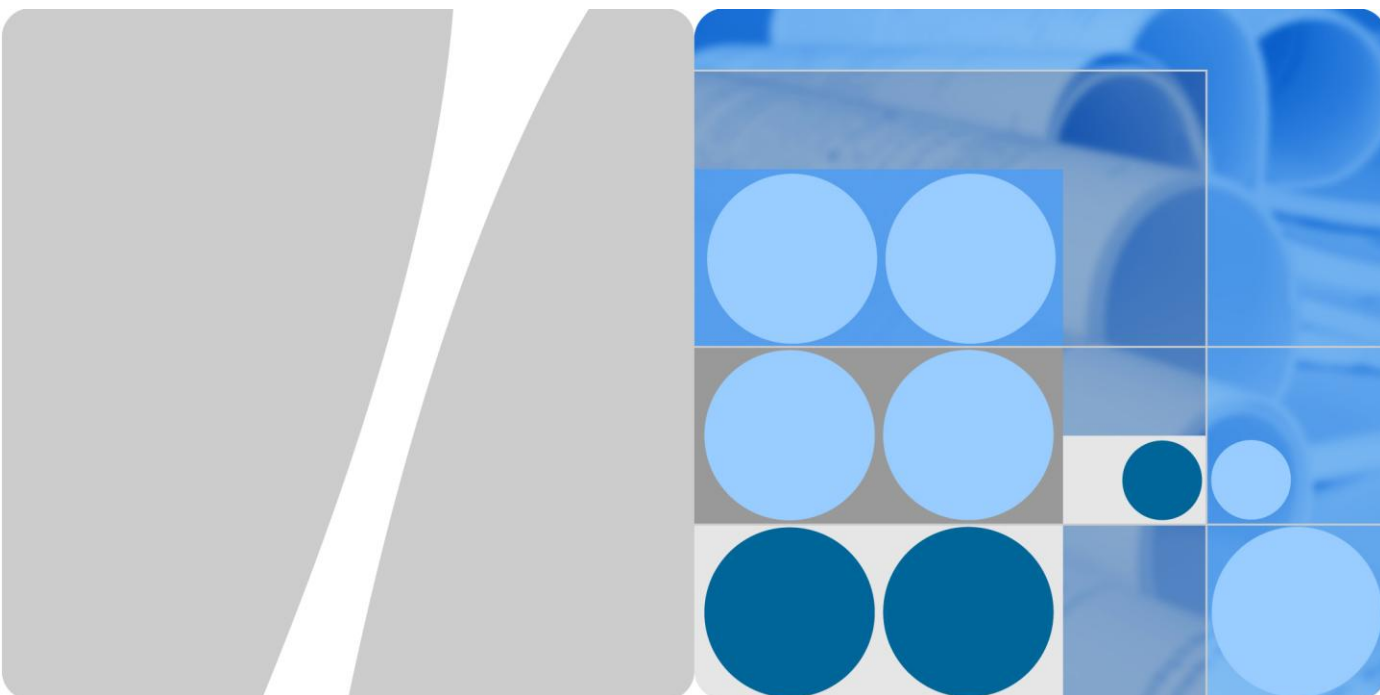


# Product Description



HUAWEI E5372 Mobile WiFi  
V200R001

**Issue**      01  
**Date**        2013-03-29

HUAWEI TECHNOLOGIES CO., LTD.



Huawei Technologies Co., Ltd. provides customers with comprehensive technical support and service. Please feel free to contact our local office or company headquarters.

## Huawei Technologies Co., Ltd.

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

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

**Copyright © Huawei Technologies Co., Ltd. 2013. 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.

### Notice

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.

---

# About This Document

---

## Summary

This document provides information about the major functions, supported services and system architecture.

The following table lists the contents of this document.

Chapter	Details
1 Overview	The supported network modes, basic services and functions, and the appearance of the product.
2 Features	The supported features and technical specifications of the product.
3 Services and Applications	The services and applications of the product.
4 System Architecture	The architecture of the product.
5 Packing List	The items contained in the package of the product.

