

Product Description



HUAWEI E8372 LTE Wingle
V100R001

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About This Document

Summary

This document provides information about the major functions, supported services, and technical references of HUAWEI E8372h-320 LTE Wingle (hereinafter referred to as the E8372h-320).

The following table lists the contents of this document.

Chapter	Describes
1 Overview	The supported network modes, basic services and functions, and the appearance of the E8372h-320.
2 Features	The supported features and technical specifications of the E8372h-320.
3 Services and Applications	The services and applications of the E8372h-320.
4 Technical Reference	The technical references of the E8372h-320.
5 Packing List	The items contained in the package of the E8372h-320.
6 Acronyms and Abbreviations	The acronyms and abbreviations mentioned in this document.

History

Issue	Details	Date
01	First release.	2020-04-10

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1 Overview

HUAWEI E8372h-320 LTE Wingle (hereinafter referred to as the E8372h-320) is a high-speed packet access product. E8372h-320 supports 16 Wi-Fi and 1 USB users to connect to the wireless network at the same time. It is a multi-mode wireless terminal for SOHO (Small Office and Home Office) and business professionals, in order to meet the requirement from different operators.

The E8372h-320 supports the following standards:

- LTE FDD (Frequency Division Duplex)
- DC-HSPA+ (Dual Cell High-speed Packet Access Plus)
- HSPA+ (High Speed Packet Access Plus)
- HSUPA (High Speed Uplink Packet Access)
- HSDPA (High Speed Downlink Packet Access)
- UMTS (Universal Mobile Telecommunications System)
- WCDMA (Wideband Code Division Multiple Access)
- WLAN(Wireless Local Area Network as WiFi AP)

The E8372h-320 provides the following services:

- LTE FDD packet data service;
- DC-HSPA+ packet data service;
- HSPA+/HSPA/UMTS packet data service;
- WCDMA packet data service ;
- Short Message Service (SMS).

You can connect the E8372h-320 with the USB interface of a computer, or with the power adapter/in-car charger also by USB interface.

In the service area of the LTE/DC-HSPA+/HSPA+/HSPA/UMTS network, you can surf the Internet and send/receive messages/emails cordlessly. The E8372h-320 is fast, reliable, and easy to operate. Thus, mobile users can experience many new features and services with the E8372h-320. These features and services will enable a large number of users to use the E8372h-320.

Figure 1-1 shows the profile of the E8372h-320.

Figure 1-1 E8372h-320 profile



2 Features

2.1 Main Features

The E8372h-320 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+ downlink data service of up to 42 Mbit/s
- HSPA+ downlink data service of up to 21 Mbit/s
- HSDPA data service of up to 14.4 Mbit/s
- HSUPA data service of up to 5.76 Mbit/s
- WCDMA data service of up to 384 kbit/s
- LTE/WCDMA Short Message Service (SMS).
- Support Wi-Fi 2.4GHz;
- Wi-Fi AP, supports up to 16 Wi-Fi and 1 USB users;
- SIM/USIM;
- Receive diversity;
- RNDIS;
- HUAWEI AI Life APP;
- Plug and Play;
- Inner antenna;
- Traffic statistic;
- USB 2.0 HighSpeed;
- manage and settings your E8372h-320 via WebUI
- Windows 7, Windows 8, Windows 8.1, Win10. Does not support Windows RT. Mac OS x 10.12, 10.13, 10.14 and 10.15.

2.2 Technical Specifications

2.2.1 Hardware

Table 2-1 lists the hardware specifications.

Table 2-1 Hardware specifications

Item	Specifications
Technical standard	LTE / DC-HSPA+/HSPA+/HSPA/UMTS
	WLAN: 802.11 b/g/n
Operating frequency	LTE:B1/B3/B5/B7/B8/B20/B28
	DC-HSPA+/HSPA+/HSPA/UMTS: B1/B5/B8
	WLAN: 2.4GHz(CH1-CH13)
Memory capability	NAND FLASH 128M
Maximum transmitter power	LTE: +23dBm (Power Class 3)
	WCDMA/HSPA+: +24dBm (Power Class 3)
	WLAN (dBm) :
	11b: 14 11g: 12 11n: 10
Static receiver sensitivity	LTE: Compliant with 3GPP TS 36.101(R9)
	WCDMA/HSPA/HSPA+: Compliant with 3GPP TS 25.101(R9)
WLAN speed	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.
	HT40: Support MCS0–MCS7; Up to 150 Mbit/s.
External interfaces	Wi-Fi MIMO: 1*1
	One USB 2.0 High Speed (Type A)
Key	One mini-SIM card interface
	Reset key
LED	Indicates the status of the E8372h-320

Item	Specifications
Size	94 mm x 30 mm x 14.6 mm
Weight	< 35g
Temperature	• Operating: –10℃ to +40℃ • Storage: –20℃ to +70℃
Humidity	5% to 95%

2.2.2 Software Specifications

Table 2-2 lists the dashboard specifications.

