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### **Import and Export Regulations**

Customers shall comply with all applicable export or import laws and regulations and will obtain all necessary governmental permits and licenses in order to export, re-export or import the product mentioned in this manual including the software and technical data therein.

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## **Thank you for purchasing WiMAX CPE!**

### **Before you begin**

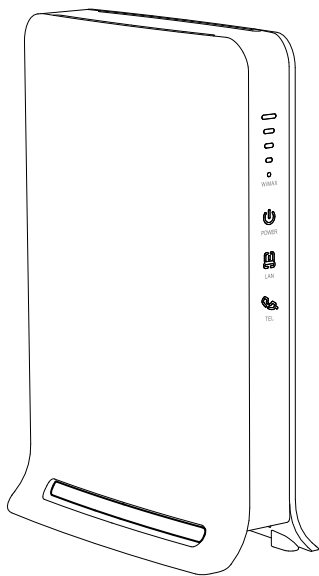
Check the following items in the product package. If you find anything missing or damaged, contact the service provider.

- WiMAX CPE
- Dedicated Power Adapter
- Ethernet Cable
- Quick Start

### **Getting to Know Your CPE**

The supported functions and actual appearance of the CPE may vary with the product you purchase. The following pictures are provided for illustration purpose only.

## Front Panel

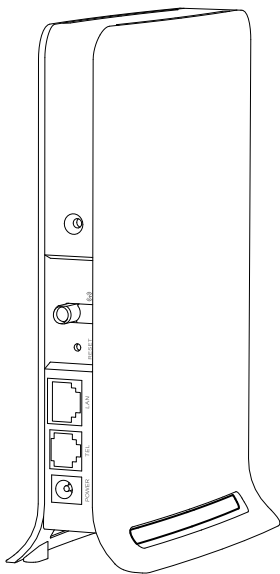



| <b>Indicator</b> | <b>Status</b> | <b>Description</b>   |
|------------------|---------------|--|
| WiMAX            | On            | The indicators indicate the signal strength of the WiMAX network. When all the indicators are on, it indicates that the signal strength is at the highest level. |
|                  | Blink         | The CPE is being upgraded when they blink sequentially. The software is damaged when they blink randomly.  |
|                  | Off           | There is no WiMAX network signal.  |
| POWER            | On            | The CPE is powered on.   |
|                  | Off           | The CPE is powered off.  |
| LAN              | On            | The LAN port is being used.  |
|                  | Blink         | The data is being transmitted.   |
|                  | Off           | The LAN port is unused.  |
| TEL              | On            | The TEL interface is being used.   |
|                  | Blink         | The TEL interface has an incoming call.  |
|                  | Off           | The telephone connected to the TEL port hangs up or the TEL interface is disabled.   |

**NOTE:**

- WiMAX: Worldwide Interoperability for Microwave Access
- CPE: Customer Premises Equipment
- LAN: Local Area Network

## Rear Panel



| Interface   | Description   |
|---|---|
| POWER   | The interface is used to connect to the output interface of the power adapter.  |
| TEL   | The interface is used to connect a telephone line.  |
| LAN   | The interface is used to connect the CPE to the computer.   |
| RESET   | <p>Press and hold the button for one to eight seconds to restart the CPE. Press and hold the button for over eight seconds to restore the default settings of the CPE.</p> <p><b>Once you restore the default settings, all the customized data will be lost. Use this function with caution.</b></p> |
|  | <p>The port is used to connect a compatible external antenna (optional accessory and sold separately). For details about how to install a compatible external antenna and enable it, refer to the Online Help in the Web-based utility.</p> <p><b>CAUTION:</b><br/>Do not touch the port.</p>         |