## History

Issue	Details	Date
01	First release.	2013-03-29

---

# Contents

---

<b>1 Overview .....</b>	<b>6</b>
1.1 Brief Introduction .....	6
1.2 Branch Type .....	7
1.3 Optional Features.....	7
<b>2 Features .....</b>	<b>8</b>
2.1 Main Features .....	8
2.2 Technical Specifications .....	9
2.2.1 Hardware .....	9
2.2.2 Software.....	11
<b>3 Services and Applications .....</b>	<b>13</b>
3.1 Data Service .....	13
3.1.1 Wireless Modem.....	13
3.1.2 USB Modem .....	14
3.1.3 LTE/3G/Wi-Fi Auto Offload .....	14
3.2 SMS.....	15
3.3 Sharing Data Stored on the microSD card.....	15
3.4 Supplying power to devices .....	15
<b>4 System Architecture .....</b>	<b>16</b>
4.1 System Architecture .....	16
4.2 Functional Modules .....	17
<b>5 Packing List.....</b>	<b>18</b>

# 1 Overview

---

## 1.1 Brief Introduction

HUAWEI E5372 Mobile WiFi (hereinafter referred to as the E5372) 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.

The E5372 supports the following standards:

- Long Term Evolution (LTE)
- Dual Carrier High Speed Packet Access Plus (DC-HSPA+)
- High Speed Packet Access Plus (HSPA+)
- High Speed Uplink Packet Access (HSUPA)
- High Speed Downlink Packet Access (HSDPA)
- Universal Mobile Telecommunications System (UMTS)
- Enhanced Data rates for Global Evolution (EDGE)
- General Packet Radio Service (GPRS)
- Global System for Mobile communications (GSM)

The E5372 provides the following services:

- LTE FDD packet data service
- DC-HSPA+ packet data service
- HSPA+ packet data service
- HSPA/UMTS packet data service
- EDGE/GPRS packet data service
- Short Message Service (SMS)

You can connect the E5372 with the USB interface of a computer, or connect the E5372 with the Wi-Fi. In the service area of the LTE/DC-HSPA+/HSPA+/HSPA/UMTS or EDGE/GPRS/GSM network, you can surf the Internet and send/receive messages/emails cordlessly. The E5372 is fast, reliable, and easy to operate. Thus, mobile users can experience many new features and services with the E5372. These features and services will enable a large number of users to use the E5372 and the average revenue per user (ARPU) of operators will increase substantially.

Figure 1-1 shows the profile of the E5372.

**Figure 1-1** E5372 profile



## 1.2 Branch Type

The E5372 has one branch types: E5372s-32.

Table 1-1 lists the branch type E5372s-32.

**Table 1-1** Branch type E5372s-32

Item	Specifications
Type	E5372s-32
Operating frequency	LTE: FDD 2600/2100/1800/900/800 MHz
	DC-HSPA+/HSPA+/HSPA/UMTS: 2100/1900/900/850 MHz
	EDGE/GPRS/GSM: 1900/1800/900/850 MHz
	WLAN: 2.4 GHz, 5 GHz (indoor use only)

## 1.3 Optional Features

Optional features refer to features that are not supported by the standard version or are disabled by default. These features can be customized according to operator or customer requirements. The E5372's optional feature is as follows:

IPv6 (optional)

# 2 Features

## 2.1 Main Features

The E5372 mainly supports the following features:

- LTE FDD (DL) data service of up to 150 Mbit/s
- LTE FDD (UL) data service of up to 50 Mbit/s
- DC-HSPA+ (DL) data service of up to 43.2 Mbit/s
- HSPA+ (DL) data service of up to 21.6 Mbit/s
- HSPA+ (UL) data service of up to 5.76 Mbit/s
- HSDPA (DL) data service of up to 14.4 Mbit/s
- HSUPA (UL) data service of up to 5.76 Mbit/s
- UMTS data service of up to 384 kbit/s
- EDGE data service of up to 236.8 kbit/s
- GPRS data service of up to 85.6 kbit/s
- PS domain data service based on LTE/UMTS/GSM
- SMS based on UMTS and GSM
- Built-in LTE/UMTS and WLAN high gain antenna
- Micro Secure Digital Memory (microSD) Card
- SIM lock
- Wi-Fi
- Menu-style LCD UI
- Five-second fast boot
- LTE/3G/Wi-Fi auto offload
- Supply power to devices
- Support for HUAWEI Mobile WIFI app
- Plug and Play (PnP)
- IPv6/IPv4 dual stack (optional)
- Display current SSID and Wi-Fi key on the screen
- Built-in DHCP Server, DNS RELAY and NAT
- Online software upgrade
- Traffic statistic



