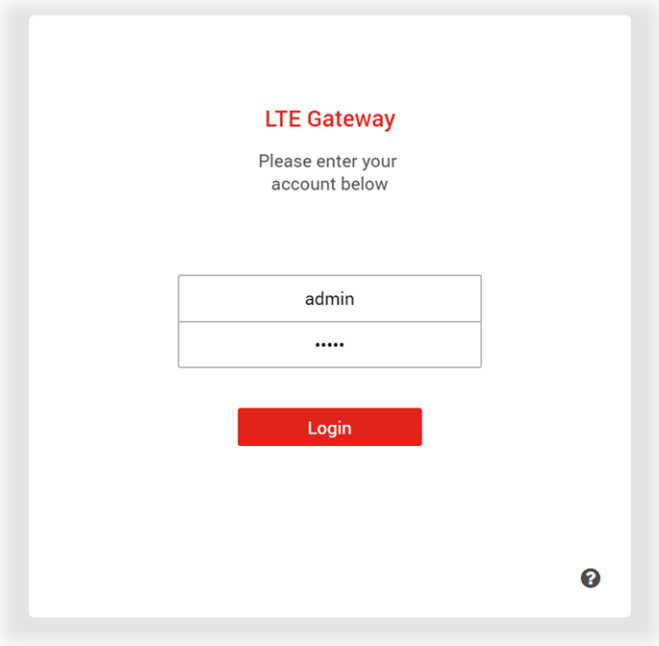
6. Enter the unique password found on the white sticker on the back of your WiFi gateway.

7. If preferred, you can use an Ethernet cable to connect your computer to the WiFi gateway's LAN port for configuration (instead of WiFi).



Login to the Web User Interface

1. Open a web browser and enter the WiFi gateway's default address **http://192.168.1.1** in the address bar.
2. Log in to the Web UI using the default username: **admin** and password: **admin**



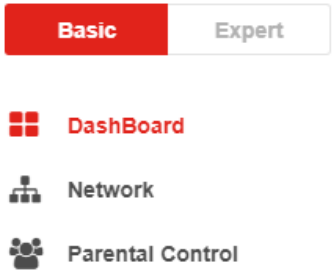
3. Go to **Basic > Network > WiFi** to change your WiFi password and **Expert > Device Settings > Administration** to change your Web UI login password, and remember to save your settings
4. Check **5. Basic Settings** and **6. Expert Settings** in this guide for more information.

5. Basic Settings

Your WiFi gateway comes with an intuitive Web User Interface (Web UI) that allows you to easily setup its Basic & Expert features.

Menu

Select the **Basic** tab in the menu:



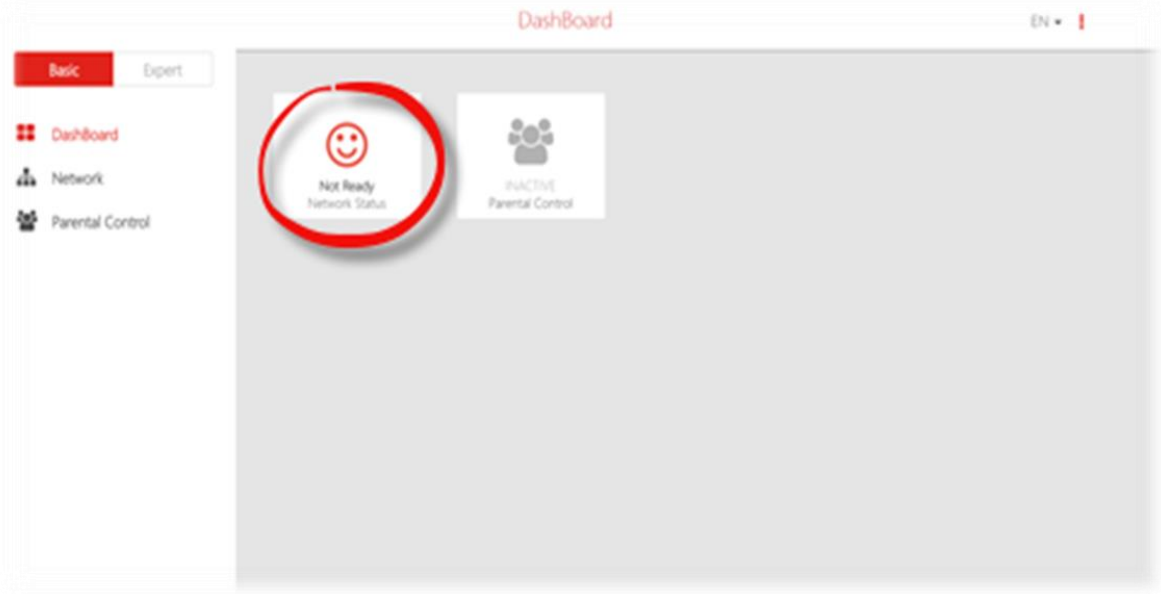
Save

Remember to save your settings with the save button after making changes. The icon takes you back to the Dashboard.

5.1 Dashboard

Basic > Dashboard

The **Dashboard** shows a snapshot of your network status with quick links to key features of your WiFi gateway.



Select any icon on the dashboard: **Network Status, Parental Control** to access more information and settings.

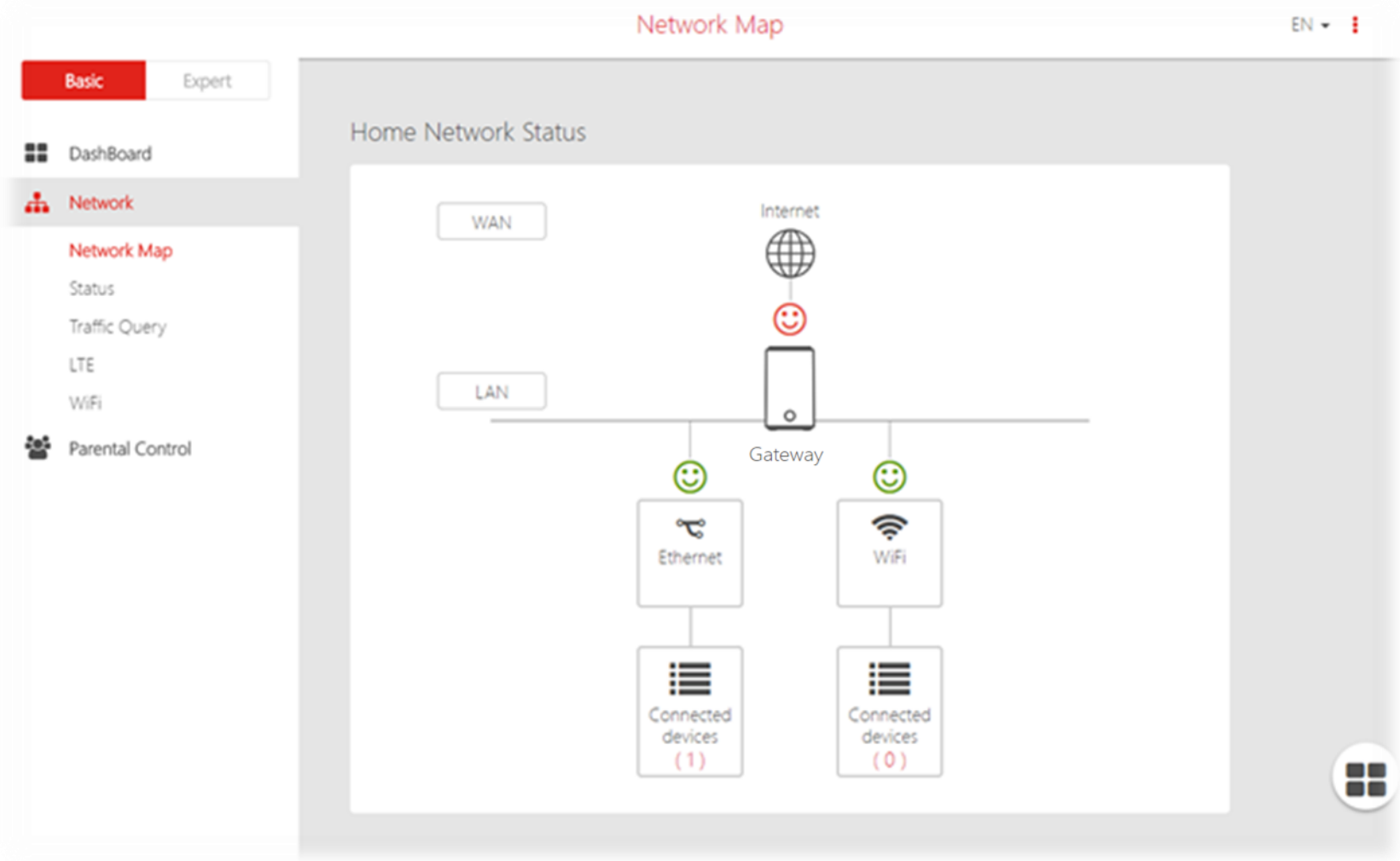
Network Status takes you to **Basic > Network > Status**
Parental Control takes you to **Basic > Network > Parental Control**

Network Status should display **All OK** to indicate a functioning LTE network. If you don't see this, check the WiFi gateway's LEDs and refer to Troubleshooting to diagnose the problem.

5.2 Network

Basic > Network

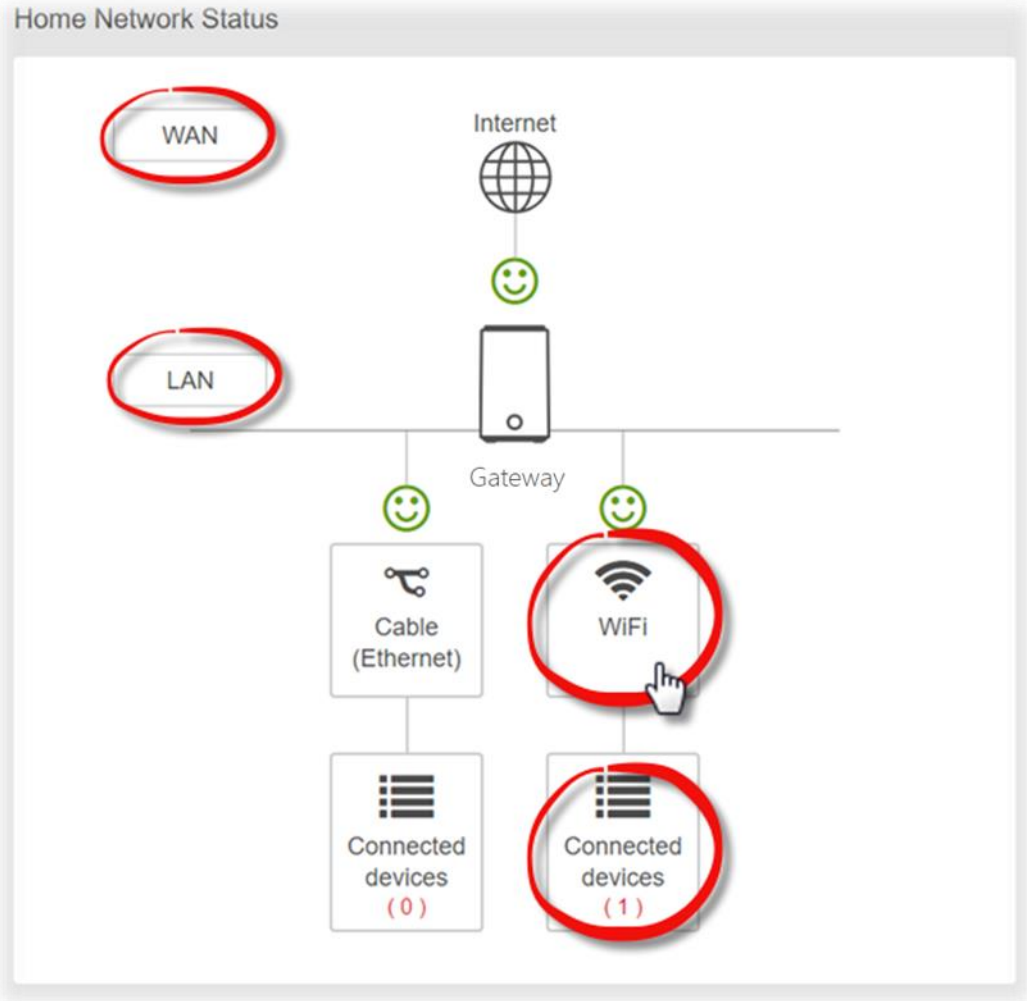
The **Network** menu provides quick links to the basic networking functions of your WiFi gateway. When you select the **Network** menu, the **Network Map** page is displayed as below.



Network Map

Basic > Network > Network Map

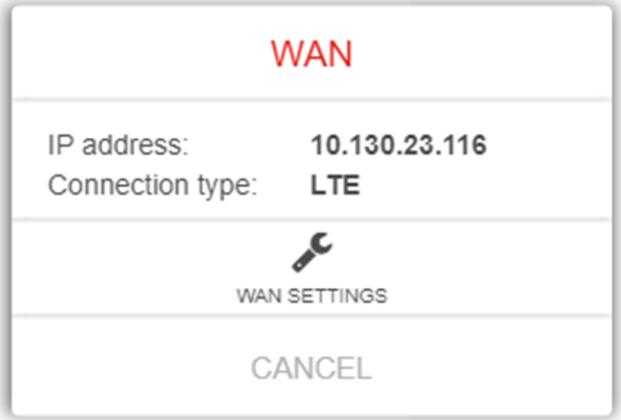
The network map provides a visual overview and status information of the network and devices on the network, with quick links to wireless security settings and client lists. It's important to check and configure security settings.



Select icons on the dashboard for more information and settings, as displayed below:

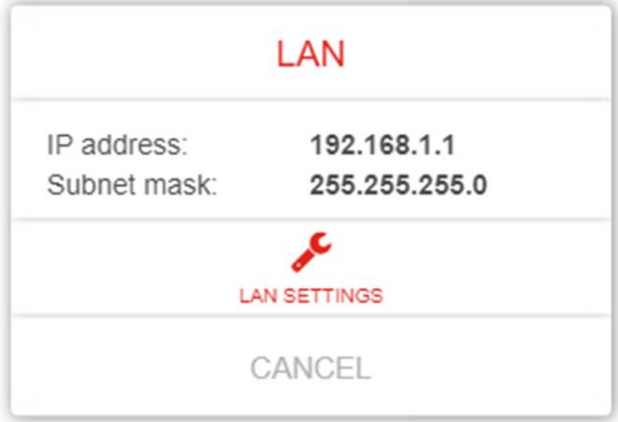
WAN

Displays the WiFi gateway's Wide Area Network (WAN) IP Address and Connection Type (LTE).



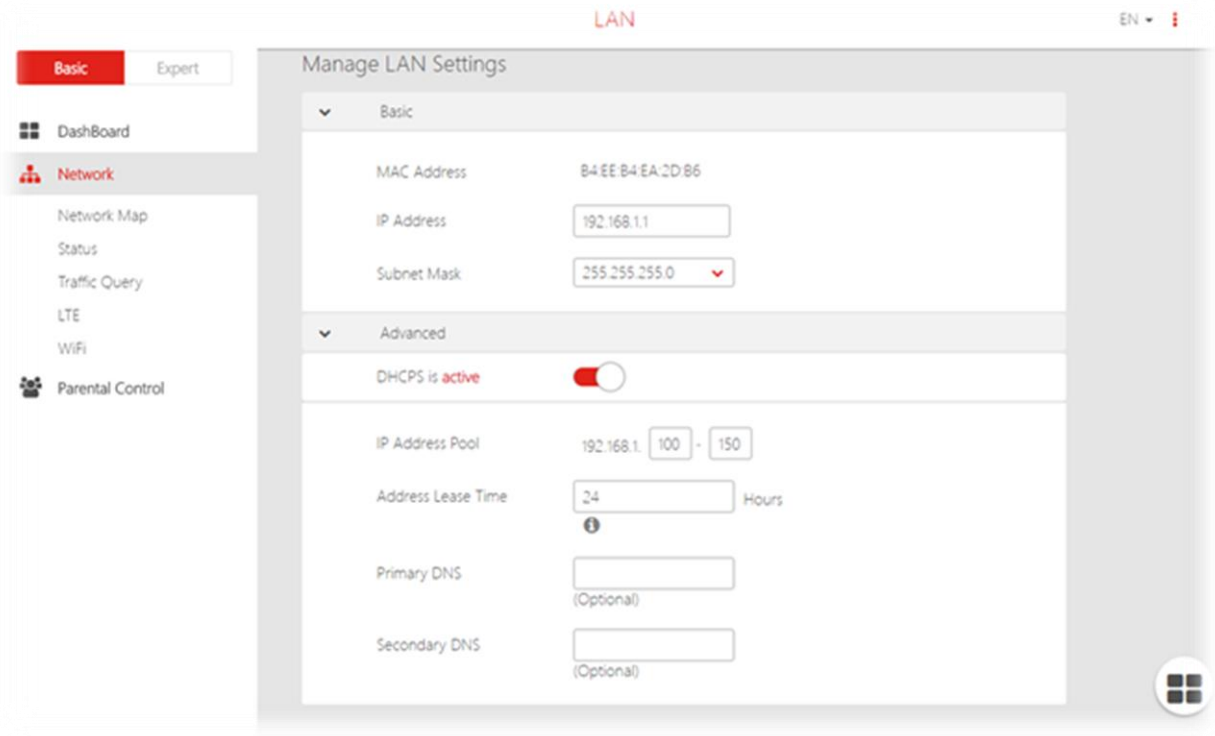
LAN

Displays the WiFi gateway's Local Area Network (LAN) IP Address and Subnet Mask. Click LAN Settings to modify the settings.



