

TP-LINK®

User Guide

MA180

3.75G HSUPA USB Adapter



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FCC STATEMENT



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

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

This 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.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

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

Note: The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

CE Mark Warning

CE 1588

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Industry Canada Statement:

This device complies with RSS-210 of the Industry Canada 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.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes:

- (1) Le dispositif ne doit pas produire de brouillage préjudiciable, et
- (2) Ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

NOTE IMPORTANTE:

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

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DECLARATION OF CONFORMITY

For the following equipment:

Product Description: **3.75G HSUPA USB Adapter**

Model No.: **MA180**

Trademark: **TP-LINK**

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 1999/5/EC, Directives 2004/108/EC, Directives 2006/95/EC, Directives 1999/519/EC, Directives 2011/65/EU

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

ETSI EN 301 908-1 & ETSI EN 301 908-2

ETSI EN 301 489-1 & ETSI EN 301 489-24

EN60950-1:2006+A11:2009+A1:2010

EN62311:2008

The product carries the CE Mark:

CE 1588

Person is responsible for marking this declaration:



Yang Hongliang

Product Manager of International Business

Date of issue: 2012

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Package Contents

The following contents should be found in your package:

- One MA180 3.75G HSUPA USB Adapter
- Quick Installation Guide

 Note:

Make sure that the above items are contained in the package. If any of the above items are damaged or missing, please contact your distributor.

Chapter 1. Product Overview

1.1 Introduction

TP-LINK's 3.75G HSUPA USB Adapter, MA180 allows you to acquire 3G mobile broadband access simply by inserting a standard 3G SIM/USIM card into the Adapter and plugging it into your laptop or desktop computer. It supports the latest 3.75G HSUPA technology, which provides improved data transfer rates. Equipped with its internal antennas, Micro SD card slot and SIM/USIM card slot, the MA180 is a great choice for you to connect to the Internet in locations that are unable to receive conventional broadband.

1.2 Conventions

The 'Adapter' mentioned in this User Guide stands for MA180 3.75G HSUPA USB Adapter without any explanations.

1.3 Main Features

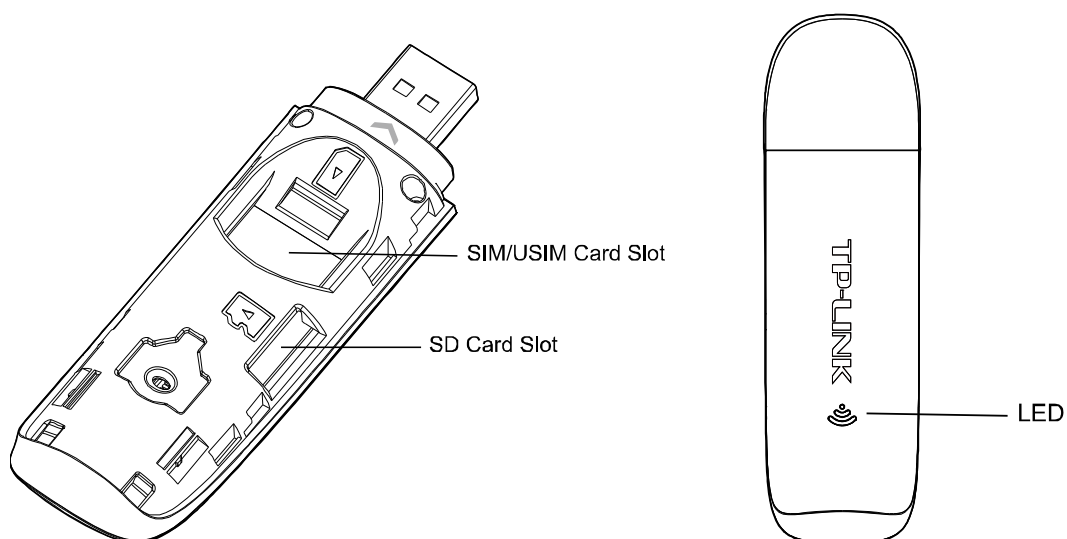
- Download speed up to 7.2Mbps
- Upload speed up to 5.76Mbps
- Micro SD card slot for up to 32GB of storage

1.4 System Requirement

Recommended system configuration:

- Operating System: Windows 7/Vista/XP 32/64 bit
- CPU: 500MHz Pentium or above
- Hard Disk: 20G or above
- RAM: 128M or above

1.5 Hardware Overview



LED Explanation:

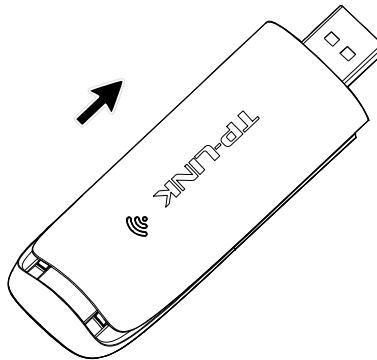
Status	Indication
Solid Red	The Adapter is initializing.
Flashing Red	No SIM/USIM card is inserted.
Flashing Green	The SIM/USIM card has registered to the network.
Solid Green	The network is available with a successful Internet connection.

Chapter 2. Installation

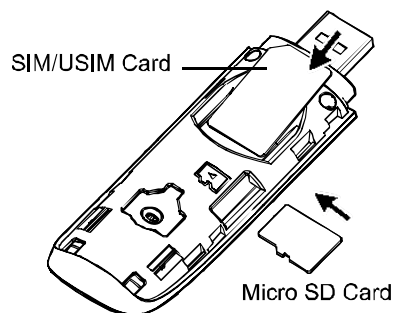
2.1 Hardware Installation

Install the Adapter following the steps below:

1. Open the cover.



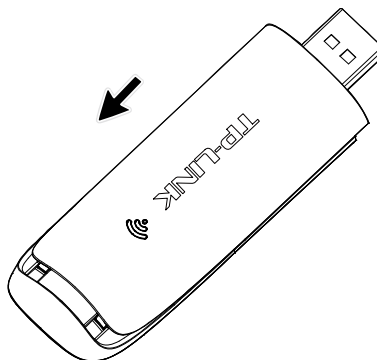
2. Insert the SIM card and the Micro SD card in the direction indicated on the Adapter.



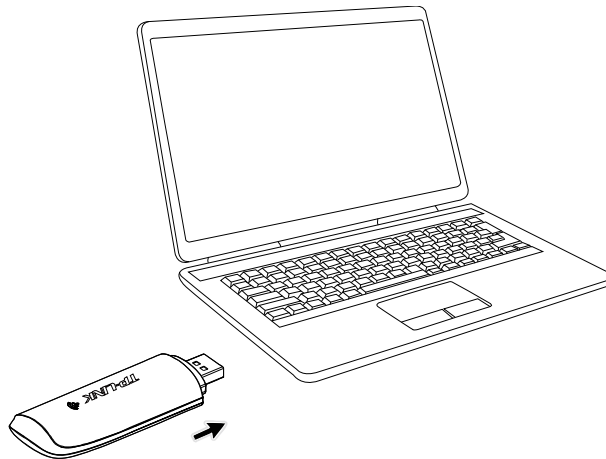
 Note:

A Micro SD card is an optional accessory. You need to buy one yourself. To remove the Micro SD card, press it to eject it from the Adapter.