- Standard Micro USB interface
- TFT-LCD screen
- Windows XP (32 bit), Windows Vista, Windows 7, Windows 8, MAC OS X 10.5, 10.6, 10.7 and 10.8

## 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/DC-HSPA+/HSPA+/HSPA/UMTS/EDGE/GPRS/GSM	
	WLAN: IEEE 802.11a/b/g/n	
Internal memory	256 MB NAND flash and 128 MB DDR SDRAM	
Maximum transmitter power	LTE: Conform to Power Class 3 Definition	
	UMTS: Conform to Power Class 3 Definition	
	WLAN	802.11a: 8 dBm
		802.11b: 11 dBm
		802.11g: 10 dBm
802.11n: 10 dBm (2.4 GHz); 8 dBm (5 GHz)		
Receiver sensitivity	LTE: Confirm to 3GPP Requirements	
	UMTS: Confirm to 3GPP Requirements	
	WLAN	802.11a: -65 dBm@54 Mbit/s
		802.11b: -76 dBm@11 Mbit/s
		802.11g: -65 dBm@54 Mbit/s
802.11n: -64 dBm@65 Mbit/s		
WLAN speed	802.11a: Up to 54 Mbit/s	
	802.11b: Up to 11 Mbit/s	
	802.11g: Up to 54 Mbit/s	
	802.11n	HT20: Support MCS0–MCS7; Up to 72.2 Mbit/s. Support MCS8–MCS15; Up to 144.4 Mbit/s. HT40: Support MCS0–MCS7; Up to 150 Mbit/s. Support MCS8–MCS15; Up to 300 Mbit/s.

Item	Specifications
Maximum power consumption	4 W
Power supply	AC: 100–240 V
	DC: 5 V, 1 A
Battery	Type: Li (rechargeable)
	Capacity: 3.7 V, 1780 mAh
	Maximum working time: 6 hours (depending on the network)
	Maximum standby time: 300 hours (depending on the network)
External interfaces	Micro USB interface
	Standard microSD card interface
	Standard 6-pin SIM card interface
	External main diversity antenna interface
Screen	TFT-LCD
key-press	Power switch, MENU switch, Reset switch
Antenna	Built-in LTE/UMTS/GSM main antenna
	Built-in LTE/UMTS diversity antenna
	Built-in WLAN antenna
Dimensions (H x W x D)	14.4 mm×99.0 mm×62.2 mm
Weight	< 130 g (including the battery)
Temperature	Operating: 0°C to +35°C
	Storage: -20°C to +60°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	<ul style="list-style-type: none"> <li>• Writing/Sending/Receiving</li> <li>• Sending/Receiving extra-long messages</li> <li>• Storage: Up to 500 messages can be saved in the internal memory of the E5372.</li> <li>• New message prompt</li> </ul>
Network connection setup	<ul style="list-style-type: none"> <li>• APN management: create, delete and edit.</li> <li>• Set up network connection</li> </ul>
WLAN setup	<ul style="list-style-type: none"> <li>• SSID broadcasting and hiding</li> <li>• Open system and shared key authentication</li> <li>• ASCII and HEX keys</li> <li>• 64/128-bit WEP encryption</li> <li>• 256-bit WPA-PSK and WPA2-PSK encryption</li> <li>• TKIP and AES encryption algorithm</li> <li>• TKIP and AES integrated encryption algorithm</li> <li>• Automatic adjustment of ratios</li> <li>• Display STA status</li> <li>• Turn off Wi-Fi automatically</li> <li>• WLAN MAC filter</li> </ul>
Firewall setup	<ul style="list-style-type: none"> <li>• Firewall Switch</li> <li>• LAN IP Filter</li> <li>• Virtual Server</li> <li>• ACL Service</li> <li>• DMZ Service</li> <li>• UPnP Service</li> </ul>
NAT setup	<ul style="list-style-type: none"> <li>• CONE NAT</li> <li>• Symmetric NAT</li> <li>• ALG</li> <li>• VPN passthrough</li> </ul>
DHCP setup	<ul style="list-style-type: none"> <li>• DHCP server enabling and disabling</li> <li>• Address pool of the DHCP server setup</li> <li>• DHCP lease time setup</li> </ul>
Software installation	Automatic installation (PnP)

