

# Thank you for purchasing the CPE. This CPE brings you a high speed wireless network connection.

This document will help you understand your CPE so you can start using it right away. Please read this document carefully before using your CPE.

For detailed information about the functions and configurations of the CPE, refer to the online help on the web management page that comes with the CPE.

## Note:

You must install Adobe Reader version 6.0 or higher to read the online help.

## Getting to Know Your CPE

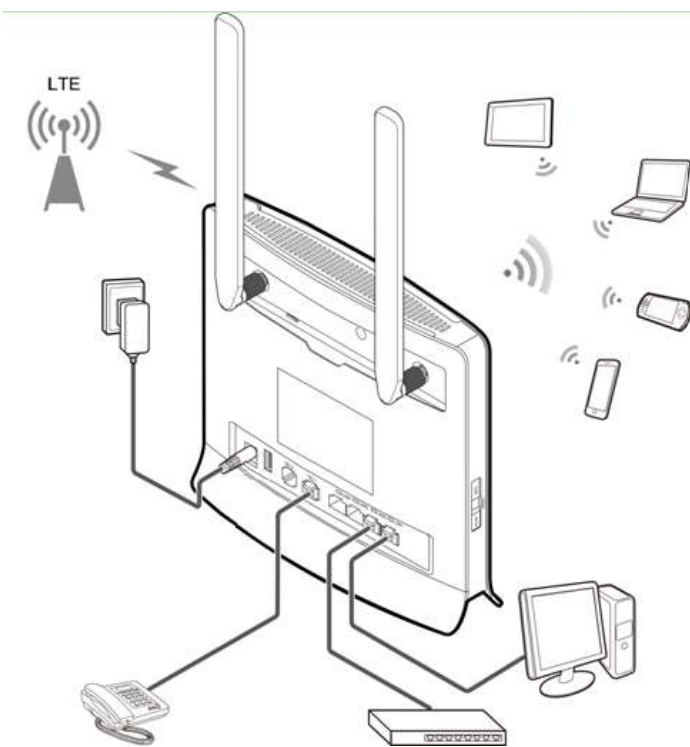
### Note:

The CPE function descriptions and illustrations in this document are for your reference only. The product you have purchased may vary.

## Application Scenario

The CPE can:

- Provide Internet access for Wi-Fi devices and computers.
- Connect to telephones for voice services.
- Expand LAN coverage together with hubs and switches.



### Note:

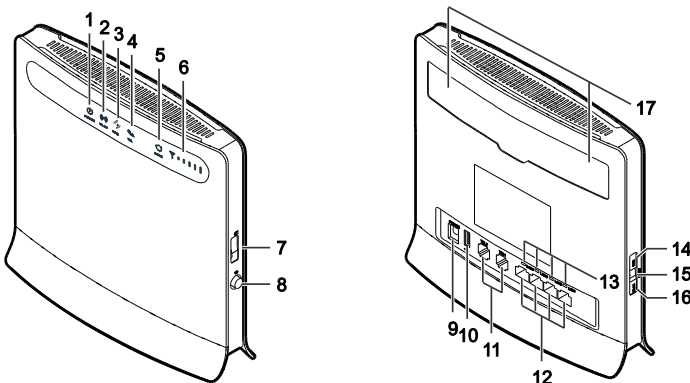
- During thunderstorms and rainy weather, turn off and disconnect the CPE.
- When the CPE is in use, you can alter its position or orientation to improve signal reception.
- Use a standard or authorized external antenna to avoid CPE malfunctions.

## Selecting the Installation Environment

Obstacles such as concrete and wooden walls will affect the transmission of the network signal. It is recommended that when you install CPE you choose an open space.

Keep the CPE away from equipment that generates strong magnetic and electric fields, for instance microwaves, refrigerators, and satellite receivers.

## Appearance



### ① Power indicator

- On: CPE turned on
- Off: CPE turned off

### ② WLAN indicator

- On: WLAN function enabled
- Blinking: Transmitting data through WLAN
- Off: WLAN function disabled

### ③ WPS indicator

- On: WPS function enabled
- Blinking: WPS interconnection verification is in progress. This process should not take longer than 2 minutes.
- Off: WPS function disabled

### ④ TEL indicator

- Off: On-hook condition
- Blinking: Incoming call
- On: Off-hook condition

### ⑤ Mode indicator

- Steady blue: The CPE is connected to an LTE network, but no data is being transmitted.
- Blinking blue: The CPE is connected to an LTE network and is transmitting data.
- Steady red: The CPE failed to connect to a wireless network.
- Steady purple: The SIM card is not recognized, the PIN has not been entered, or the PIN verification failed.

### ⑥ Signal indicator

- On: Indicates network signal strength. Full light indicates strong signal.
- Off: No network signal.

### ⑦ USIM card slot

Accommodate a USIM card.

### ⑧ Power button

Press this button to power the CPE on or off.

### ⑨ Power port

Connect to the CPE's power adapter.

### ⑩ USB port

Only for equipment maintenance.

### ⑪ TEL port

Connect to telephones (optional).

### ⑫ LAN port

Connect to computers, switches, or other network devices.

### ⑬ LAN indicator

- On: The port is connected to a device.
- Blinking: Data is being transmitted through the port.
- Off: No device is connected to the port.

### ⑭ WPS button

After the WPS function is enabled, press and hold this button for more than 0.5 seconds

to initiate WPS interconnection.

### 15 **Reset button**

Press and hold for more than 2 seconds to restore the CPE to its factory settings.

#### **Note:**

Restoring the default settings of the CPE will override all the previous settings.