3. Replace the cover.



4. Plug the Adapter directly into the USB port on your computer.



2.2 Software Installation

The MA180's Setup Wizard will guide you through the installation procedures. The procedures in different systems are quite similar. Here we use the procedures in Windows 7 as an example.

1. The window as shown in Figure 2-1 will appear on your desktop. Click the **Run AutoRun.exe**.

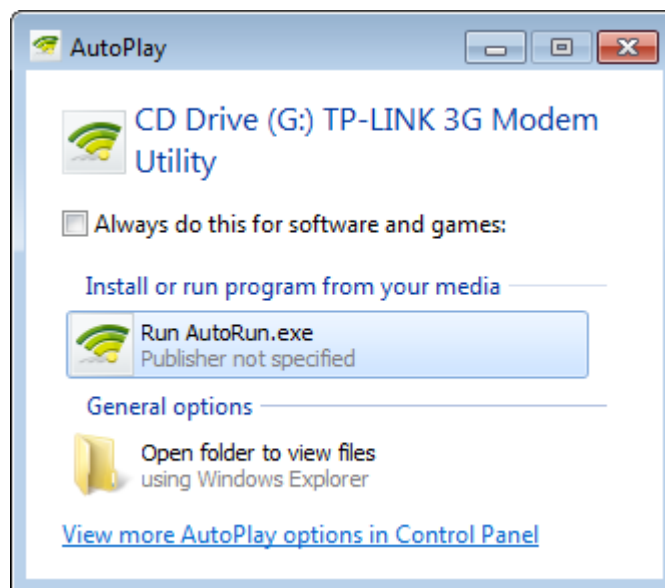


Figure 2-1

 Note:

The device will appear as a virtual disk in **My Computer**. If the above window doesn't appear, please go to **My Computer** and click the icon to start the installation program.

2. The **InstallShield Wizard** window will appear. Click **Next** to continue.

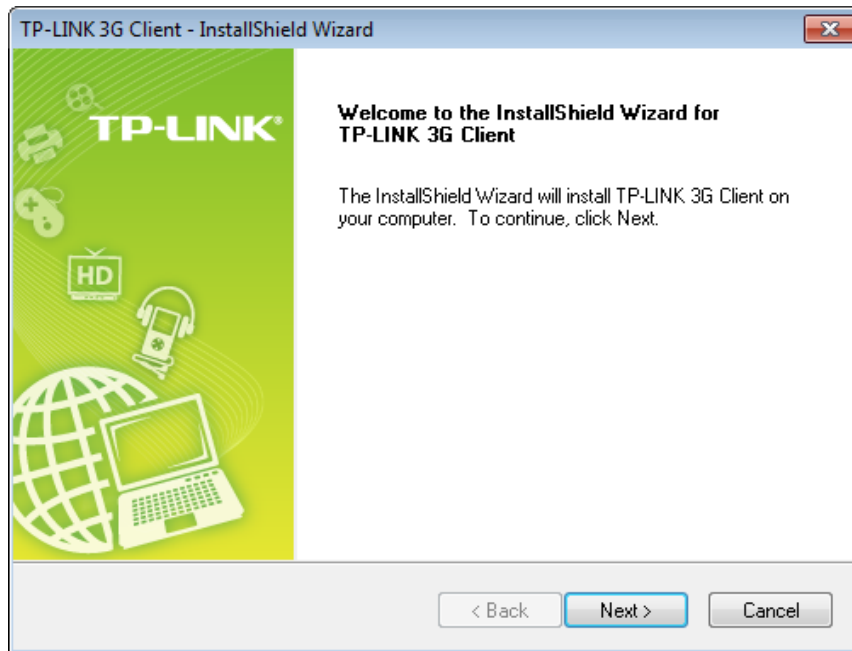


Figure 2-2

3. Click **Change** to specify the destination you wish the application to be located or leave it in default location. Click **Next** to continue.

