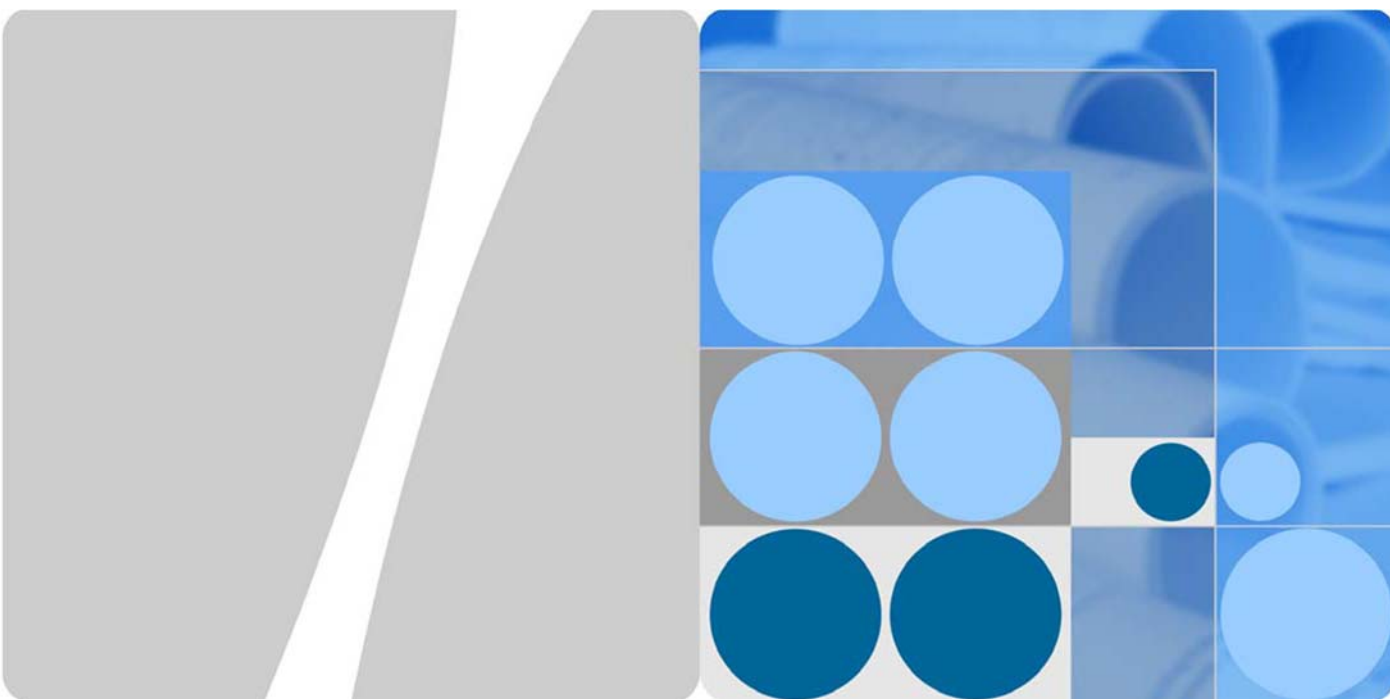


Product Description



HUAWEI E5586-326 Mobile WiFi
V100R001

Version 01
Date 2024-01-26

HUAWEI DEVICE CO., LTD.





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About This Document

Summary

This document introduces the major functions, supported services, and system architecture of the HUAWEI E5586-326 Mobile WiFi.

The following table lists the contents of this document.

Chapter	Details
1 Overview	Supported network modes, basic services and functions, and the appearance of the product
2 Features	Major features and technical specifications
3 Services and Applications	Supported services
4 System Architecture	System architecture
5 Packaging Box Items	Items contained in the packaging box
6 Appendix	Supported LTE bandwidths



History

Version	Details	Date
01	First release	2024-01-26



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1 Overview

HUAWEI E5586-326 Mobile WiFi (hereinafter referred to as the E5586-326) is a high-speed packet access mobile hotspot. It is a multi-mode wireless terminal for SOHO (Small Office and Home Office) and business professionals.

