TP-LINK®

User Guide

M7310

LTE-Advanced Mobile Wi-Fi



COPYRIGHT & TRADEMARKS

Specifications are subject to change without notice. **TP-LINK**° is a registered trademark of TP-LINK TECHNOLOGIES CO., LTD. Other brands and product names are trademarks or registered trademarks of their respective holders.

No part of the specifications may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from TP-LINK TECHNOLOGIES CO., LTD. Copyright © 2016 TP-LINK TECHNOLOGIES CO., LTD. All rights reserved.

http://www.tp-link.com

CE Mark Warning

C€1588 ①

RF Exposure Information

This device meets the EU requirements (1999/5/EC Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

This device has been tested and meets the ICNIRP exposure guidelines and the European Standard EN 62209-2. SAR is measured with this device at a separation of 0.5 cm to the body, while transmitting at the highest certified output power level in all frequency bands of this device. Carry this device at least 0.5 cm away from your body to ensure exposure levels remain at or below the as-tested levels.



Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.



Safety Information

- When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.
- Don't disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.
- Avoid water and wet locations.
- CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
 DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS..

For EU/EFTA, this product can be used in the following countries:

AT	BE	BG	СН	CY	CZ	DE	DK
EE	ES	FI	FR	GB	GR	HR	HU
IE	IS	IT	LI	LT	LU	LV	MT
NL	NO	PL	PT	RO	SE	SI	SK

Explanation of the symbols on the product label

Symbol	Explanation
===	DC voltage
	RECYCLING This product bears the selective sorting symbol for Waste electrical and electronic
(3)	equipment (WEEE). This means that this product must be handled pursuant to
	European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.
	User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.

DECLARATION OF CONFORMITY

For the following equipment:

Product Name: LTE-Advanced Mobile Wi-Fi

Model Number: M7310
Trademark: TP-LINK

We declare under our own responsibility that the above product satisfies all the technical

regulations applicable to the product within the scope of Council Directives:

Directive 1999/5/EC, Directive 2004/108/EC, Directive 2006/95/EC, Directive 2011/65/EU

The above product is in conformity with the following standards or other normative documents:

EN 300328 V1.9.1

EN 301893 V1.8.1

EN 301511 V9.0.2

EN 301908-1 V7.1.1 & EN 301908-2 V6.2.1 & EN 301908-13 V6.2.1

EN 301489-1 V1.9.2 & EN 301489-7 V1.3.1 & EN 301489-17 V2.2.1 & EN 301489-24 V1.5.1

EN 55022: 2010+AC: 2011

EN 55024: 2010

EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 +A2: 2013

EN 50566: 2013 EN 50581: 2012

The product carries the CE Mark:

C€1588①

Person responsible for making this declaration:



Huang Jing

Regulatory Compliance Manager

Date of issue: 2016/03/17

CONTENTS

Package (Contents	
Chapter 1	I. Introduction	2
1.1	Product Overview	2
1.2	Main Features	2
1.3	Physical Description	3
Chapter 2	2. Hardware Installation	6
2.1	Environment Requirements	6
2.2	Installation	6
2.3	Power on	8
2.4	Charging the Mobile Wi-Fi	8
Chapter 3	3. Quick Installation Guide	10
3.1	System Requirements	10
3.2	TCP/IP Configuration	10
3.3	Connect to the Internet	10
3.4	Quick Setup	12
	3.4.1 Quick Setup via your phone	12
	3.4.2 Quick Setup via your PC	14
Chapter 4	4. Configuration	17
4.1	Wizard	17
4.2	Status	17
4.3	SMS	18
	4.3.1 Inbox	18
	4.3.2 New Message	19
	4.3.3 Outbox	19
4.4	Advanced	20
	4.4.1 Dial-up	20
	4.4.2 Wireless	25
	4.4.3 DHCP Server	31
	4.4.4 Data Usage Settings	32
	4.4.5 Storage Sharing	34
	4.4.6 Power Saving	36
	4.4.7 Device	37
Appendix	(A: FAQ	41
Appendix	B: Configuring the PC	45

Appendix C: Specifications	. 50
Appendix D: Glossary	. 51

Package Contents

The following items should be found in your package:

- LTE-Advanced Mobile Wi-Fi M7310
- > Micro USB Cable
- Nano to Micro SIM Card Adapter
- 2000mAh Battery
- Quick Installation Guide

Note:

Make sure that the package contains the above items. If any of the listed items is damaged or missing, please contact your distributor.

Conventions

The Mobile Wi-Fi or M7310 mentioned in this guide stands for M7310 LTE-Advanced Mobile Wi-Fi without any explanation.

Chapter 1. Introduction

1.1 Product Overview

TP-LINK's M7310 is at the forefront of wireless 4G sharing. Just insert a 4G SIM card into the Mobile Wi-Fi to instantly establish a Wi-Fi hotspot. With up to 150Mbps download and 50Mbps upload speeds, M7310 is able to provide 4G wireless sharing to up to 11 users simultaneously. Its pocket-sized design and powerful 2000mAh internal battery make it an ideal travel companion, allowing users to work or play for 10 hours. With its innovative LCD-display, users can have a much more intuitive view of the Mobile Wi-Fi's operating status, such as signal strength, network type (4G/3G/2G), Wi-Fi status, messages, Internet, traffic statistics and battery life.

1.2 Main Features

Full coverage of 4G/3G/2G network

FDD-LTE (800/900/1800/2100/2600MHz)

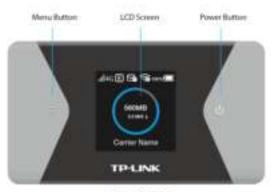
TDD-LTE (2300/2500/2600MHz)

DC-HSPA+/HSPA/UMTS (900/1800/2100MHz)

EDGE/GPRS/GSM (850/900/1800/1900MHz)

- 4G LTE supports with up to 150Mbps downloads and 50Mbps uploads speeds
- > High speed Wi-Fi hotspot at speed of 300Mbps
- Wi-Fi share up to 11 devices simultaneously (1 Wired and 10 Wireless devices)
- > All useful information at a glance with screen display
- 2000mAh battery for 10 hours of usage
- Portable and compact design ideal for travel use
- A micro USB port for versatile recharging
- A micro SD card slot for up to 32GB of optional storage
- Easy management with the tpMiFi App

1.3 Physical Description



Home Screen



Menu Screen



The details about the Exterior are explained as below.

> Menu button:

- Press this button to enter the Menu Screen from the Home Screen.
- Press this button to switch the icons/options.

> Power button:

- Press and hold this button to power on or off the Mobile Wi-Fi.
- Press this button to turn on or off the LCD Screen from the Home Screen.

- Press this button to select the icon or option.
- Micro USB Input: Plug in the USB charging cable to this port to charge your Mobile Wi-Fi.
- > **RESET Button (hole):** It's the button to restore the Mobile Wi-Fi to its factory defaults. While the Mobile Wi-Fi is powered on, remove the cover. Use a pin to press and hold the RESET button until Power Off appears on the screen.

Note:

Resetting the Mobile Wi-Fi to its factory defaults will clear all previous configuration and you may need to reconfigure it.

> Screen Display: The LCD Screen will turn off automatically after 15 seconds. Please press the Power or Menu button to turn it on again.

