

**H153-381 5G CPE
V100R001**

Product Description

Issue **01**
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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	2024-06-11	Initial official release.

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
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
LED	Light Emitting Diode

Acronym or Abbreviation	Full Spelling
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
TDD	Time Division Duplex

Acronym or Abbreviation	Full Spelling
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
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

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1 Product Overview

The 5G CPE H153-381 is a 5G wireless gateway for multiple users in household or small office environments. It enables users to access the Internet.

The H153-381 supports 3GPP Release 16 with LTE UE downlink category 18 and uplink category 18. The supported service functions are as follows:

- Working band:
5G: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/n78/n80/n81/n82/n83/n84,
LTE: B1/B3/B5/B7/B8/B20/B28/B38/B40/B41/B42/B43
- Wi-Fi: 802.11 b/g/n/a/ac/ax. 2.4GHz Wi-Fi up to 574 Mbps, 5GHz Wi-Fi up to 2400 Mbps. Maximum Users: 64+64
- Multi APN function (Customization) for Data, Voice(VoIP), TR-069 services
- Routing mode: NAT enable (Default) / IP pass-through (Customization)
- VPN client service (L2TP, PPTP)
- Customer management via WebUI
- Operator maintenance via TR-069 (Customization) and TR-143 (Customization)
- Firmware Over the Air (FOTA)
- 5GHz Wi-Fi preferred

2 Technical Specifications

2.1 Hardware Specifications

Table 2-1 Technical specifications of the H153-381 main unit

Item	Description	
Technical standard	WAN	3GPP Release 16; LTE DL Cat18/UL Cat18
	LAN	IEEE 802.3/802.3u
	Wi-Fi	IEEE 802.11b/g/n/a/ac/ax
Working band/frequency	5G	n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/n78/n80/n81/n82/n83/n84
	LTE	B1/B3/B5/B7/B8/B20/B28/B38/B40/B41/B42/B43
	Wi-Fi	2.4GHz: 2400-2483.5 MHz; 5GHz: 5170-5350MHz, 5490-5710MHz, 5735-5850MHz (W52/W53/W56/W58) Note: W58 is not certified and needs to be turned on or off according to customized policies.
	DL MIMO	5G 4x4: n1/n3/n7/n28/n38/n40/n41/n77/n78 5G 2x2: n5/n8/n20 LTE 4x4: B1/B3/B7/B28/B38/B40/B41/B42/B43 LTE 2x2: B5/B8/B20
	UL MIMO	5G 2x2: n38/n40/n41/n77/n78 (UL MIMO is supported only in SA mode.)
External port	<ul style="list-style-type: none"> • One power adapter port • One GE LAN/WAN port (RJ45) • One port for Voice (RJ11) • One SIM card slot (Nano-SIM) 	
Antennas	<ul style="list-style-type: none"> • Built-in 5G/LTE antennas • 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 Status indicator 	
Buttons	<ul style="list-style-type: none"> • One WPS button (Reuse with the power-off button) • One Reset button 	
Maximum transmit power	5G	Conform to 3GPP Definition
	LTE	Conform to 3GPP Definition
Receiving sensitivity	5G	Conform to 3GPP Definition
	LTE	Conform to 3GPP Definition
	Wi-Fi	Conform to IEEE 802.11 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)	90 mm (Top side length) x 90 mm (Bottom side length) x 183 mm (Height)	
Weight	About 440 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)	
Certification/Compliance	CE /RoHS/REACH/WEEE/Wi-Fi/ErP certification	