Item	Description
LTE/3G/Wi-Fi auto offload	<ul style="list-style-type: none"> <li>• Accessing to WAN via LTE/3G or Wi-Fi</li> <li>• Automatic offload between LTE/3G and Wi-Fi</li> </ul>
IPv6/IPv4 dual stack (optional)	<ul style="list-style-type: none"> <li>• DHCPv6/v4 server and client</li> <li>• DNSv6/v4 server and client</li> <li>• Display IPv6/v4 WAN address</li> </ul>
Other	Network connection settings: <ul style="list-style-type: none"> <li>• Automatic network selection and registration</li> <li>• Manual network selection and registration</li> </ul>
	Network status display: signal, operator name, system mode, and so on.
	Selection of network connection types, for example: <ul style="list-style-type: none"> <li>• LTE Only</li> <li>• 3G Only</li> <li>• Auto</li> </ul>
	PIN management: activate/deactivate PIN, PIN lock, changing PIN, unblocking by using the PUK.
System requirement	<ul style="list-style-type: none"> <li>• Windows XP (32 bit), Windows Vista, Windows 7 and Windows 8</li> <li>• Mac OS X 10.5, 10.6, 10.7 and 10.8</li> <li>• Your computer's hardware system should meet or exceed the recommended system requirements for the installed version of OS</li> </ul>

# 3 Services and Applications

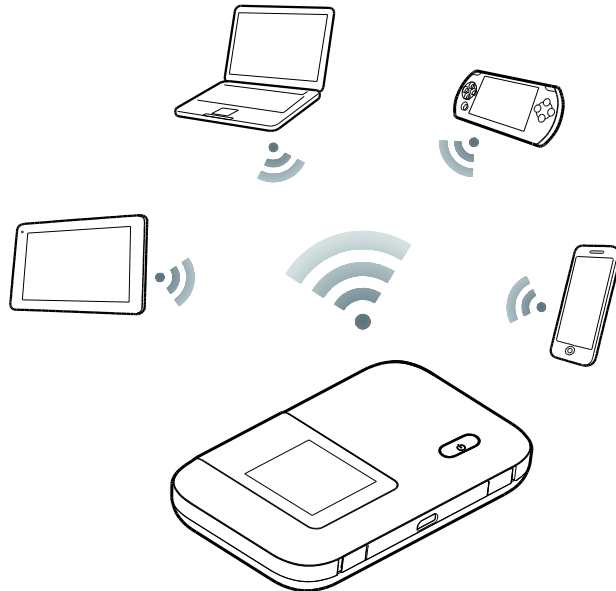
## 3.1 Data Service

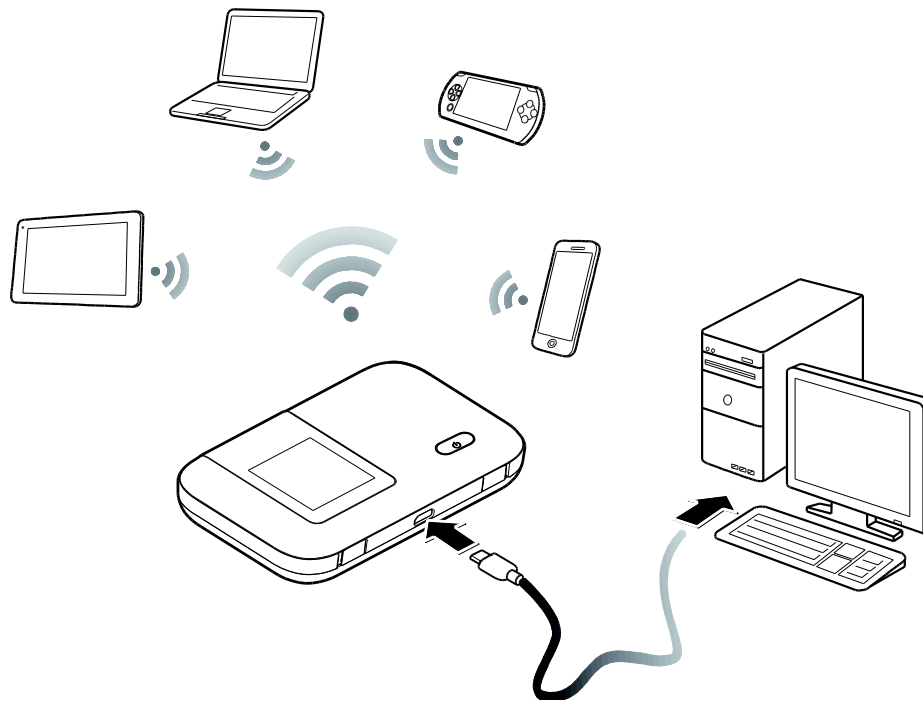
### 3.1.1 Wireless Modem

The E5372 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 E5372 WEB page) and set up a wireless network connection. Then you can access the Internet.

