



**HUAWEI H112-372 5G CPE Pro
V100R001**

Product Description

Issue 03
Date 2019-08-22

Copyright © Huawei Technologies Co., Ltd. 2019. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

LTE is a trademark of ETSI.

Wi-Fi®, the Wi-Fi CERTIFIED logo, and the Wi-Fi logo are trademarks of Wi-Fi Alliance.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: <http://consumer.huawei.com/en/>

Email: mobile@huawei.com

About This Document

Summary

This document provides information regarding the features, main functions and services, technical specifications, and technical references of the product.

This document includes:

| Chapter | Details |
|---|---|
| 1 Product Overview | Provides an overview of the product. |
| 2 Technical Specifications | Describes the specifications of the product hardware, software, and user interface. |
| 3 Services and Applications | Describes the main functions and applications of the product. |
| 4 System Structure and Scenario Constraints | Describes the product system structure. |
| 5 Technical References | Describes the standards and communication protocols of the product. |
| 6 Packing List | Describes the devices and accessories that comprise the product package |



NOTE

The document is an invitation to offer but not an offer. It is intended to describe the general features and functions of a product. The features and functions of certain products may vary with the requirements of customers.

History

| Issue | Date | Details |
|-------|------------|---|
| 01 | 2019-06-12 | Initial official release. |
| 02 | 2019-07-12 | Refresh antenna gain. |
| 03 | 2019-08-22 | Add the LTE CA combination and EN_DC combination. |

Acronyms and Abbreviations

| Acronym or Abbreviation | Full Spelling |
|-------------------------|--|
| 3GPP | 3rd Generation Partnership Project |
| ACS | Auto Configuration Server |
| AES | Advanced Encryption Standard |
| ALG | Application Layer Gateway |
| AMR-NB | Adaptive Multi-Rate compression - Narrowband |
| AMR-WB | Adaptive Multi-Rate compression - Wideband |
| AP | Access Point |
| APN | Access Point Name |
| ARP | Address Resolution Protocol |
| CLAT | Customer-side Translator |
| CPE | Customer Premises Equipment |
| CS | Circuit Switched |
| CSFB | Circuit Switched Fallback |
| DBDC | Dual Band Dual Concurrent |
| DL | Downlink |
| DMZ | Demilitarized Zone |
| DNS | Domain Name Server |
| DTMF | Dual-Tone Multi-Frequency |
| E-UTRA | Evolved Universal Terrestrial Radio Access Network |
| FDD | Frequency Division Duplex |
| HOTA | Huawei Firmware Over the Air |
| IEEE | Institute of Electrical and Electronics Engineers |
| IP | Internet Protocol |
| IPSec | Internet Protocol Security |
| IPv4 | Internet Protocol version 4 |
| IPv6 | Internet Protocol version 6 |
| ICMP | Internet Control Message Protocol |
| L2TP | Layer Two Tunneling Protocol |
| LAN | Local Area Network |

| Acronym or Abbreviation | Full Spelling |
|-------------------------|---|
| LED | Light Emitting Diode |
| LTE | Long Term Evolution |
| MAC | Media Access Control |
| MDI | Medium Dependent Interface |
| MDIX | Medium Dependent Interface Crossover |
| MIMO | Multi-input Multi-output |
| MME | Mobility Management Entity |
| NAT | Network Address Translation |
| NAPT | Network Address and Port Translation |
| PC | Personal Computer |
| PCC | Primary Component Carrier |
| PGW | PDN Gateway |
| PIN | Personal Identification Number |
| PLAT | Provider-side Translator |
| PPTP | Point-to-Point Tunneling Protocol |
| QAM | Quadrature Amplitude Modulation |
| QR | Quick Response |
| RFC | Request For Comments |
| RTCP | Real-time Transport Control Protocol |
| RTP | Real-time Transport Protocol |
| SAMBA | System for Advanced Mobile Broadband Applications |
| SCC | Secondary Component Carrier |
| SCP | Service Control Point |
| SDRAM | Synchronous Dynamic Random Access Memory |
| SDP | Session Description Protocol |
| SGW | Serving Gateway |
| SIP | Session Initiation Protocol |
| SMA | Sub-Miniature-A |
| SMS | Short Message |
| SOHO | Small Office Home Office |
| SSID | Service Set Identifier |

| Acronym or Abbreviation | Full Spelling |
|--------------------------------|---|
| TDD | Time Division Duplex |
| TKIP | Temporal Key Integrity Protocol |
| UE | User Equipment |
| UL | Uplink |
| UMTS | Universal Mobile Telecommunications System |
| UPnP | Universal Plug and Play |
| USB | Universal Serial Bus |
| USIM | UMTS Subscriber Identity Module |
| VPN | Virtual Private Network |
| WAN | Wide Area Network |
| WEP | Wireless Encryption Protocol |
| Wi-Fi® | Wireless Fidelity |
| WMM | Wi-Fi Multimedia |
| WPA/WPA2-PSK | Wi-Fi Protected Access/Wi-Fi Protected Access II - Pre-Shared Key |
| WPA2-PSK | Wi-Fi Protected Access II - Pre-Shared Key |
| WPS | Wi-Fi Protected Setup |

Contents

| | |
|---|-----------|
| About This Document | ii |
| 1 Product Overview | 1 |
| 2 Technical Specifications | 3 |
| 2.1 Hardware Specifications | 3 |
| 2.2 Antenna Specifications | 6 |
| 2.2.1 Build-in LTE Antenna..... | 6 |
| 2.2.2 Build-in Wi-Fi Antenna | 9 |
| 2.2.3 LTE CA combination | 10 |
| 2.2.4 EN_DC combination | 13 |
| 2.3 Software Specifications | 16 |
| 3 Services and Applications | 19 |
| 3.1 Data Services | 19 |
| 3.1.1 Accessing the Internet through a Mobile Network (5G/LTE)..... | 19 |
| 3.1.2 Accessing the Internet through an Ethernet Network | 20 |
| 3.2 SMS | 20 |
| 3.3 Security Service | 20 |
| 3.3.1 Firewall Service | 20 |
| 3.3.2 MAC Filtering | 21 |
| 3.3.3 Wi-Fi Authentication..... | 21 |
| 3.4 VPN Function | 21 |
| 3.4.1 VPN Client..... | 21 |
| 3.4.2 VPN Pass-Through | 21 |
| 3.5 IP Pass-Through..... | 22 |
| 3.6 IPv6 Only and IPv4v6 Dual Stack | 22 |
| 3.6.1 IPv4v6 Dual Stack | 22 |
| 3.6.2 IPv6 Only (CLAT) | 22 |
| 3.7 Multi-APN | 23 |
| 3.8 5GHz Preferred..... | 23 |
| 3.9 HiLink..... | 23 |
| 3.10 Customer management | 23 |
| 3.10.1 WebUI..... | 23 |
| 3.10.2 HUAWEI SmartHome APP | 23 |

| | |
|---|-----------|
| 3.11 Operator maintenance | 24 |
| 3.12 HOTA | 24 |
| 4 System Structure and Scenario Constraints..... | 25 |
| 4.1 System Architecture..... | 25 |
| 4.2 Scenario Constraints | 26 |
| 5 Technical References..... | 27 |
| 5.1 Standards and Communication Protocols | 27 |
| 5.1.1 Standards and Communication Protocols of the Product..... | 27 |
| 5.1.2 Standards and Communication Protocols of the Wireless Uu Interface..... | 27 |
| 6 Packing List..... | 28 |

1 Product Overview

The HUAWEI 5G CPE H112-372 is a 5G wireless gateway for multiple users in household or small office environments. It enables users to access the Internet.