LAN > LAN Settings

This page allows you to configure your WiFi gateway on your Local Area Network (LAN). You can specify a static IP address for your WiFi gateway, and configure your WiFi gateway as a DHCP server to assign IP addresses to other devices on your LAN.



Basic	
MAC Address	Displays the MAC address of your WiFi gateway. A MAC Address is a unique fixed identifier for any device on a network.
IP Address	Specify the IP address here. This IP address will be

	assigned to your WiFi gateway and will replace the default IP address.
Subnet Mask	Specify a subnet mask. The default value is 255.255.255.0

Advanced	
DHCP is active/inactive	Toggle the switch to enable or disable DHCP server.
IP Address Pool	Enter the start and end IP address of the IP address range which your WiFi gateway's DHCP server will assign to devices on the network.
Address Lease Time	Enter an address lease time in hours. IP addresses will be assigned for this period of time before being reassigned.
Primary DNS Address Secondary DNS Address	Enter a primary DNS address. Enter a secondary DNS address.

WiFi

Displays your WiFi gateway's 2.4GHz & 5GHz network name (SSID) with switches to quickly enable or disable either WiFi network. Click WiFi Settings to go to Network > WiFi Settings.

Connected Devices

Displays all devices (clients) connected to your WiFi gateway, by Ethernet (LAN) or WiFi (wireless) e.g. laptops, smartphones. The device name, MAC address and IP address is listed for each device.

Status

Basic > Network > Status

Network Status displays the status of the network across six categories: Internet v4, Internet v6, LTE, LAN, Wireless & System Information.

Information is listed in Network Status for reference as described below:

Internet v4

Displays IPv4 Wide Area Network WAN information about your WiFi gateway's LTE connection. IPv4 is the default Internet protocol widely used across the Internet.

Internet v6

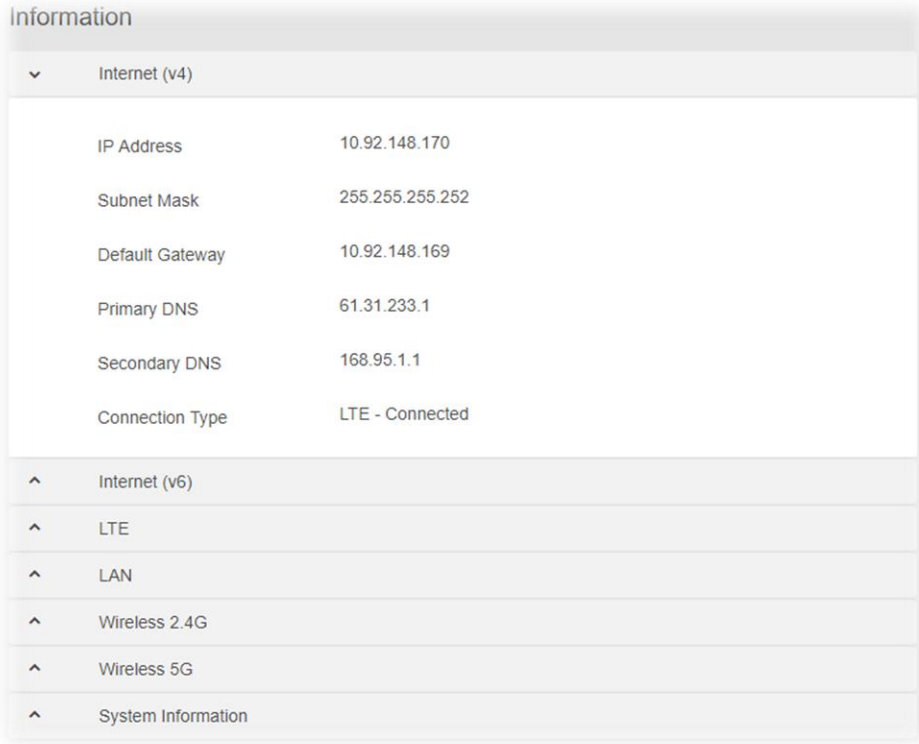
Displays IPv6 Wide Area Network WAN information about your WiFi gateway's LTE connection. IPv6 is an alternative Internet protocol which is not yet widely supported. To setup IPv6 go to Basic > Network > LTE. Contact T-Mobile for more information about using IPv6.

LTE

Displays LTE information including signal strength. To edit LTE settings go to Basic > Network > LTE.

LAN

Displays the WiFi gateway's Local Area Network (LAN) information including MAC Address, IP Address and Subnet Mask, and DHCP Server status. To edit LAN settings go to Expert > Network > LAN.



Wireless 2.4GHz & 5GHz

Displays your WiFi gateway's WiFi information for both 2.4GHz & 5GHz frequencies. Includes network name (SSID) and radio & channel information. To edit these WiFi settings go to **Expert > Network > WiFi Settings**.

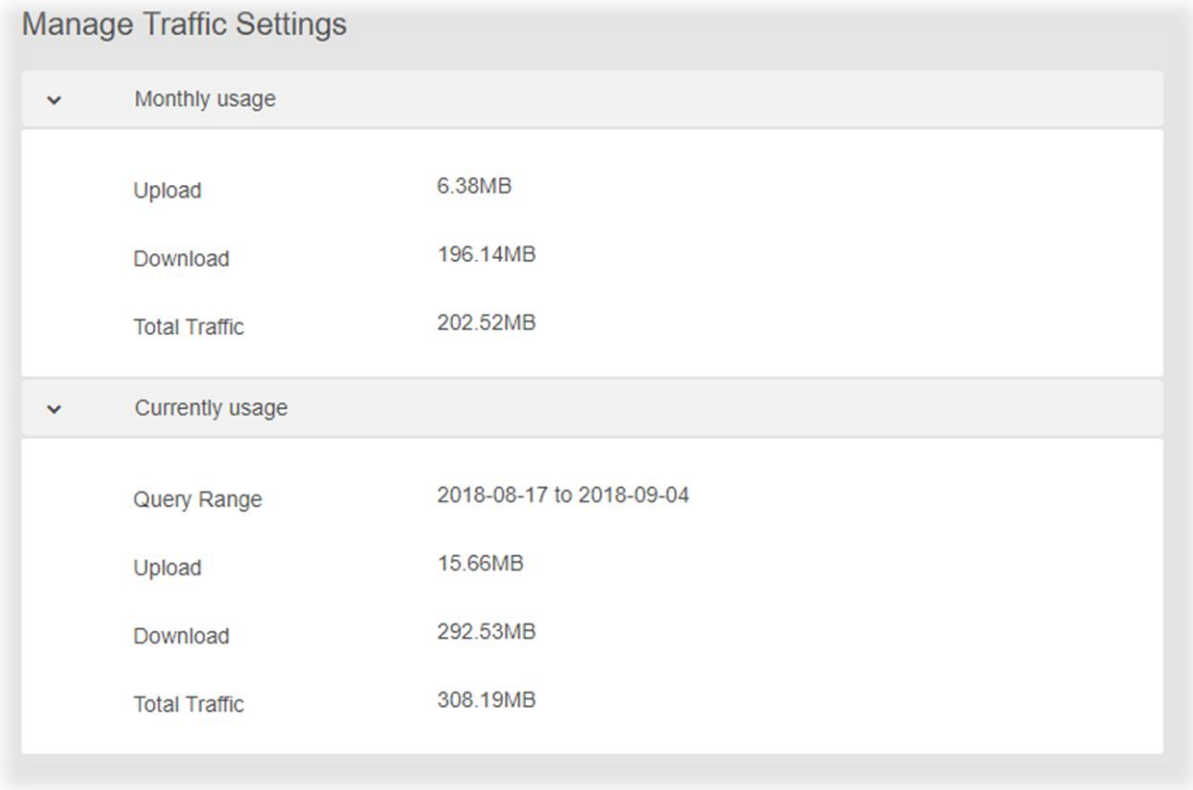
System Information

Displays system identifiers unique to your hardware.

Traffic Query

Basic > Network > Network Map

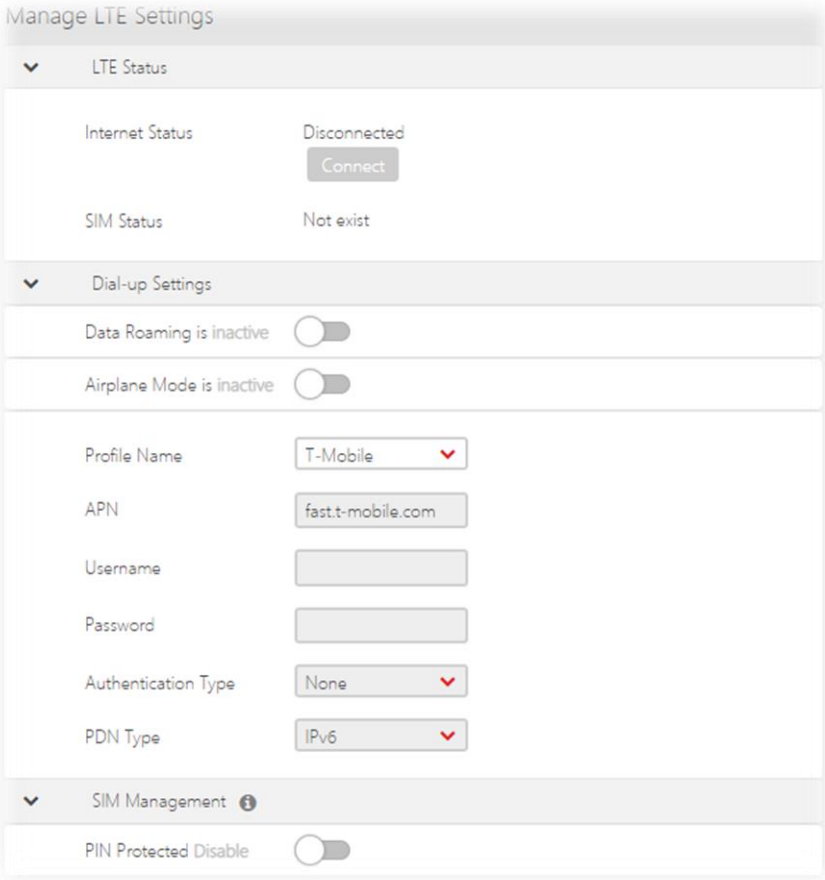
Traffic Query displays your network data usage, with upload, download and total traffic displayed in MB. Ensure that your WiFi gateway's date and time settings are correct in Expert > Device Settings > Date & Time for accurate Monthly usage information.



LTE

Basic > Network > LTE

LTE settings are pre-configured by default. You can disconnect the LTE connection using the Disconnect button if needed, and the connection and SIM status are displayed accordingly.

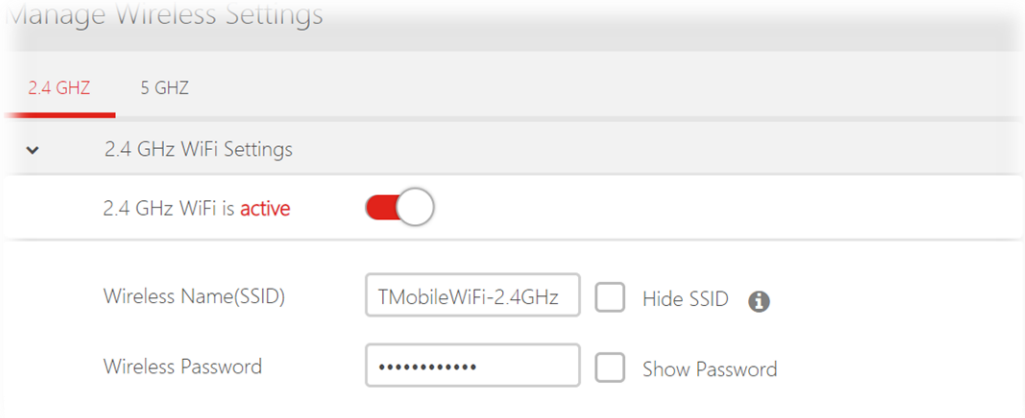


Data Roaming, APN and PDN settings may ONLY be changed when directed to do so by T-Mobile customer support. You can also setup a PIN to use the LTE data connection

WiFi

Basic > Network > WiFi

The **WiFi** screen displays the basic settings for your WiFi gateway's WiFi. Your WiFi gateway is dual-band and uses two Wi-Fi frequencies (2.4GHz & 5GHz) for better wireless performance on your devices. You can edit basic settings for 2.4GHz or 5GHz frequency bands by selecting the respective tab.

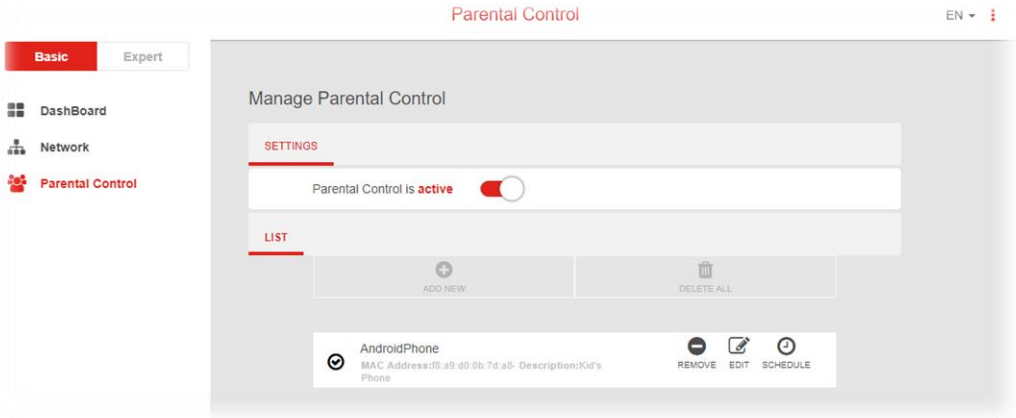


2.4 / 5 GHz WiFi Settings	
WiFi is active/inactive	Enable or disable this WiFi frequency.
Wireless Name (SSID)	This is the name of your Wi-Fi network for identification, also sometimes referred to as "SSID". The SSID can consist of any combination of up to 32 alphanumerical characters.
Hide SSID	Check the box to hide your SSID. When hidden, the SSID will not be visible as an available Wi-Fi network to clients – clients must manually enter the SSID in order to connect. A hidden SSID is typically more secure than a visible SSID.
Wireless Password	Enter your WiFi password. A complex, hard-to-guess key is recommended.

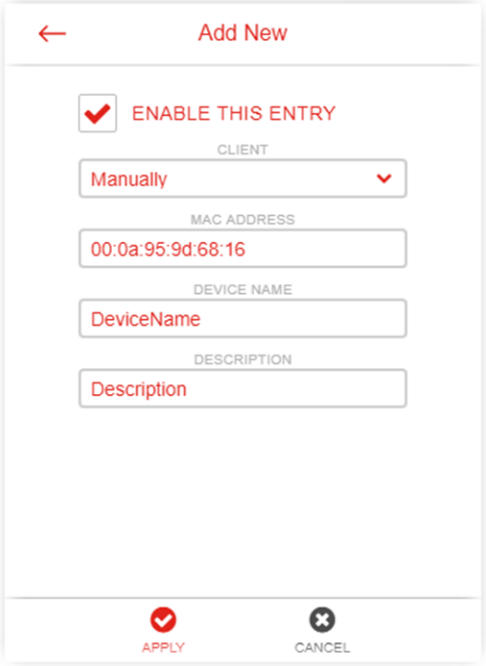
5.3 Parental Control

Basic > Parental Control

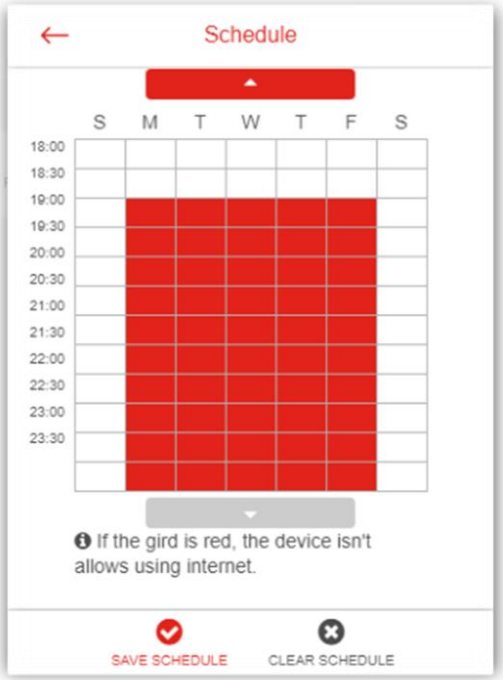
The **Parental Control** feature allows you to restrict Internet access to selected devices on your network at specified times e.g. disabling Internet access for a child's smartphone.