A maximum of ten wireless users can access the E5372 at the same time. You can set up the WLAN with the access point (AP) function.

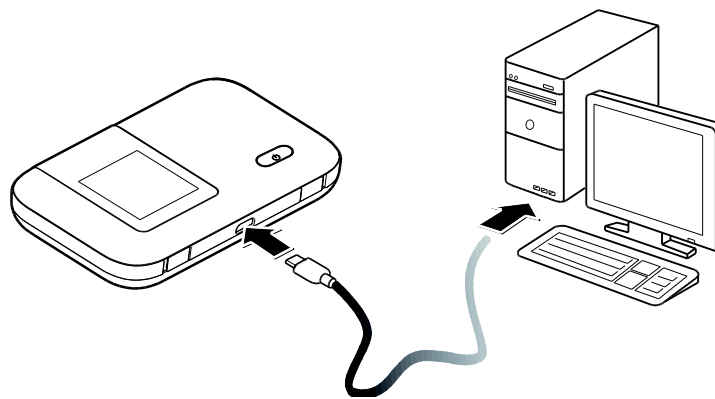
**Figure 3-1** Multi-device access via Wi-Fi



**Figure 3-2** Multi-device access via Wi-Fi and USB at the same time

### 3.1.2 USB Modem

After you connect the E5372 and PC with a USB data cable, the E5372 driver is installed on the PC automatically and the shortcut of the WEB page is displayed on the PC desktops. You can directly use the default settings (or configure APN on the E5372 WEB page) and set up a network connection. Then you can send or receive E-mail, access the network through wireless connection, and download files through wireless data channels.

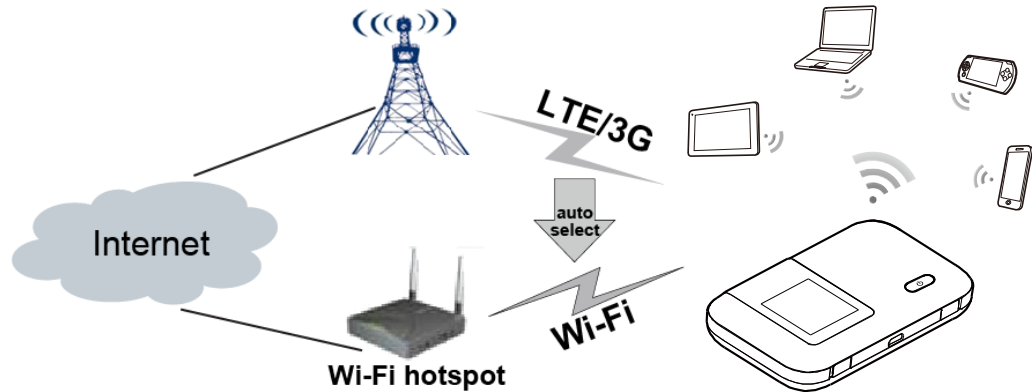
**Figure 3-3** One-device access via USB

### 3.1.3 LTE/3G/Wi-Fi Auto Offload

The E5372 allows you to access the Internet via LTE/3G or Wi-Fi. When you are using the E5372 in areas with a Wi-Fi hotspot, for example, an airport, a cafe, a hotel, or your home, the E5372 switches to Wi-Fi connection automatically, saving your LTE/3G network traffic fees.

After the function is enabled, a maximum of nine wireless users can access the E5372 at the same time.