### 16 **WLAN button**

Press and hold for more than 2 seconds to enable or disable the WLAN function.

### 17 **External antenna port**

Connect to an external antenna.

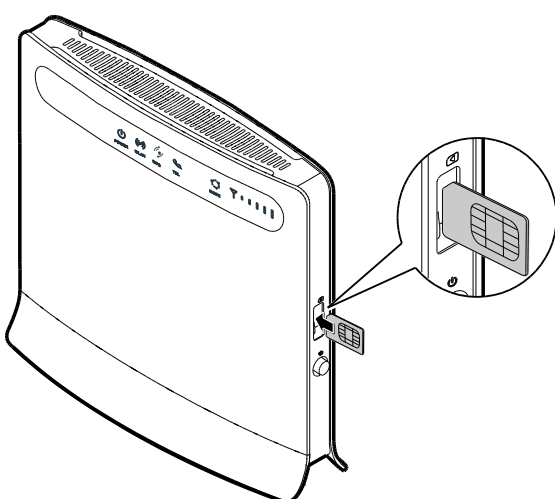
#### **Note:**

Do not power off the CPE during the upgrade. Otherwise, the CPE may be damaged.

## **Getting Started**

### **Installing the USIM Card**

Install the USIM card according to the illustration.

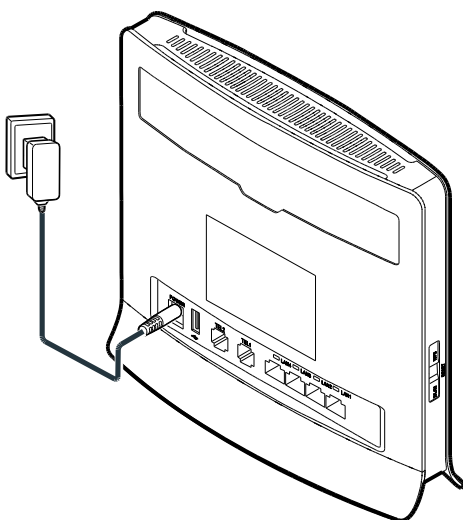


#### **Note:**

- When removing the USIM card, gently press the USIM card in, then release. The card will automatically pop out.
- Do not remove the USIM card when it is in use. Doing so will affect the performance of your CPE, and data stored on the USIM card may be lost.

### **Connecting to a Power Adapter**

Install the power adapter according to the illustration.



#### **Note:**

- Only use power adapters compatible with the CPE and provided by a designated manufacturer. Use of an incompatible power adapter or one from an unknown manufacturer may cause the CPE to malfunction, fail, or could even cause a fire. Such use voids all warranties, whether expressed or implied, on the product.
- The CPE's power adapter model is HW-120100XYW, HW-120200XYW, HKA01212010-XY or HKA02412020-XY. X and Y represent letters or numbers that vary by region. For details about the specific adapter model, contact an authorized dealer.

## **Logging In to the Web Management Page**

The web-based configuration utility can be used for initial CPE installation, parameter configuration, and function management through the browser.

The Windows 7 operating system and Internet Explorer 8.0 are used as an example.

Ensure that the CPE is connected to the computer. Follow these steps to log in to the web management page:

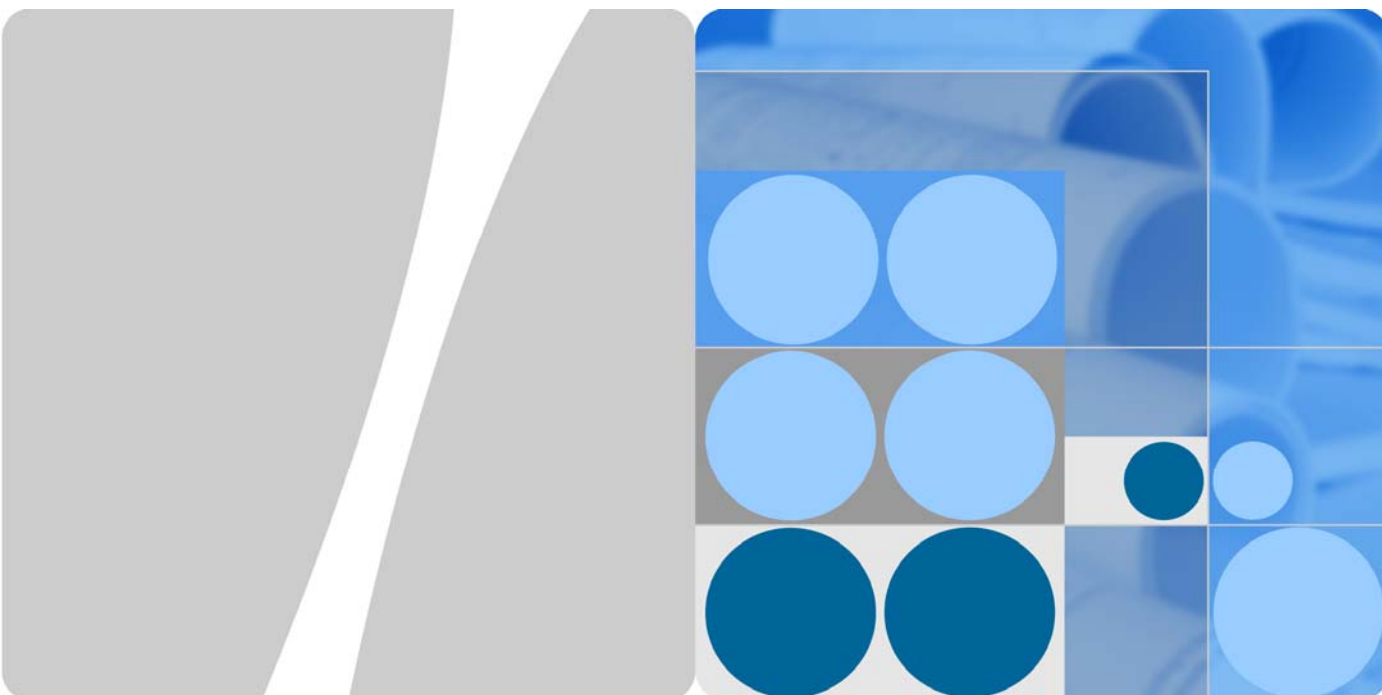
1. Connect CPE cables.
2. Configure the computer's IP address so that the IP addresses of the computer and the CPE are in the same network segment.