2.2 Antenna Specifications

2.2.1 Build-in 5G/LTE Antenna

Table 2-2 Antenna specifications

Item	Description
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Item	Description				
Frequency	5G				
	<ul style="list-style-type: none"> • n1: UL 1920–1980 MHz DL 2110–2170 MHz • n3: UL 1710–1785 MHz DL 1805–1880 MHz • n5: UL 824–849 MHz DL 869–894 MHz • n7: UL 2500–2570 MHz DL 2620–2690 MHz • n8: UL 880 – 915 MHz DL 925 – 960 MHz • n20: UL 832 – 862 MHz DL 791– 821 MHz • n28: UL 703–748 MHz DL 758–803 MHz • n38: UL 2570–2620MHz DL 2570–2620 MHz • n40: UL 2300–2400 MHz DL 2300–2400 MHz • n41: UL 2496–2690 MHz DL 2496–2690 MHz • n77: UL 3300–4200 MHz DL 3300–4200 MHz • n78: UL 3300–3800 MHz DL 3300–3800 MHz • n80: UL 1710 – 1785 MHz / • n81: UL 880 – 915 MHz / • n82: UL 832 – 862 MHz / • n83: UL 703 – 748 MHz / • n84: UL 1920 – 1980 MHz / 				
	Band	15KHz SCS	15KHz SCS Bandwidths	30KHz SCS	30KHz SCS Bandwidths
	n1	Y	5M 10M 15M 20M 25M 30M 40M 50M	N	/
	n3	Y	5M 10M 15M 20M 25M 30M 40M	N	/
	n5	Y	5M 10M 15M 20M	N	/
	n7	Y	5M 10M 15M 20M 25M 30M 40M 50M	N	/
	n8	Y	5M 10M 15M 20M	N	/
	n20	Y	5M 10M 15M 20M	N	/
	n28	Y	5M 10M 15M 20M 30M	N	/
	n38	N	/	Y	10M 15M 20M 25M 30M 40M
	n40	N	/	Y	10M 15M 20M 25M 30M 40M 50M 60M 70M 80M 90M 100M
	n41	N	/	Y	10M 15M 20M 30M 40M 50M 60M 80M 90M 100M

Item	Description				
	n77	N	/	Y	10M 15M 20M 25M 30M 40M 50M 60M 70M 80M 90M 100M
	n78	N	/	Y	10M 15M 20M 25M 30M 40M 50M 60M 70M 80M 90M 100M
	n80	Y	5M 10M 15M 20M 25M 30M	N	/
	n81	Y	5M 10M 15M 20M	N	/
	n82	Y	5M 10M 15M 20M	N	/
	n83	Y	5M 10M 15M 20M	N	/
	n84	Y	5M 10M 15M 20M	N	/
	<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 • B20: UL 832–862 MHz DL 791–821 MHz • B28: UL 703–748 MHz DL 758–803 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 (dB)	<p>5G</p> <ul style="list-style-type: none"> • n1: -1.8 • n3: -1.7 • n5: -3.0 • n7: -2.9 • n8: -2.7 • n20: -3.0 • n28: -2.3 • n38: -2.6 				

Item	Description
	<ul style="list-style-type: none"> • n40: -1.5 • n41: -2.6 • n77: -2.1 • n78: -2.1 • n80: -1.7 • n81: -2.7 • n82: -3.0 • n83: -2.3 • n84: -1.8 <p>LTE</p> <ul style="list-style-type: none"> • B1: -1.8 • B3: -1.7 • B5: -3.0 • B7: -2.9 • B8: -2.7 • B20: -3.0 • B28: -2.3 • B38: -2.6 • B40: -1.5 • B41: -2.6 • B42: -2.5 • B43: -1.9
Diversity antenna efficiency (dB)	<p>5G</p> <ul style="list-style-type: none"> • n1: -2.7 • n3: -1.3 • n5: -3.0 • n7: -2.1 • n8: -2.6 • n20: -3.0 • n28: -2.9 • n38: -2.1 • n40: -2.3 • n41: -2.4 • n77: -2.3 • n78: -1.9 • n80: -1.3 • n81: -2.6 • n82: -3.0 • n83: -2.9 • n84: -2.7

Item	Description
	LTE <ul style="list-style-type: none"> • B1: -2.7 • B3: -1.3 • B5: -3.0 • B7: -2.1 • B8: -2.6 • B20: -3.0 • B28: -2.9 • B38: -2.1 • B40: -2.3 • B41: -2.4 • B42: -2.9 • B43: -3.0
Main antenna gain (dBi)	5G <ul style="list-style-type: none"> • n1: 3.0 • n3: 3.9 • n5: 0.6 • n7: 3.8 • n8: 0.6 • n20: 0.0 • n28: 0.9 • n38: 3.8 • n40: 3.2 • n41: 3.8 • n71: 0.7 • n77: 9.0 • n78: 9.0 • n80: 3.9 • n81: 0.6 • n82: 0.0 • n83: 0.9 • n84: 3.0 LTE <ul style="list-style-type: none"> • B1: 3.0 • B3: 3.9 • B5: 0.6 • B7: 3.8 • B8: 0.6 • B20: 0.0 • B28: 0.9