The H112-372 supports 3GPP Release 15 with UE downlink category 19 and uplink category 13. The supported service functions are as follows:

- Data service:
 - SA (Supported only in China):
 - 5G:
 - Downlink 1CC (100M), 4x4 MIMO, 256 QAM, peak rate: 1.65Gbps (DL/UL subframe configuration 8:2).
 - Uplink 1CC (100M) 2x2 MIMO, 256 QAM, peak rate: 250Mbps (DL/UL subframe configuration 8:2)
 - NSA:
 - 5G:
 - Downlink 1CC (100M), 4x4 MIMO, 256 QAM, peak rate: 2.33Gbps (Total downlink subframe configuration)
 - Uplink 1CC (100M), 1T, 256 QAM, peak rate: 650Mbps (Total uplink subframe configuration)
 - LTE
 - Downlink 5CC, 4x4 MIMO (Different frequency bands support different MIMO modes), 256QAM, peak rate: 1.6Gbps (FDD frequency bands, 20+20+20+20MHz, 4x4MIMO).
 - Uplink 2CC, 1T, 64 QAM, peak rate: 150Mbps (FDD frequency bands, 20MHz+20MHz)

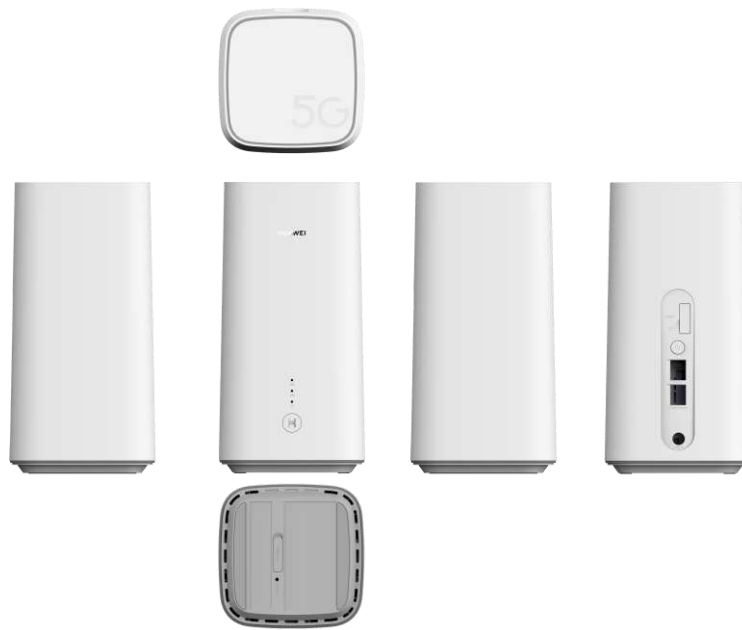
NOTE

The actual data rate varies with network configuration.

- Working band: 5G: n41/77(3300MHz~3800MHz)/78/79(4800MHz~4900MHz, Supported only in China), LTE: B1/3/5/7/8/18/19/20/28/32/34/38/39/40/41/42/43
- Wi-Fi: 802.11 b/g/n/a/ac. 2.4GHz Wi-Fi 2x2 MIMO up to 300Mbps, 5GHz Wi-Fi 2x2 MIMO up to 867Mbps. Maximum Users: 32+32
- 1 GE port for LAN/WAN, 1 GE port for LAN.
- Multi APN function (Optional) for Data, TR-069 services(Optional)
- Routing mode: NAT enable (Default) / IP pass-through (Optional)

- VPN client service (L2TP, PPTP)
- Customer management via WebUI or HUAWEI SmartHome APP (iOS or Android)
- Operator maintenance via TR-069 (Optional) and TR-143 (Optional)
- Huawei Firmware Over the Air (HOTA)
- 5GHz Wi-Fi preferred
- HUAWEI HiLink

Figure 1-1 H112-372 appearance



2 Technical Specifications

2.1 Hardware Specifications

Table 2-1 Technical specifications of the H112-372 main unit

| Item | Description | |
|------------------------|--|---|
| Technical standard | WAN | 3GPP Release 15 |
| | LAN | IEEE 802.3/802.3u |
| | Wi-Fi | IEEE 802.11b/g/n/a/ac |
| Working band/frequency | 5G | n41/77/78/79(n79 is supported only in China) |
| | LTE | B1/3/5/7/8/18/19/20/28/32/34/38/39/40/41/42/43 |
| | Wi-Fi | 2.422 GHz~2.482 GHz (5-13ch), 5.170 GHz~5.330 GHz, 5.490 GHz~5.710 GHz, 5.735 GHz~5.835 GHz, (W52,W53,W56,W58) (W58 is supported only in China) |
| | DL MIMO | 5G 4x4: n41/77/78/79 LTE 4x4: B1/3/7/38/39/40/41/42/43 LTE 2x2: B5/8/18/19/20/28/32/34 |
| | UL MIMO | n41/77/78/79 (UL MIMO is supported only in SA mode, and SA mode is supported only in China.) |
| External port | <ul style="list-style-type: none"> • One power adapter port • One LAN/WAN port (RJ45), One LAN port (RJ45) • two external 5G antenna ports (TS-9) • One SIM card slot (Nano-SIM) | |
| Antennas | <ul style="list-style-type: none"> • Built-in 5G/LTE primary antenna • Built-in 5G/LTE secondary antenna • Built-in Wi-Fi 2.4 GHz and 5 GHz antennas | |

| Item | Description | | | | |
|------------------------|--|--|----------------------|----------------------------------|------|
| LED Indicators | <ul style="list-style-type: none"> • One 5G indicator • One 4G indicator • One Wi-Fi indicator • One ambient light strip | | | | |
| Buttons | <ul style="list-style-type: none"> • One Power ON/OFF switch • One Hi button • One Reset button | | | | |
| Maximum transmit power | 5G | n77/78/79: 23 dBm+2.7/-3.7 dB n41: 23 dBm+2.7/-2.7 dB | | | |
| | LTE | B1/3/5/7/8/18/19/20/28/32/34/38/39/40/41/42/43: 23 dBm+2.7/-2.7 dB | | | |
| | Wi-Fi | 2.4GHz | 802.11b | Ant0/Ant1 13 dBm (±2dB) @11 Mbps | |
| | | | 802.11g | 15 dBm (±2dB) @6 Mbps | |
| | | | | 15 dBm (±2dB) @54 Mbps | |
| | 802.11n | 15 dBm (±2dB) @2.4G MCS0 | | 15 dBm (±2dB) @2.4G MCS7 | |
| | | 5GHz | Formats and channels | Ant0 | Ant1 |
| | | W52/W53 | 11a 6M | 15 | |
| | 11a 54M | | 15 | | 14.5 |
| | 11n 20 MCS0 | | 15 | | 14.5 |
| | 11n 20 MCS7 | | 15 | | 14.5 |
| | 11n 40 MCS0 | | 17 | | 16.5 |
| | 11n 40 MCS7 | | 16 | | 15.5 |
| | 11ac 20 MCS0 | | 15 | | 14.5 |
| 11ac 20 MCS8 | 15 | | 14.5 | | |
| 11ac 40 MCS0 | 17 | | 16.5 | | |
| 11ac 40 MCS9 | 15 | | 14.5 | | |
| 11ac 80 MCS0 | 15 | | 14.5 | | |
| 11ac 80 MCS9 | 15 | | 14.5 | | |
| W56 | 11a 6M | 19 | | 18.5 | |
| | 11a 54M | 16 | | 15.5 | |
| | 11n 20 MCS0 | 19 | | 18.5 | |
| | 11n 20 MCS7 | 16 | | 15.5 | |