**Figure 3-4** LTE/3G/Wi-Fi auto offload



## 3.2 SMS

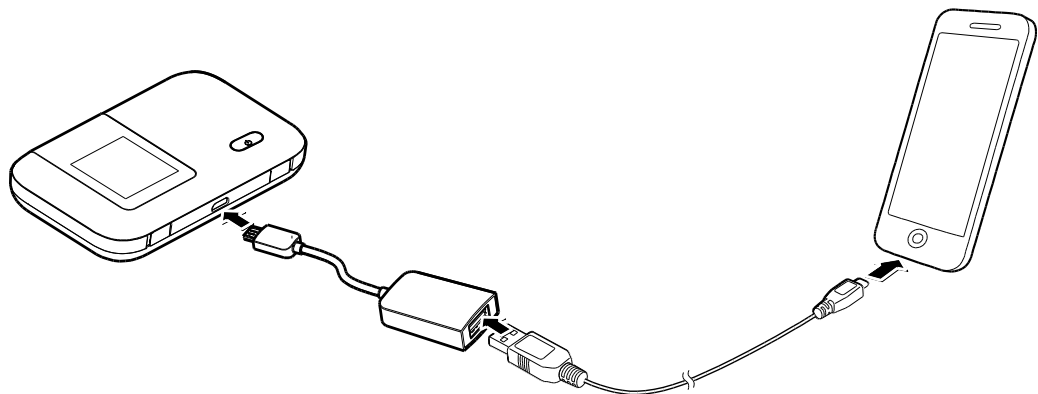
The E5372 supports message writing/sending/receiving. You can manage messages through the WEB page, such as an inbox, an outbox and a draft.

## 3.3 Sharing Data Stored on the microSD card

After the microSD card is inserted, you can store data on the card or use the WEB management page to share data stored on the card.

## 3.4 Supplying power to devices

You can connect the Mobile WiFi that supports the function of acting as a charger to the AF10 to supply power to a mobile phone, MP3, MP4, or Bluetooth headset.

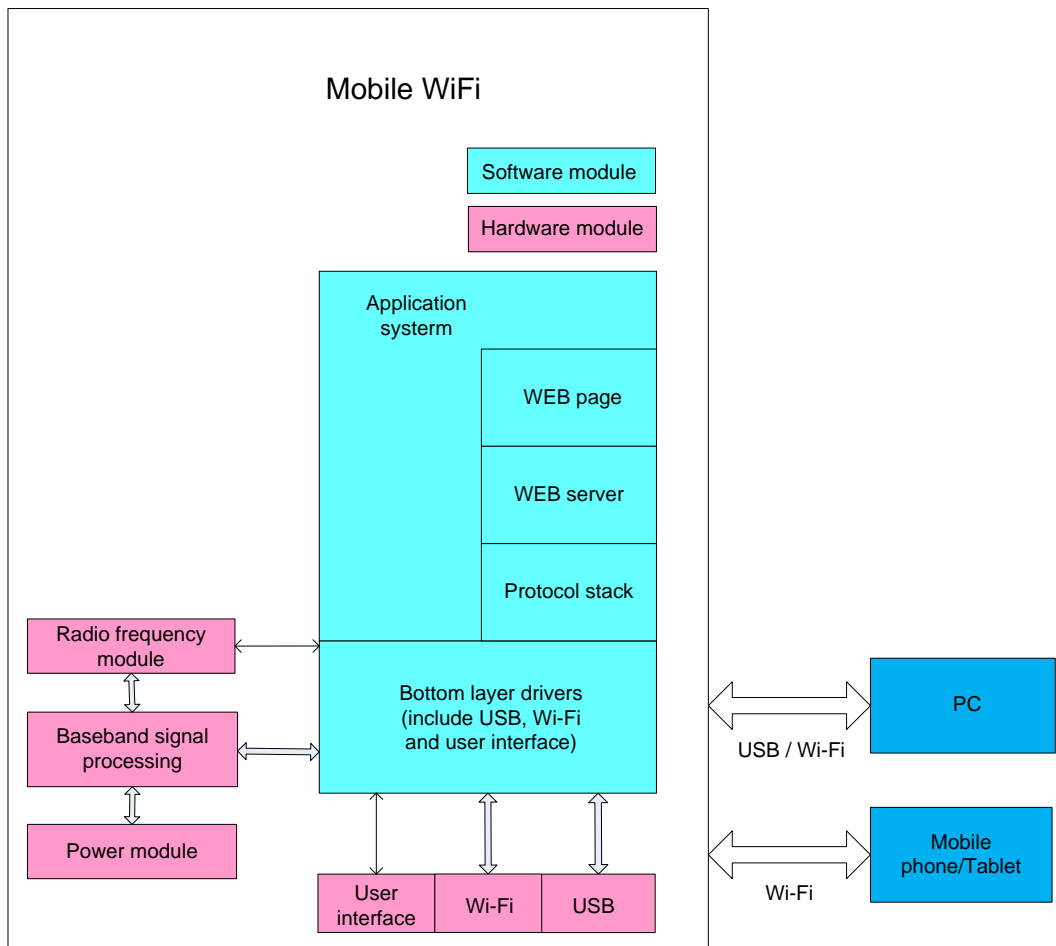


# 4 System Architecture

## 4.1 System Architecture

Figure 4-1 shows the system architecture.

