

CG1241/CG1241D Cable Modem
Quick Start

Chapter 1: Safety Precautions

To use the device properly and safely, read the safety precautions carefully before using the device and strictly observe these precautions when using the device.

Safety precautions:

Keep the device out of the reach of children as the components or accessories may be swallowed.

Install the device in strict compliance with the requirements of the supplier. Reserve a space of at least 10 cm above and around the device for heat dissipation. During the installation, keep the device away from heat or water sources, and electric appliances that generate strong magnetic or electric fields, such as microwave ovens, refrigerators, and mobile phones.

The power supply voltage of the device must meet the requirements on the input voltage of the device.

Do not use any power adapters that are not in the standard configuration. Otherwise, the device may malfunction or be unsafe.

Dry your hands before connecting or disconnecting cables. Stop the device and switch the device off before connecting or disconnecting cables.

Do not place any object on the device, preventing the device from being damaged due to overheating or deformation.

Prevent objects, such as metal or water, from entering the device through the heat dissipation hole.

Switch the device off and disconnect all cables, including the power cable, network cable, and phone cable, during periods of lightning activities.

Do not connect network cables, phone cables, power adapters, or power adapter cables outdoors, preventing device damage and bodily injuries that are prone to occur during thunderstorms.

If an abnormality occurs, for example, liquid entering the device, smoke, unusual sound, and smell, immediately stop the device, switch the device off, disconnect all cables (such as the power cable, and network cable) from the device, and contact the authorized service center.

Do not disassemble the device without permission. In the event of a device fault, contact the authorized service center.

Dispose of packing materials and old/abandoned devices in accordance to local laws and regulations (recycling them is strongly recommended).

Do not change the structure, safety design, or performance design of the device without prior authorization.

Fireproof precautions:

Keep the device away from large heat source equipment, bare flames, and high-power devices, such as electric heaters, candles, and blow drier, to eliminate safety risks.

Replace deteriorated cables or power socket facilities on the power supply line or near the device in a timely manner to eliminate safety risks.

Chapter 2: Introduction

CG1241/CG1241D is a residential VoIP cable modem which has an 802.11bgn WiFi access point that gives you wireless connection to the Internet with 4 Giga Ethernet ports which further expand the Local Area Network (LAN) capabilities. CG1241D provides additional 802.11 WiFi interface supports 802.11A/N capability.

If you have subscribed to phone services from your cable operator then you will be able to place normal phone calls using your analogue phone and/or fax machine. CG1241/CG1241D provides two RJ-11 connectors for your phone or home phone system.

Advanced technology, this residential cable gateway offers Firewall for additional protection and security and VPN (virtual private network).

CG1241/CG1241D will give you broadband Internet access, telephone connection and wireless networking all in one unit.