1. Set the slider to active to enable parental control.
2. Click **ADD NEW** to add and setup a new device for parental controls.
3. Select a device from the Client menu or enter the MAC address manually.
4. Specify a Device Name and Description for the device easy reference.
5. Check the **ENABLE THIS ENTRY** box and click apply to save the device.



6. Click the **SCHEDULE** icon beside the new device to setup the schedule for Internet access:
7. Click and drag to fill in the red blocks on the schedule by day and hour. The red blocks indicate the time blocks during which Internet access is not allowed.
8. Click **SAVE SCHEDULE** to save the schedule and the device's Internet access will now be restricted according to the schedule.

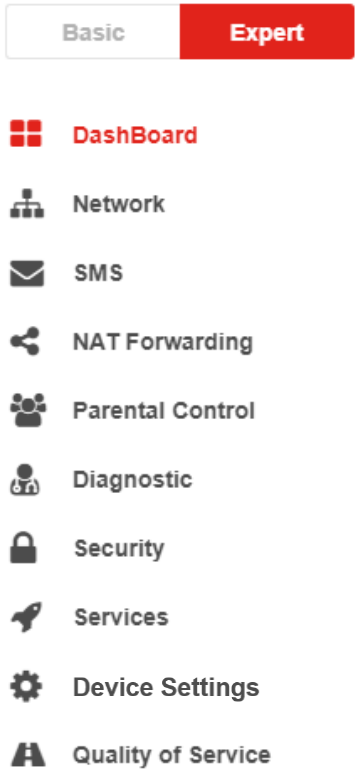


6. Expert Settings

Your WiFi gateway comes with an intuitive Web User Interface (Web UI) that allows you to easily setup its Basic & Expert features.

Menu

Select the **Expert** tab in the menu:



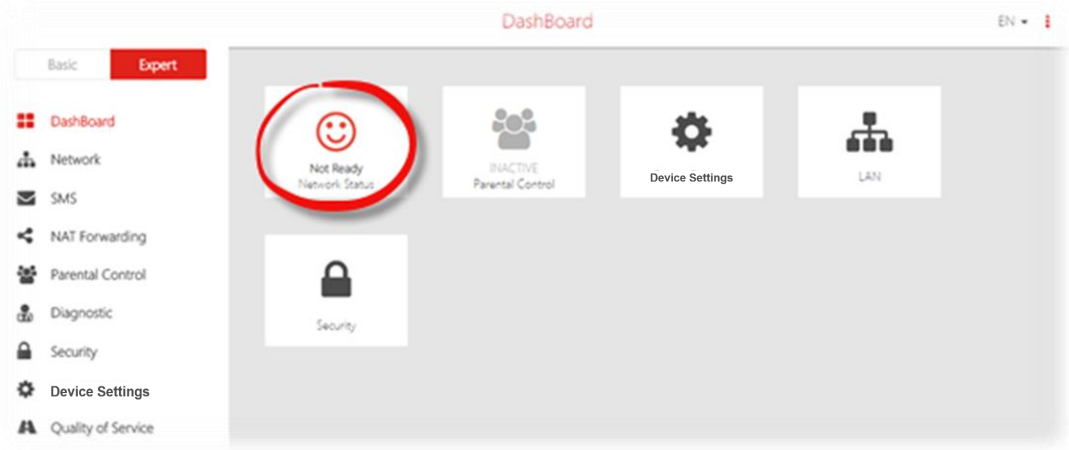
Save

Remember to save your settings with the save button after making changes. The icon takes you back to the Dashboard.

6.1 Dashboard

Expert > Dashboard

The Dashboard shows a snapshot of your network status with quick links to key features of your WiFi gateway.



Select any icon on the dashboard: **Network Status, Parental Control, Device Settings, LAN,** & **Security** to access more information and settings.

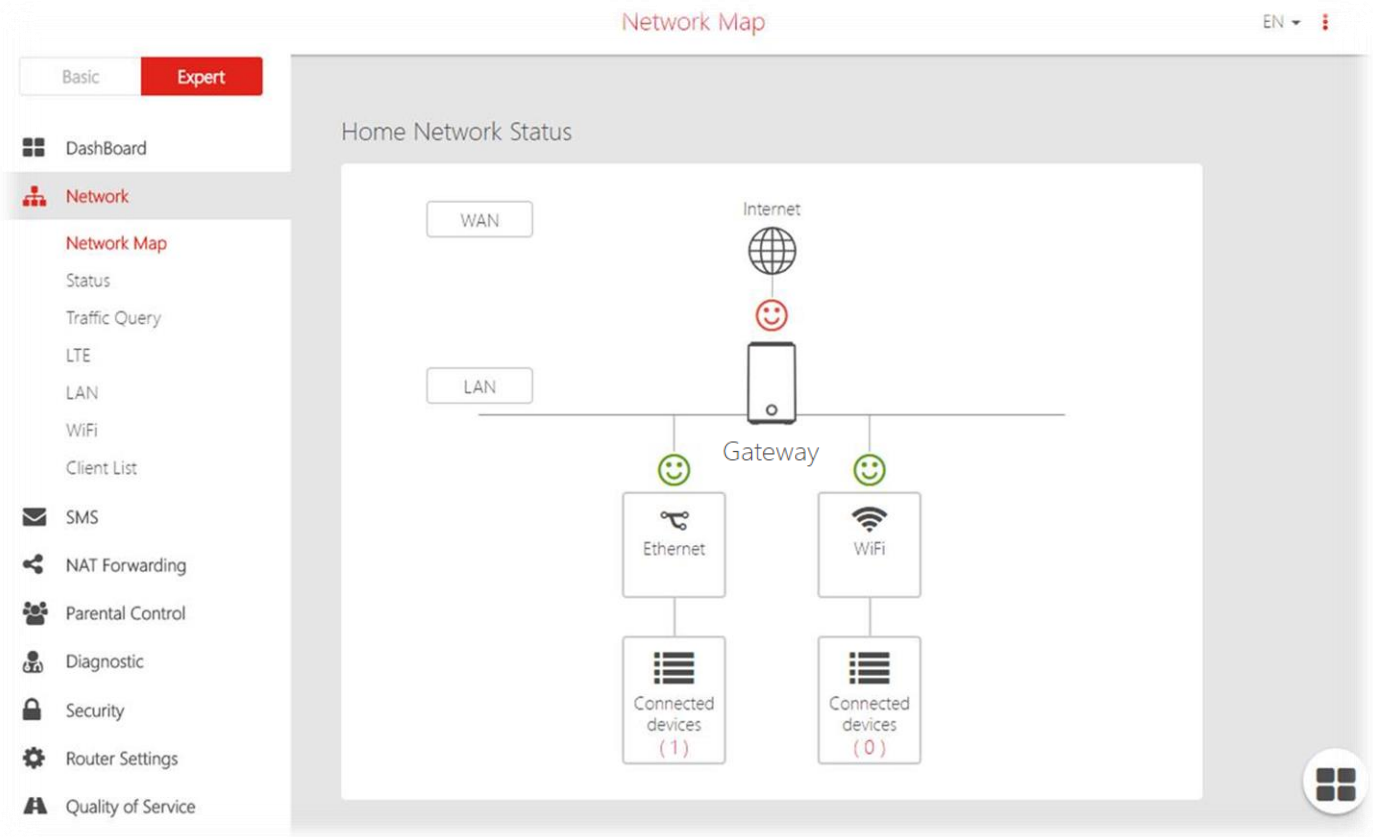
Network Status takes you to **Expert > Network > Status**
Parental Control takes you to **Expert > Network > Parental Control**
Device Settings takes you to **Expert > Network > Device Settings > Administration**
LAN takes you to **Expert > Network > LAN**
Security takes you to **Expert > Security > Firewall**

Network Status should display **All OK** to indicate a functioning LTE network. If you don't see this, check the WiFi gateway's LEDs and refer to Troubleshooting to diagnose the problem.

6.2 Network

Expert > Network

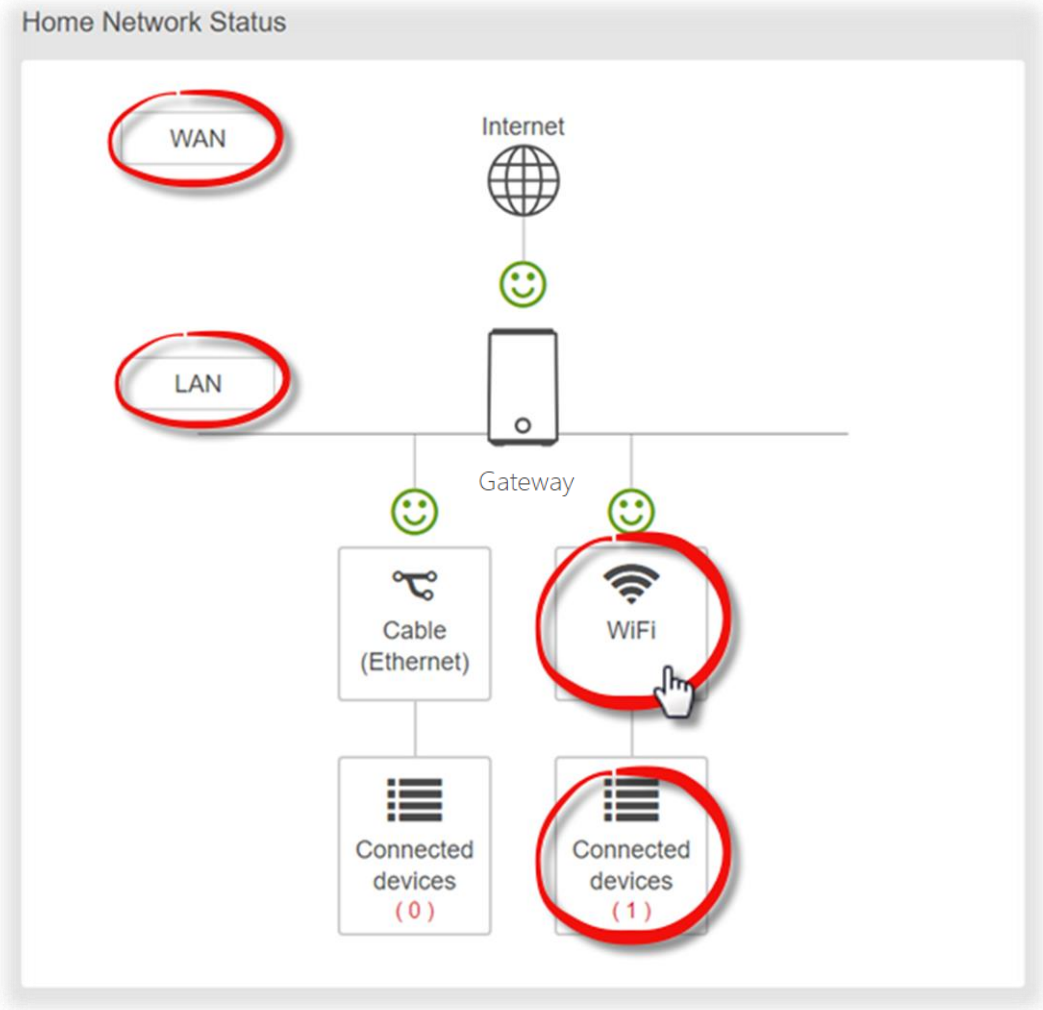
The Network menu provides quick links to the basic networking functions of your WiFi gateway. When you select the Network menu, the Network Map page is displayed as below.



Network Map

Expert > Network > Network Map

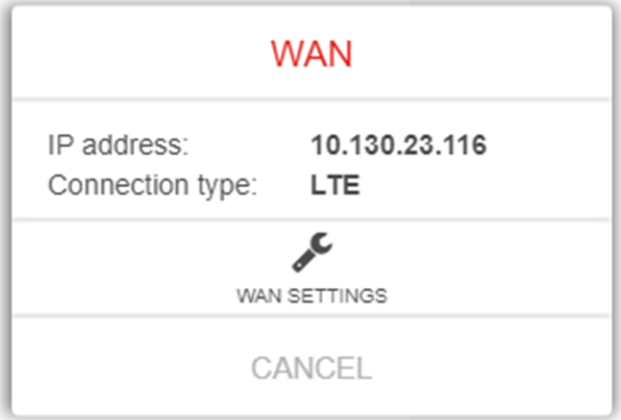
The network map provides a visual overview and status information of the network and devices on the network, with quick links to wireless security settings and client lists. It's important to check and configure security settings.



Select icons on the dashboard for more information and settings, as displayed below:

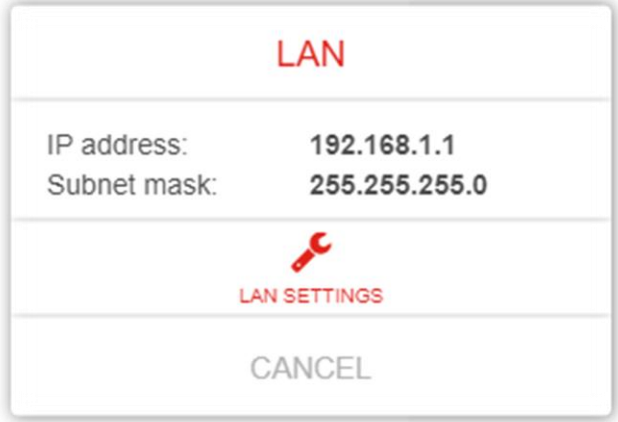
WAN

Displays the WiFi gateway's Wide Area Network (WAN) IP Address and Connection Type (LTE).



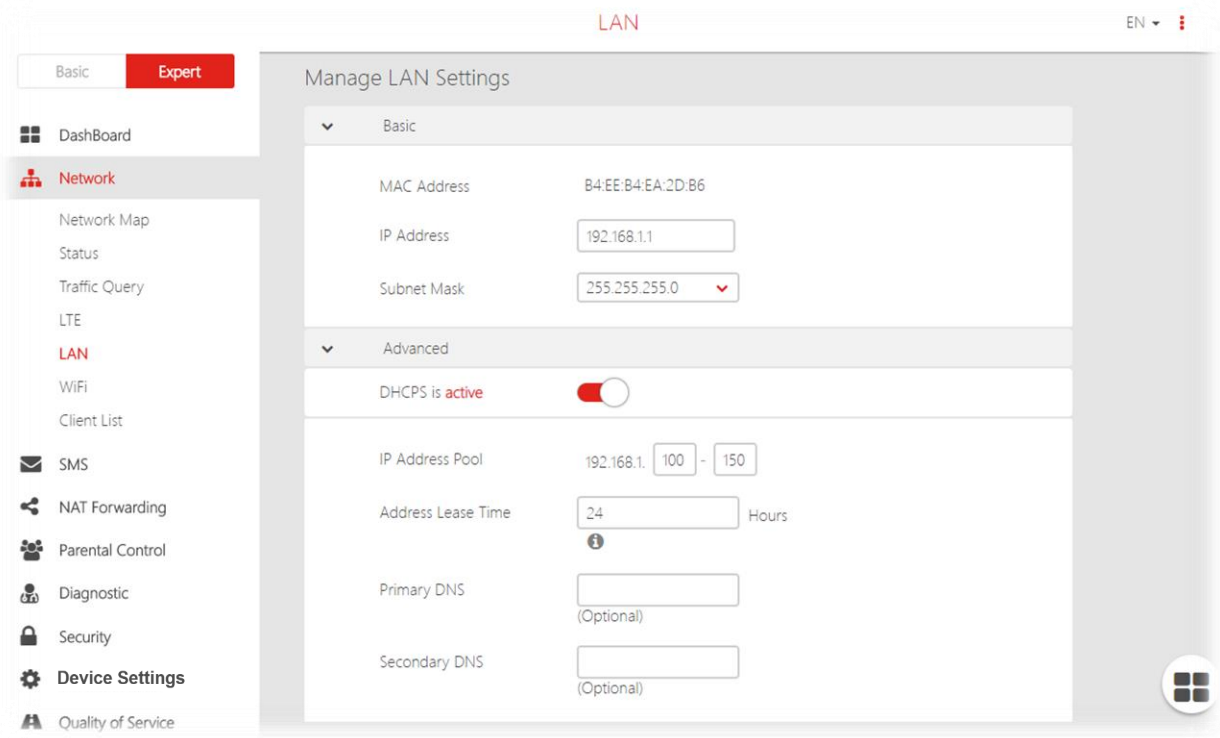
LAN

Displays the WiFi gateway's Local Area Network (LAN) IP Address and Subnet Mask. Click LAN Settings to modify the settings.