Figure 4-1 System architecture





## 4.2 Functional Modules

1. **Radio frequency module:** It sends/receives radio signals and modulates/demodulates the radio frequency (RF) signals and baseband signals
2. **Baseband signal processing:** It processes LTE/DC-HSPA+/HSPA+/UMTS/EDGE/GPRS/GSM baseband digital signals, including:
  - Modulating/Demodulating LTE/DC-HSPA+/HSPA+/UMTS/EDGE/GPRS/GSM baseband signals
  - Encoding/Decoding LTE/DC-HSPA+/HSPA+/UMTS/EDGE/GPRS/GSM channel
3. **Bottom layer driver:** It drives peripherals, including a USB device, Wi-Fi devices, a screen, buttons, a SIM card and a microSD card.
4. **Protocol stack system:** It processes protocols of LTE/DC-HSPA+/HSPA+/UMTS/EDGE/GPRS/GSM and TCP/IP.
5. **Application system:** It provides management system, including SMS, PS domain service, Wi-Fi configuration, network service, WEB service and WEB page. The user can set management parameters by WEB page.
6. **User interface:** It provides human-computer interaction, including a screen and buttons.

# 5 Packing List

This chapter describes the items contained in the package of the E5372.

Table 5-1 lists the items contained in the package of the E5372.

**Table 5-1** Packing list of the E5372

Item	Quantity	Remarks
Mobile WiFi	1	Standard
Rechargeable Battery (1780 mAh)	1	Standard
USB Cable	1	Standard
Power Adapter	1	Optional
Quick Start	1	Standard
Safety Information	1	Standard
AF10 charging adapter	1	Optional
Warranty Card	1	Optional

# A Acronyms and Abbreviations

---

<b>3G</b>	The Third Generation
<b>ACL</b>	access control list
<b>AES</b>	Advanced Encryption Standard
<b>ALG</b>	application level gateway
<b>APN</b>	access point name
<b>ARPU</b>	average revenue per user
<b>ASCII</b>	American Standard Code for Information Interchange
<b>DC-HSPA+</b>	Dual Carrier High Speed Packet Access Plus
<b>DHCP</b>	Dynamic Host Configuration Protocol
<b>DMZ</b>	demilitarized zone
<b>DNS</b>	Domain Name Server
<b>EDGE</b>	Enhanced Data Rates for GSM Evolution
<b>FDD</b>	frequency division duplex
<b>GPRS</b>	General Packet Radio Service
<b>GSM</b>	Global System for Mobile Communications
<b>HSPA+</b>	High Speed Packet Access Plus
<b>HSUPA</b>	High Speed Uplink Packet Access
<b>HSDPA</b>	High Speed Downlink Packet Access
<b>IEEE</b>	Institute of Electrical and Electronics Engineers
<b>IP</b>	Internet Protocol
<b>LCD</b>	Liquid Crystal Display
<b>LTE</b>	Long Term Evolution
<b>MAC</b>	Medium Access Control

<b>Modem</b>	Modulator Demodulator
<b>NAT</b>	Network Address Translation
<b>OS</b>	Operating System
<b>PC</b>	personal computer
<b>PIN</b>	personal identification number
<b>PnP</b>	Plug and Play
<b>PS</b>	packet switched
<b>PUK</b>	PIN unblocking key
<b>SIM</b>	subscriber identity module
<b>SMS</b>	short messaging service
<b>SOHO</b>	small office home office
<b>SSID</b>	Service Set Identifier
<b>TFT</b>	Thin Film Transistor
<b>TKIP</b>	Temporal Key Integrity Protocol
<b>UMTS</b>	Universal Mobile Telecommunications System
<b>UPnP</b>	Universal Plug and Play
<b>USB</b>	Universal Serial Bus
<b>WAN</b>	wireless area network
<b>WEP</b>	wired equivalent privacy
<b>Wi-Fi</b>	Wireless Fidelity
<b>WLAN</b>	wireless local area network
<b>WPA</b>	Wi-Fi Protected Access