Home Display

Item	Description	Indication
atl	Signal strength	Indicates the signal strength of current network.
4G/3G/2G	Network Type and Internet Connection	Indicates the current network option: 3G /4G, and the successful network connection.
Œ	Data Roaming	Indicates you are in roaming service.
□ □	Unread messages	Indicates that there is un-read message(s) and the amount of un-read messages.
^30	Wi-Fi Status and Connected Wi-Fi Devices	Displays the Wi-Fi status and the amount of current wireless clients.
100%	Remaining Battery	Displays the remaining battery power.
560MB	Cumulative Traffic Usage	Indicates the total used-data. It will be cleared after the Mobile Wi-Fi is reset.
5.0 M/S I	Download speed	Indicates the download speed of current data transmission.

Menu Display

Item	Description	Indication
企	Home	Select this icon to go back to Home Screen.
(i)	Device Info	Select this icon to enter the Device Info Screen, then you can view the information of the SSID, Password and the Login Address.
②	Power Saving	Select this icon to enter the Power Saving Screen, then you can turn on or off this function.
9	WPS	Select this icon to enter the WPS Screen, then you can enable this function when you want to connect the clients via WPS. It will last for one minute to pair clients.
(jc	Wi-Fi Band	Select this icon to enter the Wi-Fi Band Screen, then you can change your working Wi-Fi Band as you need. There are two working Wi-Fi Band supported: 2.4GHz and 5GHz.
(P)	Network Mode	Select this icon to enter the Network Mode Screen, then you can change your Network Mode as you need. There are three mode supported: 4G (preferential), 4G only and 3G only.
(Data Roaming	Select this icon to enter the Data Roaming Screen, you can turn on or off this function as you need. We recommend you to turn it on when you are out of the carrier service area.
H	App Download	Select this icon to get the QR code of TP-LINK tpMiFi App, then simply scan it to download this App to help you manage the Mobile Wi-Fi conveniently.

Chapter 2. Hardware Installation

2.1 Environment Requirements

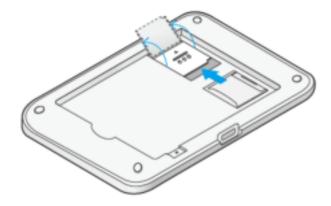
- > Place the Mobile Wi-Fi in a well-ventilated place far from any heater or heating vent
- > Avoid direct irradiation of any strong light (such as sunlight)
- > Keep at least 2 inches (5 cm) of clear space around the Mobile Wi-Fi
- Operating Temperature: 0°C ~35°C (32°F~95°F)
- > Operating Humidity: 10%~90%RH, Non-condensing

2.2 Installation

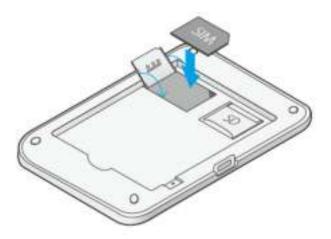
1) Remove the cover.



2) Slide and lift up the SIM card slot cover.



3) Insert the SIM card and slide the cover back to lock.



- Nano SIM card must be converted using the provided SIM card tray.
- The SD card slot can be used for storage and media sharing.
- SIM card and SD card are not included.
- 4) Use the same way to install the Micro SD card if you have one.

P Note:

The micro SD memory card is optional. You can purchase it appropriate according to your need.

5) Touch the metal contacts of the battery to the metal points of the Mobile Wi-Fi, and then press to fit the battery body into the slot.



6) Note down the default SSID and Wireless Password.



7) Replace the cover.



2.3 Power on

Press and hold the power button until the following screen appears.



To power off, press and hold the power button until the Power off appears on the screen.

2.4 Charging the Mobile Wi-Fi

Via the wall outlet (Recommend)



Via a computer



Note:

When the * on the battery icon disappears, the Mobile Wi-Fi is fully charged.

Chapter 3. Quick Installation Guide

This chapter will guide you to quickly set up the basic functions for your M7310.

3.1 System Requirements

- SIM card with Internet access enabled.
- > Computer supports the 2.4GHz/5GHz wireless band.
- > Web browser, such as Mozilla Firefox, Internet Explorer, Google Chrome, Apple Safari, etc.

3.2 TCP/IP Configuration

The default IP address of the M7310 is 192.168.0.1, and the default Subnet Mask is 255.255.255.0, which values can be changed as you desire. In this guide, we use all the default values for description, and take the configuration in Windows 7 for example. While, Pads or Wi-Fi cellphones by default obtain IP address and DNS server address automatically, so you can just skip this step and continue with the Connect to the Internet.

P Note:

Before configuration, please make sure your computer has been equipped with a wireless network adapter.

- > Obtain an IP address automatically
- Set up the TCP/IP Protocol in "Obtain an IP address automatically" mode on your PC.
 Please refer to Configuring the PC for the detailed instructions.
- 2) Then the built-in DHCP server will assign an IP address for the PC.
- > Configure the IP address manually
- 1) Set up the TCP/IP Protocol for your PC. Please refer to <u>Configuring the PC</u> for the detailed instructions.
- Configure the network parameters. The IP address is 192.168.0.X (X stands for any number from 2 to 254), Subnet Mask is 255.255.255.0, and Gateway is 192.168.0.1 (the Mobile Wi-Fi's default IP address).

3.3 Connect to the Internet

P Note:

To log in the Mobile Wi-Fi's web-management page, you need to first connect to the wireless network of the Mobile Wi-Fi.

- 1. Click the icon at the bottom of your desktop.
- 2. Click the refresh button **, and then select the SSID of M7310 and then click **Connect**.



Note:

The default SSID (Wireless Network Name) of the Mobile Wi-Fi is **TP-LINK_XXXX.** You can check the SSID and Password on the screen or rear cover label.

- > To check on the screen
 - 1) Press the MENU button to enter the Menu Screen and switch to the Device info icon.



2) Press the Power button to select it and enter the Device Info Screen. You can find the SSID here.



> To check on the rear cover label



3. Enter the wireless password found on the Mobile Wi-Fi's screen or rear cover label, and then click **OK**.



4. When **Connected** appears behind the SSID of Mobile Wi-Fi, you've successfully connected to its wireless network.

P Note:

After successful connection to M7310 (with a SIM card inserted), you can enjoy the 4G mobile connection instantaneously. If not, please refer to <u>FAQ</u> and retry.

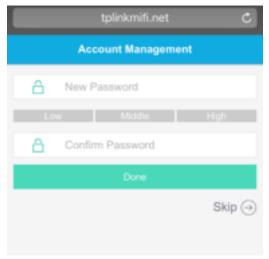
3.4 Quick Setup

3.4.1 Quick Setup via your phone

Open a web-browser on your phone or Pads, enter the default address http://tplinkmifi.net
or http://tplinkmifi.net
or http://tplinkmifi.net
or http://tplinkmifi.net
or http://tplinkmifi.net
or http://tplinkmifi.net
or <a href="http://tplinkmif



2. After successful login, there will appear the following page. You can set up a new login password on this page, and click **Done** to continue.



 On the Wireless page, you can create a unique and easy-to-remember SSID (wireless network name) as well as wireless password, or you can keep it default. Choose the wireless band. Then click Done to save your settings.

P Note:

Wireless Band determines the frequency band that the radio works on. There are two bands you can choose: 2.4GHz or 5GHz. Please select suitable frequency band according to the policy of local government and your requirements.



3.4.2 Quick Setup via your PC

Open a web-browser, enter the default address http://tplinkmifi.net or http://192.168.0.1 in the address field and then press Enter. When the login window appears, enter admin (in lower-case letters) for password, and then click Login.



☞ Note:

If the above screen does not pop-up, it means that your web browser has been set to a proxy. Go to **Tools menu > Internet Options > Connections > LAN Settings**, in the screen that appears, deselect the **Using Proxy** checkbox, and click **OK** to save the setting.