LAN > LAN Settings

This page allows you to configure your WiFi gateway on your Local Area Network (LAN). You can specify a static IP address for your WiFi gateway, and configure your WiFi gateway as a DHCP server to assign IP addresses to other devices on your LAN.



Basic	
MAC Address	Displays the MAC address of your WiFi gateway. A MAC Address is a unique fixed identifier for any device on a network.
IP Address	Specify the IP address here. This IP address will be

	assigned to your WiFi gateway and will replace the default IP address.
Subnet Mask	Specify a subnet mask. The default value is 255.255.255.0

Advanced	
DHCP is active/inactive IP Address Pool	Toggle the switch to enable or disable DHCP server. Enter the start and end IP address of the IP address range which your WiFi gateway's DHCP server will assign to devices on the network.
Address Lease Time	Enter an address lease time in hours. IP addresses will be assigned for this period of time before being reassigned.
Primary DNS Address	Enter a primary DNS address.
Secondary DNS Address	Enter a secondary DNS address.

WiFi

Displays your WiFi gateway's 2.4GHz & 5GHz network name (SSID) with switches to quickly enable or disable either WiFi network. Click WiFi Settings to go to Network > WiFi Settings.

Connected Devices

Displays all devices (clients) connected to your WiFi gateway, by Ethernet (LAN) or WiFi (wireless) e.g. laptops, smartphones. The device name, MAC address and IP address is listed for each device.

Status

Expert > Network > Status

Network Status displays the status of the network across six categories: Internet v4, Internet v6, LTE, LAN, Wireless & System Information.

Information is listed in Network Status for reference as described below:

Internet v4

Displays IPv4 Wide Area Network WAN information about your WiFi gateway's LTE connection. IPv4 is the default Internet protocol widely used across the Internet.

Internet v6

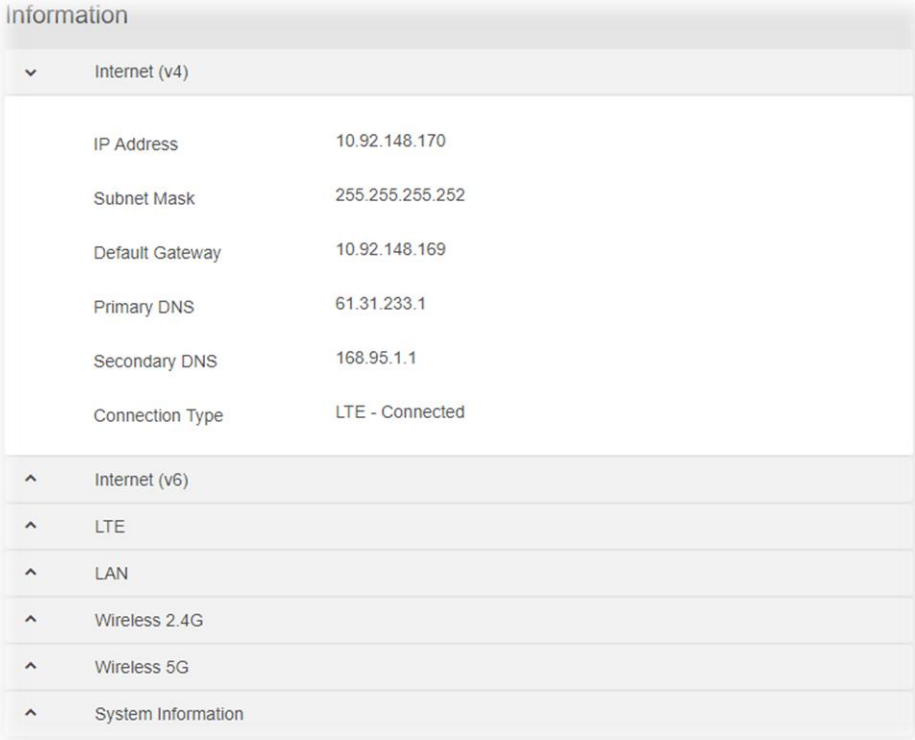
Displays IPv6 Wide Area Network WAN information about your WiFi gateway's LTE connection. IPv6 is an alternative Internet protocol which is not yet widely supported. To setup IPv6 go to Expert > Network > LTE. Contact T-Mobile for more information about using IPv6.

LTE

Displays LTE information including signal strength. To edit LTE settings go to Expert > Network > LTE.

LAN

Displays the WiFi gateway's Local Area Network (LAN) information including MAC Address, IP Address and Subnet Mask, and DHCP Server status. To edit LAN settings go to Expert > Network > LAN.



Wireless 2.4GHz & 5GHz

Displays your WiFi gateway's WiFi information for both 2.4GHz & 5GHz frequencies. Includes network name (SSID) and radio & channel information. To edit these WiFi settings go to **Expert > Network > WiFi Settings.**

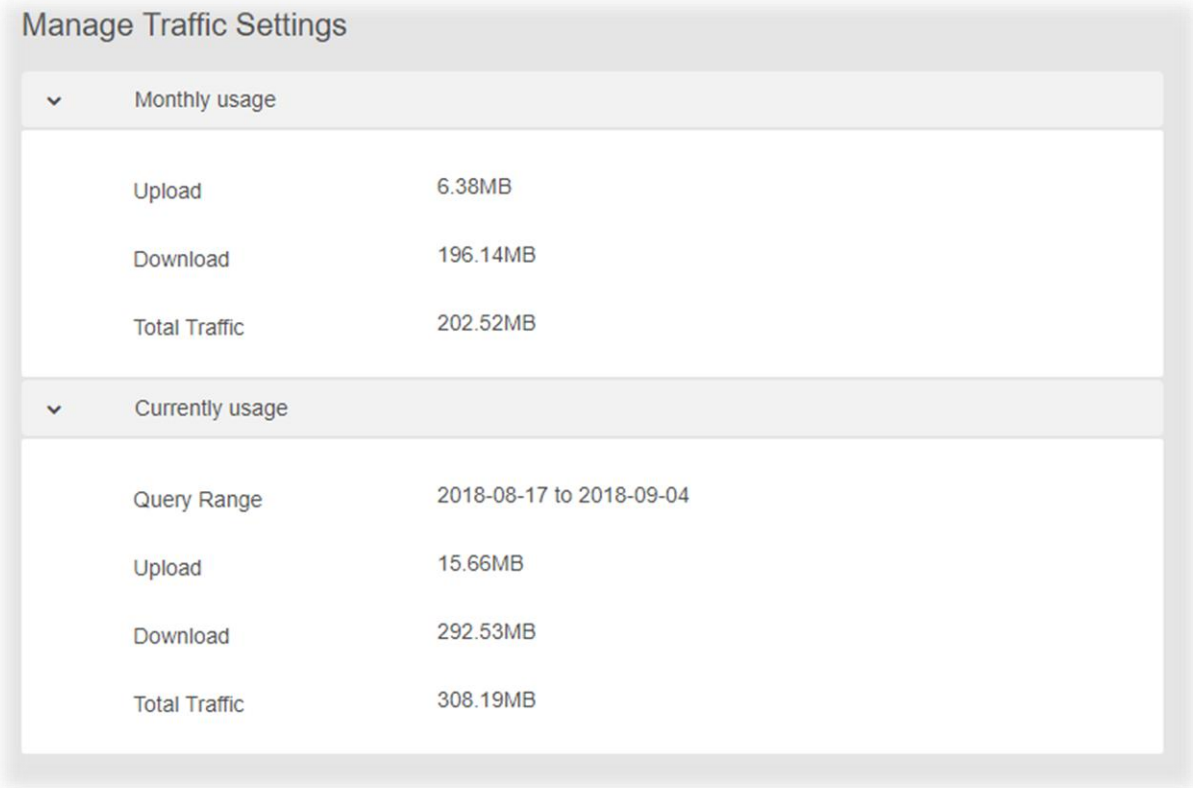
System Information

Displays system identifiers unique to your hardware.

Traffic Query

Expert > Network > Network Map

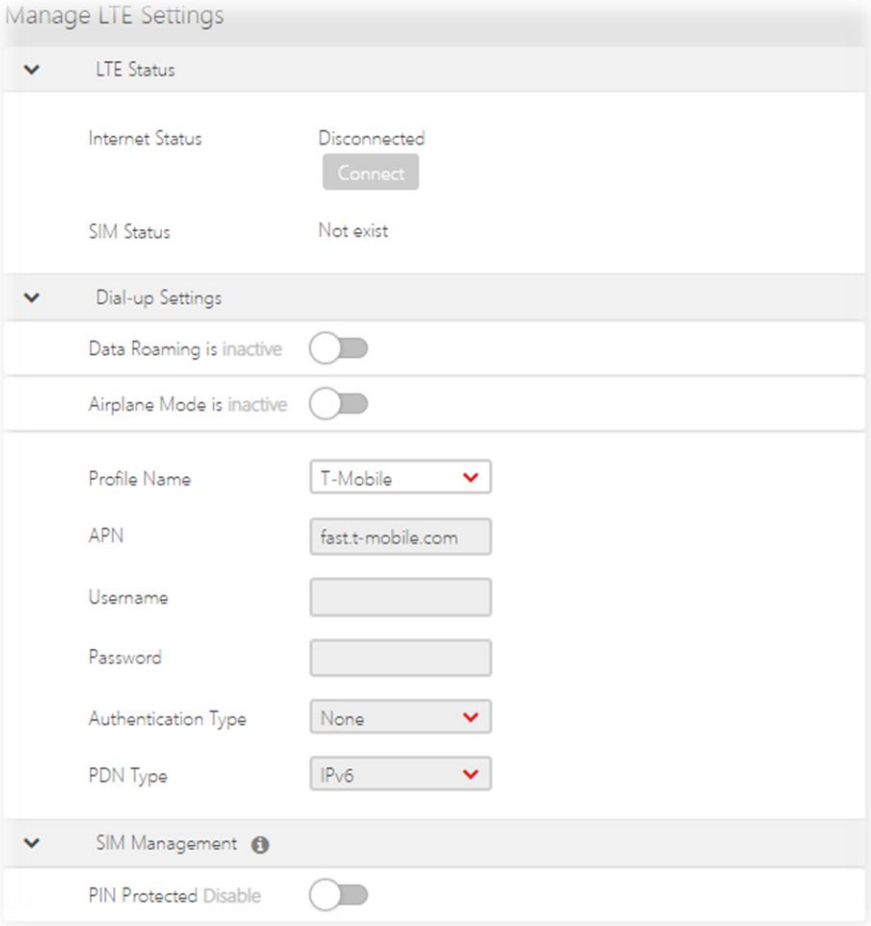
Traffic Query displays your network data usage, with upload, download and total traffic displayed in MB. Ensure that your WiFi gateway's date and time settings are correct in Expert > Device Settings > Date & Time for accurate Monthly usage information.



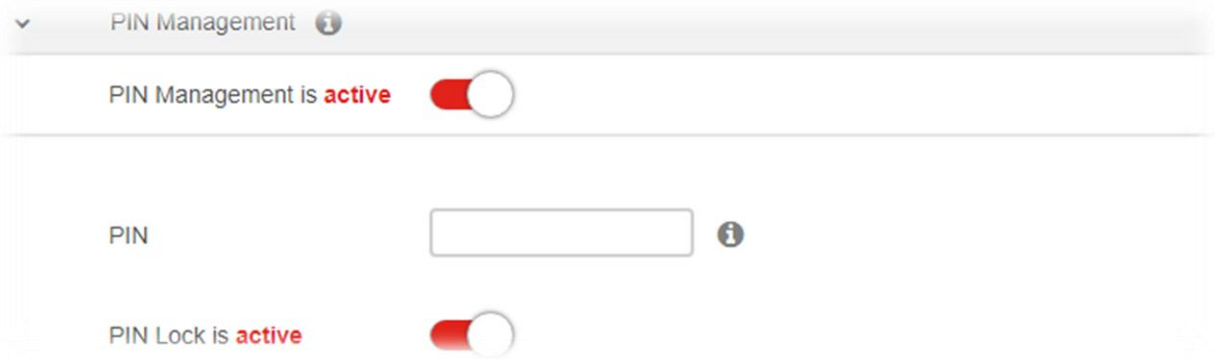
LTE

Expert > Network > LTE

LTE settings are pre-configured by default. You can disconnect the LTE connection using the Disconnect button if needed, and the connection and SIM status are displayed accordingly.



Data Roaming, APN and PDN settings may ONLY be changed when directed to do so by T-Mobile customer support. You can also setup a PIN to use the LTE data connection:

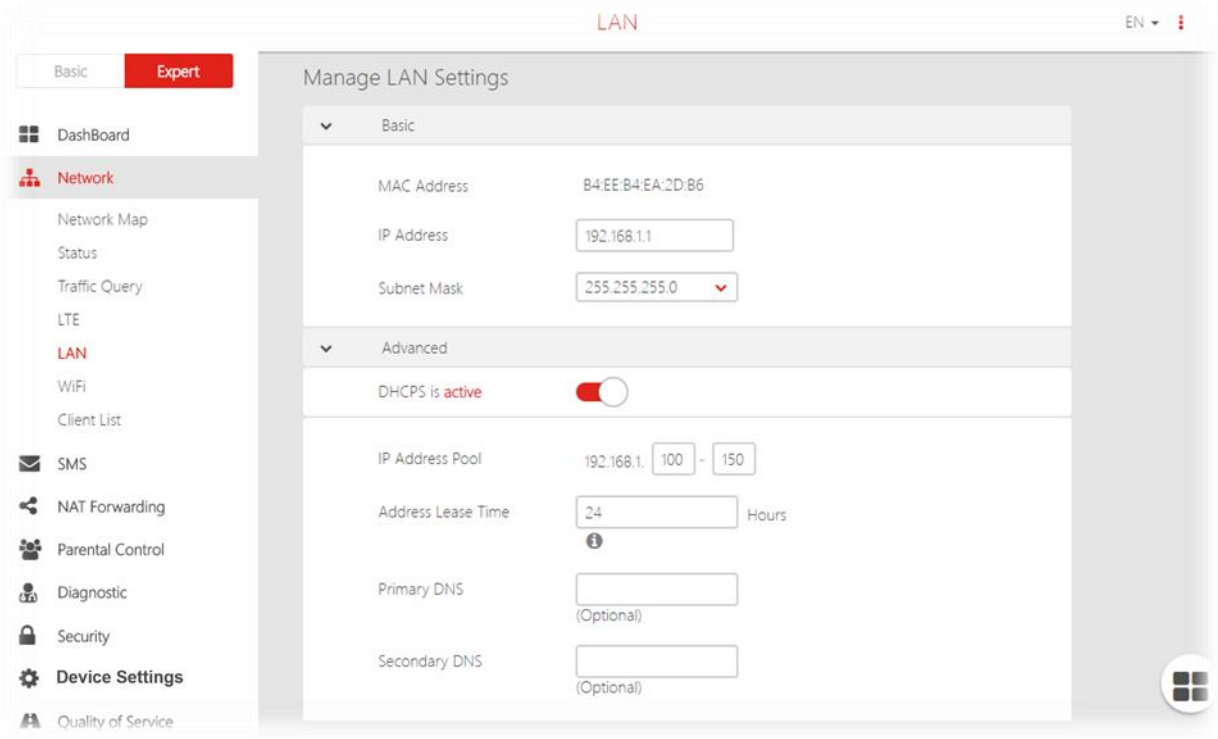


1. Click the PIN Management switch on and see that Pin Management is now active.
2. Enter a 4 digit PIN in the range 0000-9999.
3. Choose to switch on Pin Lock or not. When active, if an incorrect PIN is entered 3 times the SIM Card will be locked.

LAN

Expert > Network > LAN

The LAN page allows you to configure your WiFi gateway on your Local Area Network (LAN). You can specify a static IP address for your WiFi gateway, and configure your WiFi gateway as a DHCP server to assign IP addresses to other devices on your LAN.



Basic	
MAC Address	Displays the MAC address of your WiFi gateway. A MAC address is a unique fixed identifier for every device on a network.