#### **Note:**

- The CPE's default IP address is 192.168.1.1, the subnet mask is 255.255.255.0.
  - It is recommended that you use the automatically obtained IP addresses for the computer and domain name system (DNS) server. If you manually configure the computer IP address, you must set the DNS server IP address to the CPE's IP address. Otherwise, you will fail to log in to the web management page.
3. Open the browser, and enter **https://192.168.1.1** in the address box.
  4. Enter the user name and password to log in to the web management page.

#### **Note:**

- The default user name is **admin**.
- The default password is **4GCPE@hw**.



HUAWEI LTE CPE eA260-135  
V100R001

## Product Description

**Issue**        01  
**Date**         2015-03-16

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# 1 Overview

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## Introduction

The Huawei eA260-135 V100R001 CPEs are the Long Term Evolution (LTE) customer premises equipments (CPEs). As a wireless gateway, the eA260-135 can be deployed indoors to provide services such as data collection and video surveillance.

The eA260-135 V100R001 CPEs support LTE Release 9. The eA260-135 provide the following functions:

- Data service
- Voice service(Optional)
- Security service
- Local and remote maintenance and management
- Data routing

## Product Features

The eA260-135's main features are as follows:

- **High speed experience**  
UE Category 4  
UL/DL time slot configuration 0(3:1), 1(2:2), 2(1:3)  
5MHz, 10MHz, 15MHz, 20MHz bandwidth
- **Flexible networking capabilities**  
Provide high-speed routing capability. Comprehensive set of networking and IP protocols such as routing, DNS, DHCP server, DHCP relay, and NAT.
- **Voice over IP(Optional)**  
Provide high quality voice services with SIP protocol via the telephony interface.
- **Wi-Fi support**  
802.11 b/g/n wireless interface
- **Routing support**  
Routing behind MS
- **Flexible security services**  
Support packet filtering firewall. Provide instant protection to block potential security risks and intrusion attempts.
- **Web-based Configuration**

Built-in web based configuration supports local administration and management with User-friendly Web interface.

- **TR069-Based Device management**

Support the CPE WAN Management Protocol (CWMP) as specified in Broadband Forum TR-069 Amendment II. Support remote software installation, setting of configuration and status parameters.

## Warning

- 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.
- FCC Caution To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- FCC Radiation Exposure Statement To comply with FCC RF exposure requirements in section 1.1307, a minimum separation distance of 20cm is required between the antenna and all public persons.

## Product Appearance

Figure 1-1 shows the appearance of the eA260-135.

**Figure 1-1** eA260-135 appearance



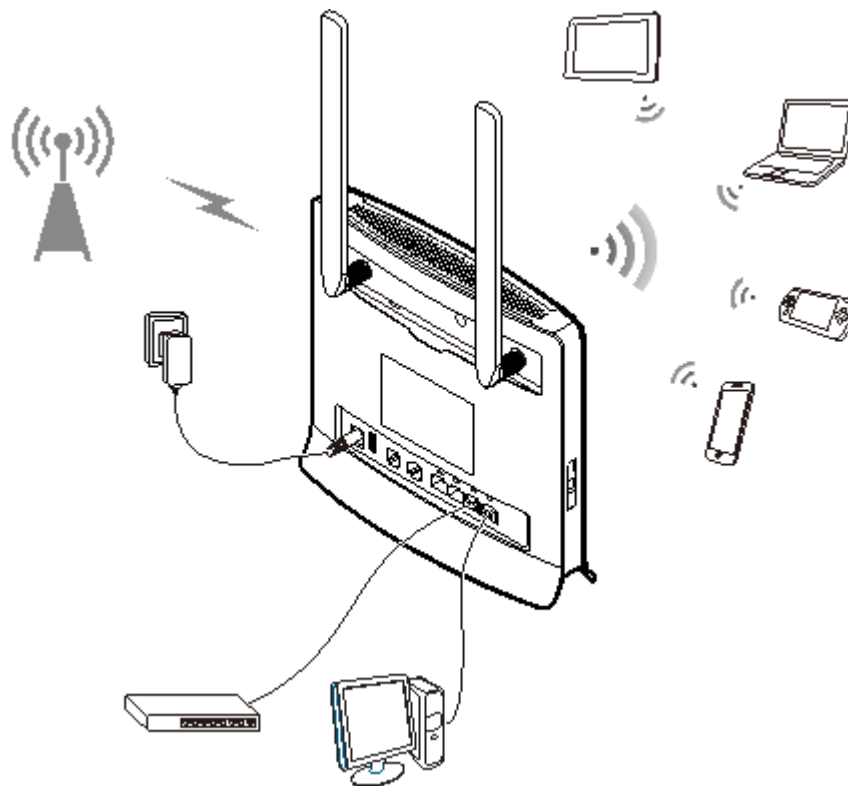
# 2 Application Scenarios

The eA260-135 are mainly intended to provide users with wireless broadband data access services for wISP market,.