Item	Description
	<ul style="list-style-type: none"> • B38: 3.8 • B40: 3.2 • B41: 3.8 • B42: 4.8 • B43: 4.5
Diversity antenna gain (dBi)	<p>5G</p> <ul style="list-style-type: none"> • n1: 2.8 • n3: 3.0 • n5: 1.0 • n7: 5.0 • n8: 2.6 • n20: -1.1 • n28: -0.7 • n38: 5.0 • n40: 3.6 • n41: 5.0 • n71: 0.8 • n77: 9.0 • n78: 9.0 • n80: 3.0 • n81: 2.6 • n82: -1.1 • n83: -0.7 • n84: 2.8 <p>LTE</p> <ul style="list-style-type: none"> • B1: 2.8 • B3: 3.0 • B5: 1.0 • B7: 5.0 • B8: 2.6 • B20: -1.1 • B28: -0.7 • B38: 5.0 • B40: 3.6 • B41: 5.0 • B42: 2.8 • B43: 3.0
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	2400-2483.5 MHz
Input impedance	50 Ω
Standing wave ratio	< 2
Efficiency	-2.0dB
Gain	<2dBi
Polarization	Linear polarization


Table 2-4 Wi-Fi 5 GHz antenna specifications

Item	Description
Frequency	5170-5350MHz, 5490-5710MHz, 5735-5850MHz
Input impedance	50 Ω
Standing wave ratio	< 2
Efficiency	-2.5dB
Gain	<3.5dBi
Polarization	Linear polarization

2.3 Software Specifications

Table 2-5 Software specifications

Item	Description	
5G features	DL 256 QAM, UL 256QAM	
LTE features	DL 4x4 MIMO (The number of MIMO is related to the specific combination.)	
	DL 256 QAM, UL 256 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)

Item	Description	
	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 (Customization , CLAT for LAN side IPv4 device access Internet)	<p> NOTE</p> <p>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</p>
	VPN pass-through	
VPN client	<ul style="list-style-type: none"> Supports L2TP VPN client Supports PPTP VPN client 	
SMS	<ul style="list-style-type: none"> Writing/sending/receiving Writing/sending/receiving extra-long messages 	
Voice	VoIP (Customization)	Supports G.711a/G.711u/G.726 (-24/-32)/G.722/G.729 codec
		Supports SIP (RFC3261)
		Supports SDP (RFC2327)
		Supports RTP/RTCP (RFC1889/RFC1890/RFC3550)
		Supports in-band/SIP info/RFC2833 DTMF
		Supports the following phone features: <ul style="list-style-type: none"> Caller ID generation Call waiting Call forwarding (unconditional, busy, and no answer forwarding) Call hold Three-way conference

Item	Description		
	VoLTE	<ul style="list-style-type: none"> • Supports AMR-NB codec • Supports AMR-WB codec 	
		Supports in-band/out-band (RFC2833) DTMF	
		Supports the following phone features: <ul style="list-style-type: none"> • Caller ID generation • Call waiting • Call forwarding (unconditional, busy, and no answer forwarding) • Call hold • Three-way conference • Originating Identification Presentation/Restriction • Outgoing Communication Barring 	
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/ax		
	WPS		
	WMM		
	Encryption	AES, and TKIP + AES	
	Security mode	<ul style="list-style-type: none"> • Open • WPA2-PSK • WPA3-SAE • WPA/WPA2-PSK • WPA2-PSK/WPA3-SAE 	

Item	Description	
	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 32 MAC address entries
	STA	<ul style="list-style-type: none"> • Supports inquiry of STA status • Supports a maximum of 128 connected stations
Operator maintenance (Customization)	<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) (Customization)	
System requirements	Operating system	Windows 8, Windows 8.1, Windows 10, Windows 11 (Not support Windows RT), MAC OS X 10.12, 10.13, 10.14 and 10.15.
	Web browser	<ul style="list-style-type: none"> • Microsoft Edge 14.0 with latest updates. • Firefox 60.0 with latest updates. • Chrome 60.0 with latest updates. • Safari 10.0 with latest updates. • Opera 51.2 with latest upgrades.
	Your computer's hardware system should meet or exceed the recommended system requirements for the installed OS version	