| Item | Description | | | | | |
|--|---|------------------------------------|--------------|--------------|------|------|
| | | | 11n 40 MCS0 | 19 | 18.5 | |
| | | | 11n 40 MCS7 | 16 | 15.5 | |
| | | | 11ac 20 MCS0 | 19 | 18.5 | |
| | | | 11ac 20 MCS8 | 15 | 14.5 | |
| | | | 11ac 40 MCS0 | 19 | 18.5 | |
| | | | 11ac 40 MCS9 | 15 | 14.5 | |
| | | | 11ac 80 MCS0 | 18 | 17.5 | |
| | | | 11ac 80 MCS9 | 15 | 14.5 | |
| | W58 | | | 11a 6M | 19 | 18.5 |
| | | | | 11a 54M | 16 | 15.5 |
| | | | | 11n 20 MCS0 | 18.5 | 18 |
| | | | | 11n 20 MCS7 | 16 | 15.5 |
| | | | | 11n 40 MCS0 | 19 | 18.5 |
| | | | | 11n 40 MCS7 | 16 | 15.5 |
| | | | | 11ac 20 MCS0 | 18.5 | 18 |
| | | | | 11ac 20 MCS8 | 15 | 14.5 |
| | | | | 11ac 40 MCS0 | 19 | 18.5 |
| | | | | 11ac 40 MCS9 | 15 | 14.5 |
| | | | | 11ac 80 MCS0 | 18 | 17.5 |
| | | | | 11ac 80 MCS9 | 15 | 14.5 |
| Note: Some edge frequency point power will have a fallback | | | | | | |
| Receiving sensitivity | 5G | Conform to 3GPP Definition | | | | |
| | LTE | Conform to 3GPP Definition | | | | |
| | Wi-Fi | Conform to IEEE P802.11 Definition | | | | |
| Power consumption | < 24 W | | | | | |
| AC/DC power supply | <ul style="list-style-type: none"> AC (input): 100V-240V 50Hz/60Hz DC (output): 12V/2A | | | | | |
| Dimensions (Maximum) | 99 mm (Top edge length) x 107 mm (Bottom edge length) x 215 mm (Height) | | | | | |
| Weight | About 756 g (excluding the power adapter) | | | | | |
| Temperature | <ul style="list-style-type: none"> Working temperature: 0°C to 40°C Storage temperature: -20°C to +70°C | | | | | |
| Humidity | 5% – 95% (non-condensing) | | | | | |

| Item | Description |
|--------------------------|--|
| Certification/Compliance | Overseas: CE certification /RoHS/REACH/WEEE/Wi-Fi certification /ErP/GCF China : CCC/ SSRC Type Approval/ China Type Approval |

2.2 Antenna Specifications

2.2.1 Build-in LTE Antenna

Table 2-2 LTE antenna specifications

| Item | Description |
|-------------------------|---|
| Frequency | <p>5G</p> <ul style="list-style-type: none"> • n41: UL 2496–2690 MHz DL 2496–2690 MHz • n77: UL 3300–3800 MHz DL 3300–3800 MHz • n78: UL 3300–3800 MHz DL 3300–3800 MHz • n79: UL 4800–4900 MHz DL 4800–4900 MHz <p>LTE</p> <ul style="list-style-type: none"> • B1: UL 1920–1980 MHz DL 2110–2170 MHz • B3: UL 1710–1785 MHz DL 1805–1880 MHz • B5: UL 824–849 MHz DL 869–894 MHz • B7: UL 2500–2570 MHz DL 2620–2690 MHz • B8: UL 880–915 MHz DL 925–960 MHz • B18: UL 815–830 MHz DL 860–875 MHz • B19: UL 830–845 MHz DL 875–890 MHz • B20: UL 832–862 MHz DL 791–821 MHz • B28: UL 703–748 MHz DL 758–803 MHz • B32: / DL 1452–1496 MHz • B38: UL 2570–2620MHz DL 2570–2620 MHz • B40: UL 2300–2400 MHz DL 2300–2400 MHz • B41: UL 2496–2690 MHz DL 2496–2690 MHz • B42: UL 3400–3600 MHz DL 3400–3600 MHz • B43: UL 3600–3800 MHz DL 3600–3800 MHz |
| Input impedance | 50 Ω |
| Standing wave ratio | < 2.5 |
| Main antenna efficiency | <p>5G</p> <ul style="list-style-type: none"> • n41: -1.9 dB • n77: -1.8 dB • n78: -1.9 dB |

| Item | Description |
|------------------------------|---|
| | <ul style="list-style-type: none"> • n79: -2.9 dB LTE <ul style="list-style-type: none"> • B1: -2.0 dB • B3: -1.6 dB • B5: -2.2 dB • B7: -2.0 dB • B8: -2.7 dB • B18: -2.3 dB • B19: -2.2 dB • B20: -2.4 dB • B28: -3.0 dB • B32: / • B34: -2.1 dB • B38: -1.8 dB • B39: -1.8 dB • B40: -2.4 dB • B41: -1.9 dB • B42: -2.0 dB • B43: -1.8 dB |
| Diversity antenna efficiency | 5G <ul style="list-style-type: none"> • n41: -1.4 dB • n77: -1.1 dB • n78: -1.3 dB • n79: -2.5 dB LTE <ul style="list-style-type: none"> • B1: -1.7 dB • B3: -1.5 dB • B5: -2.8 dB • B7: -1.4 dB • B8: -3.3 dB • B18: -2.7 dB • B19: -2.8 dB • B20: -2.3 dB • B28: -2.5 dB • B32: / • B34: -1.7 dB • B38: -1.3 dB • B39: -1.5 dB • B40: -1.9 dB • B41: -1.4 dB |

| Item | Description |
|------------------------|---|
| | <ul style="list-style-type: none"> • B42: -1.3 dB • B43: -1.2 dB |
| Main antenna gain | <p>5G</p> <ul style="list-style-type: none"> • n41: 5.6 dBi • n77: 5.6 dBi • n78: 6 dBi • n79: 4.6 dBi <p>LTE</p> <ul style="list-style-type: none"> • B1: 3.9 dBi • B3: 3 dBi • B5: 3.3 dBi • B7: 4.7 dBi • B8: 2.5 dBi • B18: 3.3 dBi • B19: 3.3 dBi • B20: 3.3 dBi • B28: 2.3 dBi • B32: / • B34: 3.6 dBi • B38: 5.5 dBi • B39: 3.2 dBi • B40: 3.9 dBi • B41: 5.5 dBi • B42: 4.1 dBi • B43: 4.8 dBi |
| Diversity antenna gain | <p>5G</p> <ul style="list-style-type: none"> • n41: 5.5 dBi • n77: 4.8 dBi • n78: 4.1 dBi • n79: 4.4 dBi <p>LTE</p> <ul style="list-style-type: none"> • B1: 3.7 dBi • B3: 3.8 dBi • B5: 2.6 dBi • B7: 5.6 dBi • B8: 1.9 dBi • B18: 2.7 dBi • B19: 2.7 dBi • B20: 2.2 dBi |

| Item | Description |
|--------------|--|
| | <ul style="list-style-type: none"> • B28: 3.0 dBi • B32: / • B34: 3.4 dBi • B38: 5.5 dBi • B39: 2.6 dBi • B40: 3.8 dBi • B41: 5.5 dBi • B42: 4.0 dBi • B43: 4.3 dBi |
| TX/RX | 2T4R |
| Polarization | Linear polarization |

2.2.2 Build-in Wi-Fi Antenna

Table 2-3 Wi-Fi 2.4 GHz antenna specifications

| Item | Description |
|---------------------|--|
| Frequency | 2.422 GHz-2.482 GHz (Channel 5 – Channel 13) |
| Input impedance | 50 Ω |
| Standing wave ratio | < 2 |
| Efficiency | -2.2 dB |
| Gain | 3 dBi |
| Polarization | Linear polarization |

Table 2-4 Wi-Fi 5 GHz antenna specifications

| Item | Description |
|---------------------|---|
| Frequency | 5.170 GHz-5.330 GHz,5.490 GHz-5.710 GHz,5.735 GHz~5.835 GHz |
| Input impedance | 50 Ω |
| Standing wave ratio | < 2 |
| Efficiency | -3 dB |
| Gain | 3.7 dBi |
| Polarization | Linear polarization |