2. After successful login, there will appear the following page. You can set up a new login password on this page, and click **Confirm** to continue.



3. Click Wizard and select the Time Zone. Click Next to continue.



 On the Dial-up Settings page shows the ISP information of the SIM card inserted. Click Next to continue, if you are sure the information is correct.



Note:

If these settings are not correct, please click Create to create a new profile with the correct

parameters, and then choose the new profile from the Profile List.

 On the Wireless Settings page, you can create a unique and easy-to-remember SSID (wireless network name) as well as Wireless Password, or you can keep it default. Then click **Next** to continue.



6. On the Finish page, please double-check your settings. If all the parameters are verified, click **Finish** to complete the Wizard; if there is anything wrong, you can click **Back** to reconfigure it.



Chapter 4. Configuration

After the successful login to the web-based management page of Mobile Wi-Fi, you will see the main menu listing **Wizard**, **Status**, **SMS** and **Advanced** on the top. In the following parts, these items will be explained in details, about their respective functions and configurations.

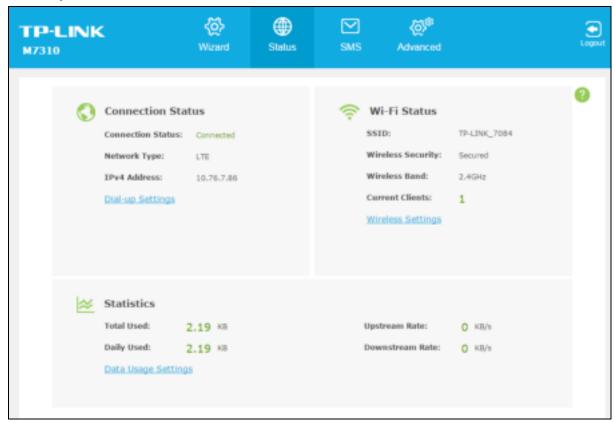


4.1 Wizard

Please refer to Quick Setup.

4.2 Status

The Status page displays the current status information about the Mobile Wi-Fi. All information is read-only.



- Connection Status: Displays the Mobile Wi-Fi's connection information, including the connection status, network type (for connected state)/SIM card status (for disconnected state) and IP address. Click Dial-up Settings to change dial-up settings.
- ➤ Wi-Fi Status: Displays the Mobile Wi-Fi's wireless information, including the SSID, wireless security, and current clients. Click Wireless Settings to change Wi-Fi settings.

Statistics: Displays the Mobile Wi-Fi's data usage statistics, including the data monthly used/total used and the data daily used. The data usage accounting may differ from your carrier's, and it is subject to your carrier's statistics. Click **Data Usage Settings** to change data settings.

4.3 SMS



There are three submenus under the **SMS** tab: **Inbox**, **New Message** and **Outbox**. Click any of them, and you will be able to configure the corresponding functions.

4.3.1 Inbox



- ➤ Status: means the message has been read. means the message hasn't been read yet.
- **Phone Number:** Shows the phone number that sent this message.
- **Content:** Click to unfold and read the detailed content of the message.
- > Received: Shows the time when the message was received.

Click **Refresh** to refresh the inbox, and get any new message.

Click **Delete** to delete the message(s) selected.

4.3.2 New Message



- **Phone Number:** Enter the receiver's phone number.
- ➤ Content: Text your message in this box. The message you are texting is limited to 160 letters or numbers, any exceeding characters will be sent in the next message. You can send up to five messages each time.

Click **Send** to send the message.

4.3.3 Outbox

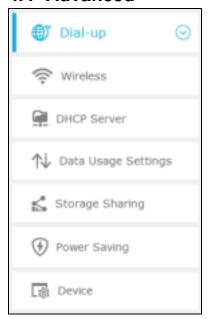


- **Phone Number:** Shows the phone number that the message was planned to be sent to.
- > Content: Click to unfold and read the detailed content of the message.
- Sent: Shows the time when the message was sent.

Click Refresh to refresh the Outbox.

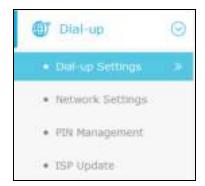
Click **Delete** to delete the message(s) selected.

4.4 Advanced



There are seven submenus under the **Advanced** tab: **Dial-up**, **Wireless**, **DHCP Server**, **Data Usage Settings**, **Storage Sharing**, **Power Saving** and **Device**. Click any of them, and you will be able to configure the corresponding functions.

4.4.1 Dial-up



4.4.1.1. Dial-up Settings

You can configure dial-up settings on this page.



- > Mobile Data: It is enabled by default. You can disable it to prohibit Internet access.
- > Data Roaming: It is disabled by default. If disabled, data service is not allowed when roaming.
- Profile List: A list of profile for you to select. If you find any parameters wrong, you can click Create to create a new profile with the right settings (as shown in the next figure). Select a profile you have created, you can further modify its parameters.
- > **Profile Name:** The name of the profile you've selected.
- > PDP Type: Select the type of your PDP (Packet Data Protocol).
- APN Type: Select the type of your APN, either Dynamic or Static. If you select Dynamic, the Mobile Wi-Fi will have dynamic APN, which does not need to be specified. If you select Static, you can manually specify your APN.
- ➤ APN: Access Point Name, provided by your ISP. You need to set APN only after selecting the static APN type. You are recommended to keep the default value.
- ➤ Auth Type: Some ISPs need a specific authentication type, please confirm it with your ISP or keep the default value.
 - None: No any authentication is needed.
 - PAP: Password Authentication Protocol. This protocol allows the Mobile Wi-Fi to establish authentication with the peer using two handshakes. Select this option if the ISP requires this authentication type.
 - CHAP: Challenge Handshake Authentication Protocol. This protocol allows the Mobile
 Wi-Fi to establish authentication with the peer using three handshakes and checking

the peer identity periodically. Select this option if the ISP requires this authentication type.

> **Username/Password:** Enter the username and password provided by your ISP. These fields are case-sensitive. You are recommended to keep the default value.

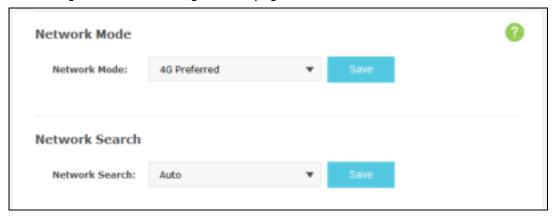
Click Create to create a new profile.

Click Save to save your settings.

al-up Settings			6
Profile Name:			
PDP Type:	IPv4	*	
APN Type:	Static	*	
APN:			
Auth Type:	CHAP	*	
Username:			
Password:			
		Cancel	Save

4.4.1.2. Network Settings

You can configure Network Settings on this page.



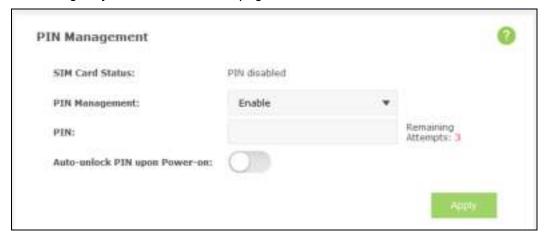
- Network Mode: The Mobile Wi-Fi supports three modes of network connection 4G Preferred, 4G Only, and 3G only. If your SIM card supports WCDMA, select 3G only; if your SIM card supports FDD-LTE or TDD-LTE, select 4G Preferred or 4G only as you need.
- Network Search: The Mobile Wi-Fi provides two types of network connection Auto and Manual. Please select the connection mode as you need.
 - Auto: The Mobile Wi-Fi will automatically establish connection once it's started.
 - Manual: When you select Manual and click Search, the Mobile Wi-Fi will search for

mobile networks automatically and you can choose a network with better performance to access, which is related or have cooperation with the network provider of your SIM.

