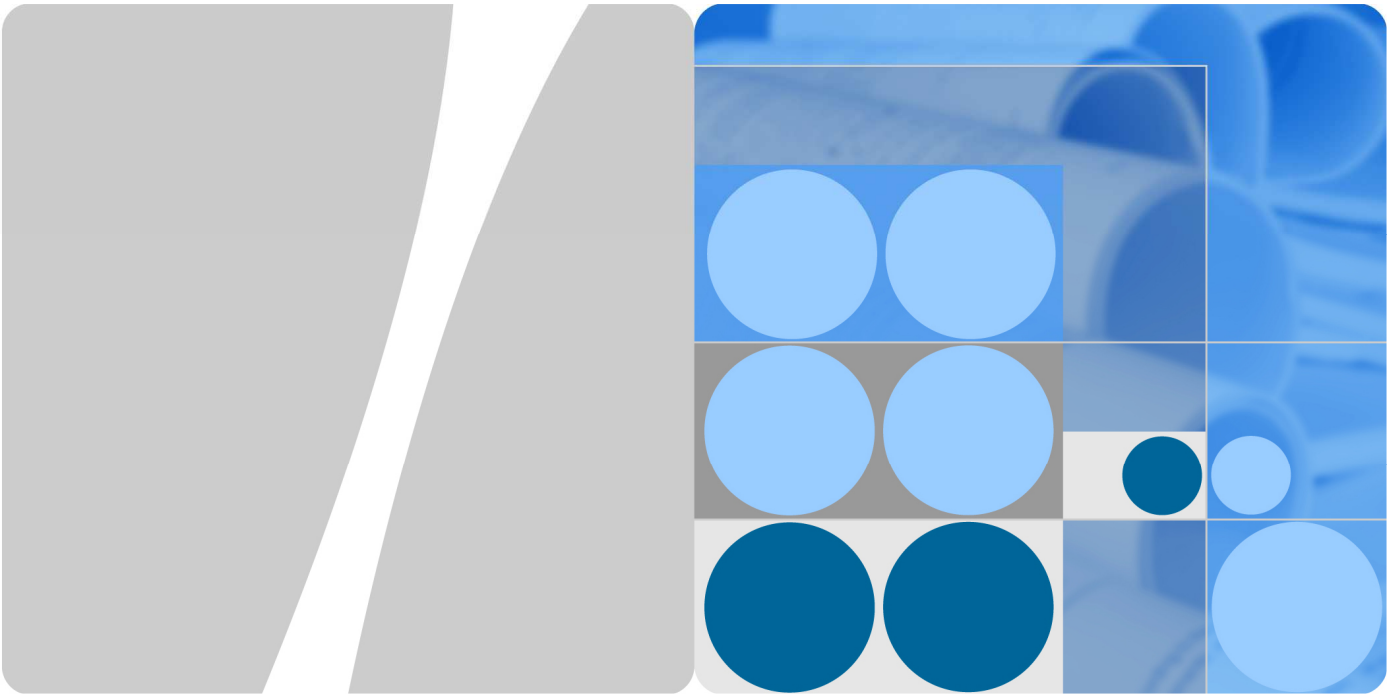
Product Description



E3372-325 LTE Dongle
V100R001

Version 01

Date 2022-05-15

ZOWEE TECHNOLOGY (HEYUAN) CO., LTD.

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About This Document

Summary

This document provides information about the major functions, supported services, and system architecture of E3372-325 LTE Dongle.