It provides users with packet data services and SMS through multiple network modes. You can connect the E5586-326 to a computer using a USB Type-C data cable, or connect multiple devices to the E5586-326 over Wi-Fi. In the service area of the network, the E5586-326 allows you to surf the Internet and send/receive messages/emails, providing you with a fast, reliable, and convenient user experience. It also helps carriers improve their average revenue per user (ARPU).

2 Features

2.1 Main Features

The E5586-326 features:

- LTE Category 4
- LTE FDD (DL) packet data service of up to 195 Mbps
- LTE FDD (UL) packet data service of up to 105 Mbps
- LTE TDD (DL) packet data service of up to 145 Mbps
- LTE TDD (UL) packet data service of up to 20 Mbps
- HSUPA packet data service of up to 2 Mbps
- HSDPA packet data service of up to 14 Mbps
- UMTS (UL/DL) packet data service of up to 384 Kbps
- SMS based on LTE/UMTS
- Built-in LTE/UMTS and Wi-Fi/WLAN antenna
- 2.4 GHz Wi-Fi
- LTE/3G/Wi-Fi auto offload
- Compatible with HUAWEI AI Life app
- Plug and Play
- IPv4v6 dual stack
- Built-in DHCP Server, DNS RELAY, and NAT
- Online software upgrade
- Traffic statistics
- WPS
- Standard Type-C port

2.2 Technical Specifications

2.2.1 Hardware

Table 2-1 lists the hardware specifications.

Table 2-1 Hardware specifications

Item	Specifications	
Technical standard	WAN: LTE/HSUPA/HSDPA/UMTS	
	Wi-Fi/WLAN: IEEE 802.11 b/g/n	
Operating frequency	LTE: B1/B3/B7/B8/B20/B28/B38/B41 UMTS: B1/B8 See Appendix for supported LTE channel bandwidths	
	Wi-Fi/WLAN: 2.4 GHz AP: 1-11 STA: 1-13	
Memory	RAM: 256 MB	
	ROM: 256 MB	
Transmit power	LTE: Conforms to Power Class 3 Definition	
	WCDMA/HSPA: Conforms to Power Class 3 Definition	
	Wi-Fi/WLAN 2.4 GHz	802.11b: 14 dBm
		802.11g: 16 dBm
		802.11n: 16(20 MHz)/16(40 MHz) dBm
	Note: The value above represents a typical transmit power in Wi-Fi/WLAN mode, and may vary slightly by device.	
Receiver sensitivity	LTE: Conforms to 3GPP	
	WCDMA/HSPA: Conforms to 3GPP	
	Wi-Fi/WLAN 2.4 GHz	802.11b: -88 dBm@11 Mbps
		802.11g: -75 dBm@54 Mbps
		802.11n: -73 dBm@65 Mbps
Wi-Fi/WLAN MIMO	2*2 MIMO	



Item	Specifications	
Wi-Fi/WLAN speed	802.11b: Up to 11 Mbps	
	802.11g: Up to 54 Mbps	
	802.11n:	HT20: Supports MCS0–MCS7; Up to 72.2 Mbps. Supports MCS8–MCS15; Up to 144.4 Mbps. HT40: Supports MCS0–MCS7; Up to 150 Mbps. Supports MCS8–MCS15; Up to 300 Mbps.
Power consumption	<= 4.5W	
Charger (Optional)	AC: 100 V to 240 V	
	DC: 5 V, 2 A	
Battery	Type: Rechargeable lithium battery (removable)	
	Capacity: 1500 mAh	
	Maximum working hours: 6 (depending on the network)	
	Maximum standby hours: 350 (depending on the network)	
External ports	Type C port	
	Micro-SIM card slot (3FF)	
Buttons	Power button, RESET button,	
Indicators	LED indicators: Signal, Battery, SMS	
Antenna	Built-in LTE/UMTS main antenna	
	Built-in LTE/UMTS diversity antenna	
	Built-in Wi-Fi/WLAN antenna	
Dimensions (W × D × H)	110 mm x 55 mm x 11.8 mm	
Weight	Approximately 81 g (including the battery)	
Temperature	Operating temperature: 0°C to 35°C	
	Storage temperature: –20°C to +45°C	
Humidity	5% to 95% (non-condensing)	

2.2.2 Software

Table 2-2 lists the software specifications.