Click **Save** to save your settings.

4.4.1.3. PIN Management

You can configure your PIN code on this page.



- > SIM Card Status: Shows the status of your SIM card.
- ➤ PIN Management: You can select whether to enable this function or not. Once the PIN code function is enabled, every time you start the Mobile Wi-Fi with this SIM card inserted, you need to enter the PIN code. But you can go to enable the auto-unlock PIN function, which could save you this trouble.
- **PIN:** Personal Identification Number of the SIM card. It consists of 4-8 digits.
- > PUK: PIN Unlocked Key. It consists of 8 digits.
- PUK code. You have 3 attempts at most for entering the PIN code and 10 attempts at most for entering the PUK code. If you accidentally fail in three attempts, the PIN will be locked and you will be required to enter the PUK code that is written on your SIM card (as shown in the next Figure).
- Auto-unlock PIN upon Power-on: When the PIN code is required upon Mobile Wi-Fi restarting, it will be validated automatically once. If validation failed, you need to enter the PIN code on the Status page.

If the current status of PIN is disabled, you can select **Enable** and set a PIN code, and then click **Apply** to make your settings take effect. While, if the SIM card's current status is PIN enabled and verified, you can select **Disable** and enter the current PIN code, or select **Modify** and set a new PIN code, and then click **Apply** to make your settings take effect.



A PUK (PIN Unlocked Key), also known as Personal Unlock Code (PUC), is used in 3GPP mobile phones to Reset a personal identification number (PIN) that has been lost or forgotten. The PUK is a SIM-specific code assigned by the service provider. If a user does not know his or her PUK and is prompted for it, it should be obtained from the service provider.

On the page as shown above, first enter the PUK code and then set a new PIN to unlock your SIM card as well as any device with it inserted.

4.4.1.4. ISP Update

You can update the ISP information on this page.



> ISP Version: The current ISP Version.

If you want to update the ISP information, please follow the steps below.

1) Download the latest ISP update file from the Support page at www.tp-link.com to your

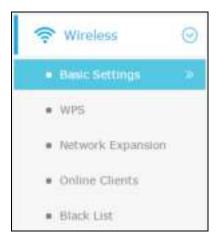
computer.

- 2) Click **Browse** to locate and select the latest file.
- 3) Click Update.

P Note:

Please keep the device powered on during the update process to prevent update fail.

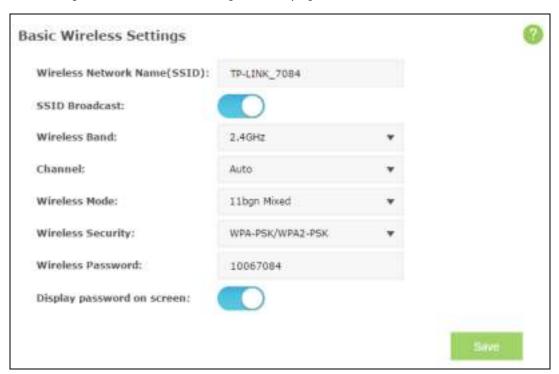
4.4.2 Wireless



Wireless Settings can prevent any intruders from connecting your wireless network, occupying your network resources, hacker-overhearing and hacker-attacking, and thus enhance the security of your wireless network.

4.4.2.1. Basic Settings

You can configure basic wireless settings on this page.



- Wireless Network Name (SSID): SSID is short for Service Set Identification, which helps you distinguish different wireless networks. The default SSID of this Mobile Wi-Fi is TP-LINK _XXXX (XXXX stand for the last 4 characters of the MAC address of it.). You can rename it as your preference, but the value is limited to 32 characters and also it's case-sensitive (For example, TEST is NOT the same as test). Later on it will display in the wireless network list searched by your devices if you don't disable the SSID broadcast.
- SSID Broadcast: Select to enable or disable this function. When wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast by the Mobile Wi-Fi. If you enable SSID broadcast, the wireless Mobile Wi-Fi will broadcast its name (SSID) on the air; otherwise, you have to manually type in the SSID and then you can join its network.
- ➤ Wireless Band: This field determines the frequency band that the radio will work on. There are two bands you can choose: 2.4GHz or 5GHz. Please pick up suitable frequency band according to the policy of local government and your requirements.
- Channel: This field determines which operating frequency will be used. If you select "Auto", then the Mobile Wi-Fi will choose the best channel automatically. It is not necessary to change the wireless channel unless you notice interference problems with another nearby access point.
- Wireless Mode: This field determines which Wi-Fi network protocol will be used. Without special demands, you are recommended to select 11bgn mixed as Wi-Fi mode. To seek the optimal performance of Wi-Fi hotspot, you are recommended to select the mode that corresponds with your wireless NIC, for instance, if your NIC supports IEEE802.11n specification, 11n only is recommended.
- Wireless Security: You are provided two modes of security here: Unsecured and WPA-PSK/WPA2-PSK. WPA-PSK/WPA2-PSK is the WPA-PSK/WPA2-PSK authentication type based on pre-shared passphrase. It's easy to set and secure to use. So it's perfect for SOHO users.
- ➤ Wireless Password: You can enter 8~63 ASCII characters (case sensitive) or 64 hexadecimal characters (case insensitive) as your wireless password.
- Display password on screen If enabled, the password of your Wi-Fi will be displayed on the screen of your mobile Wi-Fi.

Click Save to save your settings.

4.4.2.2. WPS

You can configure the WPS function on this page. The WPS function takes effect only when SSID Broadcast is enabled.



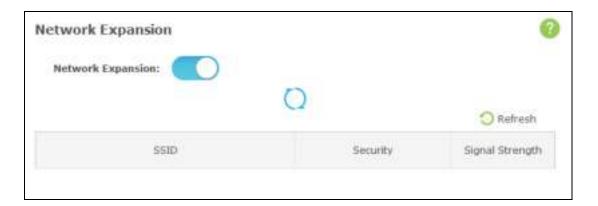
- > WPS Status Enable or disable the WPS function here.
- > WPS Choose PBC or choose PIN, and then click Start.
 - **PBC** Push Button Configuration. You need to start WPS (by hardware or software) on the Mobile Wi-Fi and the client within 2 minutes.
 - PIN Personal Identification Number, commonly consisting of 8 digits. It may be a random string generated by the client (smart devices that support WPS) when WPS is triggered, or a fixed string printed on the label of the client.
- Current Status Shows whether the client has connected to the wireless network through the method of WPS.

Click Start to start the WPS process.

Click **Save** to save your settings.

4.4.2.3. Network Expansion

You can configure Network Expansion function on this page. Network Expansion allows the Mobile Wi-FI to connect to a wireless network and share it to your other client devices.