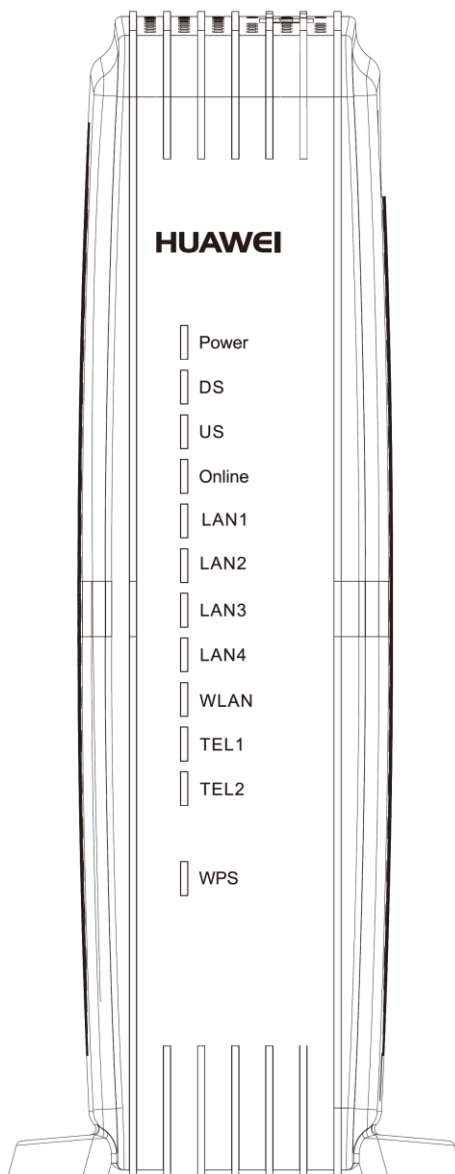
Package Contents

| | |
|---------------------------------|-----------|
| CG1241/CG1241D WiFi EMTA | x1 |
| Ethernet Cable | x1 |
| Power Adaptor | x1 |

Chapter 3: Overview

Front Panel

The following illustration shows the front panel of the EMTA:



Power - Indicates the Power status.

DS - Indicates the status of Data reception by the cable modem from the Network (Downstream Traffic).

US - Indicates the status of Data transmission by the cable modem to the Network (Upstream Traffic).

Online - Displays the status of your cable connection. The light is off when no cable connection is detected and fully lit when the modem has established a connection with the network and data can be transferred.

Ethernet - Indicates the state of Ethernet ports.

WIFI - Indicates the traffic on the wireless network.

Phone1 - Indicates the status of the telephone Phone 1.

Phone2 - Indicates the status of the telephone Phone 2.

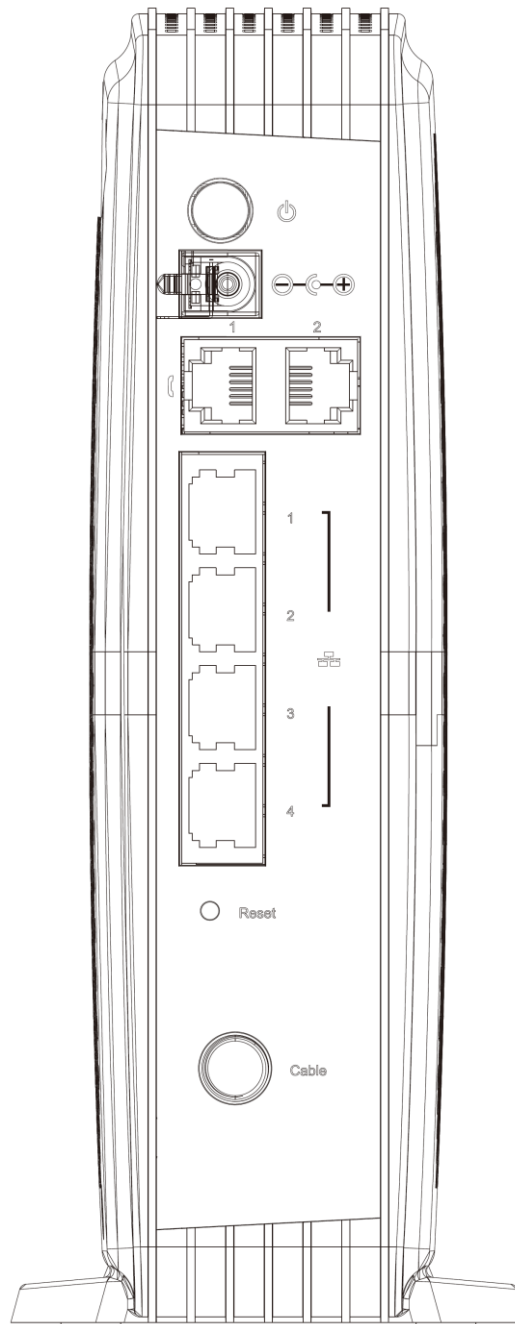
WPS - Indicates the status of the WPS functionality.