The eA260-135 provide LTE-TDD wireless routing and translating LTE wireless data into wired Ethernet data, and vice versa.

The eA260-135 can simultaneously set up wireless connections with 32 Wi-Fi devices and establish a local area network (LAN) by connecting to concentrators and switches.

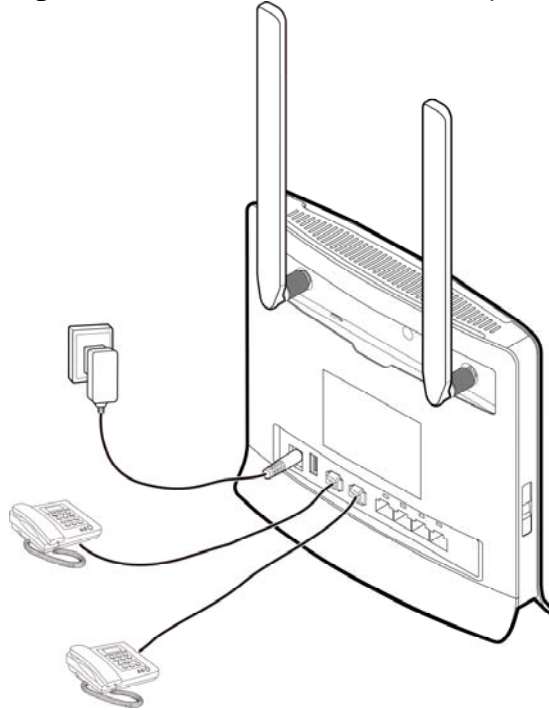
**Figure 2-1** eA260-135 connected to multiple devices





eA260 provide two telephone interface. You can connect a telephone to achieve the basic voice capabilities.

**Figure 2-2** eA260-135 connected to telephones



# 3 Technical Specifications

## 3.1.1 Hardware Specifications

Table 3-1 lists the hardware specifications of the eA260-135.

**Table 3-1** Hardware specifications

Item	Description
Technical standards	WAN: LTE
	LAN: IEEE 802.3/802.3u
	WLAN: IEEE 802.11b/g/n
Working bands	LTE: <ul style="list-style-type: none"> <li>TDD: 3650-3700MHz</li> </ul>
	WLAN: 2400–2483.5 MHz
Memory	512 MB NAND Flash 256 MB Double Data Rate (DDR) Synchronous Dynamic Random Access Memory (SDRAM)
External ports	One power port
	Two telephone ports (RJ11)
	Four LAN ports (RJ45)
	One USB 2.0 slave port(for local maintenance only)
	One Universal Subscriber Identity Module (USIM) card port
	Two external antenna ports
Buttons	One power button
	One WLAN button
	One WPS button
	One reset button

Item	Description	
LED indicators	One power indicator	
	One WLAN indicator	
	One WPS indicator	
	One telephone indicator	
	One mode indicator	
	One signal strength indicator	
	Four LAN indicators	
Maximum transmit power	LTE: Conform to Power Class 3 Definition	
	WLAN	802.11b: 20 dBm
		802.11g: 20 dBm
		802.11n: 18 dBm
Receiving sensitivity	LTE: Confirm to 3GPP Requirements	
	WLAN	802.11n: -64 dBm at 65 Mbit/s
		802.11g: -65 dBm at 54 Mbit/s
		802.11b: -76 dBm at 11 Mbit/s
Power consumption	< 12 W	
Power supply	AC: 100–240 V	
	DC: 12 V/2 A	
Dimensions (H x W x D)	176 mm × 190 mm × 35 mm (6.93 in. x 7.48 in. x 1.38 in.)	
Weight	About 390 g (power adapter excluded)	
Temperature	Working temperature: 0°C to +40°C	
	Storage temperature: -20°C to +70°C	
Humidity	5%–95% RH	

## 3.1.2 Antenna Specifications

### Built-in Antenna

**Table 3-2** Specifications of the LTE main antenna

Item	Description
Frequency range	3650-3700 MHz
Input impedance	50 $\Omega$
Standing wave ratio (SWR)	< 3
Efficiency	> 50%
Gain	4 dBi
Polarization type	Linear polarization

**Table 3-3** Specifications of the WLAN antenna

Item	Description
Frequency range	2400–2483.5 MHz
Input impedance	50 $\Omega$
SWR	< 3
Efficiency	> 50%
Gain	< -3.0 dBi
Polarization type	Linear polarization

### External Antenna

**Table 3-4** Specifications of the LTE external antenna at 3400 MHz to 3800 MHz

Item	Description
Frequency range	3650-3700 MHz
Input impedance	50 $\Omega$
SWR	< 3
Efficiency	> 50%
Gain (H-plane)	5.5 dBi
Polarization type	Linear polarization

### 3.1.3 Software Specifications

Table 3-55 lists the software specifications of the eA260-135.