2.2.3 LTE CA combination

Table 2-5 LTE CA combination

| Item | Description | 2CC(DL) | |
|------------------|-------------|------------|------|
| | | DL | MIMO |
| Band combination | LTE | CA_1C | 4+4 |
| | | CA_3C | 4+4 |
| | | CA_7C | 4+4 |
| | | CA_39C | 4+4 |
| | | CA_40C | 4+4 |
| | | CA_41C | 4+4 |
| | | CA_42C | 4+4 |
| | | CA_7A-7A | 4+2 |
| | | CA_1A-3A | 4+4 |
| | | CA_1A-7A | 4+4 |
| | | CA_1A-8A | 4+2 |
| | | CA_20A-32A | 2+2 |
| | | CA_20A-38A | 2+4 |
| | | CA_3A-19A | 4+2 |
| | | CA_19A-42A | 2+4 |
| | | CA_1A-19A | 4+2 |
| | | CA_1A-20A | 4+2 |
| | | CA_1A-28A | 4+2 |
| | | CA_1A-38A | 4+4 |
| | | CA_1A-42A | 2+4 |
| | | CA_3A-3A | 4+4 |
| | | CA_3A-7A | 4+4 |
| | | CA_3A-8A | 4+2 |
| | | CA_3A-20A | 4+2 |
| | | CA_3A-28A | 4+2 |
| | | CA_3A_32A | 4+2 |
| | | CA_41A-42A | 4+4 |
| | | CA_7A-32A | 4+2 |
| | | CA_3A-40A | 4+4 |
| | | CA_1A-32A | 2+2 |
| | | CA_3A-38A | 4+4 |
| | | CA_3A-41A | 4+4 |
| | | CA_3A-42A | 4+4 |
| | | CA_7A-8A | 4+2 |
| | | CA_7A-20A | 4+2 |
| | | CA_7A-28A | 4+2 |
| | | CA_8A-39A | 2+4 |
| | | CA_8A-41A | 2+4 |
| | | CA_38C | 4+4 |
| | | CA_39A-41A | 4+4 |
| | | CA_1A-18A | 4+2 |
| | | CA_1A-41A | 4+4 |
| CA_1A-40A | 4+4 | | |
| | | 3CC(DL) | |
| | | DL | MIMO |

| | | |
|--|----------------------------|-------|
| | CA_40D | 4+4+4 |
| | CA_41D | 4+4+4 |
| | CA_1A-7C | 4+4+4 |
| | CA_1A-3C | 4+4+4 |
| | CA_1A-41C | 4+4+4 |
| | CA_1A-42C | 4+4+4 |
| | CA_1A-40C | 4+4+4 |
| | CA_3A-7C | 4+4+4 |
| | CA_3A-40C | 4+4+4 |
| | CA_3A-41C | 4+4+4 |
| | CA_3A-41A-42A | 2+4+4 |
| | CA_3C-5A | 4+4+2 |
| | CA_3C-7A | 4+4+4 |
| | CA_3C-8A | 4+4+2 |
| | CA_3C-20A | 4+4+2 |
| | CA_3C-28A | 4+4+2 |
| | CA_3C-32A | 4+4+2 |
| | CA_7A-40C | 4+4+4 |
| | CA_7C-20A | 4+4+2 |
| | CA_7C-28A | 4+4+2 |
| | CA_28A-40C | 2+4+4 |
| | CA_1A-3A-7A | 4+4+4 |
| | CA_1A-3A-8A | 4+4+2 |
| | CA_1A-3A-20A | 4+4+2 |
| | CA_1A-3A-28A | 4+4+2 |
| | CA_1A-3A-32A | 2+4+2 |
| | CA_1A-3A-38A | 4+4+4 |
| | CA_1A-7A-7A | 4+2+4 |
| | CA_1A-8A-38A | 4+2+4 |
| | CA_1A-20A-32A | 2+2+2 |
| | CA_1A-7A-20A | 4+4+2 |
| | CA_1A-7A-28A | 4+4+2 |
| | CA_1A-7A-32A | 2+4+2 |
| | CA_3A-3A-20A | 4+4+2 |
| | CA_3A-3A-7A | 4+4+4 |
| | CA_3A-7A-7A | 4+2+4 |
| | CA_3A-7A-20A | 4+4+2 |
| | CA_3A-7A-28A | 4+4+2 |
| | CA_3A-7A-32A | 4+4+2 |
| | CA_3A-7A-38A (B3 PCC) | 4+4+2 |
| | CA_7A-20A-32A | 4+2+2 |
| | CA_7A-20A-38A (B20 PCC) | 2+2+4 |
| | CA_41A-42C | 4+4+4 |
| | CA_41C-42A | 4+4+4 |
| | CA_39A-41C | 4+4+4 |
| | CA_39C-41A | 4+4+4 |
| | CA_1A-3A-19A | 2+4+2 |
| | CA_1A-3A-42A | 2+4+4 |
| | CA_1A-19A-42A | 2+2+4 |
| | CA_1A-42C | 2+4+4 |
| | CA_3A-19A-42A | 4+2+4 |
| | CA_3A-42C | 4+4+4 |

| | | | |
|--|--|------------------|-------------|
| | | CA_19A-42C | 2+4+4 |
| | | CA_8A-41C | 2+4+4 |
| | | CA_3A-28A-40A | 4+2+4 |
| | | CA_1A-28A-40A | 4+2+2 |
| | | CA_1A-3A-40A | 4+4+4 |
| | | CA_1A-7A-8A | 2+4+2 |
| | | CA_3A-7A-8A | 4+4+2 |
| | | 4CC(DL) | |
| | | DL | MIMO |
| | | CA_40E | 4+4+4+4 |
| | | CA_3A-40D | 4+4+4+4 |
| | | CA_3C-7C | 4+4+4+4 |
| | | CA_1A-3A-7C | 4+4+4+4 |
| | | CA_1A-3A-40C | 4+4+4+4 |
| | | CA_1A-3C-5A | 2+4+4+2 |
| | | CA_1A-3C-7A | 2+4+4+4 |
| | | CA_1A-3C-8A | 4+4+4+2 |
| | | CA_1A-3C-28A | 4+4+4+2 |
| | | CA_1A-7C-28A | 4+4+4+2 |
| | | CA_1A-7A-40C | 4+2+2+2 |
| | | CA_3C-8A-38A | 4+4+2+2 |
| | | CA_3A-7A-20A-32A | 4+4+2+2 |
| | | CA_3A-7A-40C | 4+4+4+4 |
| | | CA_3A-7C-20A | 4+4+4+2 |
| | | CA_3A-7C-28A | 4+4+4+2 |
| | | CA_3C-7A-20A | 4+4+4+2 |
| | | CA_3C-7A-28A | 4+4+4+2 |
| | | CA_3C-7A-32A | 4+4+4+2 |
| | | CA_3A-28A-40C | 4+2+4+4 |
| | | CA_1A-3A-7A-7A | 4+2+2+2 |
| | | CA_1A-3A-7A-8A | 2+4+4+2 |
| | | CA_1A-3A-7A-20A | 2+4+4+2 |
| | | CA_1A-3A-7A-28A | 2+4+4+2 |
| | | CA_1A-3A-7A-32A | 2+4+4+2 |
| | | CA_1A-7A-20A-32A | 2+4+2+2 |
| | | CA_1A-3A-8A-38A | 2+4+2+4 |
| | | CA_7A-40D | 4+4+4+4 |
| | | CA_7A-28A-40C | 4+2+4+4 |
| | | CA_41C-42C | 4+4+4+4 |
| | | CA_3A-41A-42C | 2+4+4+4 |
| | | CA_3A-41C-42A | 2+4+4+4 |
| | | CA_39C-41C | 4+4+4+4 |
| | | CA_39A-41D | 4+4+4+4 |
| | | CA_1A-3A-19A-42A | 2+4+2+4 |
| | | CA_1A-3A-42C | 2+4+4+4 |
| | | CA_1A-19A-42C | 2+2+4+4 |
| | | CA_1A-42D | 2+4+4+4 |
| | | CA_3A-19A-42C | 4+2+4+4 |
| | | CA_3A-42D | 4+4+4+4 |
| | | CA_1A-3A-20A-32A | 2+4+2+2 |
| | | CA_1A-28A-40C | 4+2+2+2 |
| | | CA_1A-3A-28A-40A | 4+4+2+2 |
| | | 5CC(DL) | |

| | | DL | MIMO |
|--|--|---------------------|-----------|
| | | CA_1A-3A-3A-8A-38A | 2+2+2+2+2 |
| | | CA_1A-3A-7C-28A | 2+4+4+4+2 |
| | | CA_1A-3A-7A-20A-32A | 2+4+2+2+2 |
| | | CA_3C-7C-28A | 2+2+4+4+2 |
| | | CA_1A-41C-42C | 4+2+2+4+4 |
| | | CA_1A-3C-7C | 4+4+4+2+2 |
| | | CA_3A-7A-28A-40C | 4+4+2+2+2 |
| | | CA_1A-3A-28A-40C | 4+4+2+2+2 |
| | | CA_3A-28A-40D | 2+2+4+4+4 |
| | | CA_7A-40E | 4+2+2+2+2 |
| | | CA_3A-40E | 4+2+2+2+2 |
| | | CA_1A-3A-7A-40C | 2+2+2+2+2 |
| | | CA_1A-7A-28A-40C | 4+2+2+2+2 |
| | | CA_1A-3A-19A-42C | 2+4+2+4+4 |
| | | CA_3A-41C-42C | 2+2+2+4+4 |
| | | CA_1A-42E | 2+2+2+2+2 |
| | | CA_3A-42E | 4+2+2+2+2 |
| | | CA_1A-3A-18A-42C | 2+4+2+4+4 |
| | | UL | |
| | | UL | MIMO |
| | | CA_3C | / |
| | | CA_7C | / |
| | | CA_39C | / |
| | | CA_40C | / |
| | | CA_41C | / |
| | | CA_42C | / |
| | | CA_1A-3A | / |
| | | CA_1A-7A | / |
| | | CA_1A-20A | / |
| | | CA_3A-7A | / |
| | | CA_3A-8A | / |
| | | CA_3A-28A | / |
| | | CA_3A-20A | / |
| | | CA_3A-38A | / |