There will be 12 LEDs on CG1241/CG1241D

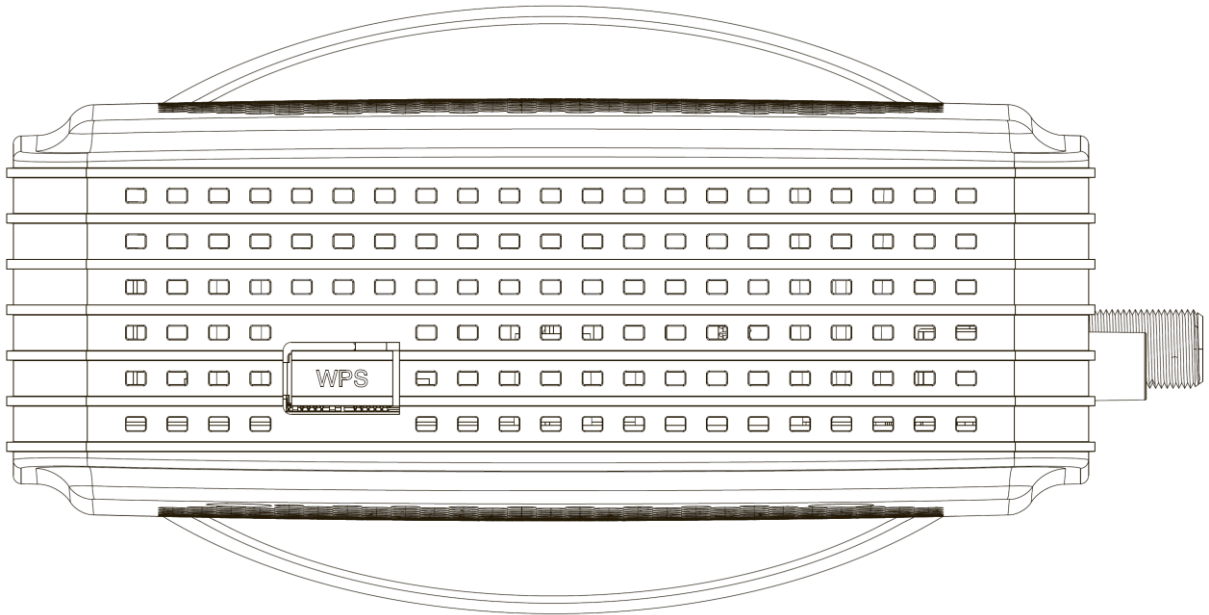
Looking at LED from TOP to Bottom: Power, DS, US, Online, LAN1, LAN2, LAN3, LAN4, WiFi, PHONE1, PHONE2, WPS.