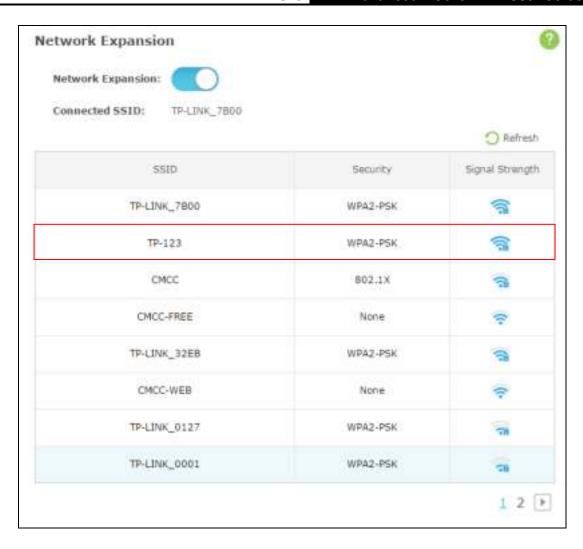


- Network Expansion This function is disabled by default. If disabled, the Mobile Wi-Fi can only connect to 2G/3G/4G network.
- Connected SSID Displays the wireless network name that the Mobile Wi-Fi is currently connected to.
- > SSID Displays the names of the detected wireless networks.
- Security Displays the security type of the network.
- > **Signal Strength** Displays the signal strength of wireless networks nearby. It is recommended that you connect to the network that has the strongest signal.

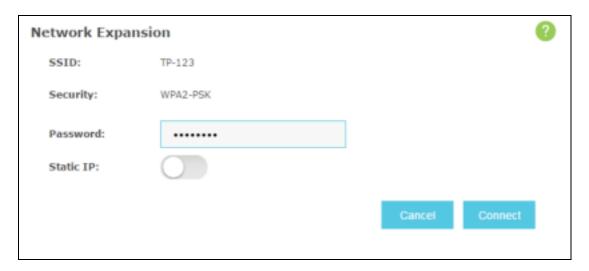
Click **Refresh** to update available wireless networks.

For example:

- 1. Enable the Network Expansion function on this page.
- 2. Choose the Network which you want to extend. Here we take TP-123 as an example.



3. Enter the password and click **Connect**.



Note:

Enabling network expansion may cause an IP conflict. If you continue, please use http://tplinkmifi.net to log into the Mobile Wi-Fi.

4. The icon of the extended network will show up in the Home Screen. You can connect to the Mobile Wi-Fi using its default SSID and the password.



4.4.2.4. Online Clients

The Online Clients page displays the basic information about the Wi-Fi clients that are currently connected to the Mobile Wi-Fi.



- > Client Name: The name of the Wi-Fi client.
- > MAC Address: The MAC address of the Wi-Fi client.
- > IP Address: The IP address of the Wi-Fi client.

Click **Refresh** to update the Wi-Fi client list.

Click **Block** to add the Wi-Fi client(s) selected to the black list.

4.4.2.5. Black List

The Black List page displays the basic information about the Wi-Fi clients that have been blocked.



- > **ID:** The index of the Wi-Fi client.
- Client Name: The name of the Wi-Fi client.

M7310

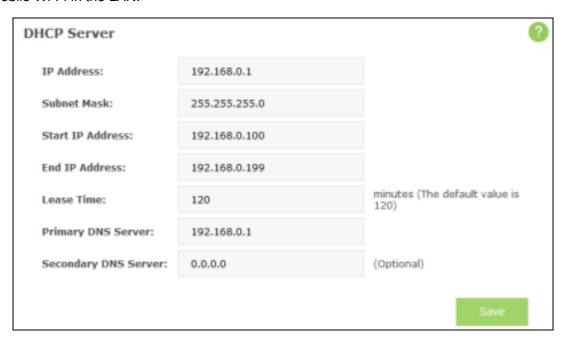
> MAC Address: The MAC address of the Wi-Fi client.

Click **Refresh** to update the Wi-Fi client list.

Click **Resume** to remove the Wi-Fi client(s) selected from the black list.

4.4.3 DHCP Server

The Mobile Wi-Fi is set up by default as a DHCP (Dynamic Host Configuration Protocol) server, which provides the TCP/IP configuration for all the wireless clients that are connected to the Mobile Wi-Fi in the LAN.



- ➤ DHCP Server You can select to enable or disable the DHCP server. If you disable the server, you must have another DHCP server within your network or else you must configure the IP address of the computer manually.
- ➤ **IP Address:** The IP address of the Mobile Wi-Fi, which is used to log in to its web-based management page. The default value is 192.168.0.1.
- Subnet Mask: An address code that determines the size of the network. Normally use 255.255.255.0 as the subnet mask.
- > Start IP Address: This field specifies the first address in the IP address pool. 192.168.0.100 is the default start IP address.
- Find IP Address: This field specifies the last address in the IP address pool. 192.168.0.199 is the default end IP address.
- Lease Time: The lease time is the length of time a network user will be allowed to keep connecting to the Mobile Wi-Fi with the current assigned address. Enter the amount of time, in minutes, and the current assigned address will be "leased". The time range is 2 to 2880 minutes. The default value is 120 minutes.
- **Primary DNS Server:** Input the DNS IP address provided by your ISP.
- Secondary DNS Server: Input the IP address of another DNS server if your ISP provides two DNS servers. It's optional.

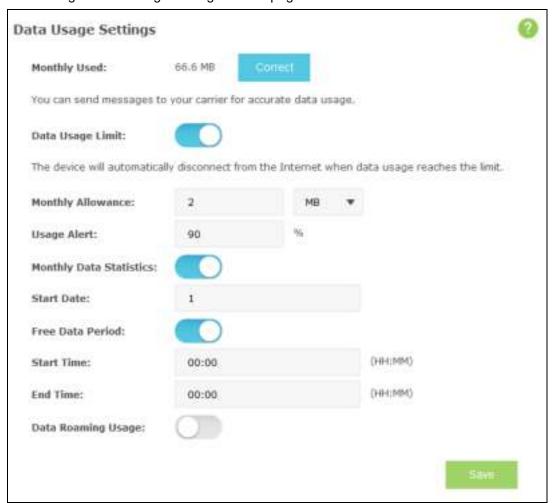
Click **Save** to save your settings.

P Note:

To use the DHCP server function of the Mobile Wi-Fi, you should configure all clients in the LAN as "Obtain an IP Address automatically" mode. This function will take effect until the Mobile Wi-Fi reboots Wi-Fi.

4.4.4 Data Usage Settings

You can configure data usage settings on this page.



> Total/Monthly Used - Total/Monthly data used. You can click Correct and input the actual data amount to correct the data.

Note:

Actual data usage may vary from the estimated data usage displayed on the usage meter.

- Data Usage Limit You can enable or disable the function of data usage limit. If enabled, you can set the data quota.
- Total/Monthly Allowance Enter the data allowance. When your data usage reaches the allowance, the Mobile Wi-Fi will automatically disconnect from the Internet and the circle icon on the screen will turn to red.
- > **Usage Alert** Enter the usage alert percentage. When data usage reaches the alert percentage, the circle icon on screen will turn to orange.

- Monthly Data Statistic You can enable or disable the function of traffic data resetting.
- > Start Date Enable the function and schedule a date, the data will reset to zero on the date. If disabled, total data information is displayed. If enabled, monthly data information is displayed.
- Free Data Period This function is disabled by default. If enabled, the data used during the free data period will not be included in your total monthly data usage.
 - Start Time Enter the start time of your free data period. Please check with your carrier.
 - End Time Enter the end time of your free data period. Please check with your carrier.

The Start Time and End Time must be different and entered in 24-hour clock format. Please check with your carrier about your data plan prior to enabling this function.