 **NOTE**

(1)All the preceding LTE CA combinations can only represent product capabilities. For details about the carrier's support, see the product configuration.

(2)B32 supports only SCC. All downlink CA combinations with B32 do not support uplink inter-band CA.

2.2.4 EN_DC combination

| Item | Description | | |
|------------------|-------------|------------|------|
| Band combination | 5G | 2CC | |
| | | EN_DC | MIMO |
| | | DC_1A_n78A | 4+4 |
| | | DC_3A_n78A | 4+4 |
| | | DC_5A_n78A | 2+4 |
| | | DC_7A_n78A | 4+4 |
| | | DC_8A_n78A | 2+4 |

| | | | |
|--|--|--------------------------|-------------|
| | | DC_20A_n78A | 2+4 |
| | | DC_28A_n78A | 2+4 |
| | | DC_38A_n78A | 4+4 |
| | | DC_40A_n78A | 4+4 |
| | | DC_41A_n78A | 4+4 |
| | | DC_1A_n77A | 4+4 |
| | | DC_3A_n77A | 4+4 |
| | | DC_28A_n77A | 2+4 |
| | | DC_1A_n41A | 4+4 |
| | | DC_3A_n41A | 4+4 |
| | | DC_20A_n41A | 2+4 |
| | | DC_39A_n41A | 4+4 |
| | | DC_39A_n79A | 4+4 |
| | | DC_3A_n79A | 4+4 |
| | | 3CC | |
| | | EN_DC | MIMO |
| | | DC_1A-3A_n78A | 4+4+4 |
| | | DC_1A-7A_n78A | 4+4+4 |
| | | DC_1A-8A_n78A | 4+2+4 |
| | | DC_1A-20A_n78A | 4+2+4 |
| | | DC_3A-7A_n78A | 4+4+4 |
| | | DC_3A-8A_n78A | 4+2+4 |
| | | DC_3A-20A_n78A | 4+2+4 |
| | | DC_3A-38A_n78A(B38 SCC) | 4+4+4 |
| | | DC_7A-20A_n78A | 4+2+4 |
| | | DC_20A-38A_n78A(B38 SCC) | 2+4+4 |
| | | DC_1C_n78A | 4+4+4 |
| | | DC_3C_n78A | 4+4+4 |
| | | DC_1C_n78A | 4+4+4 |
| | | DC_3A-3A_n78A | 4+2+4 |
| | | DC_7C_n78A | 4+4+4 |
| | | DC_40C_n78A | 4+4+4 |
| | | DC_41C_n78A | 4+4+4 |
| | | DC_1A-3A_n77A | 4+4+4 |
| | | DC_1A-28A_n78A | 4+2+4 |
| | | DC_3A-28A_n78A | 4+2+4 |
| | | DC_3A-41A_n78A | 4+4+4 |
| | | DC_3A-42A_n78A(B42 SCC) | 4+4+4 |
| | | DC_7A-28A_n78A | 4+2+4 |
| | | DC_7C_n78A | 4+4+4 |
| | | DC_3A-32A_n78A | 2+2+4 |
| | | DC_3A-40A_n78A | 2+2+4 |
| | | DC_1A-40A_n78A | 2+2+4 |
| | | DC_1A-32A_n78A | 2+2+4 |
| | | DC_7A-32A_n78A | 2+2+4 |
| | | DC_20A-32A_n78A | 2+2+4 |
| | | DC_1A-41A_n78A | 4+4+4 |
| | | DC_1A-28A_n77A | 2+2+4 |
| | | DC_3A-28A_n77A | 4+2+4 |
| | | DC_7A-8A_n78A | 2+2+4 |
| | | 4CC | |
| | | EN_DC | MIMO |
| | | DC_1A-3C_n78A | 4+4+4+4 |
| | | DC_1A-7C_n78A | 4+4+4+4 |
| | | DC_1A-3A-7A_n78A | 2+2+4+4 |
| | | DC_1A-3A-8A_n78A | 2+4+2+4 |
| | | DC_1A-3A-20A_n78A | 2+4+2+4 |

| | | |
|--|-------------------------|-------------|
| | DC_1A-7A-20A_n78A | 2+4+2+4 |
| | DC_3A-7A-20A_n78A | 2+4+2+4 |
| | DC_3A-7C_n78A | 4+4+4+4 |
| | DC_3C-7A_n78A | 4+4+4+4 |
| | DC_3C-20A_n78A | 4+4+2+4 |
| | DC_3A-42C_n78A(B42 SCC) | 4+4+4+4 |
| | DC_7C-28A_n78A | 4+4+2+4 |
| | DC_1A-41C_n78A | 4+4+4+4 |
| | DC_1A-3A-28A_n77A | 2+4+2+4 |
| | DC_1A-3A-28A_n78A | 2+4+2+4 |
| | DC_3A-7A-28A_n78A | 2+4+2+4 |
| | DC_3C-32A_n78A | 2+2+2+4 |
| | DC_3C-28A_n78A | 2+2+2+4 |
| | DC_3A-40C_n78A | 2+2+2+4 |
| | DC_1A-40C_n78A | 2+2+2+4 |
| | DC_1A-3A-40A_n78A | 2+2+2+4 |
| | DC_1A-7A-28A_n78A | 2+2+2+4 |
| | DC_1A-7A-32A_n78A | 2+2+2+4 |
| | DC_1A-20A-32A_n78A | 2+2+2+4 |
| | DC_7A-20A-32A_n78A | 2+2+2+4 |
| | DC_3A-20A-32A_n78A | 2+2+2+4 |
| | DC_1A-7A-8A_n78A | 2+2+2+4 |
| | DC_3A-7A-8A_n78A | 2+2+2+4 |
| | 5CC | |
| | EN_DC | MIMO |
| | DC_1A-3A-7A-20A_n78A | 2+2+2+2+4 |
| | DC_1A-3C-7A_n78A | 2+2+2+4+4 |
| | DC_1A-3A-7C_n78A | 4+2+2+2+4 |
| | DC_3C-7C_n78A | 4+4+4+4+4 |
| | DC_3C-7A-20A_n78A | 2+2+4+2+4 |
| | DC_1A-3C-28A_n78A | 4+2+2+2+4 |
| | DC_3A-7C-28A_n78A | 4+2+2+2+4 |
| | DC_3A-7A-20A-32A_n78A | 2+2+2+2+4 |
| | DC_1A-3A-7A-28A_n78A | 2+2+2+2+4 |
| | DC_1A-3A-7A-8A_n78A | 2+2+2+2+4 |
| | DC_1A-7A-20A-32A_n78A | 2+2+2+2+4 |
| | DC_3A-28A-40C_n78A | 2+2+2+2+4 |
| | DC_1A-3A-40C_n78A | 2+2+2+2+4 |
| | DC_1A-7C-28A_n78A | 2+2+2+2+4 |
| | 6CC | |
| | EN_DC | MIMO |
| | DC_1A-3A-28A-40C_n78A | 2+2+2+2+2+4 |
| | DC_1A-3A-7C-28A_n78A | 2+2+2+2+2+4 |
| | DC_3C-7C-28A_n78A | 2+2+4+4+2+4 |


 **NOTE**

(1)All the preceding EN_DC combinations can only represent product capabilities. For details about the carrier's support, see the product configuration.