Table 2-2 software specifications

Item	Description
SMS	• Write/send/receive short messages • Send/receive extra-long messages • Storage: Up to 500 messages can be saved in the internal memory of the E5586-326
Network connection setup	• Create, delete, or edit APN • Set up network connection
Maximum number of Wi-Fi users connected at the same time	The E5586-326 supports the connection of up to 16 wireless devices at the same time.
Wi-Fi/WLAN setup	• SSID broadcasting and hiding • None (Open), WPA2-PSK, AES, WPA/WPA2-PSK, Mix(TKIP/AES), WPA3-SAE, WPA2-PSK/WPA3-SAE encryption • Automatic adjustment of Wi-Fi/WLAN speed • Display STA status • Turn off Wi-Fi automatically • MAC address filtering • Guest SSID
Firewall setup	• Enable and disable firewall • LAN IP Filtering • Virtual Server • DMZ • UPnP
NAT setup	• CONE NAT • Symmetric NAT • ALG
DHCP setup	• Enable and disable DHCP server • Configure DHCP server address pool • Set DHCP lease time



Item	Description
LTE/3G/Wi-Fi auto offload (Wi-Fi Extender)	• Access WAN via LTE/3G/Wi-Fi
IPv4v6 dual stack	• DHCPv4v6 server and client • DNSv4v6 server and client • Display IPv4v6 WAN address
Others	Network connection settings: Automatic/manual network selection and registration
	Display network status including signal strength, carrier name, system mode, and so on
	Select network mode
	PIN management: activate/deactivate PIN, verify PIN/PUK, and modify PIN
System requirements	• Windows 8, Windows 8.1, Windows 10 (excluding Windows RT), Windows 10; macOS X 10.12, 10.13, 10.14 and 10.15 • Your computer should also meet the recommended hardware requirements for the operating system installed

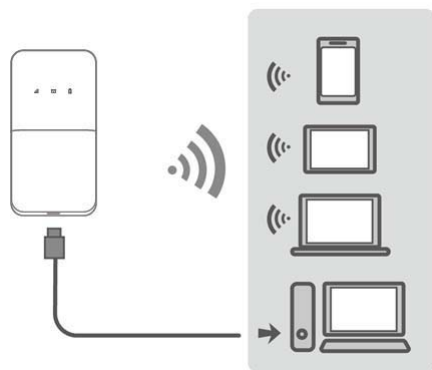
3 Services and Applications

3.1 Data Service

3.1.1 Wireless Modem

The E5586-326 can be used as a wireless modem when the Wi-Fi is enabled. You can directly use the default settings (or configure APN on the E5586-326's web-based management page) to set up a wireless network, after which you will be able to access the Internet.

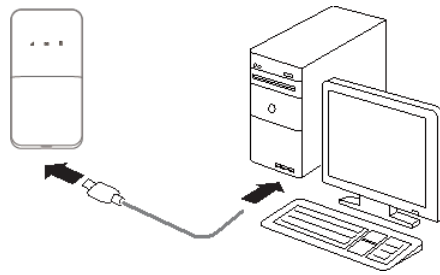
Figure 3-1 Multi-device access via Wi-Fi and USB Type-C data cableType-C port at the same time



3.1.2 USB Modem

After you connect the E5586-326 and a PC with a USB Type-C data cable, enter the IP address in the browser address bar to log in to the E5586-326's web-based management page. You can directly use the default APN settings (or configure the APN on the page) to set up a network connection, after which you can access the Internet.