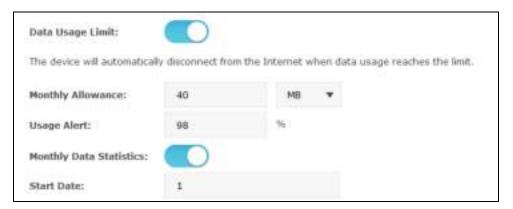
> **Data Roaming Usage** - This function is disabled by default. If enabled, the roaming data will not be included in your total/monthly data usage.

Click **Save** to save your settings.

For example:

If you want to set up a data limit to ensure that the data will not be overused every month. You can follow these steps:

- 1. Enable the Data Usage Limit and Monthly Data Statistics.
- Enter the data allowance, usage alert percentage and the Start Date.



3. Click Save to save your settings.

The Mobile Wi-Fi will automatically disconnect from the Internet when data usage reaches the limit. The circle icon on the home screen will turn to orange.



4.4.5 Storage Sharing

You can configure storage sharing on this page.



- Access Mode: You can access the SD storage by USB or Wi-Fi.
 - By USB: Connect the Mobile Wi-Fi with a USB cable to access the SD card directly.
 - By Wi-Fi: If you are using a windows laptop, then it is very easy to visit the Micro-SD storage sharing. But if you are using an Android device or an IOS device, then you can use tpMiFi APP to help you visit the Micro-SD storage sharing.

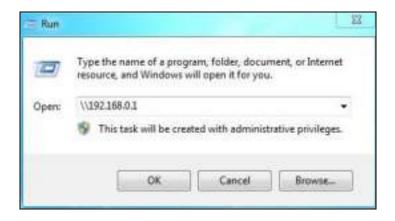


Login Permission: If you choose the Wi-Fi access mode, you can set it Signed or Anonymous for users to access.

If you have chosen the Wi-Fi access mode, please refer to the following steps to visit the Micro-SD storage sharing.

For Windows device:

- 1) Connect your computer to Mobile Wi-Fi wirelessly.
- 2) Open **Run** in your computer and input the IP address of your Mobile Wi-Fi. Here is "\\192.168.0.1" by default. Then click **OK** to continue.



3) For anonymous access, you can visit the Micro-SD storage now. For signed access, Enter your login username and password in this authentication window, click **OK**. Then you can visit the Micro-SD storage sharing.



For Android / IOS device:

You can use tpMiFi APP to access the Micro-SD storage in your Mobile Wi-Fi.

1) Search for and install the tpMiFi mobile app from the Apple App Store or Google Play, or simply scan the QR code.



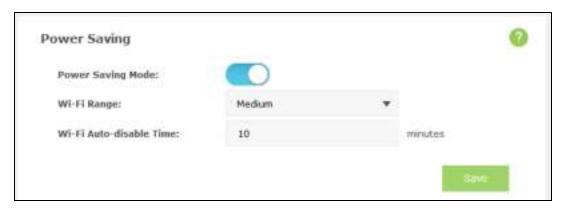


- 2) Connect your mobile device to the Mobile Wi-Fi's wireless network.
- 3) Launch tpMiFi and enter admin to log in.
- 4) Click **SD Sharing** to visit the Micro-SD storage sharing.



4.4.6 Power Saving

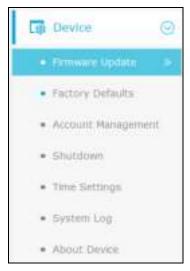
You can configure power saving on this page.



- Power Saving Mode: It's enabled by default. If enabled, you can save power by changing the Wi-Fi Range and Auto-disable Time. If disabled, the Wi-Fi will not be shut down and you can have the largest Wi-Fi coverage.
- > Wi-Fi Range: Select a Wi-Fi range.
 - Long: Provides longer Wi-Fi coverage but shorter battery life.
 - Medium: Provides medium Wi-Fi coverage and battery life.
 - Short: Provides shorter Wi-Fi coverage but longer battery life.
- ➤ Wi-Fi Auto-disable Time: If no clients connect to the Mobile Wi-Fi's wireless network in a period of time (10 minutes by default), the Wi-Fi will be shut down. You can press the power button to resume the Wi-Fi.

Click Save to save your settings.

4.4.7 Device



Under **Device** menu, you can do such configurations as restoring all the settings of the Mobile Wi-Fi to its factory defaults, rebooting the Mobile Wi-Fi, and checking some information about the Mobile Wi-Fi. As follows, we will explain them in details.

4.4.7.1. Firmware Update

You can update the firmware of the Mobile Wi-Fi on this page.



- > Firmware Version: The current firmware version.
- ➤ Update via the cloud server: Update your firmware automatically by using the Internet.

 Click Check for Updates to search for new firmware version.

New Version: This field displays the version number of the new firmware. You can click the version number to download the firmware or click **Release Note** to view the update details.

Update via the local server: Update your firmware by using the update file that has been downloaded from website www.tp-link.com.

Click **Browse** to select the update file on your local computer.

Click **Update** to update the firmware.

4.4.7.2. Factory Defaults

You can restore the Mobile Wi-Fi to its factory default settings when necessary.



Click **Restore** to reset all configuration settings to their default values. All of the settings you have saved will be lost when the default settings are restored.

You can restore the following factory default values:

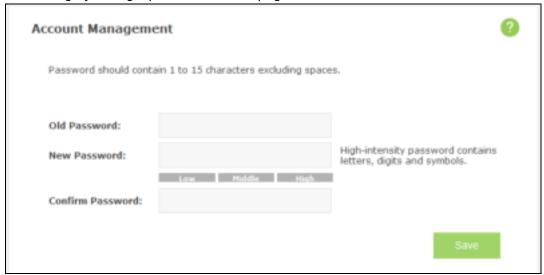
Default Password: admin

Default IP Address: 192.168.0.1

Default Subnet Mask: 255.255.255.0

4.4.7.3. Account Management

You can change your login password on this page.



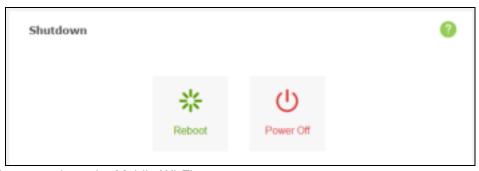
- > Old Password: The old password that is used to log in to the Mobile Wi-Fi.
- New Password: The new password you are going to set to log in to the Mobile Wi-Fi.
- **Confirm Password:** Enter the new password again for confirmation.

Note:

If you can't access the SD card via Wi-Fi after changing the login user password, please log out or reboot your computer and then try again.

Click Save to save your settings.

4.4.7.4. Shutdown



Click **Reboot** to reboot the Mobile Wi-Fi. Click **Power Off** to shut down the Mobile Wi-Fi.

4.4.7.5. Time Settings



> Time Zone: Select your local time zone.

> Date: Display your local date.

Time: Display your local time.

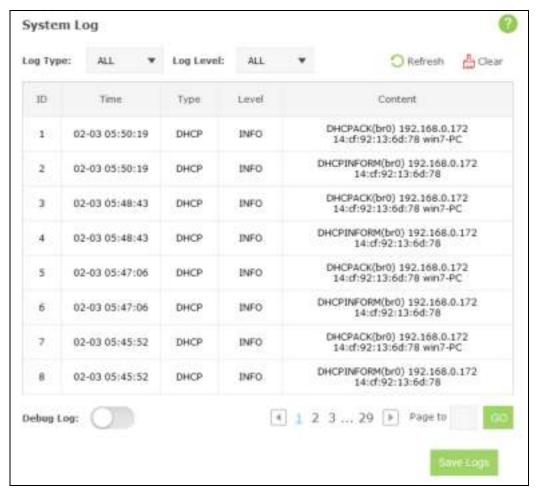
Click Save to save your settings.