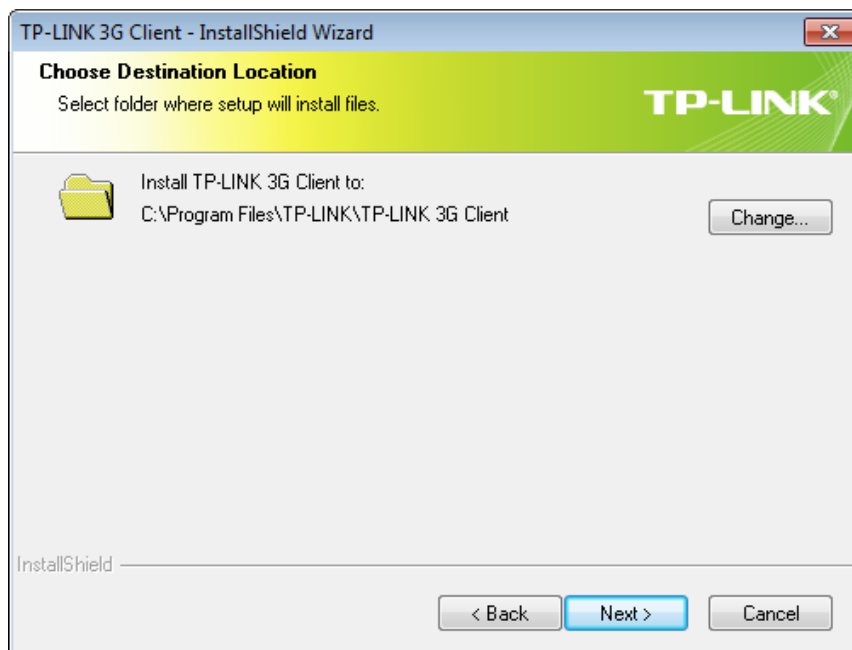


Figure 2-3

4. Click **Install** to begin the installation.

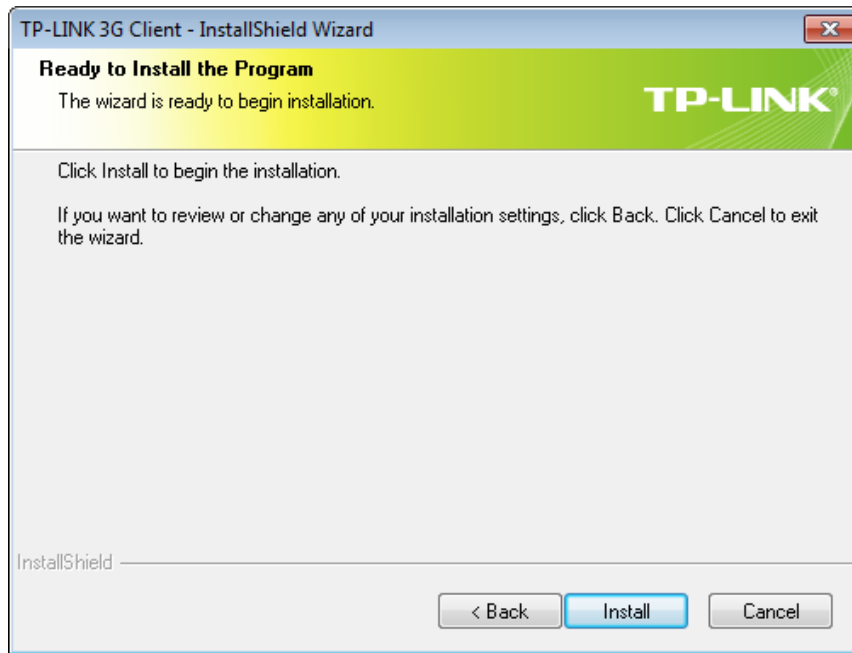


Figure 2-4

5. The installation process may take 1~2 minutes. Please wait.

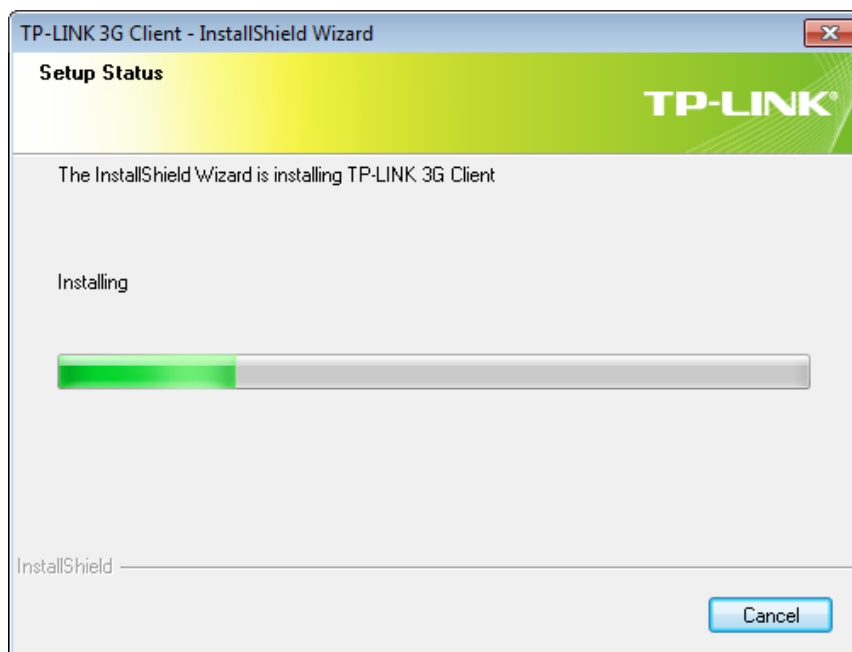


Figure 2-5

6. The screen as shown in Figure 2-6 will then appear. Click **Finish** to complete the setup.

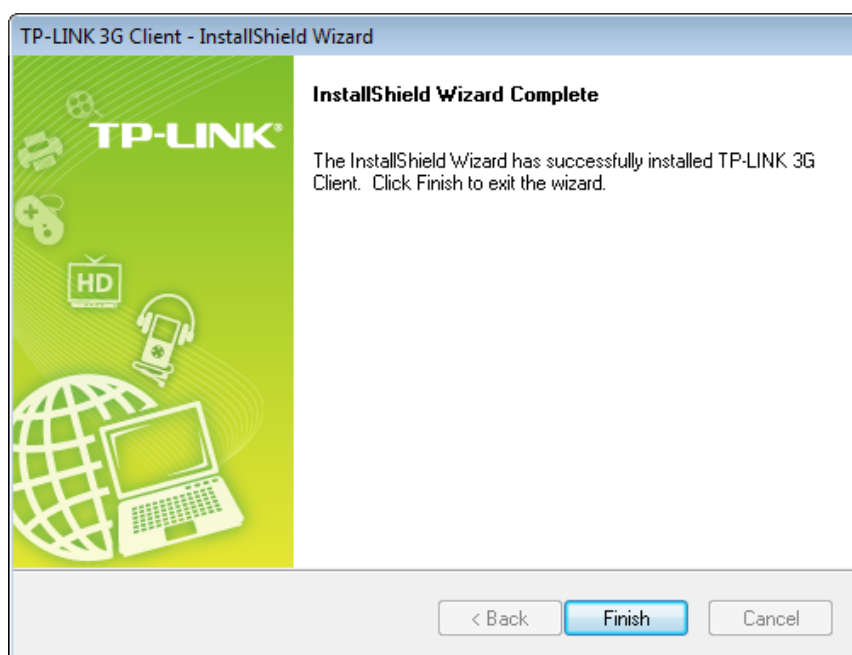


Figure 2-6

 Note:

After installation, the icon  will appear on your desktop. Double-clicking it can start the utility.

Chapter 3. Connect to Network

With both the hardware and software successfully installed into your computer, you can quickly connect to network following the steps below.

1. After installation, the utility will automatically appear on your desktop. Click on the icon  to display the **Network** interface.



Figure 3-1

2. The network parameters will be configured automatically according to the SIM/USIM card inserted. With successful configuration, a profile name (your ISP name by default) will appear on the interface. Here we use the Profile 1 as an example. Click **Connect** to establish an Internet connection.



Figure 3-2

3. If you see the **Disconnect** button and the icon , it indicates that you are now connected to the Internet and can enjoy using it. To disconnect from the Internet, click **Disconnect**.



Figure 3-3

Chapter 4. Management

This section will show you how to manage the MA180 using the utility.

The MA180 uses utility as the management software. The utility provides you with an easy interface to use various functions and configure the MA180. Double-clicking on the  icon on your desktop will start the utility.

4.1 Interface Introduction

There are various icons on the interface. The followings are detailed descriptions.

4.1.1 Functional Button Icons

There are six functional button icons: **Network**, **Message**, **Phonebook**, **Statistic**, **Settings** and **Help**. Click any of them, and you will see the corresponding interface.

Click...	To...
	Display the Network interface.
	Display the Message interface.
	Display the Phonebook interface.
	Display the Statistic interface
	Display the Settings interface.
	Display the Help interface.

4.1.2 Status Information Icons

These icons indicate the current system status. The following table lists the status information.

Status	Information
	Indicates the network's signal strength.
ISP Name	Displays the name of your Internet service provider.
	Indicates that the current Internet status is disconnected.
	Indicates that the current Internet status is connected.
	Indicates that a new message is received (with visual prompt enabled) or there are unread messages.
	Indicates that the SIM/USIM card has not been inserted.
	Indicates that the SIM/USIM card has been inserted.
	Indicates that the PIN protection has been enabled.
	Indicates that the Adapter has not been connected to your computer.
	Indicates that the Adapter has been connected to your computer.

4.2 Message

Click on the icon  , and you will see the **Message** interface as shown in Figure 4-1.