3 Services and Applications

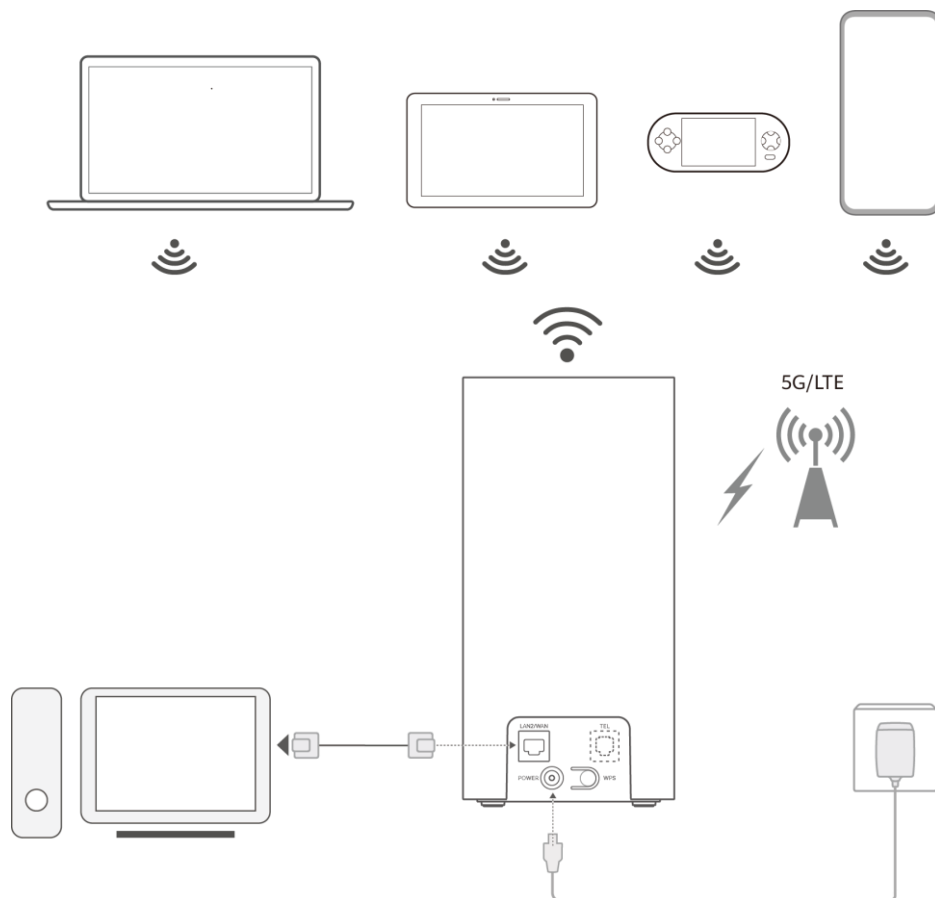
3.1 Data Services

The H153-381 can access the Internet through mobile networks and Ethernet networks. By connecting to the H153-381 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 H153-381 can access the Internet through mobile networks.

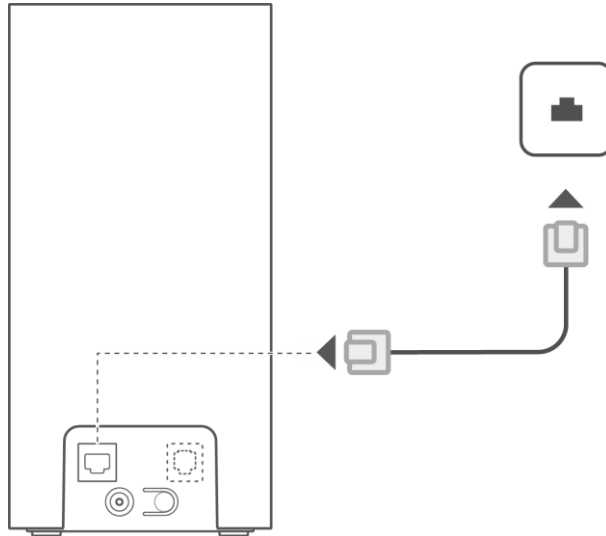
Figure 3-1 Accessing the Internet through a mobile network



3.1.2 Accessing the Internet through an Ethernet Network

The H153-381'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 Voice Services

The H153-381 provides one telephone port that can be connected to telephones for calling.

3.3 SMS

The H153-381 supports message writing/sending/receiving and group sending (up to 50 -contacts at a time).

3.4 Security Service

The H153-381 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.

3.4.1 Firewall Service

The H153-381 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.

3.4.2 MAC Filtering

The H153-381 supports configuration of the Media Access Control (MAC) address filtering to restrict network access.