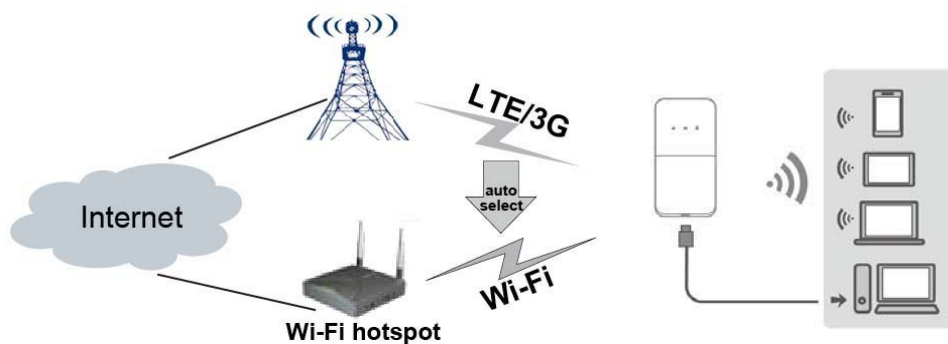
Figure 3-2 One-device access via a USB Type-C data cable



3.1.3 LTE/3G/Wi-Fi Auto Offload

The E5586-326 allows you to access the Internet via LTE, 3G or Wi-Fi. When you are using the E5586-326 in areas with a Wi-Fi hotspot, for example, an airport, a cafe, a hotel, or your home, the E5586-326 switches to the Wi-Fi network automatically to save your LTE/3G network data usage.

Figure 3-3 LTE/3G/Wi-Fi auto offload



3.2 SMS

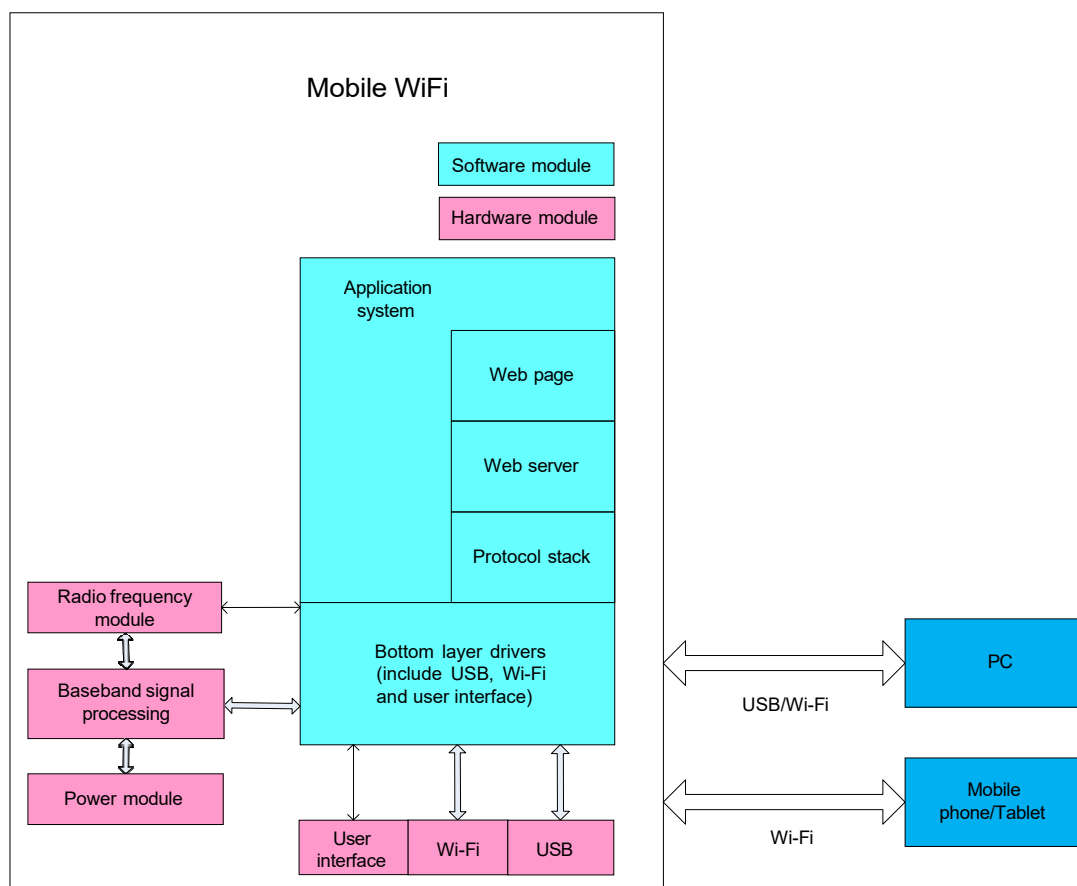
The E5586-326 supports message writing/sending/receiving. You can manage messages in the Inbox, Outbox, and Drafts on the E5586-326's web-based management page.