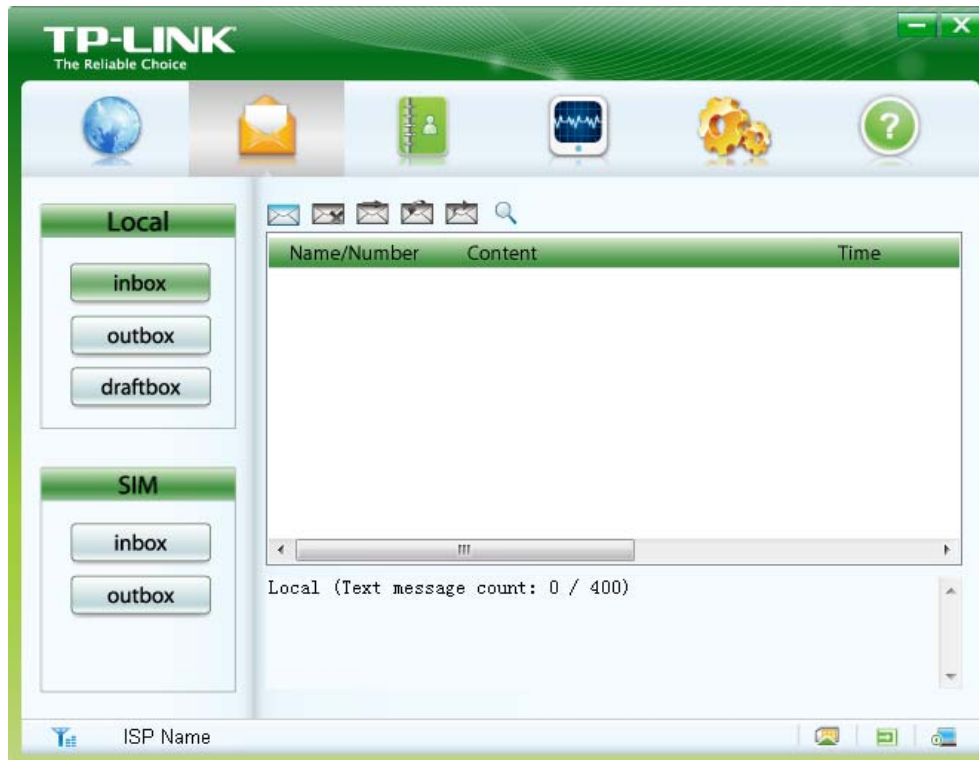


Figure 4-1

- **Inbox:** Saves the received messages.
- **Outbox:** Saves the sent messages.
- **Draftbox:** Saves the unsent messages.

 Note:

The sent messages and the unsent messages can only be saved on PC.

4.2.1 Create and Send a Message

To create and send a new message, follow the steps below:

1. Click on the icon  above the message list to display the **New Message** interface as shown in Figure 4-2.



Figure 4-2

2. Enter the recipient's number. There are two methods:
 - 1) Enter the recipient's number directly.
 - 2) Click **Send to...** and then select a number in the **Choose Number** interface, as shown in Figure 4-3.

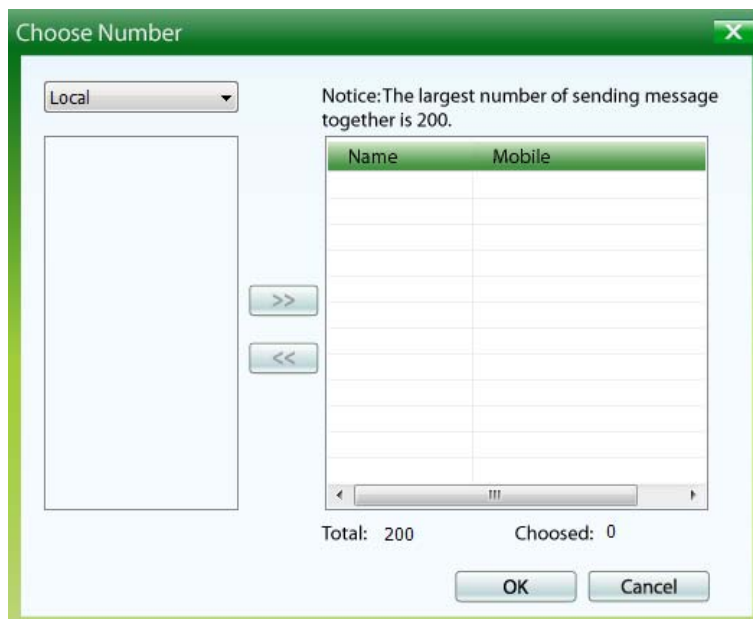


Figure 4-3

3. Enter the message content. After the edition, you can choose the following options:
 - Click **Send** to send the message.
 - Click **Save** to save the message as a draft.
 - Click **Cancel** to exit edition of the current message.

 Note:

You can also send mass messages following the above steps.

4.2.2 Search a Message

To search a message, click on the icon  and then a textbox will appear beside it. Enter the name/phone number of the message sender. Then the matched messages will be displayed in the message list area.

4.2.3 View a Message

To view a message, follow the steps below:

1. Select a message to view.
2. Click the selected message. The name and phone number of the message sender, message content and receiving time will be displayed below the message list.

The message can't be managed by right-clicking it. Please make use of the icons displayed above the message list for the following options:



: Delete the selected message.



: Re-edit the content of the selected message.



: Reply to the sender of the selected message.



: Forward the selected message to other recipients.

 Note:

1. You can press and hold the **Ctrl** or **Shift** and then click the selected messages. You can also press **Ctrl + A** to select all the messages in the list. Then you can click on the icon  to delete the selected messages at the same time.
2. If you choose to delete a message, it will be deleted permanently. Therefore, be cautious while doing this.
3. You can forward only one message at a time.

4.2.4 Message Settings

You can set visual and audio prompt as well as save mode for the received messages. Click on the icon , and then click the **Message** button to display the interface as shown in Figure 4-4.



Figure 4-4

4.2.4.1 Alert Settings

You can set visual and audio prompt for the received messages in the **Text message handling** area.

➤ **Show a notification when a new text message arrives**

With this item checked, when a new message arrives, a dialog box read “**New message in!**” will appear on the lower-right corner of your computer screen for about three seconds and then disappear. Meanwhile the icon  will appear at the bottom of the utility interface. Click the words or go to the message interface to view the new message.

➤ **Play a sound when a new text message arrives**

With this item checked, the selected tone will be played when a new message arrives. To select a tone file, follow the steps below:

1. Type the path and file name of the tone file into the “**Sound file name**” field or click the **Browse** button to locate a tone file.
2. Click **Test** to play the tone; click **Stop** to stop playing the tone.

4.2.4.2 Save Mode Settings

You can specify a location to save the received messages in the **New Message Save Mode** area. When a new message arrives, it will be saved in the specified location.

4.3 Phonebook

Click on the icon  , and you will see the **Phonebook** interface, as shown in Figure 4-5.

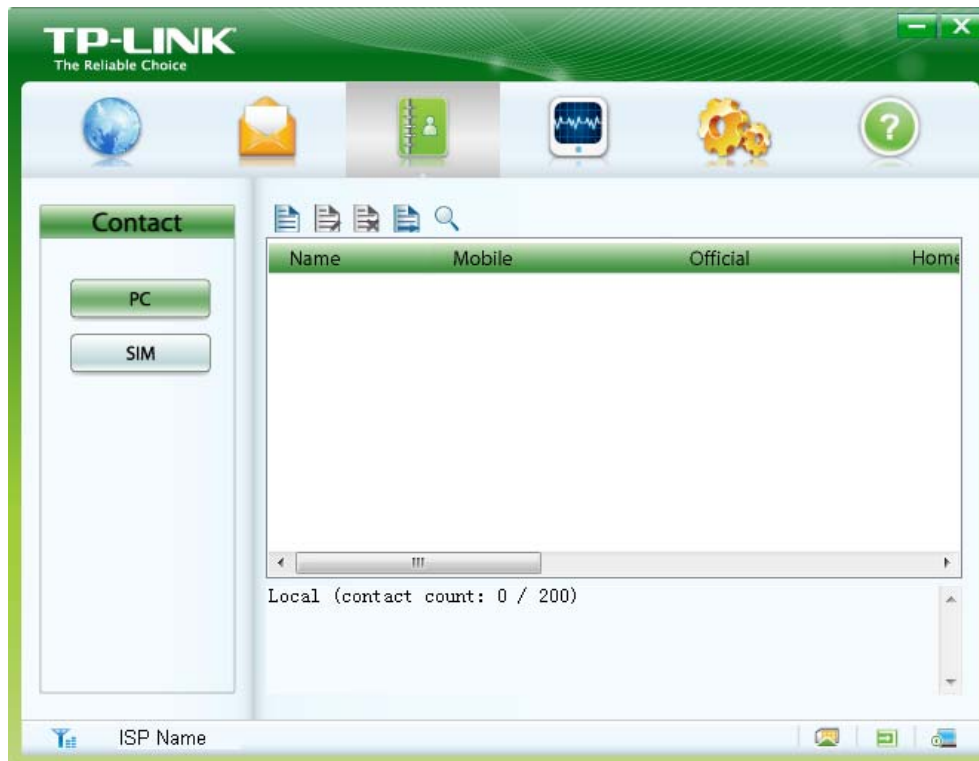


Figure 4-5

4.3.1 Create a Contact

To create a contact, follow the steps below:

1. Choose a location for the new contact by clicking the **PC** button or the **SIM** button.
2. Click on the icon  above the contact list to display the **New Contact** interface. It differs according to the location you choose.
 - 1) If you choose to save the contact on the SIM/USIM card, the interface as shown in Figure 4-6 will appear.

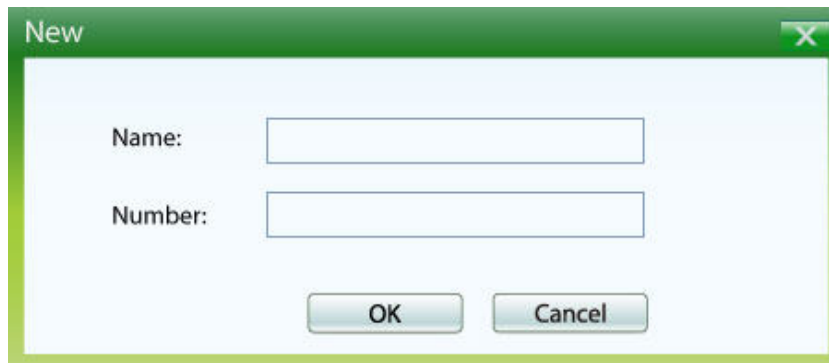
A dialog box titled "New" with a green header bar and a close button (X) in the top right corner. The dialog has a light blue background. It contains two text input fields: the first is labeled "Name:" and the second is labeled "Number:". Below the input fields are two buttons: "OK" and "Cancel".

Figure 4-6

- 2) If you choose to save the contact on your PC, the interface as shown in Figure 4-7 will appear.

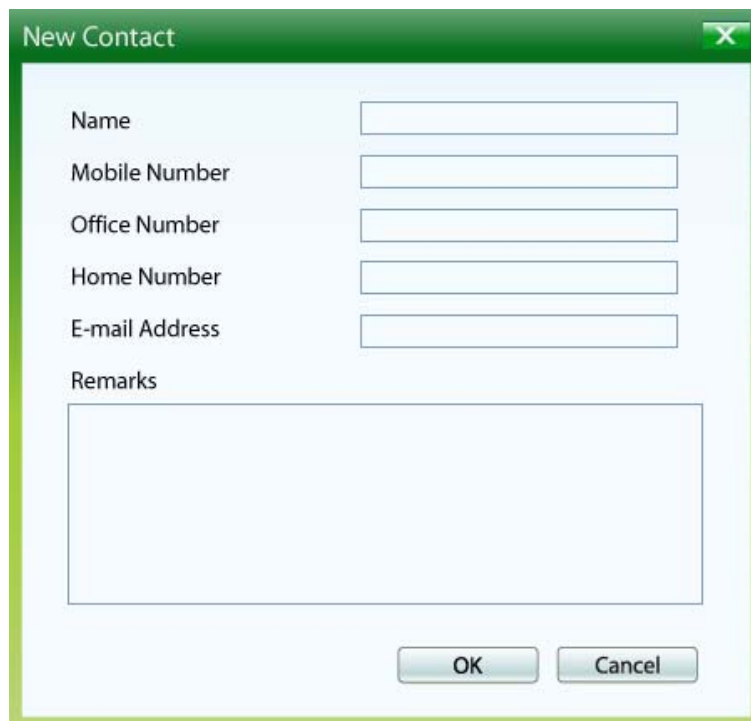
A dialog box titled "New Contact" with a green header bar and a close button (X) in the top right corner. The dialog has a light blue background. It contains five text input fields: "Name", "Mobile Number", "Office Number", "Home Number", and "E-mail Address". Below these fields is a larger text area labeled "Remarks". At the bottom of the dialog are two buttons: "OK" and "Cancel".

Figure 4-7

3. Enter the above information.
4. Click **OK** to save the contact or click **Cancel** to exit edition of the current contact.

4.3.2 Search a Contact

To search a contact, click on the icon  and a textbox will appear beside it. Enter the name/phone number and then the matched contacts will be displayed in the contact list area.

4.3.3 View a contact

To view a contact, follow the steps below:

1. Choose your desired location.
2. Select a contact to view.
3. Click the selected contact. The contact information will be displayed below the contact list.

The contact can't be managed by right-clicking it. Please make use of the icons above the contact list for the following options:



: Edit the selected contact.



: Delete the selected contact.



: Send a message to the mobile number of the selected contact.

Note:

If you choose to delete the selected contact, it will be deleted permanently. Therefore, be cautious while doing this.

4.4 Statistic

This function allows you to view the current network traffic. Click on the icon , and you will see the **Statistic** interface as shown in Figure 4-8. The navigation tree on the left displays traffic statistics. The diagram on the right displays the velocity waveform.

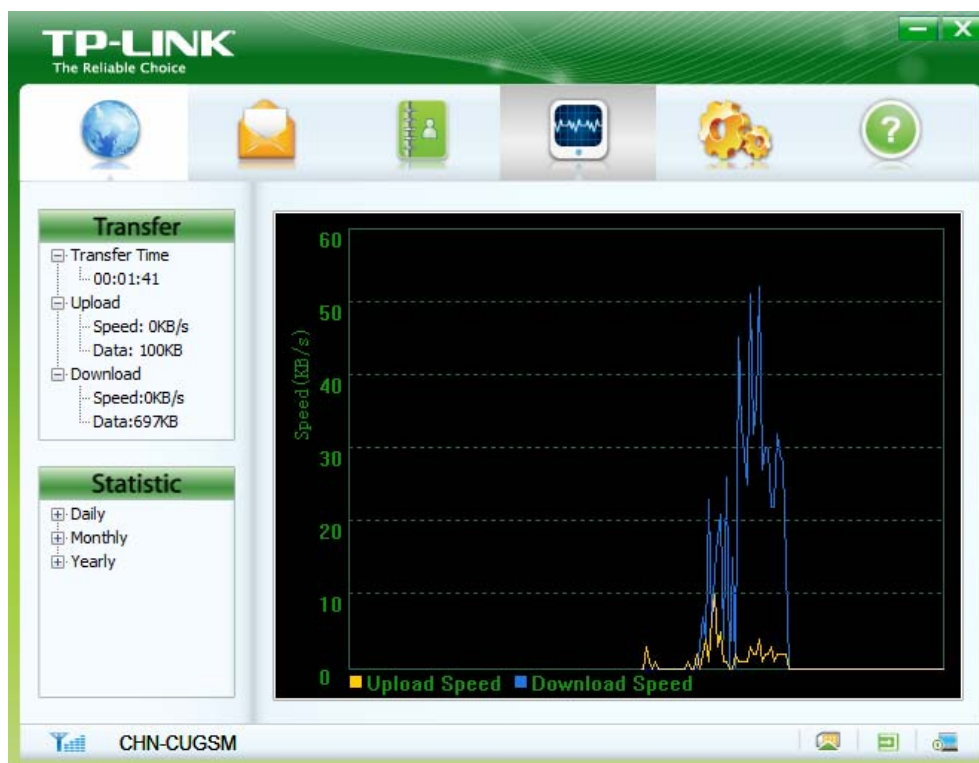


Figure 4-8

4.4.1 View the Statistics

Click the following tabs in the navigation tree to view corresponding statistics.