4.4.7.6. System log

This page displays the Mobile Wi-Fi's information about system logs, including log ID, time, type, level and content.

- Debug Log To use the debug log function:
 - 1. Insert an SD card with at least 100M free space.
 - 2. Go to the "Advanced > Storage Sharing" page and configure the Wi-Fi access mode.

- 1. Do not enable the debug log function unless required by your technical support.
- 2. Do not remove the SD card or change its mode when using the debug log function.



Click Refresh to update the log list.

Click Clear to delete all the logs.

Click **Save Logs** to save the logs to your local computer.

4.4.7.7. About Device

You can view the related information about the Mobile Wi-Fi on this page.



➤ Model: The model of the Mobile Wi-Fi.

Firmware Version: The current firmware version.

Hardware Version: The current hardware version.

➤ **IMEI:** International Mobile Equipment Identity. Composed of 15 digits, it is unique and thus used to identify individual mobile equipment.

MAC Address: The physical address of the Mobile Wi-Fi.

Appendix A: FAQ

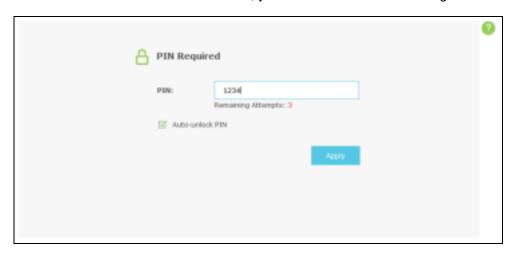
FAQ1. What should I do if I cannot log into the web-management page?

- 1) Verify that your device is connecting to the Mobile Wi-Fi.
- 2) Verify that you entered the correct IP address http://tplinkmifi.net.
- 3) Verify that your device is obtaining an IP address automatically.

FAQ2. What should I do when one of the following messages appears on the screen or I cannot access the Internet?

Tip 1: PIN Required

Open your web browser and type http://tplinkmifi.net or http://192.168.0.1 into the address bar on your PC, then enter the default password admin, and click <a href="https://doi.org/10.168.0.1 into the address bar on your PC, then enter the default password admin, and click <a href="https://doi.org/10.168.0.1 into the address bar on your PC, then enter the default password admin, and click <a href="https://doi.org/10.168.0.1 into the address bar on your PC, then enter the default password admin, and click <a href="https://doi.org/10.168.0.1 into the current SIM card status is "PIN Locked", you will need to unlock it using the PIN code.



Tip 2. No SIM Card

Power off the Mobile Wi-Fi and reinstall the SIM card.

Tip 3. No Service

- Verify that your SIM card is an LTE, WCDMA or GSM SIM card;
- · Verify that your SIM card is in your carrier's service area and has sufficient credit;
- Verify that your carrier parameters are correct:
 On your phone, log into the web management page, go to Dial-up > View profile details to verify if APN, Username and Password are correct. If not, return to the Dial-up page and create a new profile with the correct information. Then click Done and confirm at the prompt.

FAQ3. What should I do if my Internet speed is slow?

Tip 1:

If you are experiencing intermittent slow Internet connection, you can switch between 2.4GHz and 5GHz bands for better connectivity. From the Menu screen, go to Wi-Fi Band. Tip 2:

The 4G network may be temporarily unavailable in your current location. From the Menu screen, go to Network Mode and try a different network.

FAQ4. How do I restore factory default settings?

Tip 1:

Open your web browser and type http://192.168.0.1 into the address bar on your PC, then enter the default password admin, and click Login. Go to "Advanced->Device->Factory Defaults", and click Restore.

Tip 2:

While the Mobile Wi-Fi is powered on, remove the cover. Use a pin to press and hold the Reset button until all LEDs turn on momentarily.

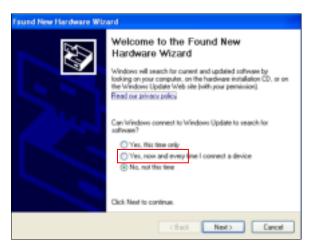
Restoring the Mobile Wi-Fi to its factory defaults will clear all previous settings and you have to reconfigure it.

FAQ5. How to share 3G/4G connection via USB?

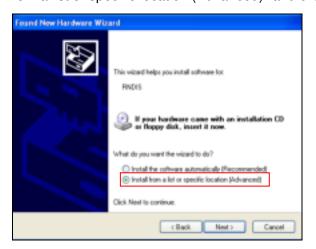
This function (also called as RNDIS) is plug and play in windows Vista, windows 7 and windows 8. But in windows XP, you will need to install the driver manually.

For windows XP:

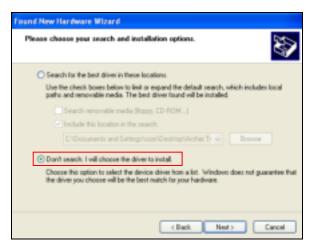
Step 1: After you have connected your M7310 to a windows XP computer via USB, there will be a popup window like this. Choose "no, not this time" and click **next**.



Step 2: Choose "Install from a list or specific location (Advanced)" and click next.



Step 3: Choose "Don't search. I will choose the driver to install." and click next.



Step 4: Click Next to continue.



Step 5: Choose "Have Disk -> Browse". Then choose the driver you have downloaded from TP-LINK website and click Open.

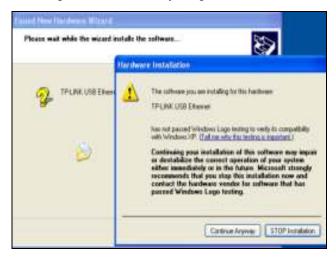


Step 6: Click **OK** to continue.

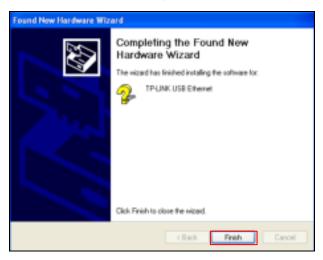


Step 7: Click Next to continue.

Step 8: You may get a warning like this. Please just ignore it.



Step 9: Click **Finish**, then this windows XP computer will be able to go to Internet.



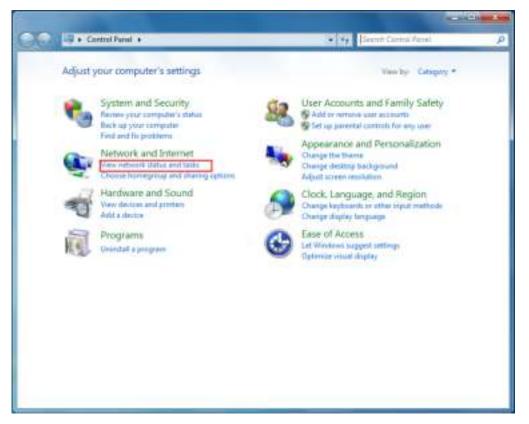
Appendix B: Configuring the PC

In this section, we'll introduce how to install and configure the TCP/IP correctly in Windows 7. First make sure your Ethernet Adapter is working, refer to the adapter's manual if needed.