| CG1241/CG1241D | Power | Internet | | | LAN | | | | Wi-Fi | Phone1 | Phone2 | WPS | Description |
|----------------------------------|----------|-----------------------|---|--------|-------|-------|-------|-------|-------|--------|--------|-------|---|
| | | DS | US | Online | 1 | 2 | 3 | 4 | | | | | |
| Boot-up Operation | ON | ON | ON | ON | ON | ON | ON | ON | X | ON | ON | X | Power on 0.25 sec |
| | ON | 0.25 second | | | | | | | | | | | |
| | ON | FLASH | FLASH | FLASH | X | X | X | X | X | X | X | X | From power ON to system initialization complete |
| | ON | ON | ON | ON | X | X | X | X | X | X | X | X | Following system initialization complete to (before) DS scanning |
| | 1 second | | | | | | | | | | | | |
| DOCSIS Start-up Operation | ON | FLASH | OFF | OFF | X | X | X | X | X | X | X | X | During DS scanning and acquiring SYNC |
| | ON | ON | FLASH | OFF | X | X | X | X | X | X | X | X | From SYNC completed, receiving UCD to ranging completed |
| | ON | ON | ON | FLASH | X | X | X | X | X | X | X | X | During DHCP, configuration file download, registration, and Baseline Privacy initialization |
| | ON | ON | ON | ON | X | X | X | X | X | X | X | X | Operational (NACO=ON) |
| | ON | FLASH | FLASH | OFF | X | X | X | X | X | X | X | X | Operational (NACO=OFF) |
| MTA initialization | ON | ON | ON | ON | X | X | X | X | X | FLASH | OFF | X | MTA DHCP |
| | ON | ON | ON | ON | X | X | X | X | X | OFF | FLASH | X | MTA SNMP/TFTP |
| | ON | ON | ON | ON | X | X | X | X | X | FLASH | FLASH | X | RSIP for NCS/Register for SIP |
| CPE Operation | ON | X | X | X | OFF | OFF | OFF | OFF | X | X | X | X | No Ethernet Link |
| | | | | | ON | ON | ON | ON | | | | | Ethernet Link |
| | | | | | FLASH | FLASH | FLASH | FLASH | | | | | TX/RX Ethernet Traffic |
| | ON | X | X | X | X | X | X | X | OFF | X | X | X | Wireless is disable |
| | | | | | | | | | ON | | | | Wireless initiate success or enable |
| | | | | | | | | | FLASH | | | | TX/RX Wireless Traffic |
| SW Download Operation | ON | FLASH | FLASH | ON | X | X | X | X | X | X | X | X | A software download and while updating the FLASH memory |
| WPS Operation | ON | <CM Normal Operation> | | | | | | | | X | X | Flash | (long press, > 5 seconds) WPS WiFi association during client and AP linking process, WPS LED Green color light Blinking. |
| | | ON | After link established WPS LED Green color light ON | | | | | | | | | | |
| | | Flash | Timeout to link. | | | | | | | | | | |

Rear Panel Connector Description



| Slot | Description |
|------------------|--|
| CABLE | F-Connector |
| RESET | Reset/Reboot this Cable modem |
| ETHERNET 1 2 3 4 | Ethernet 10/100/1000 BaseT RJ-45 connector |
| TEL 1 2 | Telephony RJ-11 connector |
| 12VDC | 12V DC-IN Power connector |
| DC Power switch | Power ON/OFF switch |



 **WPS** – Indicates the status of the WPS (Wi-Fi Protected Setup™) functionality.

There is one WPS button on the Top Side Panel of CG1241/CG1241D and is designed to have multiple function. This button can be used to:

Securely and Simply Get WiFi Client Connected: WPS button can be used to pairing WiFi client which also supports WPS function. A long press (press more than 5 seconds) on the WPS button will enable CG1241/CG1241D scan for any available WPS device.

Note: You must ensure that the WiFi client device supports WPS function in order to use this WPS function on CG1241/CG1241D.

WiFi On/Off Switch: a short press on the button can switch the WiFi Interface ON or OFF

Chapter 4. Connecting the Residential VoIP cable modem to Your Computer

Installation Procedure for Ethernet Interface

Follow the steps below for proper installation:

1. Ensure the ON/OFF switch, on the rear panel, is on position ON = '1'.
2. Connect one end of the coaxial cable to the **CABLE** connection on the wall, and the other end to the CABLE jack on the CG1241/CG1241D.
3. Connect the plug from the power supply into the **POWER** jack on the CG1241/CG1241D, and plug the power supply into an AC outlet.

Note: Use only the power supply that accompanied this unit. Using other adapters may damage the unit.

4. Connect one end of the Ethernet cable to the Ethernet port on the back of your computer, and the other end to the **ETHERNET** port on the CG1241/CG1241D.
5. Press the **Power Button**, switch ON the device.
6. The CG1241/CG1241D will look for the proper cable modem signal in the Cable Television network and process the initial registration. The voice gateway is ready for data transfer after the LED "Cable Link" is lit solid green.

Note: The REBOOT button at the rear panel is for maintenance purposes only. You don't need to use it.