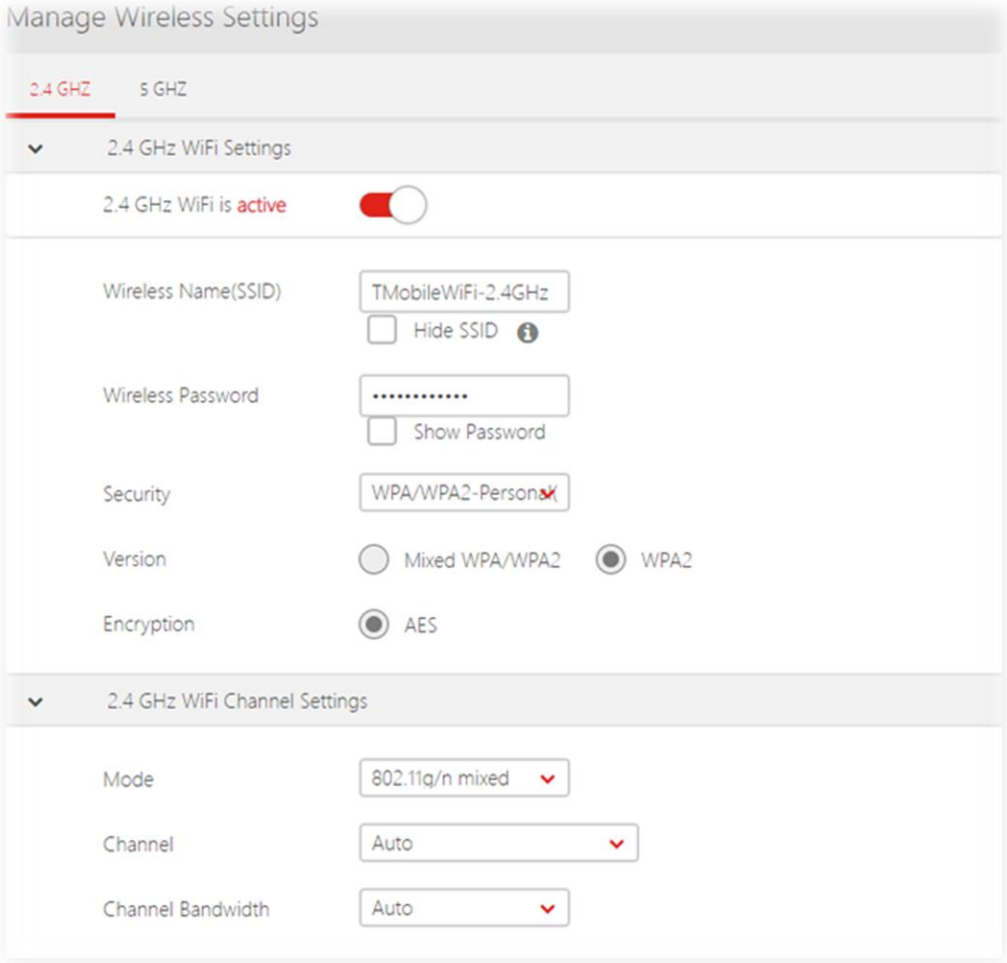
IP Address	Specify the IP address here. This IP address will be assigned to your WiFi gateway and will replace the default IP address.
Subnet Mask	Specify a subnet mask. The default value is 255.255.255.0

Advanced	
DHCP is active/inactive	Toggle the switch to enable or disable DHCP server.
IP Address Pool	Enter the start and end IP address of the IP address range which your WiFi gateway's DHCP server will assign to devices on the network.
Address Lease Time	Enter an address lease time in hours. IP addresses will be assigned for this period of time before being reassigned.
Primary DNS Address	Enter a primary DNS address.
Secondary DNS Address	Enter a secondary DNS address.

WiFi

Expert > Network > WiFi

The **WiFi** screen displays advanced settings for your WiFi gateway's WiFi. Your WiFi gateway is dual-band and uses two Wi-Fi frequencies 2.4GHz & 5GHz) for better wireless performance on your devices. You can edit advanced settings for 2.4GHz or 5GHz frequency bands by selecting the respective tab.



2.4 / 5 GHz WiFi Settings	
WiFi is active/inactive	Enable or disable this WiFi frequency.
Wireless Name (SSID)	This is the name of your Wi-Fi network for identification, also sometimes referred to as “SSID”. The SSID can consist of any combination of up to 32 alphanumerical characters.
Hide SSID	Check the box to hide your SSID. When hidden, the SSID will not be visible as an available Wi-Fi network to clients – clients must manually enter the SSID in order to connect. A hidden SSID is typically more secure than a visible SSID.
Wireless Password	Enter your WiFi password. A complex, hard-to-guess key is recommended.
Security	Select a WiFi security type from the drop-down menu. WPA/WPA2 is the default setting and the most secure. Security can be disabled by selecting None but this is not recommended.
Version	Select which version of security type to use. WPA2 is the most secure but not supported by all wireless clients. Selecting Mixed WPA/WPA2 ensures wireless client compatibility.
Encryption	Displays encryption type according to version. AES encryption is the default setting for WPA2, while Mixed TKIP+AES is default for Mixed WPA/WPA2.

2.4 / 5 GHz Channel Settings	
Mode	Select the wireless standard used for the WiFi gateway’s WiFi. **802.11b/g mixed** means 802.11b and 802.11g wireless clients can connect to the WiFi gateway, **802.11g/n**

	mixed means 802.11g and 802.11n wireless clients can connect to the WiFi gateway.
Channel	Select a wireless radio channel or use the default “Auto” setting from the drop-down menu. Changing radio channel can improve WiFi signal depending on how crowded the channel is with other radio signals and interference.
Channel Bandwidth	Set the channel bandwidth: 20MHz (lower performance but less interference), 40MHz (better performance but likely more interference), or Auto (automatically select based on interference level).

Client List

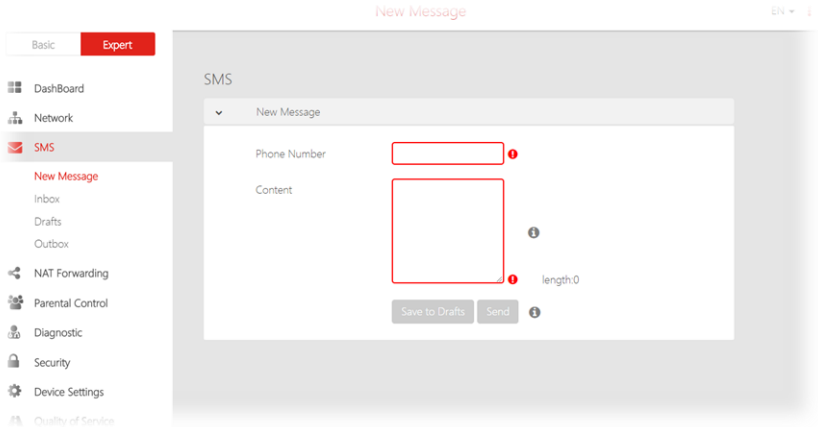
Expert > Network > Client List

Displays all devices (clients) connected to your WiFi gateway, by Ethernet (LAN) or WiFi (wireless) e.g. laptops, smartphones. The device name, MAC address and IP address is listed for each device.

6.3 SMS

Expert > SMS

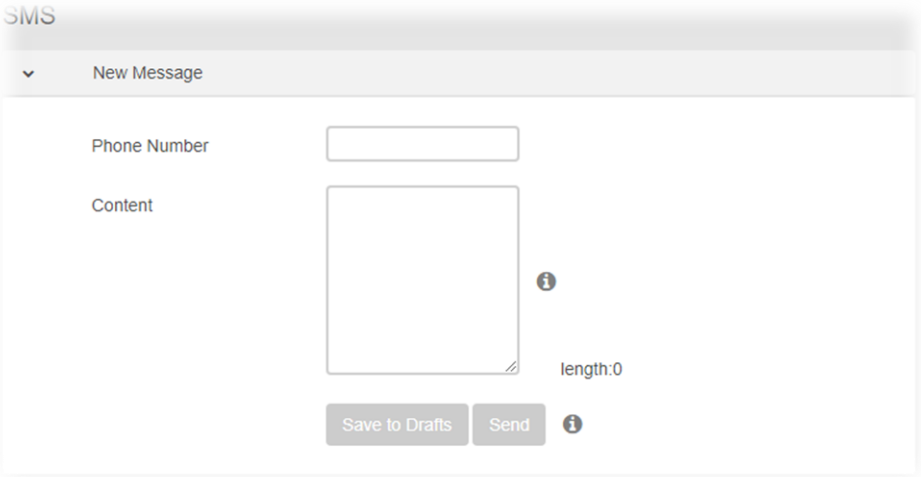
Your WiFi gateway has an SMS feature according to your SIM card's data plan, with send, receive and draft functions that work the same way as SMS on a smartphone.



New Message

Expert > SMS > New Message

Compose new messages and send or save as a draft. Enter the recipient phone number correctly. Maximum 500 characters per SMS.



Inbox

Expert > SMS > Inbox

Displays all SMS received to the number associated with your LTE SIM card. Select any message and click the trash icon to delete.

Drafts

Expert > SMS > Drafts

Any SMS saved as Drafts will be displayed here. Select a message to remove, or edit and then send. Drafts capacity is limited to 100 messages after which new messages will be unable to save as drafts.

Outbox

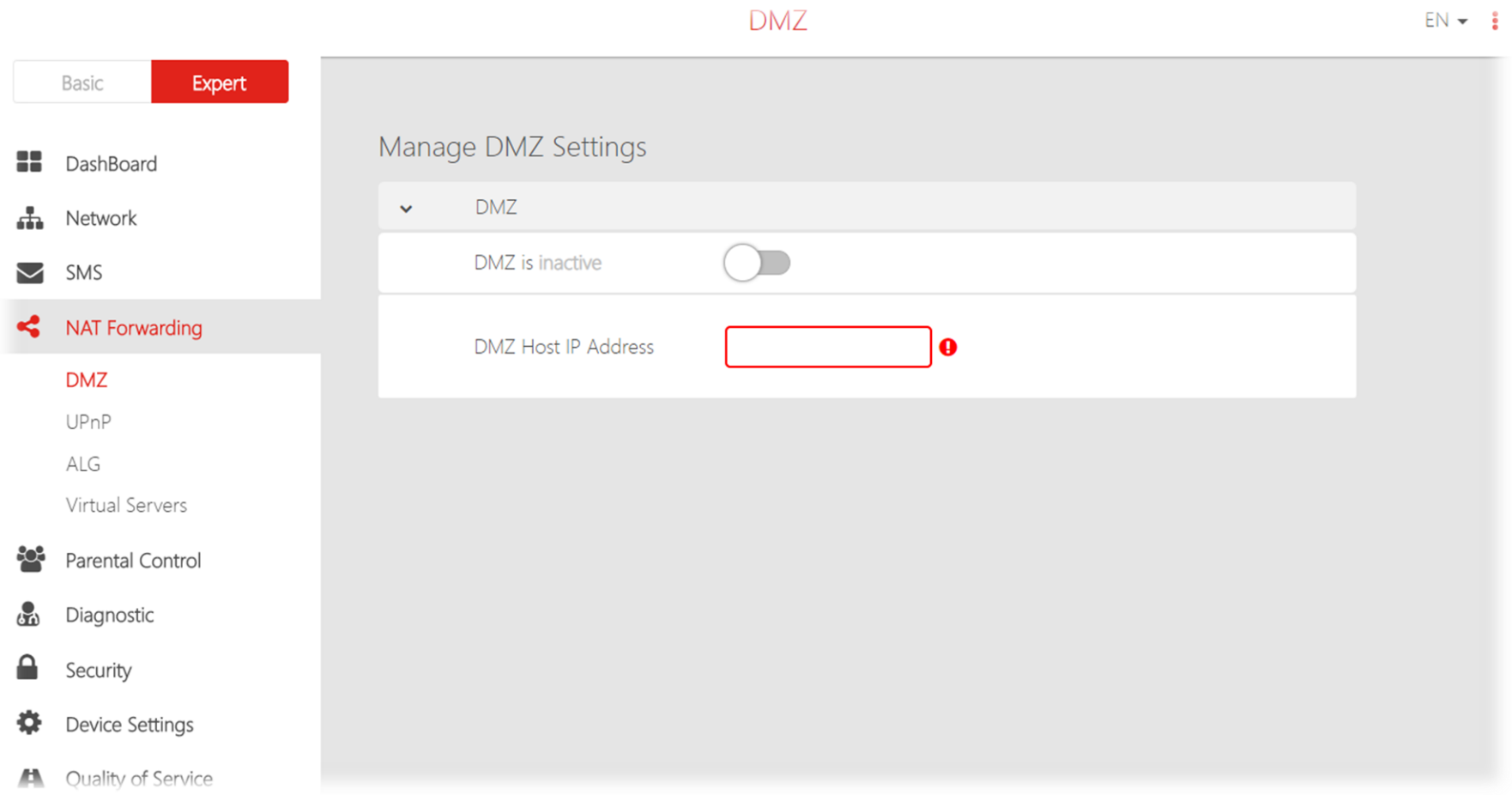
Expert > SMS > Outbox

After sending, messages may go to the Outbox during sending until the message is sent. Outbox capacity is limited to 100 messages after which new messages will be unable to send.

6.4 NAT Forwarding

Expert > NAT Forwarding

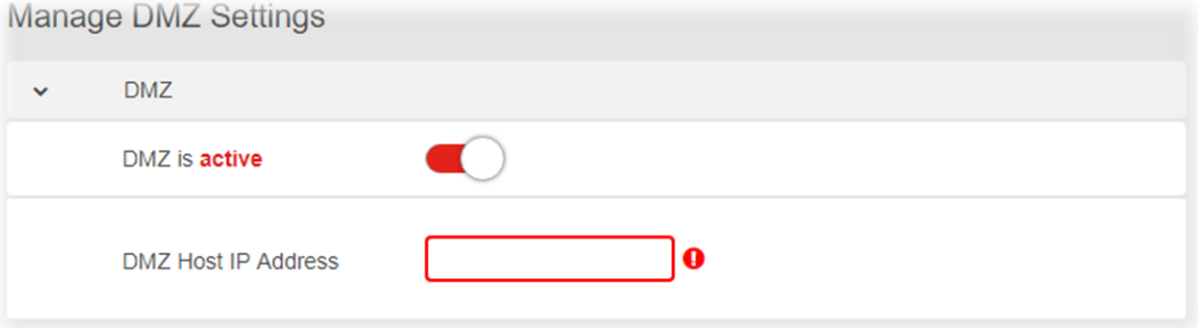
Functions in the **Network Address Translation** (**NAT**) **Forwarding** menu can improve network performance and security.



DMZ

Expert > NAT Forwarding > DMZ

A Demilitarized Zone (DMZ) is an isolated area in your local network where a computer runs outside the firewall and receives/intercepts all incoming Internet traffic. This can provide an extra layer of security to the rest of the network, or can be useful if a network client PC cannot run an application properly from behind an NAT firewall. However since it opens the client up to unrestricted two-way access this computer is vulnerable. DMZ should be configured only by expert network users aware of the security risks.



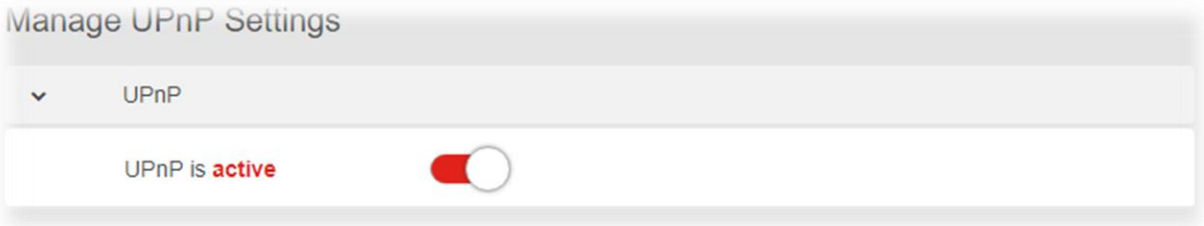
1. Use the switch to set DMZ to **active**.
2. Enter the IP Address of the computer to provide the DMZ service (ensure this computer is using a Static IP Address)

UPnP

Expert > NAT Forwarding > UPnP

Universal plug-and-play (UPnP) is a set of networking protocols which enables network devices to communicate and automatically establish working configurations with each other, such as computers, printers, mobile devices etc.

It's typically used for data sharing, communications and entertainment purposes, although sometimes not preferred due to security concerns. Some devices may require UPnP to be enabled to function properly. Use the switch to set UPnP to active or inactive, according to your requirements.

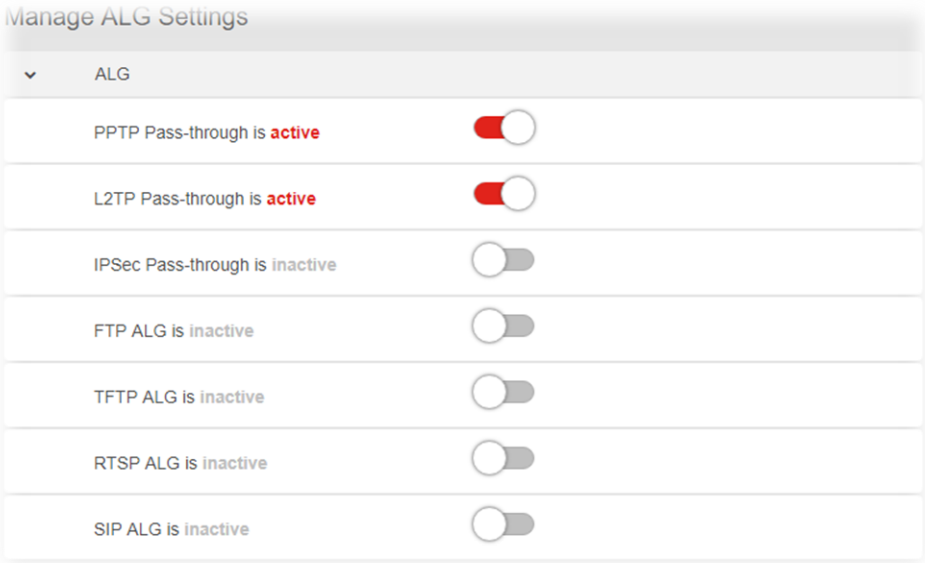


ALG

Expert > NAT Forwarding > ALG

Application Level Gateway (ALG) settings are advanced functions that can resolve issues where services are disrupted by the firewall. Each ALG module is a security component that augments the firewall. Services such as VPNs or Virtual Servers may require ALG modules enabled. By default all ALG modules are inactive. Use the switches to enable any ALG module required. ALG Settings are recommended for expert users only.