**Table 3-5** Software specifications

Item	Description		
Gateway	Supports the default route, namely, the route with the IP address <b>0.0.0.0</b> .		
	Supports the Address Resolution Protocol (ARP).		
	Supports the Internet Control Message Protocol (ICMP).		
	Supports the domain name service (DNS).		
	NAT	Supports NAT and Network Address and Port Translation (NAPT), which complies with RFC2663, RFC3022, and RFC3027.	
	DHCP server	Enables and disables the DHCP server.	
		Configures DHCP server address pools.	
		Sets the lease time.	
Supports DHCP relay			
	Displays the status of the DHCP server address pools, including host names, Media Access Control (MAC) addresses, IP addresses, and remaining lease time.		
	Routing behind MS	Supports routing behind MS	
Firewall	Enables and disables the firewall.		
	Filters LAN MAC addresses.		
	Filters LAN IP addresses.		
	Filters URLs.		
	Supports port forwarding.		
	Supports demilitarized zone (DMZ).		
	Supports Application Level Gateway (ALG) settings.		
LAN	Supports 10/100 Mbit/s autonegotiation.		
	Supports auto MDI/MDIX. MDI stands for Medium Dependent Interface, and MDIX stands for Medium Dependent Interface Crossover.		
	Complies with IEEE 802.3 and IEEE 802.3u.		
VOIP	Supports G.729, G.711a and G.711u		

Item	Description	
	Supports SIP (RFC3261)	
	Supports SDP (RFC2327)	
	Supports DNS	
	Supports DTMF	
	Supports SIP ALG	
Upgrade	Supports TR-069 upgrade and local upgrade.	
SIM	Supports PIN management and SIM card authentication	
Dial-up connection	Supports automatic and manual connection	
Importing and exporting configuration	Encrypt and back up the current configuration, and then restore from a backup configuration	
WLAN	Broadcasts and hides service set identifiers (SSIDs).	
	Complies with IEEE 802.11b/g/n.	
	Supports WPS.	
	Authentication	Supports OpenSystem authentication.
		Supports encryption using wired equivalent privacy (WEP), Wi-Fi protected access preshared key (WPA-PSK), and WPA2-PSK keys.
		Supports the Advanced Encryption Standard (AES) encryption algorithm.
		Supports the TKIP and AES hybrid encryption algorithm.
	MAC address authentication	Supports the MAC address authentication whitelist.
		Supports the MAC address authentication blacklist.
		Supports a maximum of 16 MAC address entries.
	Supports automatic transmission rate adjustment.	
	Station management	Supports station status queries.
		Supports a maximum of 32 connected stations.

# 4 Services and Applications

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## Data Services

By connecting to the eA260-135 over a wireless or wired network, users can get access to high-speed Internet services.

## Voice Services

The eA260-135 provides two telephone ports to which users can connect telephones to implement basic voice functions and supplement voice functions.

## Security Services

The eA260-135 offers security features, such as network firewalls, user authentication, and personal identification number (PIN) protection, to protect users from network security threats.

## Firewall

The eA260-135 has the following firewall functions:

- Firewall switch: Enable and disable the firewall.
- LAN MAC address filtering: Prevent specified MAC addresses on a LAN from accessing the network.
- LAN IP address filtering: Prevent specified IP addresses on a LAN from accessing the network.
- URL filtering: Prevent computers on a LAN from visiting specified URLs.

## Local Management and Maintenance

The eA260-135 supports local configuration to manage devices, configure network parameters, and help ensure that the device functions properly and stably.

## Remote management and maintenance

The eA260-135 allows users to remotely manage connected device by TR069 as well as WebUI.

# 5 Adopted Standards

## Communication Protocols

[Table 5-1](#) lists the standards and communication protocols supported by the eA260-135.

**Table 5-1** eA260-135 standards and communication protocols

Item	Description
Physical layer	RFC894
ARP	RFC826
IP	RFC791, RFC1122, RFC1071, RFC1141, RFC1624, RFC792, RFC950, RFC1256
ICMP	RFC792, RFC950, RFC1256
TCP	RFC793
UDP	RFC768
DHCP	RFC1531, RFC1533
NAT	RFC1631

## Wireless Port

The eA260-135 wireless Uu port complies with LTE R9.



# 6 Packing List

Table 6-1 lists the items included with the eA260-135.

**Table 6-1** Items in the eA260-135 package

Item	Quantity	Remarks
LTE CPE	1	Mandatory
Power adapter	1	Mandatory
Quick Start	1	Mandatory
Safety Information	1	Mandatory
External antenna	2	Mandatory
Ethernet cable	1	Optional

# 7 Acronyms and Abbreviations

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## Numerics

### A

AC	Alternating Current
AES	Advanced Encryption Standard
ALG	Application Level Gateway
ARP	Address Resolution Protocol
AP	Access Point
APN	Access Point Name

### C

CPE	Customer-Premises Equipment
-----	-----------------------------

### D

DDR	Double Data Rate
DHCP	Dynamic Host Configuration Protocol
DL	Down Link
DMZ	demilitarized zone
DNS	domain name service