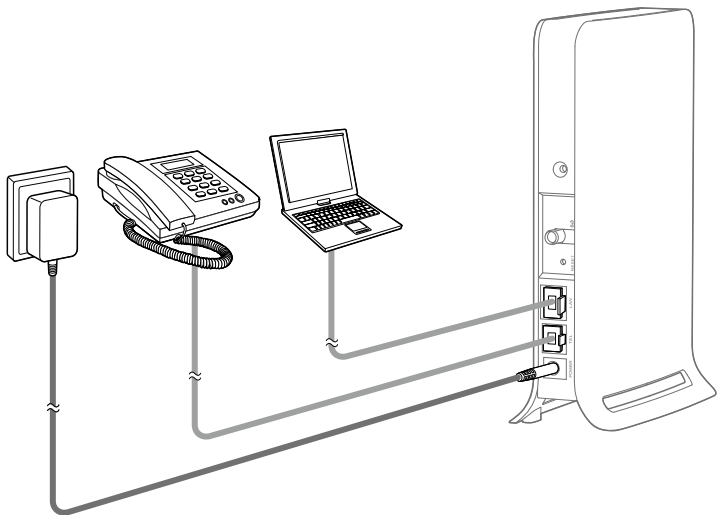
## Preparing for Installation

### Selecting a Proper Installation Position

- Obstacles such as concrete or wooden walls may affect the transmission of WiMAX network signals. Therefore, install the CPE in an open space.
- Keep the CPE away from any household appliance that produces a strong electric or magnetic field, such as a microwave oven, a refrigerator, or a satellite dish antenna.



## Connecting the Cables



Use the cables and the power adapter provided with the product.

The cable connection figure is provided for illustration purpose. You can connect the devices to the CPE according to the actual requirements.

**NOTE:**

During lightning storms, power off the CPE, and do not touch the antenna.

## Logging In to the Web-Based Utility

Take the Windows XP operating system and the Internet Explorer 6.0 as examples.

Ensure that the CPE is connected to the PC. To log in to the Web-based utility, do as follows:

1. Set the IP address of the PC and ensure that the IP address of the PC is in the same network segment as that of the CPE.

**NOTE:**

- By default, the IP address of the CPE is 192.168.1.1 and the subnet mask is 255.255.255.0.
  - If the CPE is working as a routing device, it is recommended that the IP address and DNS settings be obtained automatically.
2. Start the Internet Explorer, enter **http://192.168.1.1** in the address bar, and then press **Enter**.
  3. Enter the user name and the password (both are **user** by default) in the login window, and then click **Login**.
  4. After the user name and the password are verified, you can perform operations on the Web-based utility.

For details about the settings of advanced parameters, see the online help in the Web-based utility. To read the online help, you need to install the Adobe Reader 6.0 or later versions.

## Troubleshooting

### **The power indicator is not on.**

- Ensure that the device is powered on.
- Ensure that the power adapter is compatible with the device.

### **You cannot make calls.**

- Ensure that the telephone is working normally and the telephone line is connected properly.
- Ensure that the VoIP service is configured correctly.

If the problem persists, contact the local service provider.

### **You cannot log in to the Web-based utility.**

- Ensure that the device is powered on.
- Ensure that the network cable connecting the device and the PC is in good condition.
- Ensure that the parameters are set correctly.

If the problem persists, contact the local service provider.

### **The WiMAX network cannot be found.**

- Ensure that the antennas are properly connected.
- Check the power supply, ensuring that the power supply is properly connected.
- Ensure that the device is placed in an open space where it is away from obstacles such as concrete or wooden walls.
- Ensure that the device is placed away from any household appliance that produces a strong electric or magnetic field, such as a microwave oven, a refrigerator, or a satellite

dish antenna.

If the problem persists, contact the local service provider.

### **The device or the power adapter overheats.**

- The device may get heated after being used for a long time. Therefore, power off the device when you do not use the device.
- Place the device in a well-ventilated place and do not expose the device to direct sunlight.

## Specifications

| <b>WiMAX Parameters</b> |   |
|-------------------------|---|
| Standard                | IEEE 802.16e-2005   |
| Frequency               | 2.496–2.69 GHz (BM622i)<br>3.4–3.6 GHz (BM632i)<br>2.3–2.4 GHz (BM652i) |
| <b>Interface</b>        |   |
| LAN                     | One Fast Ethernet (FE) interface  |
| TEL                     | One Plain Old Telephone Service (POTS) interface                        |
| <b>Other Parameters</b> |   |
| Power adapter input     | 100–240 V AC  |
| Power consumption       | 10 W  |
| Power supply to device  | 12 V, 1 A   |
| Operating temperature   | 0°C to 40°C (32°F to 104°F)   |
| Operating humidity      | 5% to 95%, non-condensing   |
| Dimensions (L×W×H)      | 128 mm × 60 mm × 186 mm   |

## Warnings and Precautions

To use the device properly and safely, read these warnings and precautions carefully and strictly observe them during operation. Unless otherwise specified, the device described in this section includes the device and its accessories.