(2)B32 supports only SCC. All downlink EN_DC combinations with B32 do not support uplink inter-band CA.

2.3 Software Specifications

Table 2-6 Software specifications

| Item | Description | |
|----------------|---|--|
| 5G features | DL 4x4 MIMO | |
| | DL 256 QAM, UL 256QAM | |
| LTE features | DL 4x4 MIMO+5 CC | |
| | DL 256 QAM, UL 64 QAM | |
| Mobile network | APN management APN auto adapter | |
| Gateway | Router | <ul style="list-style-type: none"> Supports the default route Supports manual configuration of LAN IP addresses Supports Address Resolution Protocol (ARP) |
| | DHCP server | <ul style="list-style-type: none"> The DHCP server can be enabled or disabled The address pool of the DHCP server can be configured The lease can be configured |
| | NAT | <ul style="list-style-type: none"> Supports NAT and NAPT (compliant with RFC2663, RFC3022, and RFC3027) Supports cone NAT |
| | ARP | |
| | ICMP | |
| | IPv4v6 dual stack IPv4 only IPv6 only (Optional , CLAT for LAN side IPv4 device access Internet) | |
| |  NOTE When the CLAT function is enabled, the IPv4 device Internet access service cannot reach the maximum throughput. Under IPv6 only, NAT-base service (such as port forwarding and port triggering) is not available | |
| | VPN pass-through | |
| VPN client | <ul style="list-style-type: none"> Support L2TP VPN client Support PPTP VPN client | |
| SMS | <ul style="list-style-type: none"> Writing/sending/receiving Writing/sending/receiving extra-long messages | |

| Item | Description | |
|----------------|--|--|
| Data service | <ul style="list-style-type: none"> • 5G: Downlink single CC (100M), 4x4 MIMO, 256 QAM Uplink single CC (100M), 2x2 MIMO, 256 QAM • LTE: Downlink 5CC, 4x4 MIMO, 256 QAM Uplink 2CC, single-shot, 64 QAM | |
| | Wi-Fi 802.11b/g/n/a/ac | |
| | Supports multi APNs (Optional, one for data and one for TR-069) | |
| Firewall setup | <ul style="list-style-type: none"> • Firewall enable/disable • MAC Address Filter • IP Filter • Virtual server • Special Applications • DMZ settings • SIP ALG settings • UPnP settings • NAT settings • Domain Filter | |
| LAN | <ul style="list-style-type: none"> • 10/100/1000 Mbps auto-negotiation • MDI/MDIX auto-sensing • IEEE 802.3/802.3u-compatible | |
| Wi-Fi | Broadcasts and hides service set identifiers (SSIDs) | |
| | Complies with IEEE 802.11b/g/n/a/ac | |
| | WPS | |
| | WMM | |
| | Encryption | WEP, AES, and TKIP + AES |
| | Security mode | <ul style="list-style-type: none"> • Open • WPA2-PSK • WPA/WPA2-PSK • WEP |
| | MAC address authentication | <ul style="list-style-type: none"> • Supports the MAC address authentication whitelist • Supports the MAC address authentication blacklist • Supports a maximum of 10 MAC address entries |
| STA | <ul style="list-style-type: none"> • Supports inquiry of STA status • Supports a maximum of 64 connected stations | |

| Item | Description | |
|---------------------------------|---|---|
| Operator maintenance (Optional) | <ul style="list-style-type: none"> • Supports TR-069 Amendment III • Supports TR-098 Amendment II • Supports TR-143 Amendment I | |
| USIM | PIN management and USIM card authentication | |
| NTP | Supports daylight saving time (DST) (Optional) | |
| HUAWEI SmartHome APP | <ul style="list-style-type: none"> • View data traffic usage and SMS • Manage connected devices • Change CPE's SSID and password | |
| System requirements | Operating system | Windows 7, Windows 8.1, Windows 10 (Not support Windows RT), MAC OS X 10.12, 10.13 and 10.14 with latest updates |
| | Web browser | <ul style="list-style-type: none"> • Microsoft Internet Explorer 9.0 and Microsoft Edge with latest updates • FireFox 49.0 with latest updates • All major versions of Chrome in the last year (53.0 with latest updates) • Safari 10.0 with latest updates (MACOS) |
| | Your computer's hardware system should meet or exceed the recommended system requirements for the installed OS version | |

3 Services and Applications

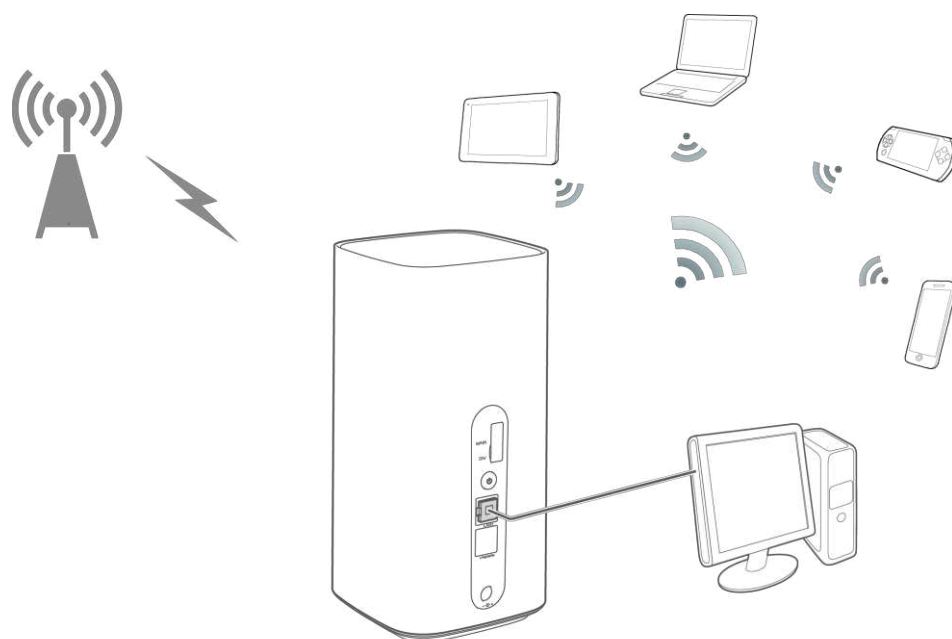
3.1 Data Services

The H112-372 can access the Internet through mobile networks and Ethernet networks. By connecting to the H112-372 using Wi-Fi or a network cable, users can obtain access to high-speed Internet services and establish a local area network (LAN).

3.1.1 Accessing the Internet through a Mobile Network (5G/LTE)

The H112-372 can access the Internet through mobile networks.

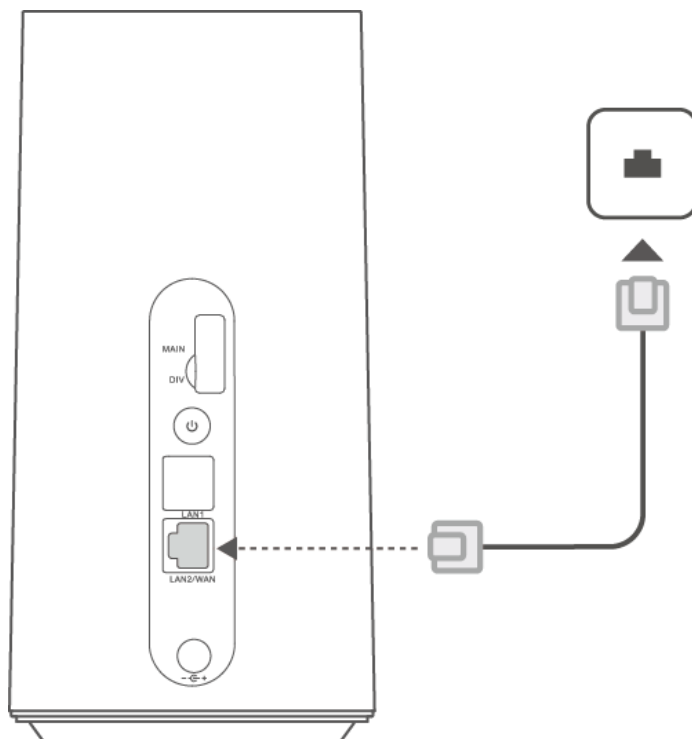
Figure 3-1 Accessing the Internet through a mobile network



3.1.2 Accessing the Internet through an Ethernet Network

The H112-372's LAN/WAN port can be connected to a wall-mounted Ethernet port using a network cable.