### I

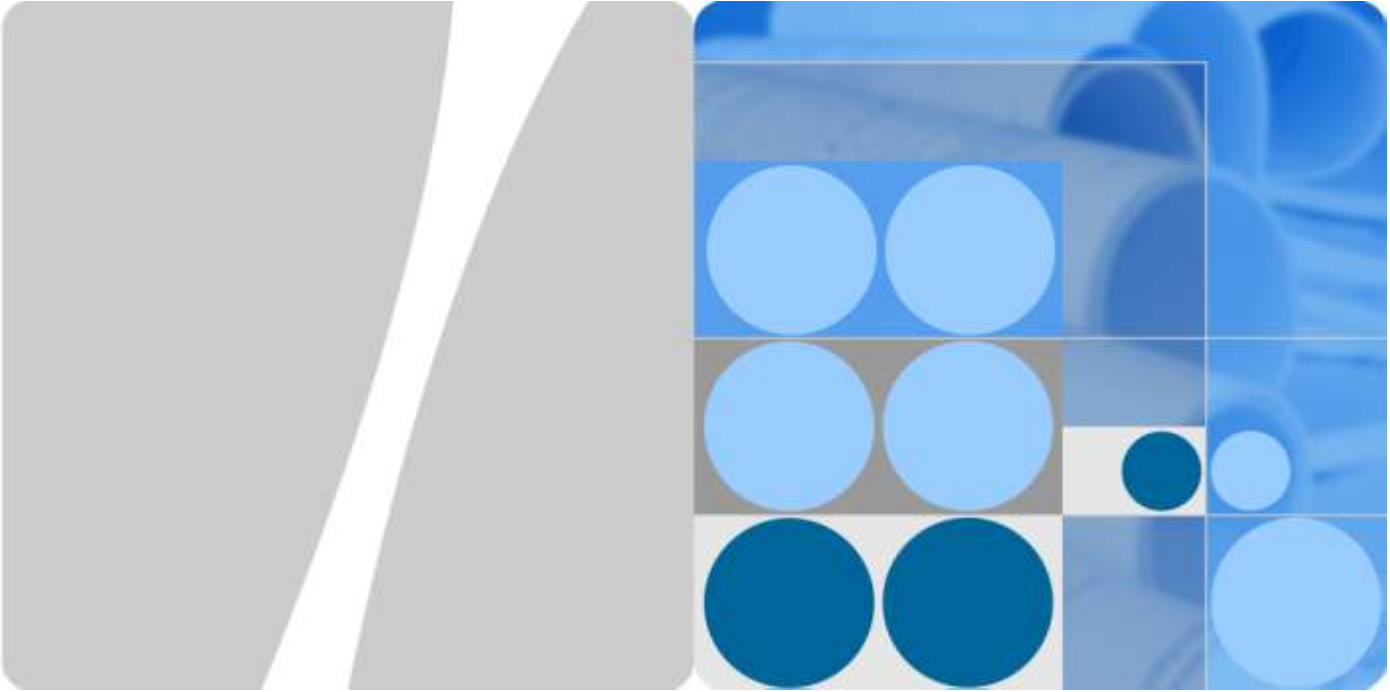
ICMP	Internet Control Message Protocol
IP	Internet Protocol

### L

LAN	Local Area Network
LED	Light Emitting Diode
LTE	Long Term Evolution

### M

MAC	Media Access Control
MDI	Medium Dependent Interface
MDIX	Medium Dependent Interface Crossover
<b>N</b>	
NAPT	Network Address and Port Translation
NAT	Network Address Translation
<b>P</b>	
PIN	Personal Identification Number
<b>S</b>	
SDRAM	Synchronous Dynamic Random Access Memory
SSID	service set identifier
<b>T</b>	
TDD	time division duplex
TKIP	Temporal Key Integrity Protocol
<b>U</b>	
UL	Up Link
URL	Uniform Resource Locator
USB	Universal Serial Bus
USIM	Universal Subscriber Identity Module
<b>W</b>	
WAN	Wide Area Network
Wi-Fi	Wireless Fidelity
WLAN	Wireless Local Area Network
WPA-PSK	Wi-Fi Protected Access Pre-shared Key
WPS	Wi-Fi Protected Setup



# Regulatory Compliance Statement eA260-135

**Issue : 01**

**Date: 2015-6-14**

**HUAWEI TECHNOLOGIES CO., LTD.**





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# **1** Regulatory Compliance Statement

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## **About This Chapter**

1.1 Declaration of Conformity to European Directives

## **1.1 Declaration of Conformity to European Directives**

**Figure 1-1** Declaration of Conformity to European Directives



Doc NO.: CE-01371870

## Declaration of Conformity

### For EU Directives and Regulations

For the following equipment

**Product** : LTE CPE  
**Model/Trademark** : eA360-135 / HUAWEI  
**Manufacturer's Name** : Huawei Technologies Co., Ltd.  
**Manufacturer's Address** : Administration Building, Headquarters of  
Huawei Technologies Co., Ltd., Bantian,  
Longgang District, Shenzhen, 518129, P.R.C

is herewith confirmed to comply with the requirements which are set out in 1999/5/EC(R&TTE Directive), 2002/95/EC & 2011/65/EU (RoHS Directive), 2002/96/EC&2012/19/EU (WEEE Directive) and 2006/1907/EC(REACH Regulation). For the evaluation of the compliance with these Directives and Regulations, the following standards/requirements were applied:

Safety	EN 60950-1:2006+A11:2009+A1:2010+A12:2011 EN 60950-22:2006+A11:2008		
EMC	EN 301 489-1 V1.9.2 EN 301 489-24 V1.5.1	EN 55022:2010 EN 55024:2010	CISPR 22:2008 CISPR 24:2010
Radio & Health	ETSI EN 301 908-1 V6.2.1 Council Recommendation 1999/519/EC		
RoHS	EN 62311:2008 EN 50385:2002		
REACH	2002/95/EC, 2011/65/EU, EN 50581: 2012		
WEEE	EC NO. 1907/2006		
	2002/96/EC, 2012/19/EU		

Responsible for making this declaration is the:

 Manufacturer     Authorised representative established within the EU

Person responsible for making this declaration

Name/Title:



Regulation Compliance Manager

Place/Date

Shenzhen, China

Jul 2, 2014

# 2 Regulatory Compliance Information

## About This Chapter

- 2.1 Regulatory Compliance Standards
- 2.2 European Regulatory Compliance
- 2.3 U.S.A Regulatory Compliance
- 2.4 Canada Regulatory Compliance
- 2.5 CISPR 22 Compliance
- 2.6 China RoHS hazardous substance table
- 2.7 India RoHS hazardous substance table
- 2.8 Other Markets

## 2.1 Regulatory Compliance Standards

This product complies with the standards listed in Table 2-1.