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 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 Packaging Box Items	The items contained in the package of the product.
6 Appendix	Supported LTE bandwidths

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

Version	Details	Date
01	First release	2022-05-15

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1 Overview

E3372-325 LTE Dongle as a high speed network access terminal product. 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 E3372-325 supports the following frequency bands:

- LTE: B1/B3/B7/B8/B20/B28/B38/B40
- HSPA+/HSPA/UMTS: B1/B8

The E3372-325 supports the following standards:

- Long Term Evolution (LTE)
- High-Speed Packet Access Plus (HSPA+)
- High Speed Uplink Packet Access (HSUPA)
- High Speed Downlink Packet Access (HSDPA)
- Universal Mobile Telecommunications System (UMTS)

The E3372-325 provides the following services:

- LTE FDD packet data service
- HSPA+ packet data service
- HSDPA packet data service
- HSUPA packet data service
- UMTS packet data service
- LTE/UMTS SMS service

You can connect the E3372-325 with the USB interface of a computer.

In the service area of the LTE/HSPA+/UMTS network, you can surf the Internet and send/receive messages/emails cordlessly. The E3372-325 is fast, reliable, and easy to operate. Thus, mobile users can experience many new features and services with the

E3372-325. These features and services will enable a large number of users to use the E3372-325 and the average revenue per user (ARPU) of operators will increase substantially.

2 Features

2.1 Main Features

The E3372-325 mainly supports the following features:

- LTE FDD data service of up to DL 150Mbit/s/UL 50Mbit/s
- HSPA+ data service of up to 21Mbit/s (64QAM)
- HSDPA data service of up to 14.4Mbit/s
- HSUPA data service of up to 5.76Mbit/s
- Support LTE/UMTS SMS service
- Support WebUI management the device
- Support PnP, Plug and Play

2.2 Technical Specifications

2.2.1 Hardware

Table 2-1 Hardware specifications

Item	Specifications
Technical standard	LTE/HSPA+/HSPA/UMTS
Operating frequency	LTE: B1/B3/B7/B8/B20/B28/B38/B40 HSPA+/HSPA/UMTS: B1/B8
External interfaces	One USB 2.0 High Speed (Type A)
	One Mini-SIM card interface

Item	Specifications	
	Two TS-5 External antenna interface	
LED	Indicating the status of the network	
Maximum transmitter power	LTE	+23dBm (Power Class 3)
	HSPA+/HSPA/UMTS	+23dBm (Power Class 3)
Static receiver sensitivity	LTE FDD: Accorded with 3GPP TS 36.101(R9)	
	HSPA+/HSPA/UMTS: Compliant with 3GPP TS 25.101(R9)	
Maximum power consumption	<3.5W	
Dimensions (D × W × H)	88mm x 28mm x 11.5mm	
Weight	<= 35g	
Temperature	Operating: –10°C to +40°C Storage: –20°C to +70°C	
Humidity	5% to 95%	

2.2.2 Software

Table 2-2 software specifications (WebUI)

Item	Description
Basic specifications	• WebUI • Auto connect, auto reconnect • Display the device information by website
PIN management	PIN unlock
SMS	Support SMS read and send
Device information display	• Connection status • Signal strength • Operator name • Network mode • Roam status
System requirement	• Windows 7, Windows 8, Windows 8.1, Windows 10 (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
Notes: PIN = personal identification number PUK = PIN unblocking key	

3 Services and Applications

3.1 Data Service

After the E3372-325 is connected to the PC through the USB interface, the E3372-325 will automatically connect to the network. Users can directly use the APN parameters preset on the page (or configure the APN on the E3372-325 web page) and establish a connection to access the Internet.