SIP ALG may disrupt WiFi calling for cellphones connected to the network.



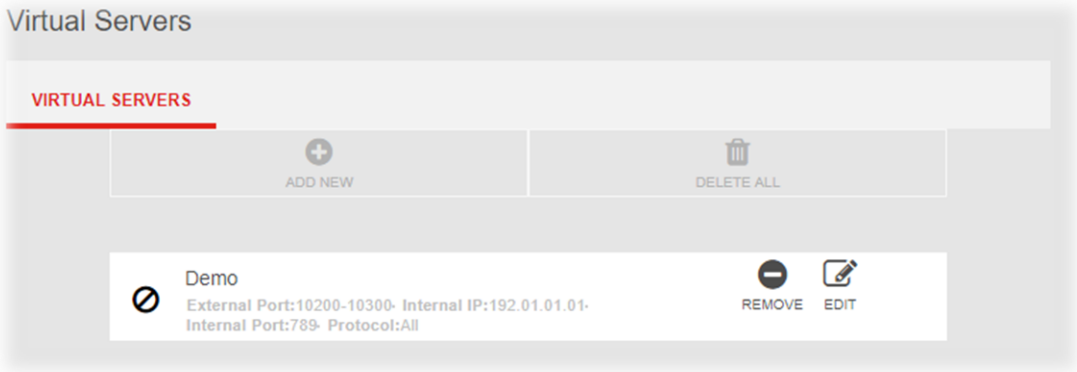
Manage ALG Settings	
PPTP Passthrough	Point-to-Point Tunneling Protocol (PPTP) is a module for implementing virtual private networks.
L2TP Passthrough	Layer 2 Tunneling Protocol (L2TP) is a tunneling protocol used to support virtual private networks (VPNs) or as part of the delivery of services by ISPs.
IPSec Passthrough	Internet Protocol Security (IPsec) is a protocol suite for securing Internet Protocol (IP) communications by authenticating and encrypting each IP packet of a communication session.
FTP ALG	File Transfer Protocol is a widely and commonly used method of exchanging files over IP networks. The FTP ALG

	monitors PORT, PASV, and 227 commands. It performs NAT on the IP, port, or both in the message and gate opening on the device as necessary
TFTP ALG	Trivial File Transfer Protocol (TFTP) is a simple protocol used for files transfer *(RFC 1350)*. TFTP is implemented on top of UDP, with destination port 69 as the well-known port. The TFTP Application Layer Gateway (ALG) processes TFTP packets that initiate the request.
RTSP ALG	The Real Time Streaming Protocol (RTSP) is a network control protocol designed for use in entertainment and communications systems to control streaming media servers.
SIP ALG	The Session Initiation Protocol (SIP) is a communications protocol for signaling and controlling multimedia communication sessions. The most common applications of SIP are in Internet telephony for voice and video calls, as well as instant messaging all over Internet Protocol (IP) networks.

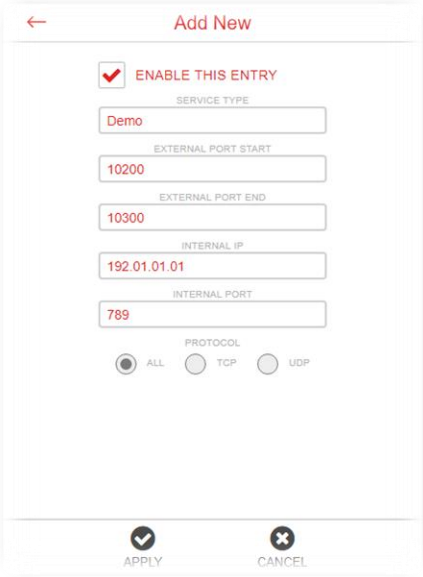
Virtual Servers

Expert > NAT Forwarding > Virtual Servers

This function allows you to set up an internet service on a local computer, without exposing the local computer to the internet. Internet traffic is directed to a specific port or range of ports on a device or devices on your local network. You can also build various sets of port redirection, to provide various internet services on different local computers via a single Internet IP address. It also allows PCs outside the network to access services provided by a computer in the local network.



1. Click **ADD NEW** and enter the parameters to setup a virtual server:



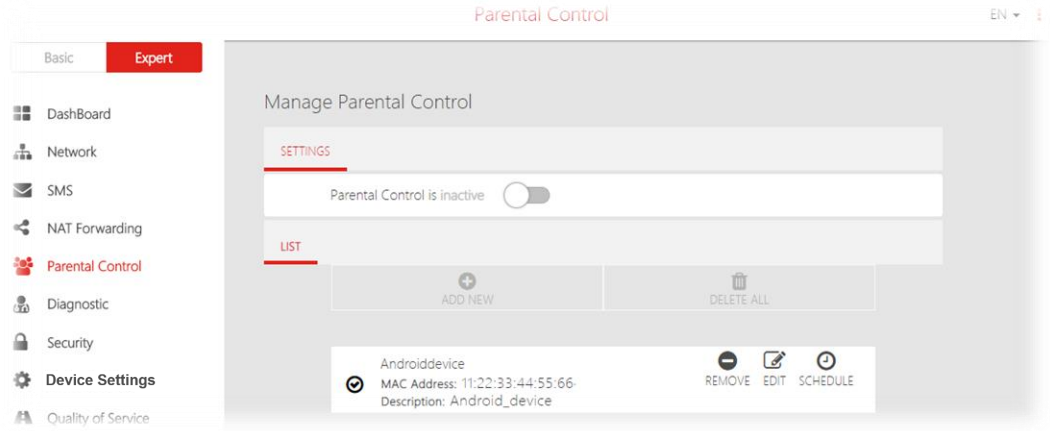
Service Type	Specify the service type e.g. HTTP, FTP etc.
External Port Start	Specify the external/public port to access the computer on your local network.
External Port End Internal IP	Select the type of Internet Protocol. Enter the IP address of the computer on your local network.
Internal Port	Specify the internal/private port you wish to use on the computer in your local network.
Protocol	Select the connection protocol: TCP, UDP or All.

2. Check **ENABLE THIS ENTRY** and click **APPLY** to save and enable the settings for your virtual server. You can remove or edit any Virtual Server entry using the icons.

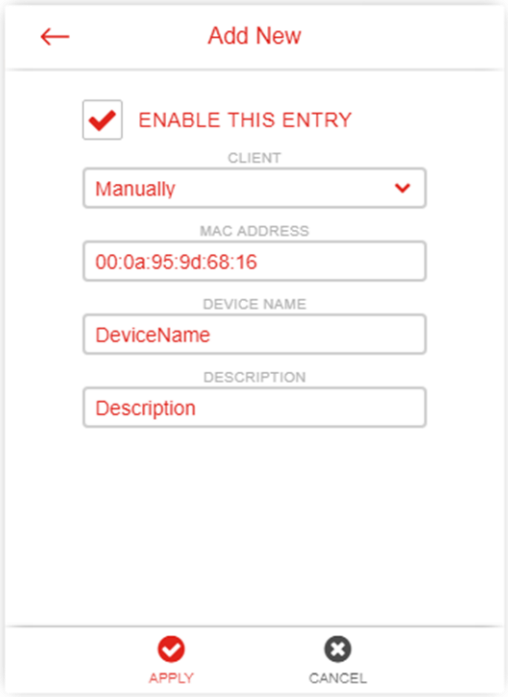
6.5 Parental Control

Expert > Parental Control

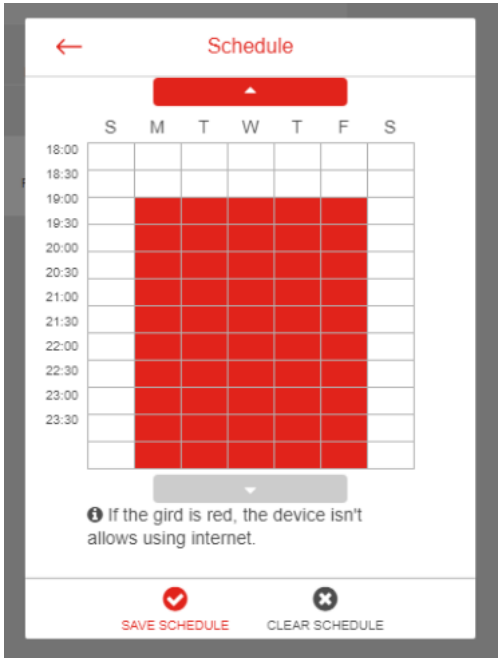
The **Parental Control** feature allows you to restrict Internet access to selected devices on your network at specified times e.g. disabling Internet access for a child's smartphone.



1. Set the slider to active to enable parental control.
2. Click **ADD NEW** to add and setup a new device for parental controls.
3. Select a device from the Client menu or enter the MAC address manually.
4. Specify a Device Name and enter a Description of the device for easy reference.
5. Check the **ENABLE THIS ENTRY** box and click apply to save the device.
6. Click the **SCHEDULE** icon beside the new device to setup the schedule for Internet access:



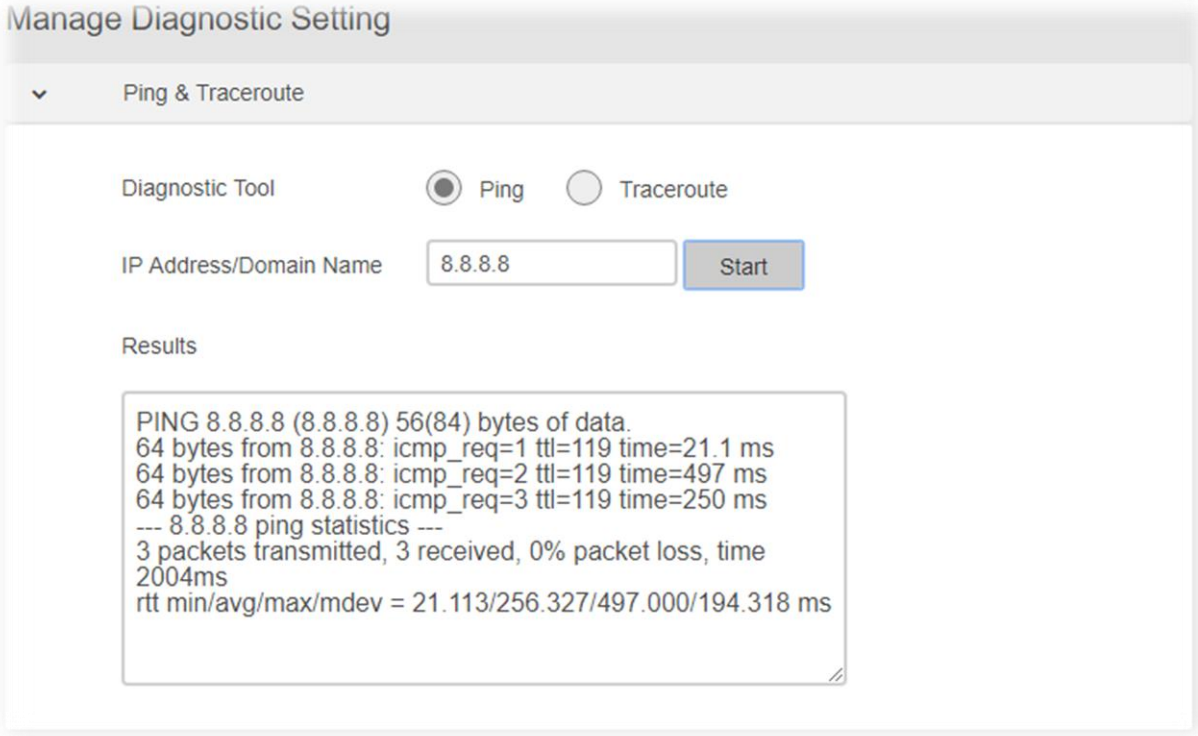
7. Click and drag to fill in the red blocks on the schedule by day and hour. The red blocks indicate the time blocks during which Internet access is not allowed.
8. Click **SAVE SCHEDULE** to save the schedule and the device's Internet access will now be restricted according to the schedule.



6.6 Diagnostic

Expert > Diagnostic

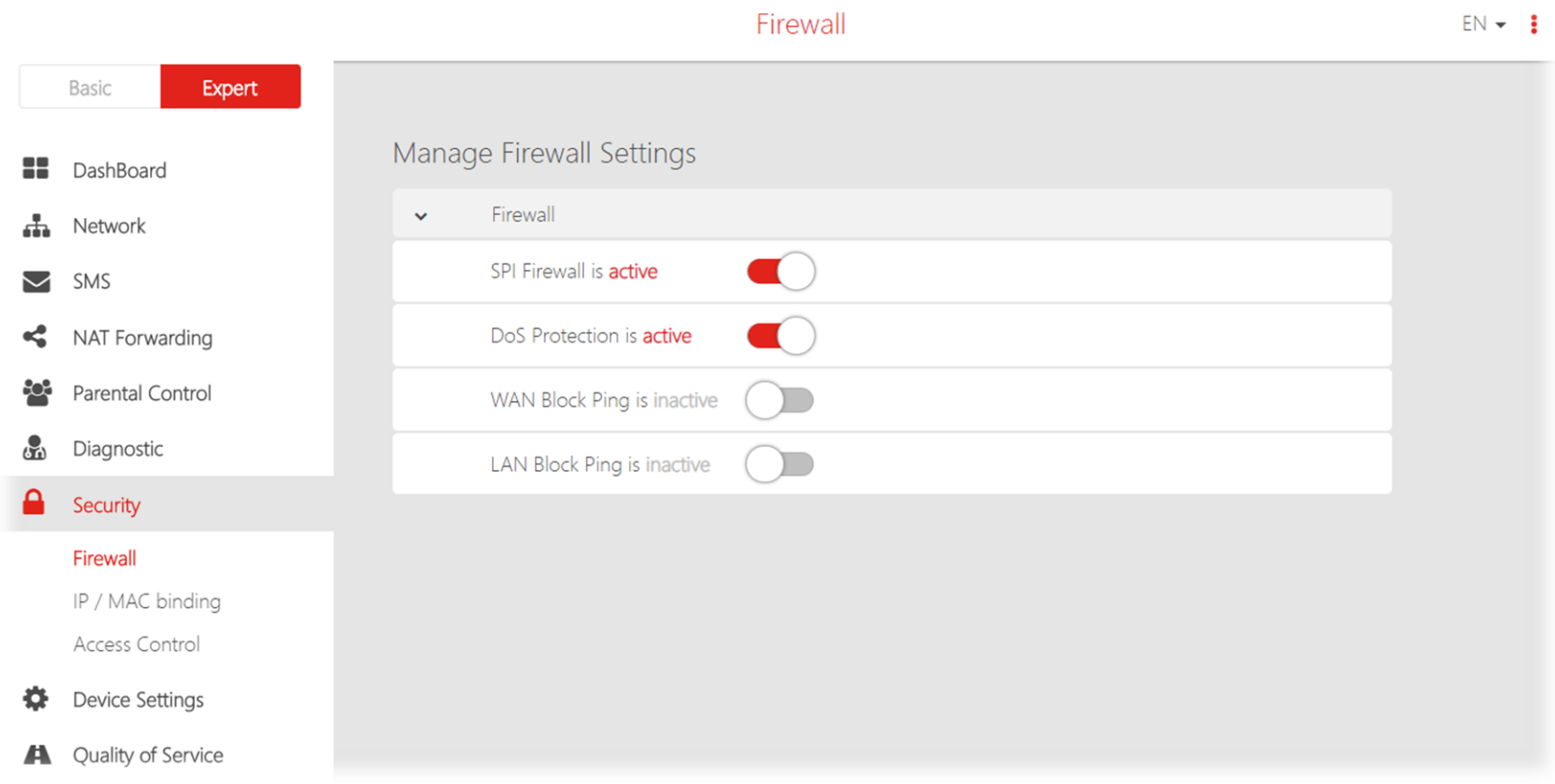
You can run **Ping & Traceroute diagnostic** tests with the WiFi gateway. Enter the IP address to use for the test and click Start, results are displayed in the box.



6.7 Security

Expert > Security

Use the **Security** menu to configure various security functions if needed, including Firewall, IP/MAC Binding and Access Control.