**Table 2-1** Regulatory compliance standards

Discipline	Standards
EMC	<ul style="list-style-type: none"> <li>• CISPR22 Class B</li> <li>• CISPR24</li> <li>• EN55022 Class B</li> <li>• EN50024</li> <li>• ETSI EN 301 489 Class B</li> <li>• CFR 47 FCC Part 15 Class B</li> <li>• FCC Part 90z</li> <li>• ICES 003 Class B</li> <li>• AS/NZS CISPR22 Class B</li> <li>• GB9254 Class B</li> <li>• CNS 13438 Class B</li> <li>• IEC61000-3-2</li> <li>• IEC61000-3-3</li> <li>• EN61000-6-1</li> <li>• EN61000-6-3</li> </ul>

Discipline	Standards
Safety	<ul style="list-style-type: none"> <li>• IEC 60950-1</li> <li>• IEC60950-22</li> <li>• IEC/EN41003</li> <li>• EN 60950-1</li> <li>• UL 60950-1</li> <li>• CSA C22.2 No 60950-1</li> <li>• AS/NZS 60950.1</li> <li>• BS EN 60950-1</li> <li>• IS 13252</li> <li>• GB4943</li> </ul>
RF	<ul style="list-style-type: none"> <li>• ETSI EN 301 908</li> <li>• ETSI EN 300 328</li> </ul>
Telecom	<ul style="list-style-type: none"> <li>• FCC Part 68 (CFR 47)</li> </ul>
Health	<ul style="list-style-type: none"> <li>• ICNIRP Guideline</li> <li>• 1999-519-EC</li> <li>• EN 50385</li> <li>• EN 62311</li> <li>• OET Bulletin 65</li> <li>• IEEE Std C95.1</li> </ul>
Environmental protection	<ul style="list-style-type: none"> <li>• 2011/65/EU (RoHS)</li> <li>• EC NO. 1907/2006 (REACH)</li> <li>• 2002/96/EC (WEEE)</li> </ul>
Grounding	<ul style="list-style-type: none"> <li>• ITU-T K.27</li> <li>• ETSI EN 300 253</li> </ul>

Discipline	Standards
<p><b>NOTE</b></p> <p>EMC: electromagnetic compatibility</p> <p>NEBS: Network Equipment Build Standard</p> <p>RF: radio frequency</p> <p>CISPR: International Special Committee on Radio Interference</p> <p>EN: European Standard</p> <p>ETSI: European Telecommunications Standards Institute</p> <p>CFR: Code of Federal Regulations</p> <p>FCC: Federal Communication Commission</p> <p>IEC: International Electrotechnical Commission</p> <p>AS/NZS: Australian/New Zealand Standard</p> <p>VCCI: Voluntary Control Council for Interference</p> <p>CNS: Chinese National Standard</p> <p>UL: Underwriters Laboratories</p> <p>CSA: Canadian Standards Association</p> <p>BS: British Standard</p> <p>IS: Indian Standard</p> <p>GR: General Requirement</p> <p>FDA: Food and Drug Administration</p> <p>BTS: Base Transceiver Station</p> <p>GSM: Global System for Mobile communications</p> <p>WLAN: wireless local area network</p> <p>ICNIRP: International Commission on Non-Ionizing Radiation Protection</p> <p>OET: Office of Engineering Technology</p> <p>IEEE: Institute of Electrical and Electronics Engineers</p> <p>RoHS: restriction of the use of certain hazardous substances</p>	

## 2.2 European Regulatory Compliance

This product complies with the following European directives and regulations.

- 2004/108/EC (EMC)
- 2006/95/EC (low voltage)
- 1999/5/EC (R&TTE)
- 2011/65/EU (RoHS)
- EC NO. 1907/2006 (REACH)
- 2002/96/EC (WEEE)

Product complies with Directive 2002/95/EC, 2011/65/EU and other similar regulations from the countries outside the European Union, on the RoHS in electrical and electronic equipment. The device does not contain lead, mercury, cadmium, and hexavalent chromium and brominated flame retardants (Polybrominated Biphenyls (PBB) or Polybrominated Diphenyl Ethers (PBDE)) except for those exempted applications allowed by RoHS directive for technical reasons.

Product complies with Regulation EC NO. 1907/2006 (REACH) and other similar regulations from the countries outside the European Union. Huawei will notify to the European Chemical Agency (ECHA) or the customer when necessary and regulation requires.

Product complies with Directive 2002/96/EC on waste electrical and electronic equipment (WEEE). Huawei is responsible for recycling its end-of-life devices, and please contact Huawei local service center when recycling is required. Huawei strictly complies with the EU Waste Electrical and Electronic Equipment Directive (WEEE Directive) and electronic waste management regulations enacted by different countries worldwide. In addition, Huawei has established a system for recycling and reuse of electronic wastes, and it can provide service of dismantling and recycling for WEEE. By Huawei recycling system, the waste can be handled environmentally and the resource can be recycled and reused fully, which is also Huawei WEEE stratagem in the word. Most of the materials in product are recyclable, and our packaging is designed to be recycled and should be handled in accordance with your local recycling policies.

In accordance with Article 11(2) in Directive 2002/96/EC (WEEE), products were marked with the following symbol: a cross-out wheeled waste bin with a bar beneath as below:



## 2.3 U.S.A Regulatory Compliance

2.3.1 [FCC Part 15](#)

2.3.2 [FCC Part 68](#)

### 2.3.1 FCC Part 15

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device does not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

If this device is modified without authorization from Huawei, the device may no longer comply with FCC requirements for Class B digital devices. In that a case, your right to use the device may be limited by FCC regulations. Moreover, you may be required to correct any interference to radio or television communications at your own expense.