### Basic Requirements

- During storage, transportation, and operation of the device, keep it dry and prevent it from colliding with other objects.
- Do not dismantle the device. In case of any fault, contact an authorized service center for assistance or repair.
- Without authorization, no organization or individual can change the mechanical, safety, or performance design of the device.
- When using the device, observe all applicable laws and regulations and respect the legal rights of other people.

### Environmental Requirements for Using the Device

- Before connecting and disconnecting cables, stop using the device, and then disconnect it from the power supply. Ensure that your hands are dry during operation.
- Keep the device far from sources of heat and fire, such as a heater or a candle.
- Keep the device far from electronic appliances that generate strong magnetic or electric fields, such as a microwave oven or a refrigerator.
- Place the device on a stable surface.
- Place the device in a cool and well-ventilated indoor area. Do not expose the device to direct sunlight. Use the device in an area with a temperature ranging from 0°C to 40°C.
- Do not block the openings on the device with any object. Reserve a minimum space of 10 cm around the device for heat dissipation.

- Do not place any object (such as a candle or a water container) on the device. If any foreign object or liquid enters the device, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- During thunderstorms, power off the device, and then remove all the cables connected to it to prevent it from getting damaged due to lightning strikes.

## **Precautions for Using Wireless Devices**

- When using the device, ensure that the antenna of the device is at least 20 cm away from all persons.
- Do not use the device where using wireless devices is prohibited or may cause interference or danger.
- The radio waves generated by the device may interfere with the operation of electronic medical devices. If you are using any electrical medical device, contact its manufacturer for the restrictions on the use of the device.
- Do not take the device into operating rooms, intensive care units (ICUs), or coronary care units (CCUs).

## **Areas with Inflammables and Explosives**

- Do not use the device where inflammables or explosives are stored, for example, in a gas station, oil depot, or chemical plant. Otherwise, explosions or fires may occur. In addition, follow the instructions indicated in text or symbols.
- Do not store or transport the device in the same box as inflammable liquids, gases, or explosives.

## **Accessory Requirements**

- Use only the accessories supplied or authorized by the device manufacturer. Otherwise, the performance of the device may get affected, the warranty for the device or the laws and regulations related to telecommunications terminals may become null and void, or an injury may occur.

- Do not use the power adapter if its cable is damaged. Otherwise, electric shocks or fires may occur.
- Ensure that the power adapter meets the specifications indicated on the device nameplate.
- Ensure that the power adapter meets the requirements of Clause 2.5 in IEC60950-1/EN60950-1 and it is tested and approved according to national or local standards.

## **Safety of Children**

Keep the device and its accessories out of the reach of children. Otherwise, they may damage the device and its accessories by mistake, or they may swallow the small components of the device, causing suffocation or other dangerous situations.

## **Maintenance**

- If the device is not used for a long time, power it off, and then remove all the cables connected to it.
- If any exception occurs, for example, if the device emits any smoke or unusual sound or smell, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- Do not trample, pull, or overbend any cable. Otherwise, the cable may get damaged, causing malfunction of the device.
- Before cleaning the device, stop using it, power it off, and then remove all the cables connected to it.
- Use a clean, soft, and dry cloth to clean the device shell. Do not use any cleaning agent or spray to clean the device shell.

## **Environmental Protection**

- Do not dispose of the device and the accessories in a garbage can.



- Dispose of the device according to the local regulations on disposing of packing materials, exhausted batteries and abandoned devices, and support the recycling activity.

## **Federal Communications Commission (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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications made to this device not expressly approved by Huawei Technologies Co., Ltd. may void the FCC authorization to operate this device.

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