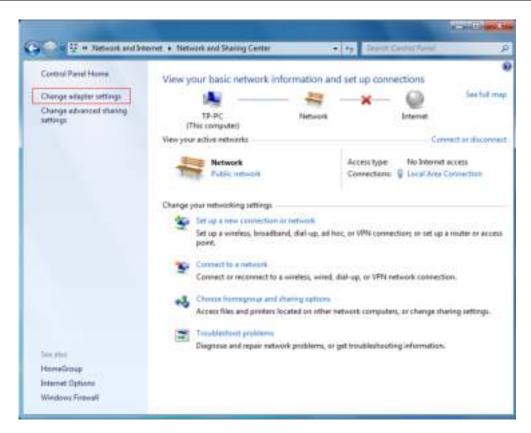
1) On the Windows taskbar, click the **Start** button, and then click **Control Panel**.



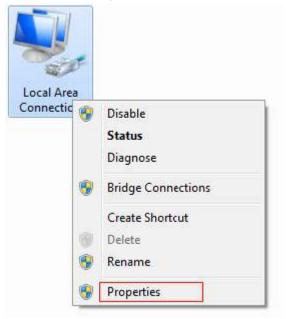
2) Click the View network status and tasks.



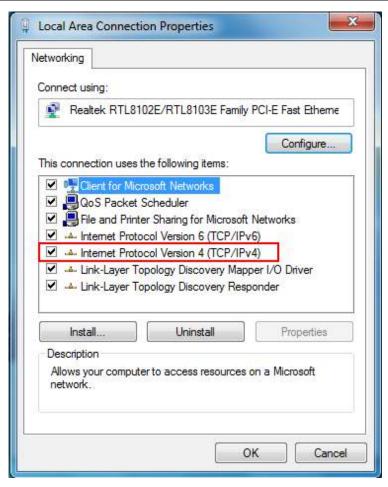
3) Click the Change adapter settings.



4) Click the right button, and Select **Properties**.



5) In the prompt page that showed below, double click on the **Internet Protocol Version 4** (TCP/IPv4).

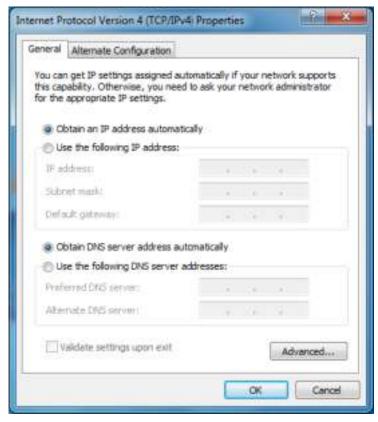


6) The following Internet Protocol Version 4 (TCP/IPv4) Properties window will display and the IP Address tab is open on this window by default.

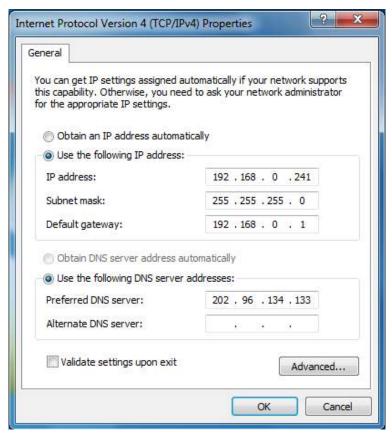
You have two ways to configure the TCP/IP protocol below:

Setting IP address automatically

Select Obtain an IP address automatically, Choose Obtain DNS server address automatically, as shown in the Figure below:



- > Setting IP address manually
- a. Select **Use the following IP address** radio button. And the following items available.
- b. If the Mobile Wi-Fi's LAN IP address is 192.168.0.1, type IP address is 192.168.0.x (x is from 2 to 254), and **Subnet mask** is 255.255.255.0.
- c. Type the Mobile Wi-Fi's LAN IP address (the default IP is 192.168.0.1) into the **Default** gateway field.
- d. Select Use the following DNS server addresses radio button. In the Preferred DNS Server field you can type the DNS server IP address, which has been provided by your ISP.



7) Now click **OK** to keep your settings.

Appendix C: Specifications

General		
Standards	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n	
Network Type	4G:FDD-LTE/ TDD- LTE	
	3G: DC-HSPA+/HSPA/UMTS 2G: EDGE/GRPS/GSM	
Certification	CE, RoHS	
Dimension	98.5*60.5*16mm	
Interface	One Micro USB port, One SIM card slot, One Micro SD Memory card slot	
Button	Power On/Off Button, RESET button, Menu button	
Home Screen Display	Signal strength; 4G/3G/2G Network Type and Internet Connection;	
	■ Data Roaming;	Unread Messages;
	Wi-Fi connection;	100% Remaining Battery;
	560MB Cumulative Traffic Usage;	5.0 M/S 1 Download speed;
Menu Screen Display	Home; Device Info;	Power Saving ;
	WPS; Swi-Fi Band;	Network Mode;
	Data Roaming;	EApp Download;
Power Supply	Internal 2000mAh Rechargeable Li-ion Battery	
Wireless		
WWAN Band	FDD-LTE (800/900/1800/2100/2600MHz)	
	TDD-LTE (2300/2500/2600MHz)	
	DC-HSPA+/HSPA/UMTS (900/1800/2100MHz)	
	EDGE/GPRS/GSM (850/900/1800/1900MHz)	
Data Rate	Download: 150Mbps	
	Upload: 50Mbps	
Wi-Fi Frequency	2.4-2.4835GHz,5.15-5.25GHz,5.725-5.825GHz	
EIRP	<20dBm	
Wi-Fi Security	Support WPA-PSK/WPA2-PSK, Wireless MAC Filtering	
Antenna	Internal Antenna	
Environment		
Temperature	Operating : 0°C~35°C	
	Storage: -20℃~60℃	
Humidity	Operating: 10% ~ 90% RH, Non-condensing	
	Storage: 5% ~ 90% RH, Non-condensing	

Appendix D: Glossary

- 802.11n 802.11n builds upon previous 802.11 standards by adding MIMO (multiple-input multiple-output). MIMO uses multiple transmitter and receiver antennas to allow for increased data throughput via spatial multiplexing and increased range by exploiting the spatial diversity, perhaps through coding schemes like Alamouti coding. The Enhanced Wireless Consortium (EWC) [3] was formed to help accelerate the IEEE 802.11n development process and promote a technology specification for interoperability of next-generation wireless local area networking (WLAN) products.
- 802.11b The 802.11b standard specifies a wireless networking at 11 Mbps using direct-sequence spread-spectrum (DSSS) technology and operating in the unlicensed radio spectrum at 2.4GHz, and WEP encryption for security. 802.11b networks are also referred to as Wi-Fi networks.
- > **802.11g** specification for wireless networking at 54 Mbps using direct-sequence spread-spectrum (DSSS) technology, using OFDM modulation and operating in the unlicensed radio spectrum at 2.4GHz, and backward compatibility with IEEE 802.11b devices, and WEP encryption for security.
- > **DHCP** (**D**ynamic **H**ost **C**onfiguration **P**rotocol) A protocol that automatically configure the TCP/IP parameters for the all the PC(s) that are connected to a DHCP server.
- > ISP (Internet Service Provider) A company that provides access to the Internet.
- SSID A Service Set Identification is a thirty-two character (maximum) alphanumeric key identifying a wireless local area network. For the wireless devices in a network to communicate with each other, all devices must be configured with the same SSID. This is typically the configuration parameter for a wireless PC card. It corresponds to the ESSID in the wireless Access Point and to the wireless network name.
- Wi-Fi A trade name for the 802.11b wireless networking standard, given by the Wireless Ethernet Compatibility Alliance (WECA, see http://www.wi-fi.net), an industry standards group promoting interoperability among 802.11b devices.
- > WLAN (Wireless Local Area Network) A group of computers and associated devices communicate with each other wirelessly, which network serving users are limited in a local area.