3.4.3 Wi-Fi Authentication

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

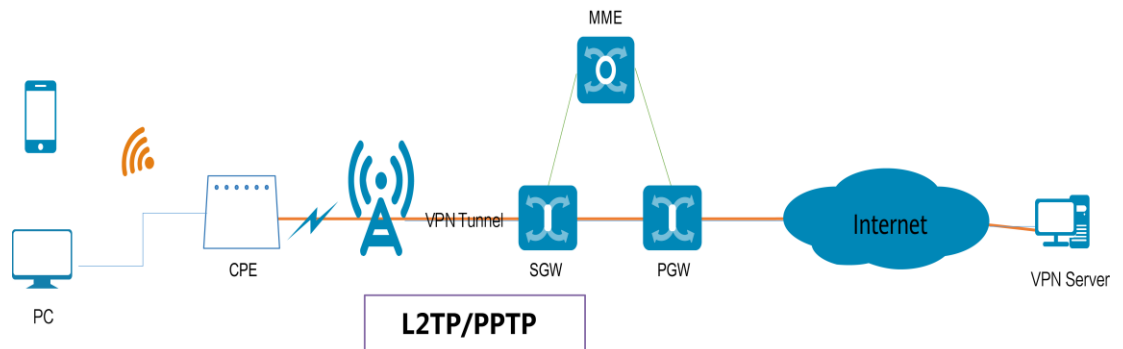
- No encryption
- WPA2-PSK, WPA3-SAE, WPA/WPA2-PSK, WPA2-PSK /WPA3-SAE.

3.5 VPN Function

3.5.1 VPN Client

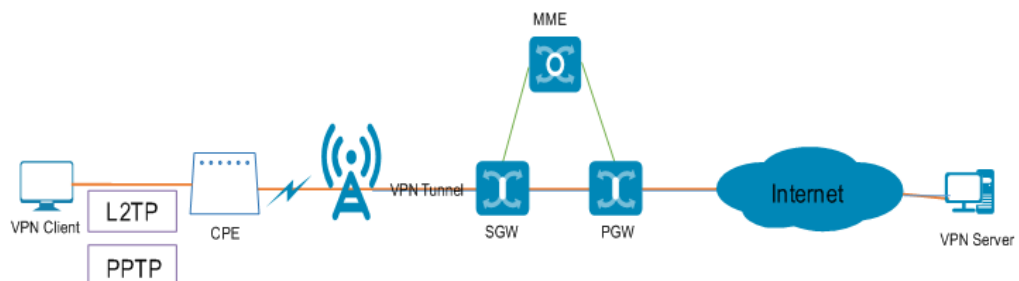
VPN tunneling involves establishing and maintaining a logical network connection (that may contain intermediate hops). On this connection, packets constructed in a specific VPN protocol format are first encapsulated within some other base or carrier protocol, then transmitted between the VPN client and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

The H153-381 supports L2TP and PPTP tunneling protocols.



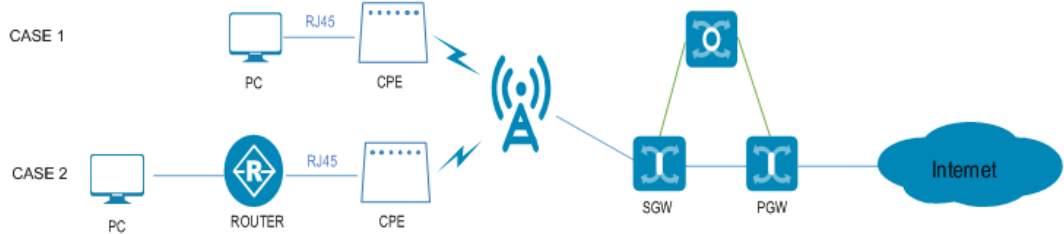
3.5.2 VPN Pass-Through

The H153-381 supports L2TP/PPTP VPN pass-through for the LAN side device. The LAN side device can create a VPN tunnel to the VPN server.