Table 2-2 Software specifications

Item	Description
SMS	• Writing/Sending/Receiving • Sending/Receiving extra-long messages • Group sending • Storage • Sorting
Network connection setup	• Profile management (Create/Delete/Edit) • Set up network connection
WLAN setup	• SSID broadcast and conceal • Open System • Support ASCII or HEX password • 64/128bits WEP Encryption • WPA2-PSK, AES Encryption • WPA/WPA2, TKIP/AES mixed Encryption Algorithm • auto speed adjustment • STA management • MAC Filter
Firewall setup	• supporting firewall activation and deactivation • supporting LAN IP address filtering • supporting DMZ • supporting UPnP • supporting WAN Ping block

Item	Description
DHCP setup	• supporting DHCP Server deactivation and activation • supporting DHCP Server address configuration • supporting DHCP lease configuration
Software installation	Automatic installation for Plug and Play
Other	Network connection settings
	Network status display: signal, operator name, system mode, and so on.
	Selection of network connection types
	PIN management: activate/deactivate PIN, PIN lock, changing PIN, unblocking by using the PUK.
System requirement	• Windows 7, Windows 8, Windows 8.1, Win10. Does not support Windows RT. Mac OS x 10.12, 10.13, 10.14 and 10.15. • Your computer's hardware system should meet or exceed the recommended system requirements for the installed version of OS • Display resolution: 800 × 600 or above
Notes: PIN = personal identification number PUK = PIN unblocking key	

3

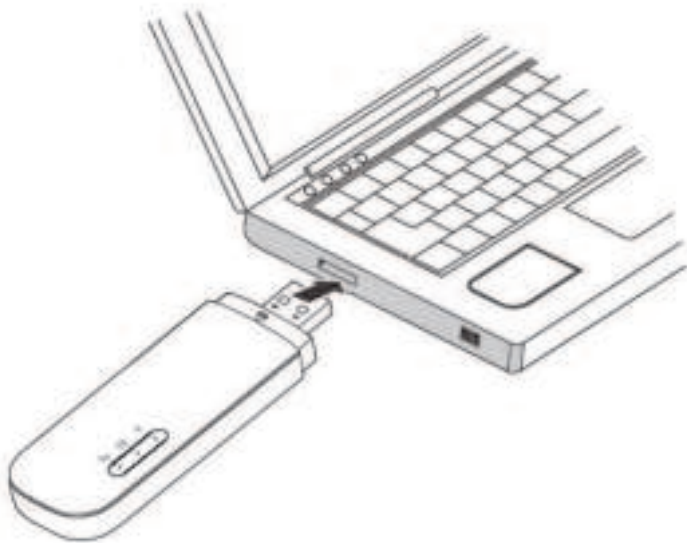
Services and Applications

3.1 Packet Data Service

3.1.1 USB Modem

After you connect the E8372h-320 to a PC with the USB interface, you can send or receive E-mail, access the network through wireless connection, and download files through wireless data channels.

Figure 3-1 shows the device connecting to the network by USB.



3.1.2 Wireless Router (Wi-Fi AP)

As Wi-Fi AP, after the device accesses the LTE network, user can enjoy the wireless network through the connection between Wi-Fi and E8372h-320.

E8372h-320 supports up to 16 and 1 USB users to connect to the wireless network at the same time so as to achieve the wireless LAN establishment.

Figure 3-2 shows multi-devices access the wireless work through Wi-Fi and USB.



4 Technical Reference

4.1 Layer 1 Specifications (Physical)

- Examples of Channel Coding and Multiplexing TR 25.944
- Physical Layer–General Description TS 25.201
- Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD) TS 25.211
- Multiplexing and Channel Coding (FDD) TS 25.212
- Spreading and Modulation (FDD) TS 25.213
- Physical Layer–Procedures (FDD) TS 25.214
- Physical Layer–Measurements (FDD) TS 25.215
- 3GPP HSDPA overall description 25.308
- 3GPP UE radio access capabilities 25.306
- LTE Physical Layer - General Description 36.201
- E-UTRAN Physical Channels and Modulation 36.211
- E-UTRAN Multiplexing and channel coding 36.212
- E-UTRAN Physical layer procedures 36.213
- E-UTRAN Physical layer – Measurements 36.214
- E-UTRAN Services provided by the physical layer 36.302