- **Transfer Time:** Displays the duration of the current connection.
- **Upload:** Displays the upload speed and date of the current connection.
- **Download:** Displays the download speed and date of the current connection.
- **Daily:** Displays the daily uploaded and downloaded data.
- **Monthly:** Displays the monthly uploaded and downloaded data.
- **Yearly:** Displays the yearly uploaded and downloaded data.

4.4.2 Reset the Statistics

To reset the statistics, right-click your desired tab and then choose **Reset Statistics**. Then the dialog box as shown in Figure 4-9 will appear. Click **OK**.

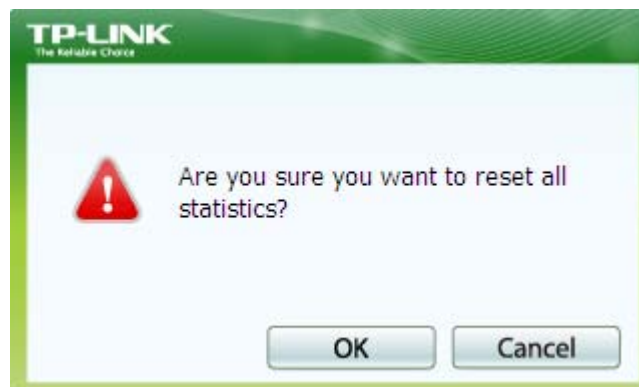


Figure 4-9

Note:

The daily/monthly/yearly uploaded and downloaded data can be reset while the transfer time, upload/download speed and date can not be reset.

4.5 Settings

This section introduces how to configure the Adapter. Click on the icon  to display the **Settings** interface.

4.5.1 Connecting

There is much ISP information embedded in the Adapter. If the ISP information of the SIM/USIM card inserted is embedded in the Adapter, the parameters will be set automatically. With successful configuration and, the dial-up profile named after your ISP by default will appear in the **Profile Name** field. You just need to click the **Connect** button to use the Adapter's network-related

functions. Otherwise, nothing will be displayed in the **Profile Name** field and you need to create a new dial-up profile according to the actual situation. Click the **Connecting** button, and you will see the interface as shown in Figure 4-10.



Figure 4-10

4.5.1.1 Create a Profile

To create a profile, follow the steps below:

1. Click **New** to set the Profile Name, APN (Access Point Name) and Authentication.
2. Click the **Advanced** button, and you will see the **Advanced** interface as shown in Figure 4-11. Complete the parameters as required.

The image shows a software window titled "Advanced" with a green title bar and a close button (X) in the top right corner. The window contains four sections of settings, each with a light blue header and a white body:

- IP Settings:** Contains two radio buttons, "Dynamic" (selected) and "Static". Below them is a text input field labeled "IP:".
- Authentication Protocol Settings:** Contains two checkboxes, "CHAP" (checked) and "PAP" (unchecked).
- DNS Settings:** Contains two radio buttons, "Dynamic" (selected) and "Static". Below them are two text input fields labeled "Primary DNS:" and "Secondary DNS:".
- WINS Settings:** Contains two radio buttons, "Dynamic" (selected) and "Static". Below them are two text input fields labeled "Primary WINS:" and "Secondary WINS:".

At the bottom right of the window are two buttons: "Save" and "Cancel".

Figure 4-11

3. Click **Save** to save the advanced settings and return to the **Dial Config** interface.
4. Click **Save** to save this profile, or click **Cancel** to exit the current edition.

 Note:

For details about the above parameters, please contact your ISP.

4.5.1.2 Edit a Profile

To edit a profile, follow the steps below:

1. Select a profile from the drop-down list.
2. Click **Edit** to modify the Profile Name, APN (Access Point Name) and Authentication.
3. Click **Advanced** to modify the advanced settings.
4. Click **Save** to save the changes and return to the **Dial Config** interface.
5. Click **Save** to save the changes, or click **Cancel** to exit the current modification.

4.5.1.3 Delete a Profile

To delete a profile, follow the steps below:

1. Select a profile from the drop-down list.
2. Click **Delete** and a dialog box will appear.

3. Click **Yes** to delete the profile or click **No** to cancel the deletion.

 Note:

The default profile can be edited but can not be deleted.

4.5.1.4 Set a Profile default

To set a profile default, follow the steps below:

1. Select a profile from the drop-down list.
2. Click **Default**.

When a profile is set default, the word “Default” will appear in the brackets beside its name, as shown in Figure 4-10. Meanwhile, the profile name displayed on the **Network** interface will also change from the previous one to the specified one without affecting your current Internet connection. When you start the utility next time, you can use the new default profile or choose your desired one from the drop-down list to connect to the Internet.

4.5.2 Security

PIN (Personal Identity Number) code can protect your card from unauthorized use. The followings are detailed instructions about PIN operation.

 Note:

The PIN code and the PUK (PIN Unlocking Key) code are provided along with the SIM/USIM card. For details, please contact your ISP.

4.5.2.1 Enable/Disable the PIN Protection

PIN protection is disabled by default.

To enable it, follow the steps below:

1. Choose **Enable Pin** from the drop-down list, as shown in Figure 4-12.
2. Enter the PIN Value.
3. Click **OK**.

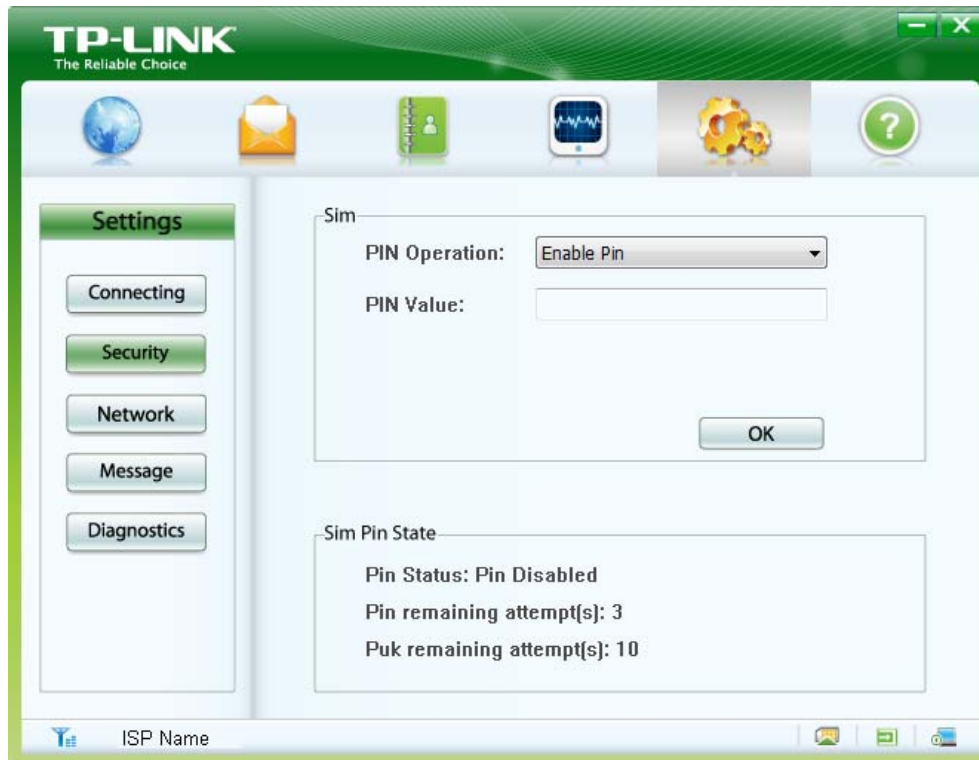


Figure 4-12

To disable it again, follow the steps below:

1. Choose **Disable Pin** from the drop-down list, as shown in Figure 4-13.
2. Enter the PIN Value.
3. Click **OK**.



Figure 4-13

4.5.2.2 Verify the PIN Code

With PIN protection enabled, you need to enter the PIN code when starting the utility again, as shown in Figure 4-14. Enter the correct PIN code and then click **OK** to use the Adapter.

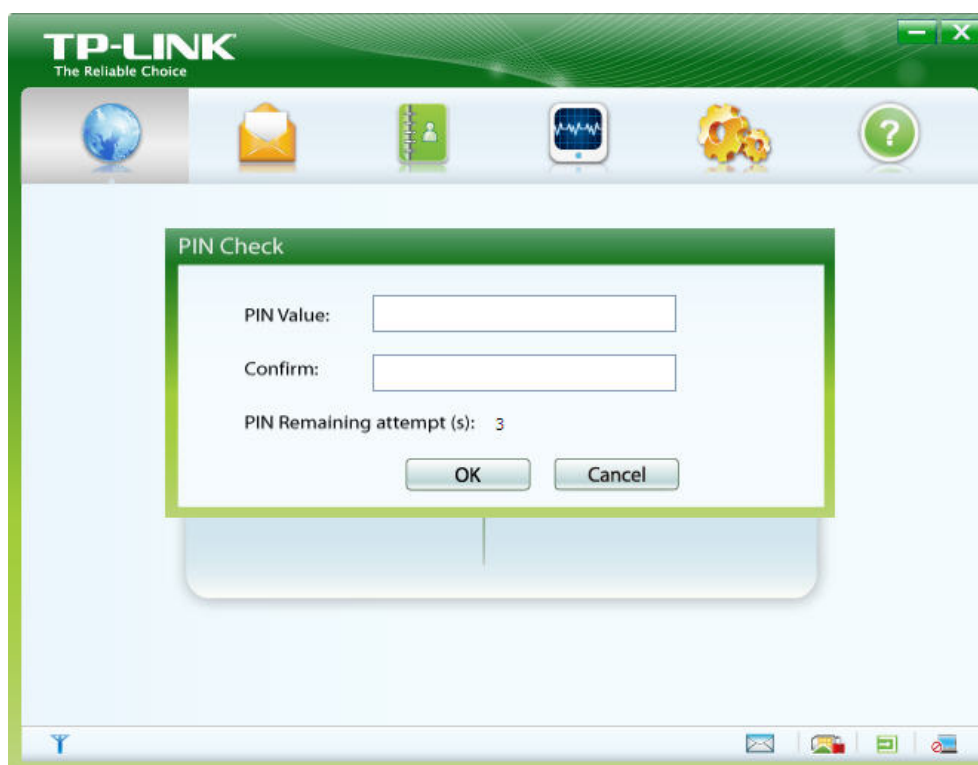


Figure 4-14

If you click the **Cancel** button before entering the PIN code, follow the steps below to verify the PIN protection.

1. Click on the icon  to display the **Settings** interface.
2. Click the **Security** button.
3. Choose **Verify Pin** from the drop-down list, as shown in Figure 4-15.
4. Enter the PIN value.
5. Click **OK** and then you can use the Adapter.



Figure 4-15

Note:

The remaining number of attempts for entering the PIN code is displayed on the interface. If you enter the wrong PIN code for a preset number of times, the SIM/USIM card will be locked and you can not use it to access the Internet until you enter the correct PUK code.

4.5.2.3 Unblock the PIN

When the SIM/USIM card is locked, the **PUK Unblock** dialog box as shown in Figure 4-16 will appear. Enter the PUK code, new PIN and then click **OK** to use the Adapter.

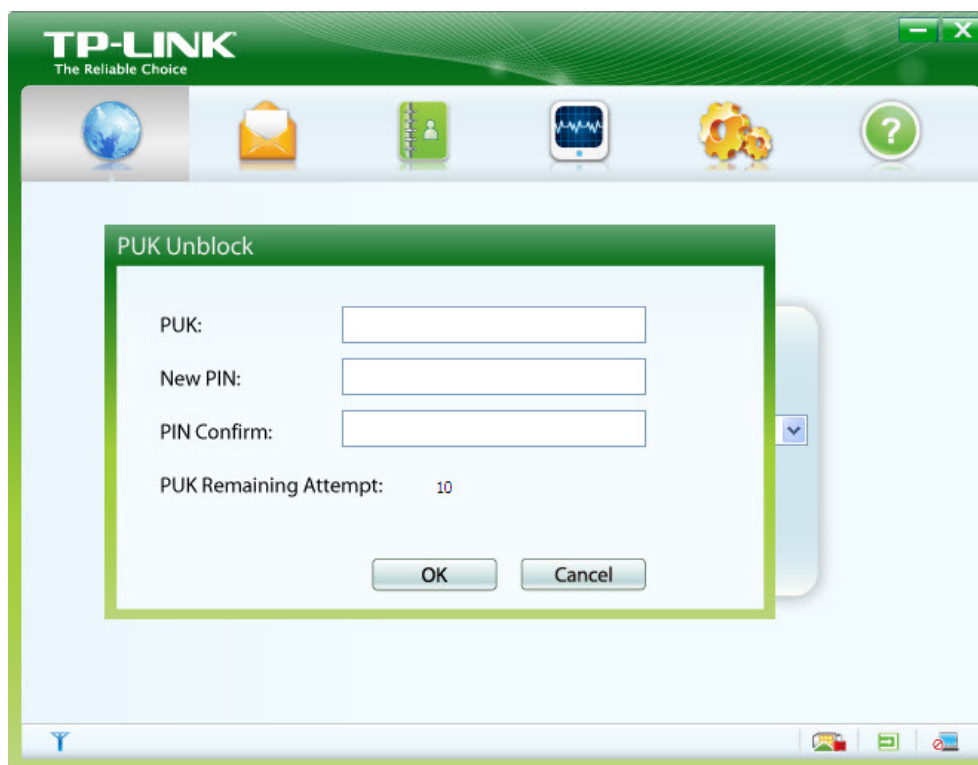


Figure 4-16

If you click the **Cancel** button before entering the PUK code, follow the steps below to unlock the PIN.