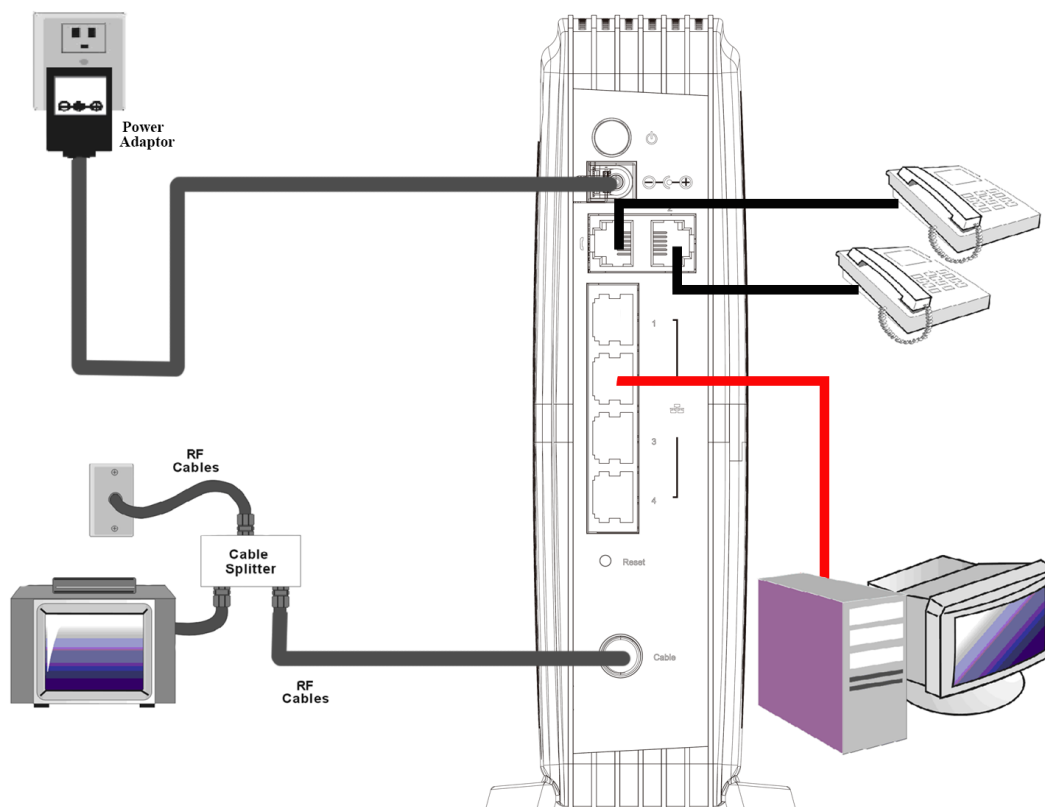


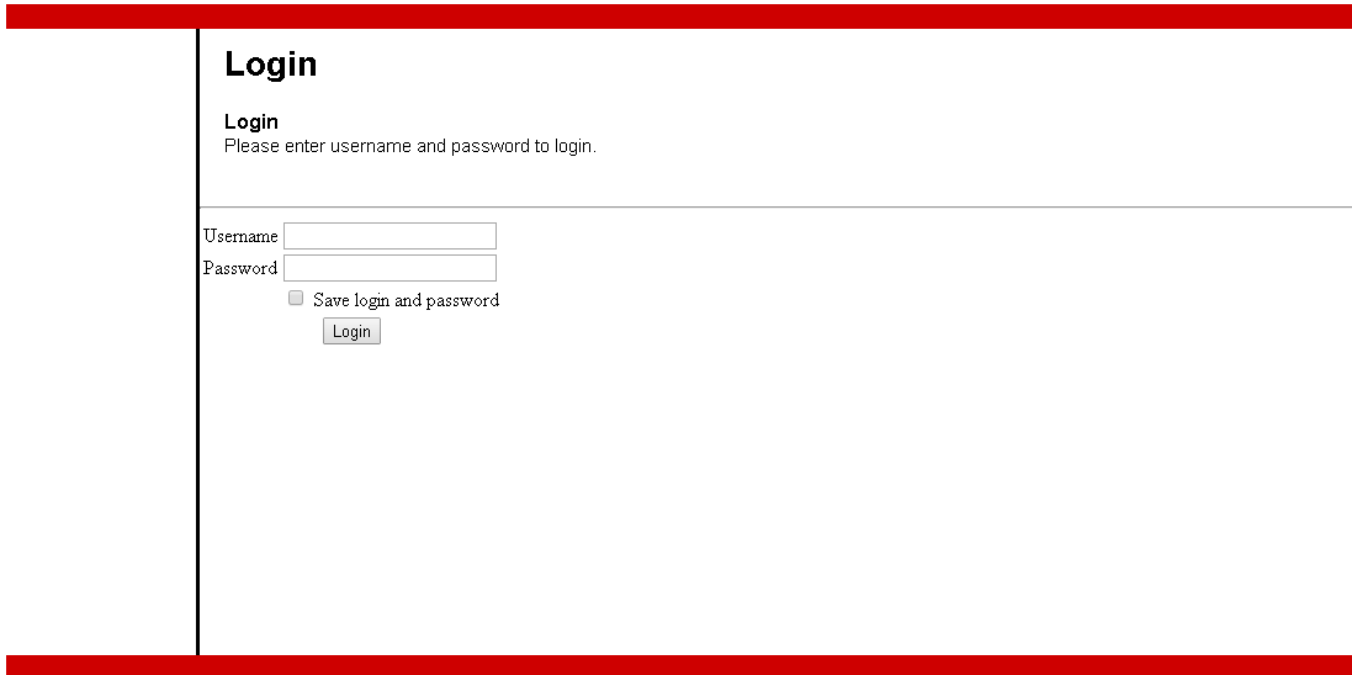
Fig. How to set up your connection

Chapter 5. WEB Configuration

If enabled by your service provider; please proceed as follows:

1. Once your host PC is properly configured.
2. Start your web browser and type the private IP address of the EMTA on the URL field: **192.168.1.1**.

After connecting to the URL, you can see the login page. Please enter the username, password and then press **Login** button. The default username is "**admin**" and password is "**password**".



The screenshot shows a web browser window with a red header bar. The page content is titled "Login" in bold black text. Below the title, there is a sub-heading "Login" and a prompt: "Please enter username and password to login." A horizontal line separates this text from the input fields. There are two text input fields: "Username" and "Password". Below the "Password" field is a checkbox labeled "Save login and password". At the bottom of the form is a "Login" button.

Fig. Login Page

Note: If you forget your username and password, you may Press "Reset" button on the rare panel for more than 5seconds to restore the username and password to default.

Chapter 6. Technical Specification

1. Power Requirements :

- Power adaptor requirement : Input: 100V~240VAC \pm 10%
Output: 12VDC 2A
Plug Type: Two round pins
Frequency: 50-60 Hz \pm 10%
- Power Consumption : 24W
- DC voltage tolerance : 11.4V~12.6V
- Power requirement : on/off DC power switch on housing

2. Environmental Requirements :

- Operating Temperature : 0°C to 40°C
- Storage Temperature : -20°C to 70°C
- Humidity : 20% ~ 90% non-condensing

Chapter 7. Wireless SSID and WPA Pre-shared Key

Default SSID and WPA Pre-shared Key on the CM Lable.

Note: If you want to change your SSID and WPA Pre-shared Key, please connect webpage.

Wireless

802.11 Primary Network

This page allows configuration of the Primary Wireless Network and its security settings.