4.2 Layer 2 Specifications (MAC/RLC)

- MAC Protocol Specification TS 25.321
- RLC Protocol Specification TS 25.322
- E-UTRAN Layer 2 – Measurements 36.314
- E-UTRAN Medium Access Control (MAC) protocol specification 36.321
- E-UTRAN Radio Link Control (RLC) protocol specification 36.322
- E-UTRAN Packet Data Convergence Protocol (PDCP) specification 36.323

4.3 Layer 3 Specifications (RRC)

- UE Interlayer Procedures in Connected Mode TS 25.303
- UE Procedures in Idle Mode TS 25.304
- RRC Protocol Specification TS 25.331
- E-UTRAN Radio Resource Control (RRC) Protocol specification 36.331
- E-UTRAN User Equipment (UE) procedures in idle mode 36.304

4.4 Layer 3 NAS/Core Network (MM/CM)

- Architectural Requirements for Release 1999 TS 23.121
- NAS Functions Related to Mobile Station (MS) in Idle Mode TS 23.122
- Mobile Radio Interface Signaling Layer 3 – General Aspects TS 24.007
- Mobile Radio Interface Layer 3 Specification – Core Network TS 24.008
- PP SMS Support on Mobile Radio Interface TS24.011
- Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS) 24.301

4.5 General Specifications

- UE Capability Requirements TR 21.904
- UE Radio Access Capabilities TR 25.926
- Vocabulary TR 25.990
- Radio Interface Protocol Architecture TS 25.301
- Services Provided by the Physical Layer TS 25.302
- Synchronization in UTRAN Stage 2 TS 25.402

4.6 Performance/Test Specifications

- UE Radio Transmission and Reception (FDD) TS 25.101
- Common Test Environments for User Equipment (UE) TS 34.108
- Special Conformance Testing Functions TS 34.109
- Terminal Conformance Specification TS 34.121
- User Equipment (UE) Conformance Specification; Part 1: Protocol Conformance TS 34.123-1
- User Equipment (UE) Conformance Specification; Part 2: Protocol Conformance TS 34.123-2
- Terminal Conformance Specification, Radio Transmission and Reception (FDD) TS 34.121
- User Equipment (UE) Conformance Specification; Part 1: Protocol Conformance TS 34.123-1
- S48 User Equipment (UE) Conformance Specification; Part 2: Implementation Conformance Statement (ICS) Specification TS 34.123-2

4.7 USIM Specifications

- SIM and IC Card Requirements TS 21.111
- 3rd Gen. Partnership Proj Tech. Spec. Group Terminals; SIM App. Toolkit (USAT) TS 31.111

5 Packing List

This chapter describes the items contained in the package of the E8372h-320.

Table 5-1 lists the items contained in the package of the E8372h-320.

Table 5-1 Packing list of the E8372h-320

Item	Quantity	Remarks
HUAWEI E8372 LTE Wingle	1	Standard
Quick start	1	Standard
USB cable	1	Optional
Strap	1	Optional

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Acronyms and Abbreviations

Numerics

3G	The Third Generation
3GPP	3rd Generation Partnership Project

A

APN	Access Point Name
ARPU	Average Revenue Per User

B

BSS	Base Station Subsystem
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C

CM	Connection Management
CS domain	Circuit Switched Domain

E

EDGE	Enhanced Data Rates for GSM Evolution
EGPRS	Enhanced GPRS

F

FDD	Frequency Division Duplex
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G

GERAN	GSM/EDGE Radio Access Network
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communications

H

HSUPA	High Speed Uplink Packet Access
HSDPA	High Speed Downlink Packet Access

I

IC	Integrated Circuit
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L

LED	Light Emitting Diode
LTE	Long Term Evolution
M	
MAC	Medium Access Control
MexE	Mobile Execution Environment
MM	Mobility Management
Modem	Modulator Demodulator
MS	Mobile Station
MSC	Mobile Switching Center
N	
NAS	Non-Access Stratum
O	
OS	Operating System
P	
PIN	Personal Identification Number
PnP	Plug and Play
PP	Point-to-Point
PS domain	Packet Switched Domain
PUK	PIN Unblocking Key
R	
RF	Radio Frequency
RLC	Radio Link Control
RRC	Radio Resource Control
S	
SGSN	Serving GPRS Support Node
SIM	Subscriber Identity Module
SMS	Short Message Service
SNDCP	Subnetwork Dependent Convergence Protocol
SOHO	Small Office and Home Office
T	
TDD	Time Division Duplexing
TR	Technical Report
TS	Technical Specification

U

UE	User Equipment
UMTS	Universal Mobile Telecommunications System
USAT	USIM Application Toolkit
USB	Universal Serial Bus
USIM	UMTS Subscriber Identity Module
USSD	Unstructured Supplementary Service Data
UTRAN	UMTS Terrestrial Radio Access Network

W

WCDMA	Wideband Code Division Multiple Access
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