1. Click on the icon  to display the **Settings** interface.
2. Click the **Security** button.
3. Choose **Unblock Pin** from the drop-down list, as shown in Figure 4-17.
4. Enter the PUK value.
5. Enter a new PIN code.
6. Enter the new one again.
7. Click **OK** and then the SIM/USIM card is unlocked.



Figure 4-17

Note:

- 1) The remaining number of attempts for entering the PUK code is displayed on the interface.
- 2) The PIN code should be a numeric string of 4~8 digits.

4.5.2.4 Change the PIN Code

To change the PIN code, follow the steps below:

1. Choose **Change Pin** from the drop-down list, as shown in Figure 4-18.
2. Enter the old PIN code.
3. Enter a new PIN code.
4. Enter the new one again.
5. Click **OK** to save the changes.

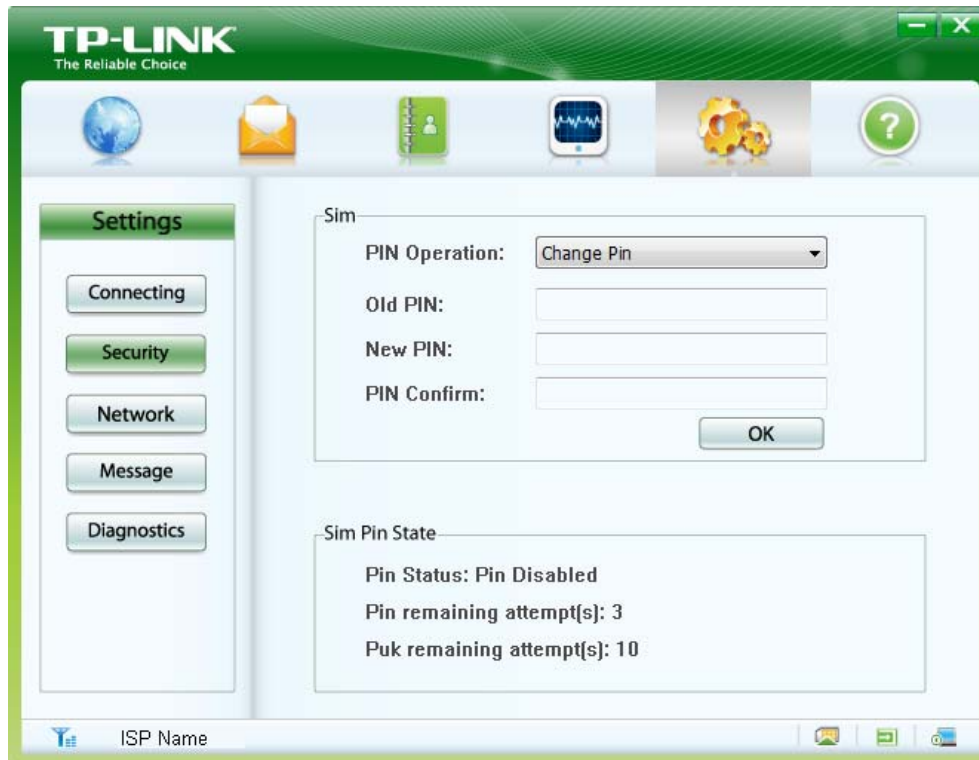


Figure 4-18

4.5.3 Network

You can select the search and registration mode here. Click the **Network** button, and you will see the interface as shown in Figure 4-19.



Figure 4-19

- **Auto search and register:** When you select this mode, the Adapter will automatically search and register to an available network.
- **Manual search and register:** When you select this mode, follow the steps below to register to an available network.
 1. Click **Scan**. After a while, the operator list will appear.
 2. Select an available operator name in the list.
 3. Click **Register**.

 Note:

The items above the operator list indicate which network is available. Those with the **Forbidden** item displayed **No** are available.

4.5.4 Diagnostics

Click the **Diagnostics** button, and then you can view the IMEI information about the Adapter, as shown in Figure 4-20. Click **Refresh** to refresh immediately.

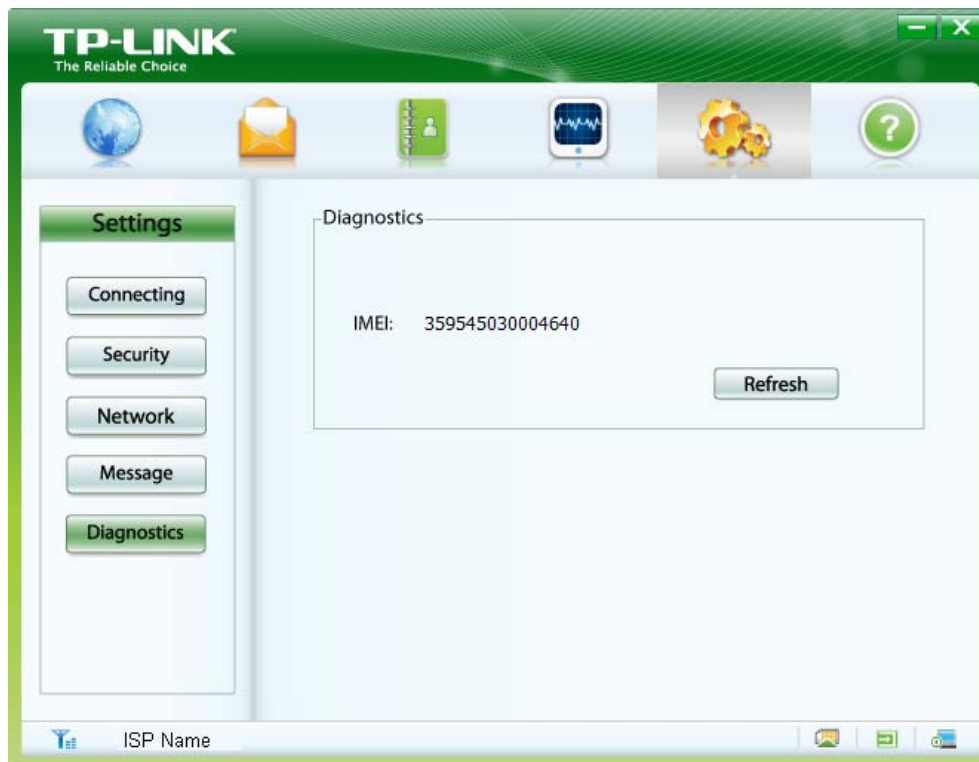


Figure 4-20

4.6 Help

Click on the icon  to display the **Help** interface where you can get information on installation, functions and operation guide, etc.

Appendix: Specifications

Normal	
Network Type	WCDMA
Network Services	HSUPA, HSDPA, UMTS, GPRS, EDGE and GSM
Bands	GSM (850/900/1800/1900MHz), HSUPA (2100MHz)
Data Transfer Rates	Download: 7.2Mbps Upload: 5.76Mbps
Antenna Type	Internal antenna
Interface	USB 2.0 Interface
SIM/USIM Card Slot	Supports standard 6-Pin SIM/USIM card
Micro SD Card Slot	Supports standard Micro SD card up to 32GB
System Requirement	Windows 7/Vista /XP operating systems
Dimensions (W x D x H)	3.90 x 1.10 x 0.55 in. (99 x 28 x 14 mm)
Environmental	
Working Temperature	0°C~40°C (32°F~104°F)
Working Humidity	10% ~ 90% RH, Non-condensing
Storage Temperature	-40°C~70°C (-40°F~158°F)
Storage Humidity	5% ~ 90% RH, Non-condensing