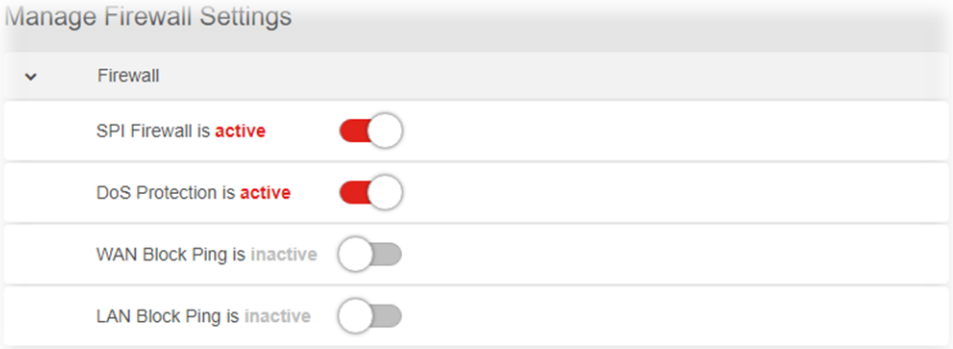
Firewall

Expert > Security > Firewall

The WiFi gateway features a built-in firewall that provides protection to your network from unauthorized intrusions from the Internet. The firewall features four modules which can be enabled or disabled using the switches.

SPI Firewall

Stateful Packet Inspection (SPI) firewall protection means only packets matching a known active connection will be allowed by the firewall, and others will be rejected. An SPI firewall goes beyond stateless filtering and checks an entire packet's content rather than only packet headers. This is a security feature to help distinguish between legitimate packets of information and potentially harmful packets, and provides greater security for your network.



DoS Protection

Denial-of-Service (DoS) is a common form of malicious attack against a network. The WiFi gateway's firewall can protect against such attacks by filtering unreasonable packets that could flood and disable network with large amounts of traffic.

WAN Block Ping

When active the WiFi gateway will not answer ping requests from the Internet. This can increase security as pinging is a common method used by hackers to test networks.

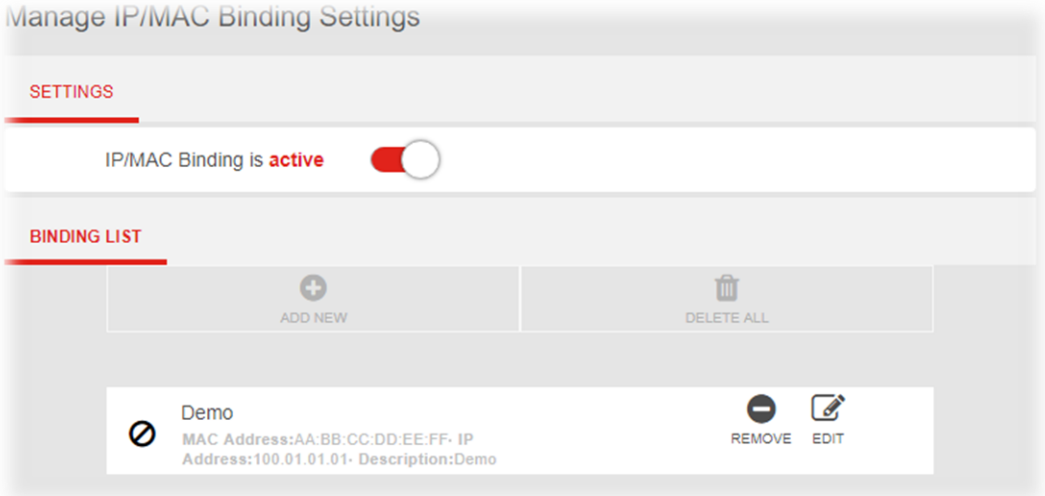
LAN Block Ping

When active the WiFi gateway will not answer ping requests from the local network. This can increase security as pinging is a common method used by hackers to test networks.

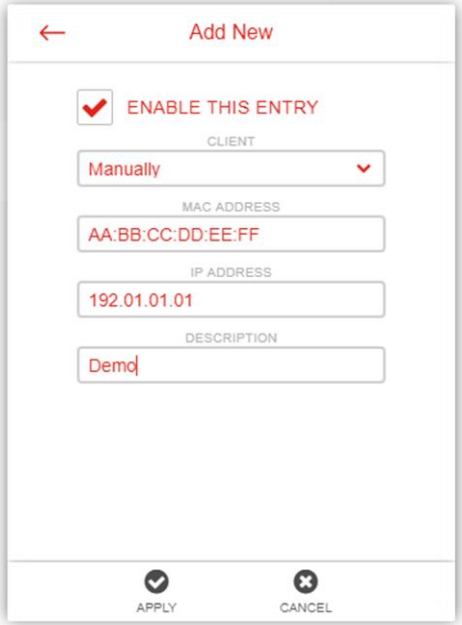
IP / MAC Binding

Expert > Security > IP / MAC Binding

IP/MAC Binding allows you to reserve a static IP address for a device on the network, rather than being assigned a new (dynamic) IP address by the WiFi gateway's DHCP Server every time the device connects to the WiFi gateway. Static IP addresses can be useful for using various services on the local network. Every device is identified by a unique MAC address, and the IP address can be bound to the MAC address.



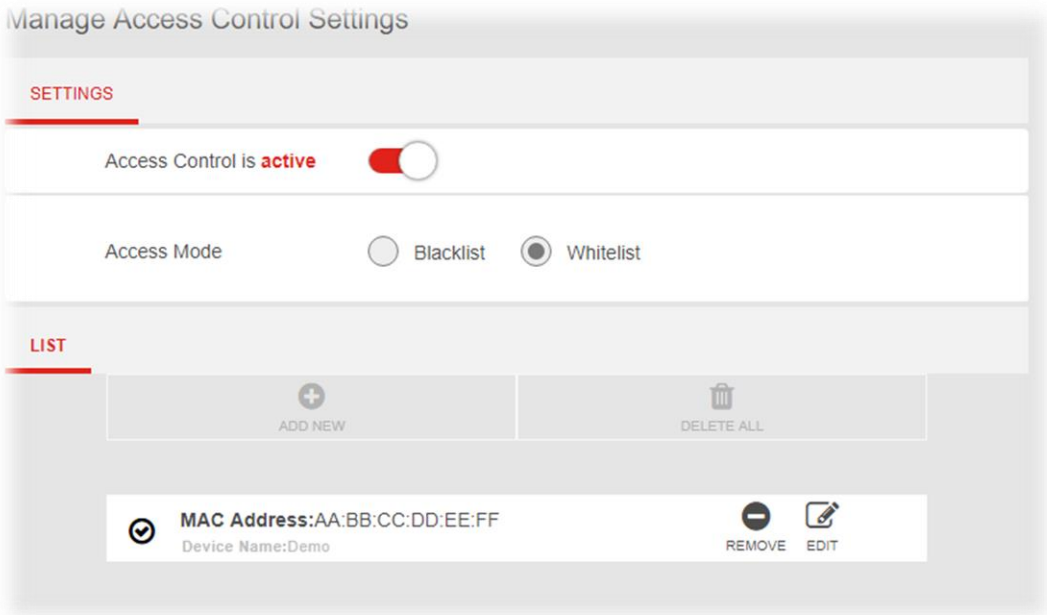
1. Switch IP/MAC Binding on using the switch.
2. Click ADD NEW to setup a new client for IP/MAC Binding.
3. Select a device from the Client menu or enter the MAC address manually.
4. Specify the IP Address the client will use, and enter a Description of the device for easy reference.
5. Check the ENABLE THIS ENTRY box and click apply to save the device.
6. Click the REMOVE or EDIT icon beside any entry in the Binding List to remove or edit the entry.



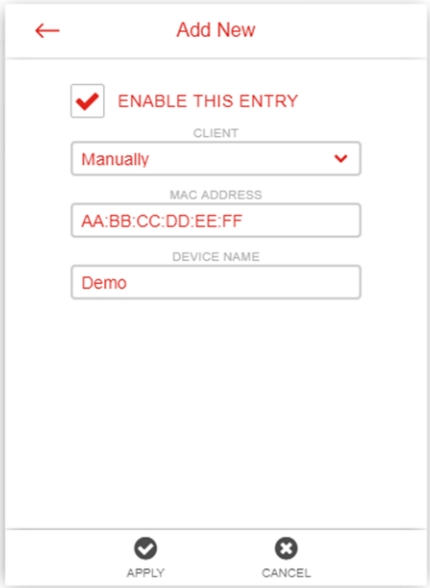
Access Control

Expert > Security > Access Control

Access Control is a security feature that can help to prevent unauthorized users from connecting to your WiFi gateway. You can define a list of network devices permitted (whitelist) or denied (blacklist) to connect to the WiFi gateway. Devices are each identified by their unique MAC address or IP address.



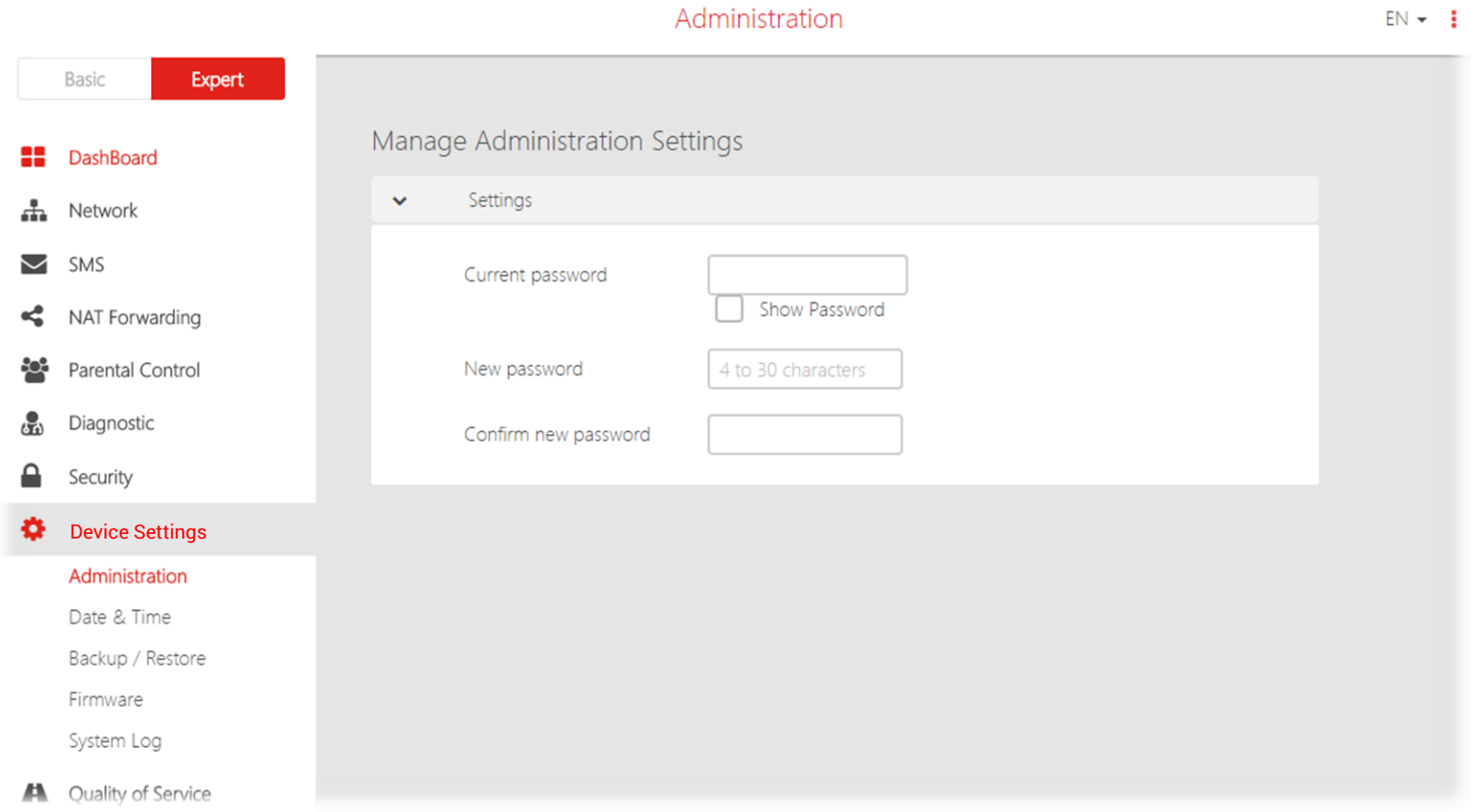
1. Switch Access Control on using the switch.
2. Select Blacklist (not permitted) or Whitelist (permitted), and click **ADD NEW**.
3. Select a device from the Client menu or enter the MAC address manually.
4. Enter the Name of the device for easy reference.
5. Check the **ENABLE THIS ENTRY** box and click apply to save the device.
6. Click the **REMOVE** or **EDIT** icon beside any entry in your Blacklist or Whitelist to remove or edit the entry.



6.8 Device Settings

Expert > Device Settings

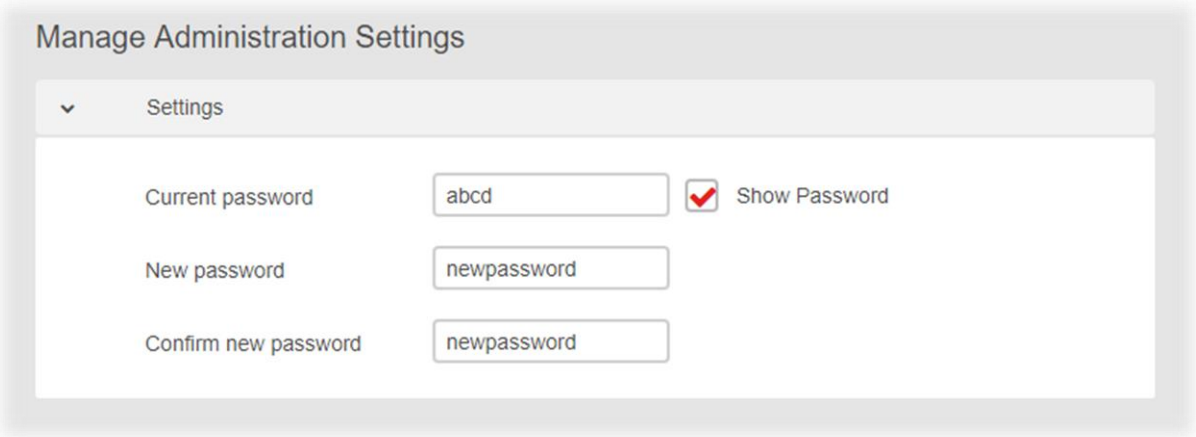
Various administrative functions of your WiFi gateway can be configured from the **Device Settings** menu, including the Web UI login password, WiFi gateway date & time settings, backup, WiFi gateway firmware and system logs.



Administration

Expert > Device Settings > Administration

The **administration** function allows you to change the login password for the WiFi gateway's Web UI. It's essential to change this password for the security of your WiFi gateway. Use hard-to-guess password which include combinations of numbers, letters and symbols, and change your password regularly.

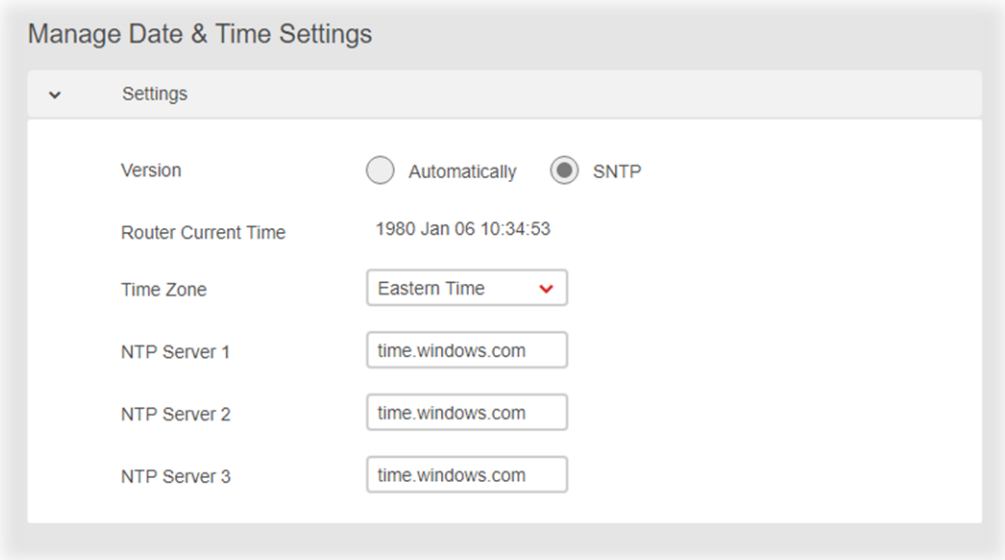


1. Enter the current password for authentication.
2. Enter your name password in the New Password field and again to confirm, and choose **Save** to save the new settings.

Date & Time

Expert > Device Settings > Date & Time

Set the **date and time** for your WiFi gateway. You can use a Simple Network Time Protocol (SNTP) which synchronizes the date and time with public time servers, or the WiFi gateway can get the date and time automatically based on your selected time zone.