3.2 SMS

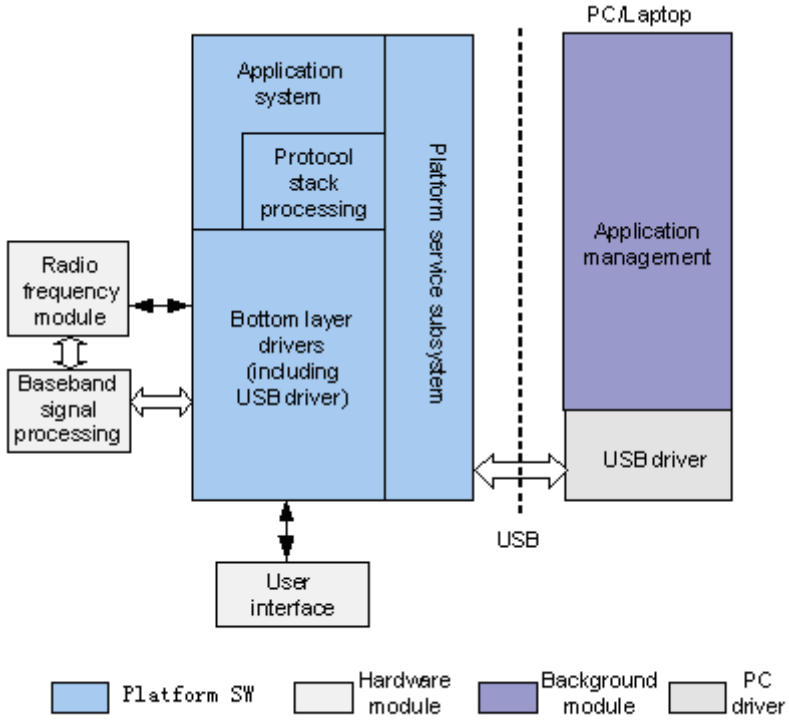
The E3372-325 supports message writing/sending/receiving. The E3372-325's web-based management page provide powerful SMS management functions, including Outbox, Inbox, and Drafts.

4 System Architecture

4.1 System Architecture

Figure 4-1 shows the system architecture of the E3372-325

Figure 4-1 System architecture of the E3372-325



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/HSPA+/HSPA/UMTS baseband signals, including:
   - Modulating/demodulating LTE/HSPA+/HSPA/UMTS baseband signals
   - Encoding/decoding LTE/HSPA+/HSPA/UMTS channels
3. Platform Service Subsystem: It initializes programs, diagnoses the running of the system, downloads data and serves as a watchdog.
3. Bottom layer driver: Drives peripherals, including USB devices, LED and USIM/SIM.
4. Protocol stack system: Processes protocols of LTE/HSPA+/HSPA/ UMTS.
5. Application system: Send the laptop's commands to the underlying protocol for processing and return values to the laptop. Existing applications include: call management, SMS management, PS/CS domain service management.
6. User interface: Provides an interface for connecting peripheral devices. Interfaces are used for LED indicators and USIM/SIM.
7. Web Server: Provides server programs for Web client programs.
8. Web client application: The configuration management of the E3372-325 and related services are realized through the WebUI.

5 Packaging Box Items

Table 5-1 lists the items contained in the packaging box of the E3372-325.

Table 5-1 Packaging box items of the E3372-325

Item	Quantity	Remarks
E3372-325 LTE Dongle	1	Standard
Quick Start Guide (Including safety information)	1	Standard
Warranty Card	1	Optional

6 Appendix

Table 6-1 Shows the LTE bandwidths supported by the E3372-325.

Band	Bandwidth					
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
1			√	√	√	√
3	√	√	√	√	√	√
7			√	√	√	√
8	√	√	√	√		
20			√	√	√	√
28		√	√	√	√	√
38			√	√	√	√
40			√	√	√	√

7 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
C	
CM	Connection Management
CPU	Central Processing Unit
CS domain	Circuit Switched Domain
D	
DTM	Dual transfer mode
E	
EDGE	Enhanced Data Rates for GSM Evolution
EGPRS	Enhanced GPRS
F	
FDD	Frequency Division Duplex
G	
GERAN	GSM/EDGE Radio Access Network
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	
IC	Integrated Circuit
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
NDIS	Network Driver Interface Specification
O	
OS	Operating System
P	
PC/SC	Personal computer/Smart card
PIN	Personal Identification Number
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

T

TR	Technical Report
TS	Technical Specification
TD-SCDMA	Time Division Synchronous CDMA

U

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

W

WCDMA	Wideband Code Division Multiple Access