3.6 IP Pass-Through (Customization)

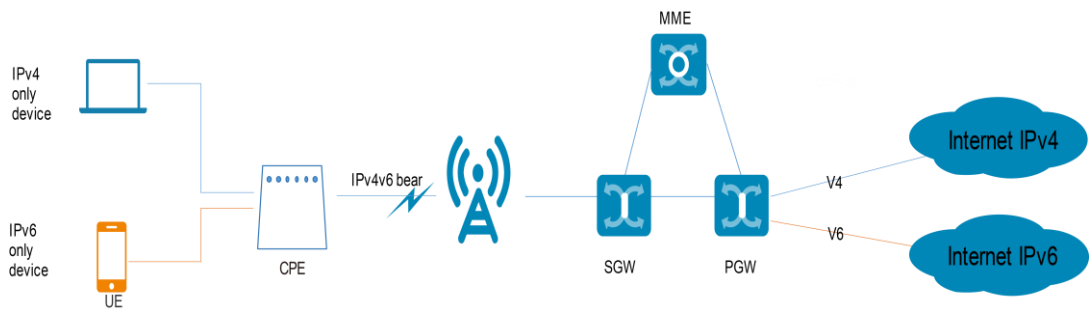
The H153-381 obtains the WAN IP address and passes it through to the PC (Case 1) or Router (Case 2), and then the PC (Case 1) or Router (Case 2) can directly use the WAN IP address.



3.7 IPv6 Only and IPv4v6 Dual Stack

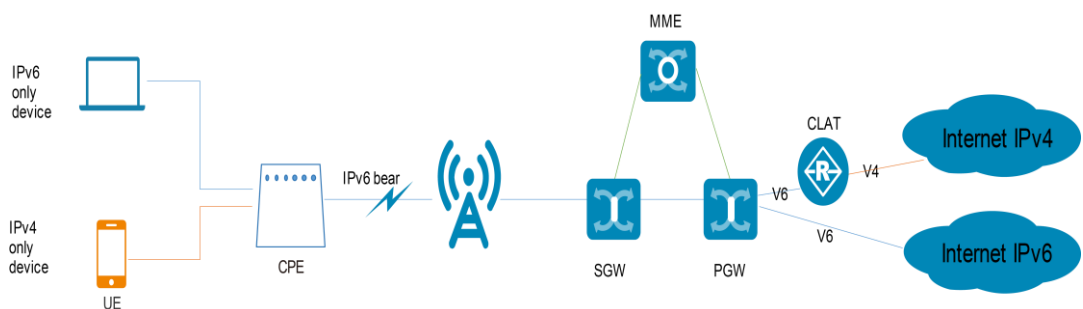
3.7.1 IPv4v6 Dual Stack

The H153-381 provides dual stack function.



3.7.2 IPv6 Only (CLAT) (Customization)

The H153-381 supports IPv6 only with the transition solution CLAT for IPv4 device.



NOTE

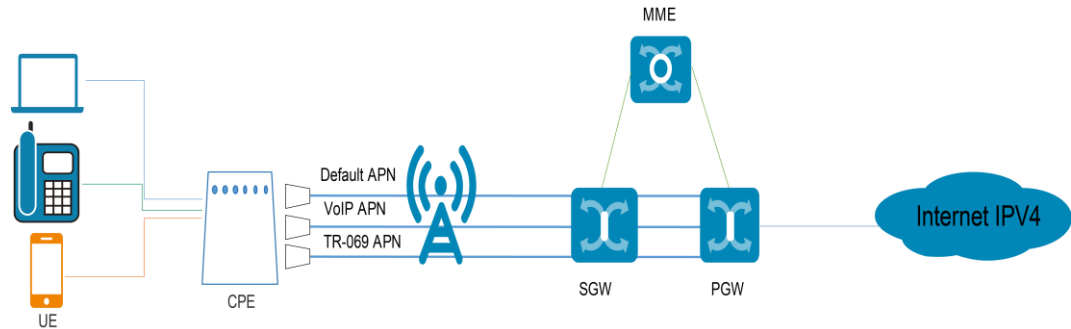
When the IPv6 only (CLAT) function is enabled, NAT-based functions (like DMZ/Port Forwarding/Port trigger) cannot be used.

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.

3.8 Multi-APN (Customization)

The H153-381 supports the establishment and maintenance of three APNs. These three APN connections isolate data and remote management services on an operator's network.

The H153-381 supports an independent APN for CPE internet/VoIP/TR-069.



3.9 5GHz Preferred

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

The product will support two SSIDs when 5 GHz preferred is enabled. The first SSID includes 2.4 GHz Wi-Fi and 5GHz Wi-Fi, which provides 5 GHz preferred capabilities. The second SSID ending with '_5G' is an independent 5 GHz Wi-Fi. Customers can choose according to their needs.