Figure 3-2 Accessing the Internet through an Ethernet network



3.2 SMS

The H112-372 supports message writing/sending/receiving and group sending (up to 50 -contacts at a time).

3.3 Security Service

The H112-372 supports comprehensive and robust security services. It provides a firewall function and PIN protection mechanisms. These features allow users to connect their computers to the Internet and simultaneously protect their computers against security threats from the Internet.

3.3.1 Firewall Service

The H112-372 supports the enabling or disabling of a firewall on the network connection, which protects the device and network from attacks by hackers on the Internet and controls access to the Internet.

3.3.2 MAC Filtering

The H112-372 supports configuration of the Media Access Control (MAC) address to restrict network access.

3.3.3 Wi-Fi Authentication

The gateway supports the following user authentication protocols for Wi-Fi:

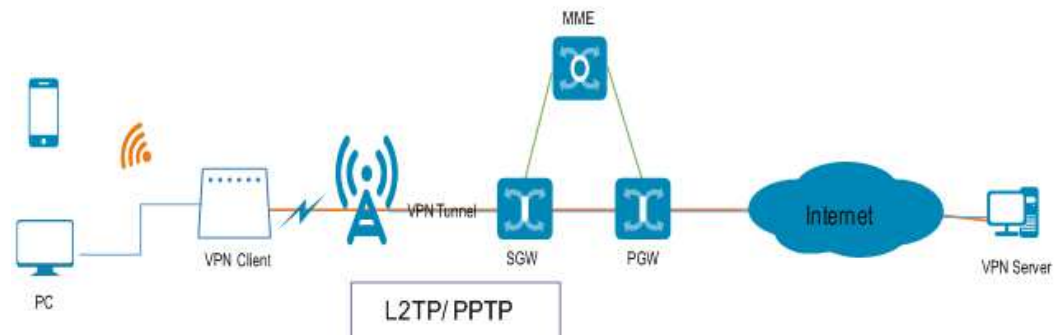
- No encryption
- WEP, WPA2-PSK (AES), WPA/WPA2-PSK (TKIP/AES).

3.4 VPN Function

3.4.1 VPN Client

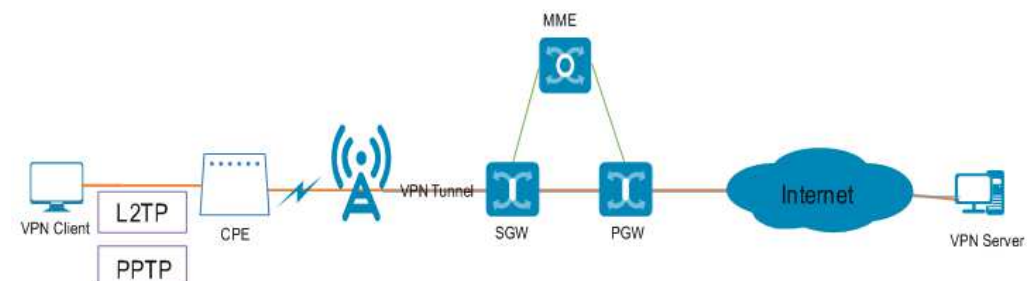
VPN tunneling involves establishing and maintaining a logical network connection (that may contain intermediate hops). On this connection, packets constructed in a specific VPN protocol format are first encapsulated within some other base or carrier protocol, then transmitted between the VPN client and server, and finally decapsulated on the receiving side.

The H112-372 supports L2TP and PPTP tunneling protocols.



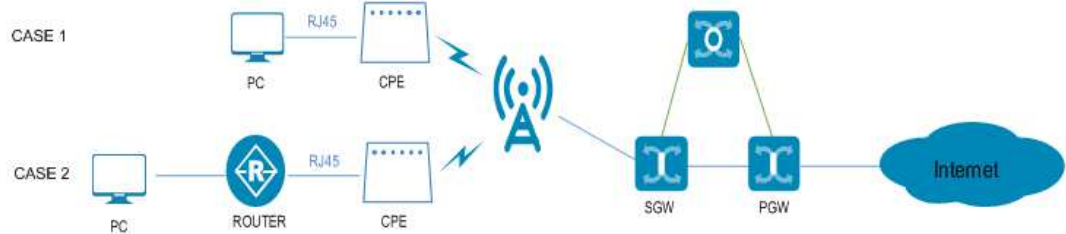
3.4.2 VPN Pass-Through

The H112-372 supports L2TP/PPTP VPN pass-through for the LAN side device. The LAN side device can create a VPN tunnel to the VPN server.



3.5 IP Pass-Through

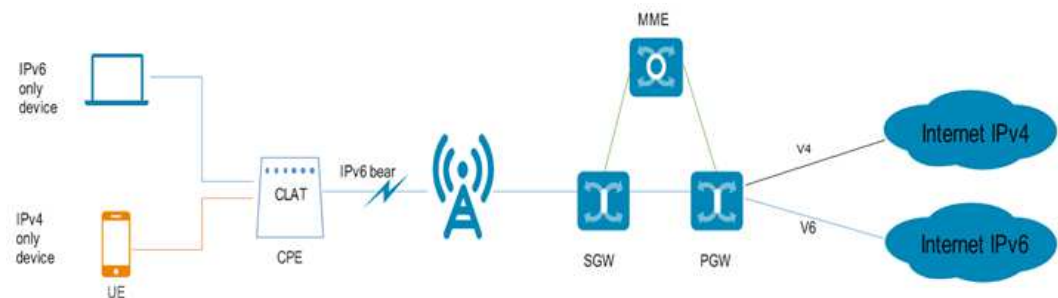
The LTE CPE obtains the WAN IP address and passes it through to the PC (Case 1) or Router (Case 2), and then the PC (Case 1) or Router (Case 2) can directly use the WAN IP address.



3.6 IPv6 Only and IPv4v6 Dual Stack

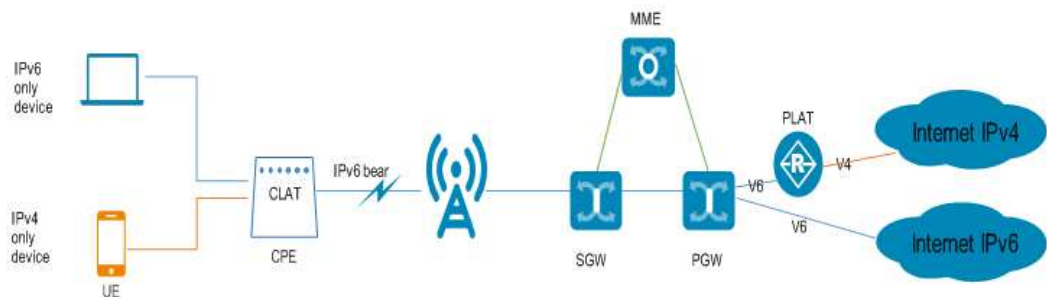
3.6.1 IPv4v6 Dual Stack

CPE provides dual stack function.



3.6.2 IPv6 Only (CLAT)

The LTE CPE supports IPv6 only with the transition solution CLAT for IPv4 device.