Turbonet2G_ABCD (00:1F:C6:92:AF:E4)

Primary Network: Enabled

Network Name (SSID):

Closed Network: Disabled

Mode Required:

AP Isolate: Disabled

WPA: Disabled

WPA-PSK: Enabled

WPA2: Disabled

WPA2-PSK: Enabled

WPA/WPA2 Encryption:

WPA Pre-Shared Key: Show Key

RADIUS Server:

RADIUS Port:

RADIUS Key:

Group Key Rotation Interval:

WPA/WPA2 Re-auth Interval:

WEP Encryption:

Network Key 1:

Network Key 2:

Network Key 3:

Network Key 4:

Current Network Key:

PassPhrase:

Automatic Security Configuration

WPS:

WPS Config State:

The physical button on the AP will provision wireless clients using Wi-Fi Protected Setup (WPS)

Device Name:

WPS Setup AP

UUID: e59fe5b161b336403ad8c9f64c9d7530

PIN:

Configure by External Registrar:

WPS Add Client

Add a client:

Client PIN:

Authorized Client MAC:

Fig. primary Network configuration

CAUTION for UL

North American Cable Installer:

This reminder is provided to call your attention to Article 820.93 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.



This symbol on your set guarantees that your product complies with the European Directives 1999/5/EC and 2009/125/EC on Safety, Telecom, Electromagnetic Compatibility and Energy using Products.





Warranty Card

Thank you for choosing Huawei Technologies Co., Ltd. To get better services, please read this warranty card carefully, fill in the required information, and preserve this card in good condition.

| | |
|-------------------------------------|--|
| PERSONAL OR COMPANY FULL NAME | |
| Address/Postal Code | |
| Telephone Number | |
| Email | |
| Product Type | |
| Product Serial Number | |
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| Invoice Number | |
| Dealer's Name | |
| Dealer's Address | |
| Dealer's Telephone | |

Preserve well. No reissue.

Dealer's Seal



Limited Warranty

Subject to the exclusions contained below, Huawei Technologies Co., Ltd. (referred to as Huawei) warrants its access terminals ("Products") to be free from defects in materials and workmanship under normal consumer usage for one year from the date of purchase of the product ("Warranty period"). During the warranty period, a Huawei authorized service partner shall remedy defects in materials and workmanship free of charge.

Special Notice:

1. The warranty card shall be applicable only after being stamped by the dealer.
2. The warranty card must be preserved in good condition and free of any scratch or alteration.
3. To claim such service for defects that are not included in the following exclusion terms, the warranty card and the invoice that records the product serial number shall be presented to a Huawei authorized service partner.

Exclusions:

In any of the following cases, the warranty card becomes unenforceable or inapplicable without prior notice:

1. The defects are caused by improper handling in transportation and assembly.
2. The defects are caused by the fact that the product is dismantled or altered by anyone that is not from a Huawei authorized service partner.
3. The defects are caused by the fact that the product is used in a harsh environment that is not suitable for the operation of the product.
4. The defects are caused by any force majeure including but not limited to fire, earthquake, lightning and tsunami.
5. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
6. The normal wear and tear, including but not limited to the normal wear and tear of the shell and the power module, shall not be covered by the limited warranty.
7. The warranty card is altered or illegible, or the product serial number recorded on the warranty card is inconsistent with the actual one imprinted or labeled on the product.

In any case that is not covered by this limited warranty or should the warranty expire, Huawei shall charge for the service(s) claimed for the products if the product is still remediable. Huawei preserves the right for interpretation of this limited warranty.



HUAWEI Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base

Bantian, Longgang

Shenzhen 518129

People's Republic of China

Website: <http://www.huawei.com>





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Issue : 01 (20150615)

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

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

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

For operation within 5.15 ~ 5.25GHz / 5.47 ~5.725GHz frequency range, it is restricted to indoor environment. The band from 5600-5650MHz will be disabled by the software during the manufacturing and cannot be changed by the end user. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement:

This equipment complies with FCC 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.

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.