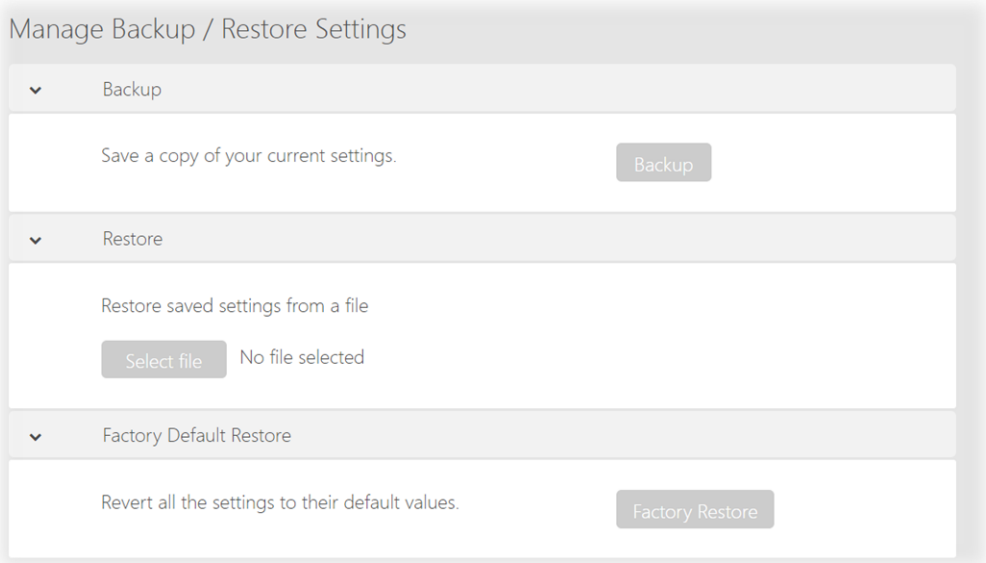
1. Select SNTP from the Version options.
2. Select your time zone from the drop-down menu.
3. If you want to use SNTP to synchronize date and time with public time servers, enter the NTP Servers and Save settings.
4. Set the Version back to Automatic to use the selected time zone automatically, and Save the settings.

Examples of commonly used NTP Servers include time.microsoft.com or time.google.com.

Backup / Restore

Expert > Device Settings > Backup & Restore

The Backup & Restore page enables you to save/backup the WiFi gateway's current settings as a file to your local computer, or restore your WiFi gateway to previously saved settings by loading a backed up file. You can also reset the WiFi gateway back to factory default settings. If the WiFi gateway malfunctions or is not responding, then it is recommended that you first reboot the device, and if still experiencing problems reset the device back to its factory default settings. You can reset the WiFi gateway back to its default settings using the Reset button on the back of the WiFi gateway (press and hold for 2+ seconds).

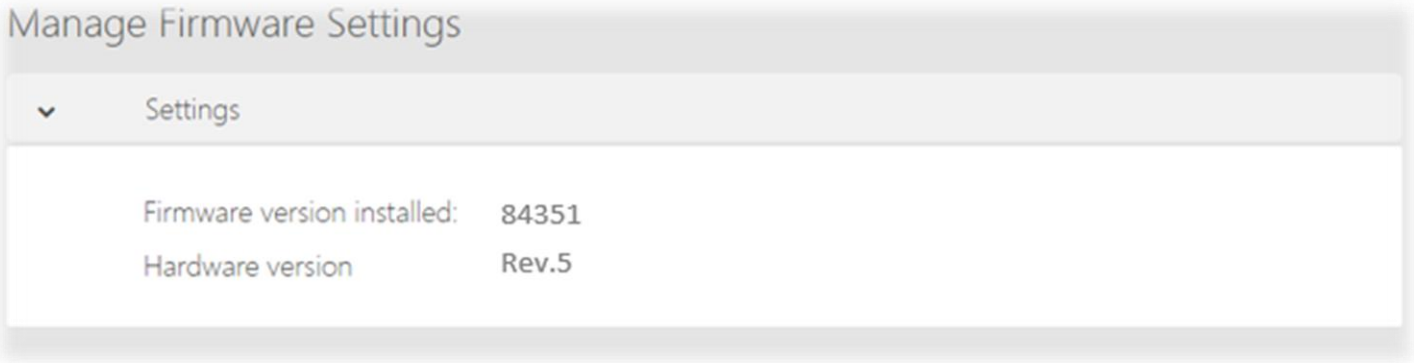


Backup	
Save a copy of your current settings	Click the Backup button to save the settings file to your local computer.
Restore	
Restore saved settings from a file	Choose Select File to locate a previously saved settings file on your computer and select it to load the file to your WiFi gateway.
Factory Default Restore	
Revert all the settings to their default values.	Select Factory Restore to revert your WiFi gateway to it's original factory default state. This resets all settings.

Firmware

Expert > Device Settings > Firmware

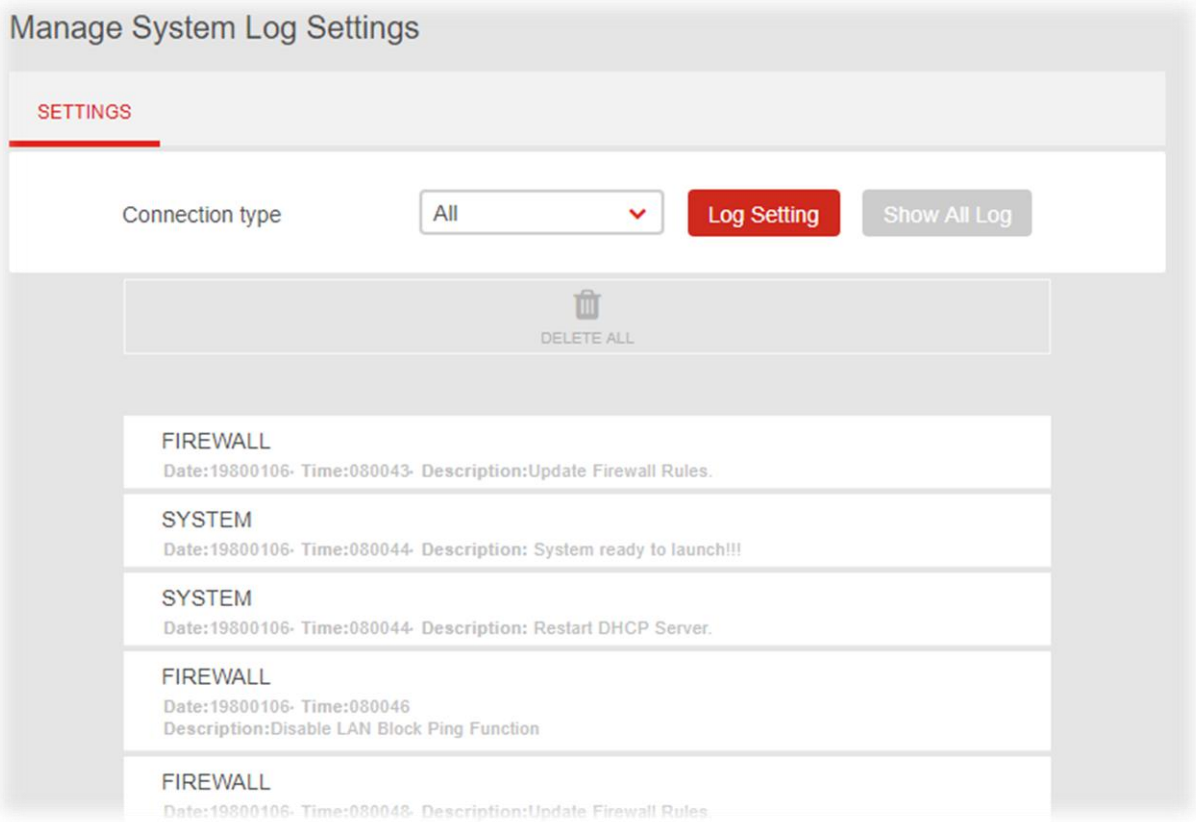
The **Firmware** page displays your WiFi gateway's firmware version and hardware version information.



System Log

Expert > Device Settings > System Log

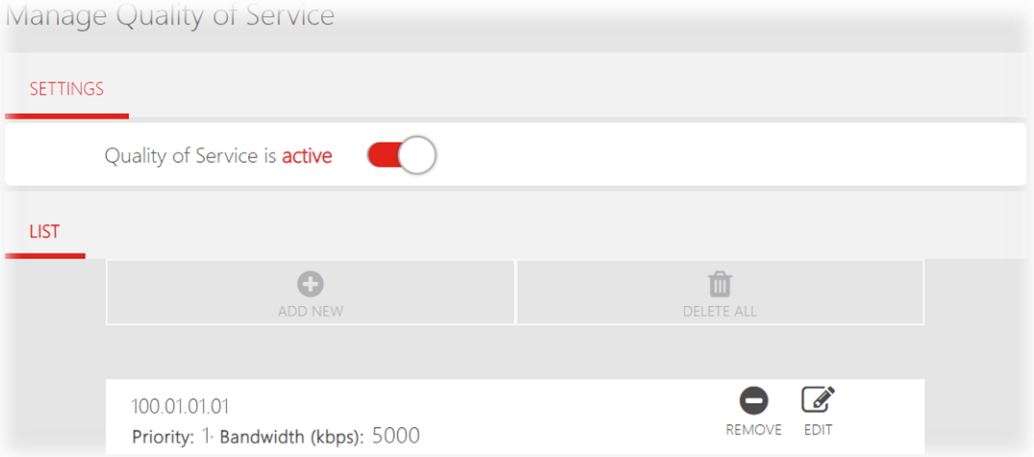
System Log is useful information for network administrators or for potentially troubleshooting WiFi gateway/network issues. The page displays a detailed information log of network activities under different categories. You can select a category using the drop-down menu or view all categories, as well as clear log entries using the DELETE ALL icon.



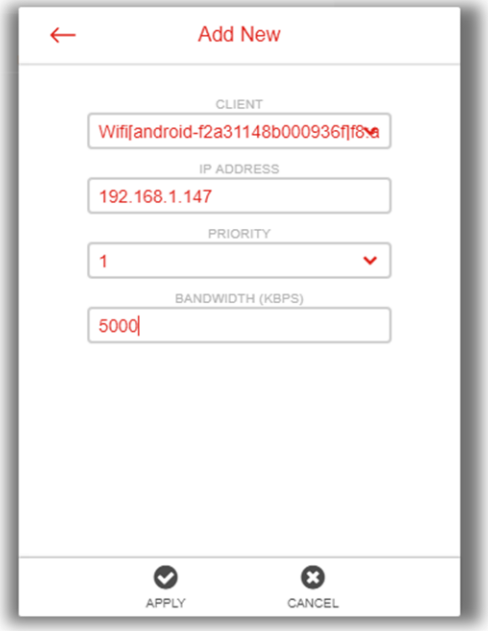
6.9 Quality of Service

Expert > Quality of Service

Quality of Service (QoS) is a feature to manage Internet bandwidth efficiently. Some applications require more bandwidth than others to function properly, and QoS allows you to ensure that sufficient bandwidth is available. Maximum bandwidth can be set for specified devices on the network, ensuring that sufficient bandwidth is available for others – or priority numbering can be used to prioritize devices on the network for bandwidth. QoS can improve performance for applications such as gaming or entertainment streaming.



1. Switch Quality of Service on using the switch.
2. Click **ADD NEW** to add and setup a new device for QoS.
3. Select a device from the Client menu or enter the IP address manually.
4. Select a priority number for this device, which indicates its priority for bandwidth on the network e.g. no. 1 gets bandwidth priority over no. 2.
5. Enter a maximum bandwidth limit in KBPS. Allocate bandwidth according to your data plan, number of devices on your network, and device priority. You can use this to limit bandwidth for lower priority devices.
6. Click **APPLY** to save the QoS settings for this device.
7. Click the **REMOVE** or **EDIT** icon beside any entry in your QoS list to remove or edit the entry.



7. Troubleshooting

If you are having problems with your WiFi gateway, try these basic steps in this section before looking for further solutions.

Phone or computer is disconnected from the WiFi gateway.

Your phone or computer might have lost the connection to the WiFi gateway due to interference, system updates, or any number of reasons. If you're not connected, reconnect to the WiFi gateway's WiFi and make sure the password is correct, or use an Ethernet cable to connect directly to the WiFi gateway's LAN port. Follow the steps in 4. Configure your LTE WiFi Gateway for more help.

Cannot find the Wi-Fi network or cannot connect to the WiFi gateway.

If you can't see your WiFi gateway's WiFi when scanning available networks, or if you can't establish a connection, try the following:

- Refresh the list of available WiFi networks on your device.
- Switch the WiFi gateway off and back on again with the power switch.
- Move the WiFi gateway closer to your device, or move your device closer to the WiFi gateway.
- Restart your device or computer.

If you still can't find the WiFi network or establish a connection, then try resetting your WiFi gateway back to factory default settings. To do this, press and hold the reset button on the back of the WiFi gateway for at least 2 seconds and wait for the WiFi gateway to restart. Then repeat the connection process as described in 4. Configure your LTE WiFi Gateway.

Can't access the Web User Interface to configure settings.

If you can't access the Web UI, it might be an issue with your device or computer's proxy or IP address settings. Make sure that proxy settings are disabled and that your device or computer can be allocated an IP address on the network by the WiFi gateway's DHCP server. You'll need to check the support for your device or computer's operating system e.g. Windows, macOS, for detailed instructions how to do this.

8. Tips & tricks

Taking care of your SIM card

- You should not remove your SIM card from the WiFi gateway unless asked to do so by T-Mobile customer service.
- Keep your SIM card dry and clean
- Avoid extreme temperatures and magnetic fields
- Do not bend, cut, trim or modify the SIM card in any way.
- Avoid touching the SIM card's gold contacts.

Get the best WiFi signal

Where you place the WiFi gateway can affect your wireless coverage. For the best WiFi performance, your WiFi gateway needs open spaces, away from walls, obstructions and heavy-duty appliances or electronics.

Surf the Internet faster

Have you thought of changing your network frequency band to enjoy a faster connection? Your WiFi gateway is dual-band (2.4GHz & 5GHz), so you'll likely get better speed by switching to the 5GHz band instead of the more commonly used and congested 2.4GHz band. Make sure your 5GHz WiFi is active at **Basic > Network > WiFi** in the WiFi gateway's Web UI, and connect your WiFi device or computer to the 5GHz band instead of 2.4GHz.

Network security

Your WiFi gateway is pre-set with the recommended WPA2 security type, but you should immediately change the default WiFi password, as well as the Web UI login password. You can do so at **Expert > Network > WiFi** and **Expert > Device Settings > Administration** in the Web UI. It's not recommended to change WiFi security type: WPA2 with AES is the most secure. And it's never recommended to disable WiFi security (no security type), this means your network is open and anybody within range can connect by WiFi.

Have more questions?

For troubleshooting, WiFi Gateway configuration, or additional information about T-Mobile WiFi Gateway installation go to **http://isp.t-mobile.com/support**, or Call T-Mobile customer service at **1-844-275-9310**.

IMPORTANT

9-1-1 Emergency Service available via LTE WiFi Gateway may be limited. It will not function in the event of a broadband or power outage, or if your broadband, ISP or LTE WiFi Gateway service is suspended or disconnected.

Before using LTE WiFi Gateway to make calls you MUST provide T-Mobile with the primary street address where you will use your WiFi Gateway device in order to enable 9-1-1 Emergency Service. **If you do not supply T-Mobile with your correct address, your call may not be routed to the correct emergency response center for your area.** Your WiFi Gateway device may not operate at a location other than the address you have registered with T-Mobile. As a result, and to assist 911 operators with determining your device's location, you MUST update your address as soon as possible if the device is moved to a new address.

Qualifying wireless service, compatible phone & broadband Internet connection required for fixed location LTE WiFi Gateway, May require plan change. Non-return fee applied if WiFi Gateway is not returned. See **T-Mobile Terms and Conditions (including arbitration provision)** at T-Mobile.com for details and restrictions **including important 9-1-1 limitations**. T-Mobile and the magenta color are registered trademarks of Deutsche Telekom AG.

9. Technical Specification

General

Technical Standard	3GPP LTE , LTE Category 12
Frequency band	LTE FDD: B2, B4, B12, B71, B66, B5 WCDMA: B1, B2, B4, B5, B8
Wi-Fi Standard	802.11 a/b/g/n/ac
Dimensions (W x H x D)	170mm x 124mm x 55mm
Operating temperature range	-20 – 45 °C
Storage temperature range	-40 – 85 °C
Battery	5200mAh
AC adapter (or plug-in adapter) type	ADAPTER 24W 12VDC/2A
Dimensions (W x H x D)	170mm x 124mm x 55mm

Connections

DC input	12V/ 2A
USB input	1x 2.0 Micro USB connector (for professional service only)
Ethernet plugs	2xRJ-45

Federal Communication Commission Interference Statement

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.

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement

The product comply with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.