This device 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 device generates, uses and radiates radio frequency energy. If it is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user may take one or more of the following measures:

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

## 2.3.2 FCC Part 68

Product complies with Part 68 of the FCC rules and the requirements adopted by the Administrative Council on Terminal Attachments (ACTA). On the enclosure of this device is a label that contains, among other information, a device identifier in the format US: HAUOTNANEA260. On request, this number must be provided to the telephone company.

Table 2-3 lists the service order code (SOC), facility interface code (FIC) and Universal Service Order Code (USOC).

**Table 2-2** SOC, FIC and USOC information

Interface Type	SOC	FIC	Jack Type (USOC)
FXS	N/A	METALLIC	RJ11C

Product that bears labeling identification number US: HAUITNANEA260 complies with:

- FCC Rules and Regulations 47 CFR Part 68
- TIA/EIA/IS-968, Technical Criteria for Terminal Device to Prevent Harms to the Telephone Network, July 2001, as adopted by the ACTA.

A plug and jack used to connect this device to the premises wiring and telephone network must comply with the FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug are provided with this device. The plug is designed to connect to a compatible modular jack that is also compliant with the applicable FCC Part 68 rules and requirements.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The

digits represented by ## are the REN without a decimal point. For earlier products, the REN is separately shown on the label. For this product the FCC Registration number is [US: HAUOTNANEA260] indicates the REN would be NA(in the case of equipment not connecting to circuits with analog ringing supplied then “NA” shall appear).

If this device causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. In this case, you will be advised of your right to file a complaint with the FCC.

The telephone company may make changes in its facilities, device, operations or procedures that could affect the operation of the device. If this happens, the telephone company will provide advance notice so that you make necessary modifications to maintain uninterrupted service.

If this device causes any trouble, contact Futurewei Technologies, Inc. phone number +1 469-277-5852 for repairs or warranty information. If the device causes harm to the telephone network, the telephone company may request that you disconnect the device until the problem is resolved.

Connection to party-line service is subject to state tariffs. Contact the state public utility commission, public service commission, or corporation commission for information.

If your home has specially wired alarm device connected to the telephone line, ensure the installation of this US: HAUITNANEA260 does not disable your alarm device. For queries relating to disabling of alarm device, consult the telephone company or a qualified installer.

## 2.4 Canada Regulatory Compliance

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by Industrial Canada and meets the requirements for radiation exposure limits set forth for an uncontrolled environment.

Cet appareil est conçu et fabriqué pour ne pas dépasser les limites d'émission pour l'exposition à la fréquence radio (RF) de l'énergie fixé par l'Industrielle Canada et répond aux exigences en matière de limites d'exposition aux rayonnements définies pour un environnement non contrôlé.

In order to avoid the possibility of exceeding the Industrial Canada radio frequency exposure limits, human proximity to the device antenna shall not be less than 20 cm during normal operation;

Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio industrielle du Canada, la proximité humaine pour l'appareil antenne ne doit pas être inférieure à 20 cm au cours fonctionnement normal.;

## 2.5 CISPR 22 Compliance

This product complies with CISPR 22 for Class B by the ITE.

Class A ITE is a category of all other ITE that satisfies only the Class A ITE regulations, and not the Class B ITE regulations. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:

## 2.6 China RoHS hazardous substance table

This products described in this guide complies with “the Administration on the Control of Pollution Caused by Electronic Information Products” which is also called China RoHS

部件名称	产品中有害物质或元素的名称及含量					
	镉	铅	汞	六价铬	多溴联苯	多溴联苯醚
Frame	○	×	○	○	○	○
Alloy Parts	○	×	○	○	○	○
Power Adapter	○	×	○	○	○	○
Metal Fittings	○	○	○	○	○	○
PCBA	○	×	○	○	○	○
Capacitor	○	×	○	○	○	○
Other electronics	○	×	○	○	○	○
Screen	○	○	○	○	○	○
Solder	○	×	○	○	○	○
Cable	×	×	○	○	○	○
Plastic and Polymer	○	×	○	○	○	×
Label	○	○	○	○	○	○
Battery	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。  
 ×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。



## 2.7 India RoHS hazardous substance table

This products described in this guide complies with the “e-waste (Management and Handling) Rules, 2011” of India which is also called India RoHS.

Part Descriptions	Restricted Substances in Product					
	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs
Frame	○	×	○	○	○	○
Alloy Parts	○	×	○	○	○	○
Power Adapter	○	×	○	○	○	○
Metal Fittings	○	○	○	○	○	○
PCBA	○	×	○	○	○	○
Capacitor	○	×	○	○	○	○
Other electronics	○	×	○	○	○	○
Screen	○	○	○	○	○	○
Solder	○	×	○	○	○	○
Cable	×	×	○	○	○	○
Plastic and Polymer	○	×	○	○	○	×
Label	○	○	○	○	○	○
Battery	○	○	○	○	○	○

○: indicates that the content of the toxic and hazardous substance in all the Homogeneous Materials of the part is below the concentration limit requirement as described in the e-waste (Management and Handling) Rules, 2011.

×: indicates that the content of the toxic and hazardous substance in at least one Homogeneous Material of the part exceeds the concentration limit requirement as described in S in the e-waste (Management and Handling) Rules, 2011.

## 2.8 Other Markets

For relevant compliance information/documentation for markets not mentioned above,  
Please contact Huawei representative