4 System Architecture

4.1 System Architecture

Figure 4-1 shows the system architecture of the E5586-326

Figure 4-1 System architecture of the E5586-326



4.2 Functional Modules

1. Radio frequency module: Sends/receives radio signals and modulates/demodulates radio signals and baseband signals.
2. Baseband signal processing module: Processes LTE FDD/LTE TDD/HSUPA/HSDPA/UMTS baseband signals, including:
 - Modulating/demodulating LTE FDD/LTE TDD/HSUPA/HSDPA/UMTS baseband signals
 - Encoding/decoding LTE FDD/LTE TDD/HSUPA/HSDPA/UMTS channels
3. Bottom layer driver: Drives peripherals, including USB devices, Wi-Fi devices, buttons and SIM cards.
4. Protocol stack system: Processes protocols of LTE FDD/LTE TDD/HSUPA/HSDPA/UMTS and TCP/IP.
5. Application system: Provides SMS, PS domain service, Wi-Fi configuration, network service, web service and web-based management page. Users can configure system settings on the web-based management page.
6. User interface: Provides man-machine interaction, including a display screen and buttons.

5 Packaging Box Items

This chapter describes the items contained in the packaging box of the E5586-326.

Table 5-1 lists the items contained in the packaging box of the E5586-326.

Table 5-1 Packaging box items of the E5586-326

Item	Quantity	Remarks
Mobile WiFi	1	Standard
Rechargeable battery (removable)	1	Standard
Quick Start Guide (Including safety information)	1	Standard
USB Type-C Cable	1	Optional
Charger	1	Optional
Warranty Card	1	Optional

6

Appendix

Table 6-1 Shows the LTE bandwidths supported by the E5586-326.

Band	Bandwidth					
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
1			√	√	√	√
3	√	√	√	√	√	√
7			√	√	√	√
8	√	√	√	√		
20			√	√	√	√
28		√	√	√	√	√
38			√	√	√	√
41			√	√	√	√

7

Acronyms and Abbreviations

Numerics

3G The Third Generation

A

AES Advanced Encryption Standard

ALG Application Level Gateway

APN Access Point Name

ARPU Average Revenue Per User

ASCII American Standard Code for Information Interchange

D

DHCP Dynamic Host Configuration Protocol

DMZ Demilitarized Zone

DNS Domain Name Server

E

EDGE Enhanced Data Rates for GSM Evolution

F

FDD Frequency Division Duplex

G

GPRS General Packet Radio Service

GSM Global System for Mobile Communications

H

HSPA+ High Speed Packet Access Plus

HSUPA High Speed Uplink Packet Access

HSDPA High Speed Downlink Packet Access

I	
IEEE	Institute of Electrical and Electronics Engineers
IP	Internet Protocol
L	
LCD	Liquid Crystal Display
LTE	Long Term Evolution
M	
MAC	Medium Access Control
Modem	Modulator Demodulator
N	
NAT	Network Address Translation
O	
OS	Operating System
P	
PC	Personal Computer
PIN	Personal Identification Number
PnP	Plug and Play
PS	Packet Switched
PUK	PIN unblocking key
S	
SIM	Subscriber Identity Module
SMS	Short Messaging Service
SOHO	Small Office Home Office
SSID	Service Set Identifier
T	
TDD	Time Division Duplex
TFT	Thin Film Transistor
U	
UMTS	Universal Mobile Telecommunications System
UPnP	Universal Plug and Play



USB	Universal Serial Bus
V	
VPN	Virtual Private Network
W	
WAN	Wireless Area Network
WEP	Wired Equivalent Privacy
Wi-Fi	Wireless Fidelity
WLAN	Wireless Local Area Network
WPA	Wi-Fi Protected Access