The product also supports two SSIDs when 5 GHz preferred is disabled. The first SSID is only 2.4 GHz Wi-Fi, the second SSID is 5 GHz Wi-Fi ending with '_5G'. Customers can choose according to their needs.

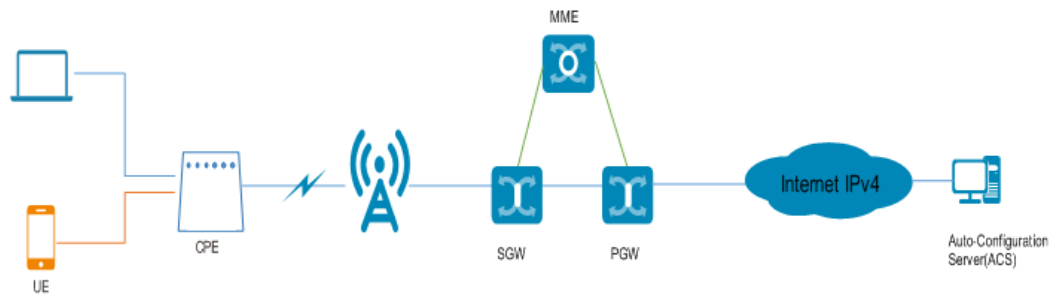
3.10 Customer management

3.10.1 WebUI

The H153-381 supports local configuration through the Web UI. You can perform device management and network configuration to ensure normal and stable performance.

3.11 Operator maintenance (Customization)

The H153-381 supports Operator maintenance through the TR-069. Operator remote manages the CPE software update/parameters configuration via TR-069.



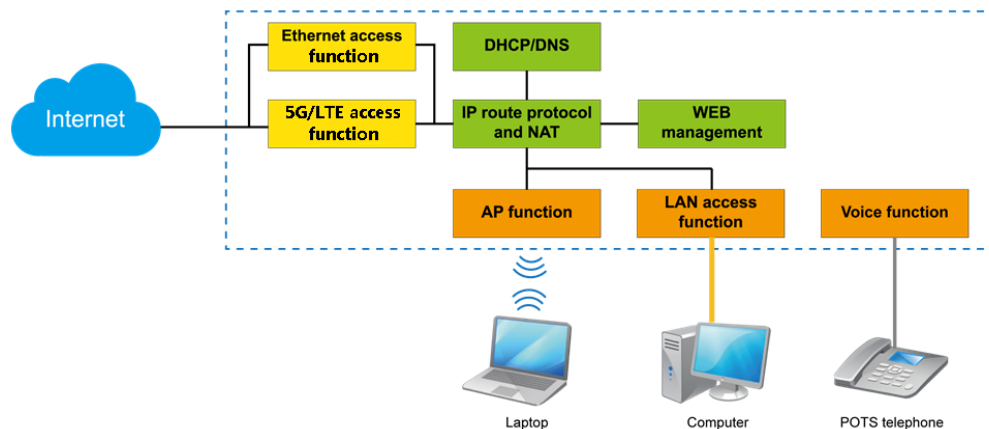
3.12 FOTA

The H153-381 supports the FOTA feature, which allows users to remotely update the device firmware through the FOTA server.

4 System Structure and Scenario Constraints

4.1 System Architecture

Figure 4-1 System structure



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

- Ethernet access function: The H153-381 adopts the Ethernet access technology at the WAN side.
- 5G/LTE access function: The H153-381 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 H153-381 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/ax-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/ax standard and the WPA2-PSK, WPA3-SAE, WPA/WPA2-PSK, WPA2-PSK /WPA3-SAE security authentication mechanisms.
- DHCP/DNS: The DHCP server dynamically allocates IP addresses to PCs.
- Web-based management: You can configure the H153-381 and modify and view the configuration of the H153-381.

- IP routing protocol and NAT: The H153-381 has high-speed routing capability. With the built-in NAT, the H153-381, together with LTE terminals, can provide flexible broadband access solutions and networking schemes.
- Voice function: The H153-381 supports voice services.

4.2 Scenario Constraints

The H153-381 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 H153-381 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 H153-381 has the following constraints:

- When the IP Pass-Through mode is enabled, the FOTA function cannot be used.
- When the L2TP/PPTP VPN client function is enabled, the throughput performance will slow down.
- A maximum of 128 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 16.

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
Phone cable	1	Optional
Warranty card	1	Optional