NOTE

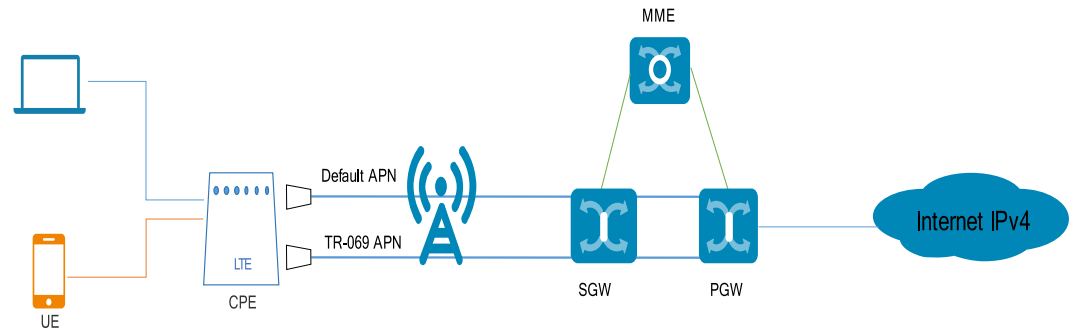
When the IPv6 only (CLAT) function is enabled, NAT-based functions (like DMZ/Port Forwarding/Port tigger) cannot be used.

When an IPv4 device accesses the Internet, the performance is degraded because packets need to be packetized and unpacked. However, IPv6 devices are not affected.

3.7 Multi-APN

The H112-372 supports the establishment and maintenance of two APNs. These two APN connections isolate data and remote management services on an operator's network.

The H112-372 supports an independent APN for CPE internal/TR-069.



3.8 5GHz Preferred

Priority usage of 5 GHz Wi-Fi band over 2.4 GHz band when signal strength is equal to increase connection speeds.

3.9 HiLink

- Supports HiLink routers to connect to H112-372 through the Hi button to create an expanded network.
- Supports quick connection between a HiLink device (such as Honor set-up boxes, Honor handsets and HUAWEI handsets running on EMUI 5.0 and later) and H112-372 through the Hi button.

3.10 Customer management

3.10.1 WebUI

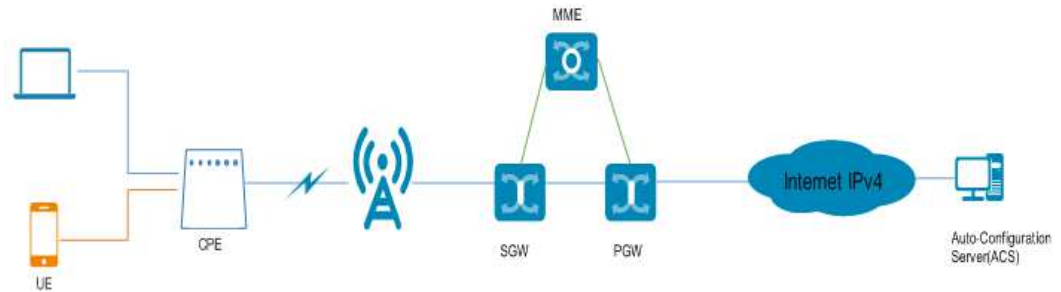
The H112-372 supports local configuration through the Web UI. You can perform device management and network configuration to ensure normal and stable performance.

3.10.2 HUAWEI SmartHome APP

Scan the QR code (can be found in the Quick Start Guide and Web UI) to download the HUAWEI SmartHome APP and configure the router from your phone.

3.11 Operator maintenance

The H112-372 supports Operator maintenance through the TR-069. Operator remote manages the CPE software update/parameters configuration via TR-069.



3.12 HOTA

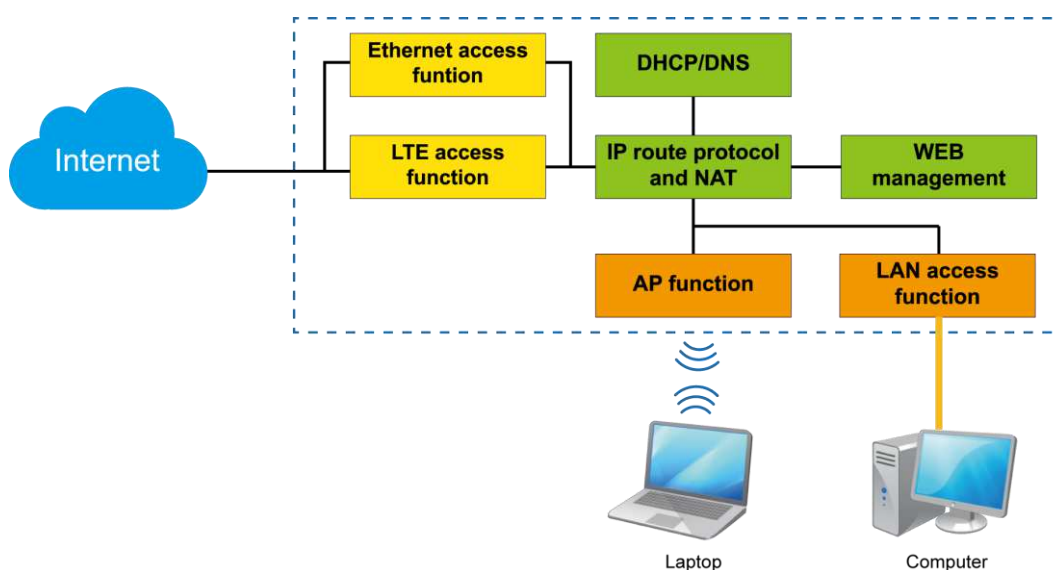
The H112-372 supports the HOTA feature, which allows users to remotely update the device firmware through the HOTA server.

4 System Structure and Scenario Constraints

4.1 System Architecture

Figure 4-1 shows the interfaces for the H112-372.

Figure 4-1 System structure



The following describes the modules shown in Figure 4-1.

- 5G/LTE access function: The H112-372 adopts the 5G/LTE access technology at the WAN side.
- LAN access function: One 10/100/1000 Mbps high-speed Ethernet ports are provided at the LAN side. The H112-372 provides the switching function for local networking and sharing of the broadband network when it is connected to terminal devices.
- AP function: An 802.11b/g/n/a/ac-compliant Wi-Fi AP interface is provided for wireless networking at home. The interface is compliant with the IEEE 802.11b/g/n/a/ac standard and the WEP, WPA/WPA2-PSK, WPA2-PSK security authentication mechanisms.
- DHCP/DNS: The DHCP server dynamically allocates IP addresses to PCs.

- Web-based management: You can configure the H112-372 and modify and view the configuration of the H112-372.
- IP routing protocol and NAT: The H112-372 has high-speed routing capability. With the built-in NAT, the H112-372, together with LTE terminals, can provide flexible broadband access solutions and networking schemes.

4.2 Scenario Constraints

The H112-372 is a household wireless broadband access product designed for use in scenarios with relatively few network access devices and relatively low network reliability requirements, such as homes or small office and home offices (SOHOs).

The H112-372 is not an enterprise-grade product. It cannot be used by medium- or large-sized enterprises or in scenarios with high network reliability requirements, such as banks, securities agencies, traffic control, and communications device backhaul.

The H112-372 has the following constraints:

- When the IP Pass-Through mode is enabled, the HOTA function cannot be used.
- When the L2TP/PPTP VPN client function is enabled, the throughput performance will slow down.
- A maximum of 64 devices can be connected to the Wi-Fi in theory; the actual number of devices that can be connected and served depends on actual conditions.

5 Technical References

5.1 Standards and Communication Protocols

5.1.1 Standards and Communication Protocols of the Product

Table 5-1 Standards and communication protocols of the product

| Item | Description |
|----------------|---|
| Physical layer | RFC894 |
| ARP | RFC826 |
| IP | RFC791, RFC1122, RFC1071, RFC1141, RFC1624, RFC792, RFC950, RFC1256 |
| ICMP | RFC792, RFC950, RFC1256 |
| TCP | RFC793 |
| UDP | RFC768 |
| NAT | RFC1631, RFC2663, RFC3022, RFC3027 |
| DHCP | RFC1531, RFC1533 |

5.1.2 Standards and Communication Protocols of the Wireless Uu Interface

This device supports 3GPP Release 15.

6 Packing List

Table 6-1 Packing list

| Description | Quantity | Remarks |
|----------------------|----------|----------|
| Wireless Gateway | 1 | Standard |
| Power supply adapter | 1 | Standard |
| Quick Start | 1 | Standard |
| Ethernet cable | 1 | Standard |
| Warranty card | 1 | Optional |

The HUAWEI H112-372 wireless gateway has an optional external antenna.