LTE Outdoor CPE B2366-F01
V200R003C00

Product Description

Issue	02
Date	2019-06-14

Huawei Technologies Co., Ltd.

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

Website: http://www.huawei.com

Email: support@huawei.com

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1 About This Document

1.1 Change History

Issue	Change Description	Date
Draft A	Initial formal release	2018-07-19
01	Formal version release	2018-10-31
02	Add new features: 5 APN, roaming, APN AAA authentication, LTE MTU size, gateway mode, TR143, one key diagnostics, MAC address filtering, LAN IP address filtering, domain name filtering.	2019-06-14

1.2 Summary

This document provides information of product features, main functions and services, and technical specifications and references.

The following table describes the contents in this document.

Chapter	Description
2 Product Overview	Describes the product appearance and main services.
3 Features	Describes the product features.
4 Technical Specifications.	Describes the specifications of product hardware, software, and the user interface.
5 Services and Applications	Describes the main functions and applications.

6 System Structure and Scenario Constraints	Describes the product system structure.
7 Technical References	Describes standards and communication protocols which the products comply with.
8 Packing List	Describes the product packing list.
9 Acronyms and Abbreviations	Describes acronyms and abbreviations.

📖**NOTE**

The document is an invitation to offer but not an offer. It describes the general product features and functions. The features and functions of certain products vary with customer requirements.

2 Product Overview

2.1 Overview

The Huawei LTE customer-premises equipment (CPE) B2366-F01 (hereinafter referred to as the B2366) is an LTE wireless gateway for multiple users and is mainly used in households. You can access the Internet through a wired or wireless network.

The B2366 supports 3GPP Release 11/12 and UE CAT13 in the uplink and CAT10 in the downlink.

The B2366 supports the following functions:

- Data services
- Security services
- IP pass-through
- Gateway
- Multi-APN configuration
- Local maintenance management
- Remote maintenance management
- Firmware over the air (FOTA)
- ODU only
- Firewall

2.2 Introduction

The B2366 is an LTE wireless gateway CPE. It converts data between LTE wireless wide area networks (WANs) and wired local area networks (LANs) and performs data backhaul for user terminals. The B2366 can be used independently and deployed outdoors.

The B2366 supports 3GPP Release 11/12. Wired and wireless network access are supported. The CPE provides the following services and functions:

- Data services

  The LTE broadband technology is adopted to support high-speed Internet access.

- Small-scale LAN services

  The B2366 can connect to terminals through network cables to provide data services.

- Security services

  The CPE supports the PIN password protection mechanism, which protects user data during Internet access.

- Firewall services

  The CPE protects user data during Internet access and supports the following firewall functions:

  - Firewall switch: Enable or disable the firewall connected to the network.
  - LAN Media Access Control (MAC) address filtering: Prevent the devices from accessing specified MAC addresses.

- Local management and maintenance services

  Local configuration helps to manage devices and configure the network, ensuring that the devices function properly.

- Remote management and maintenance services

  CPEs can be managed remotely using the TR069.

Figure 2-1 B2366 exterior

2.3 Application Scenarios

The B2366 provides wireless broadband access services for users and fixed wireless access for enterprises and industry customers, and can meet outdoor deployment requirements. **Figure 2-2** shows an example of the B2366 application scenario. The B2366 supports LTE TDD and LTE FDD wireless routes and converts data between LTE wireless networks and Ethernet wired networks.

Figure 2-2 Example of a B2366 application scenario
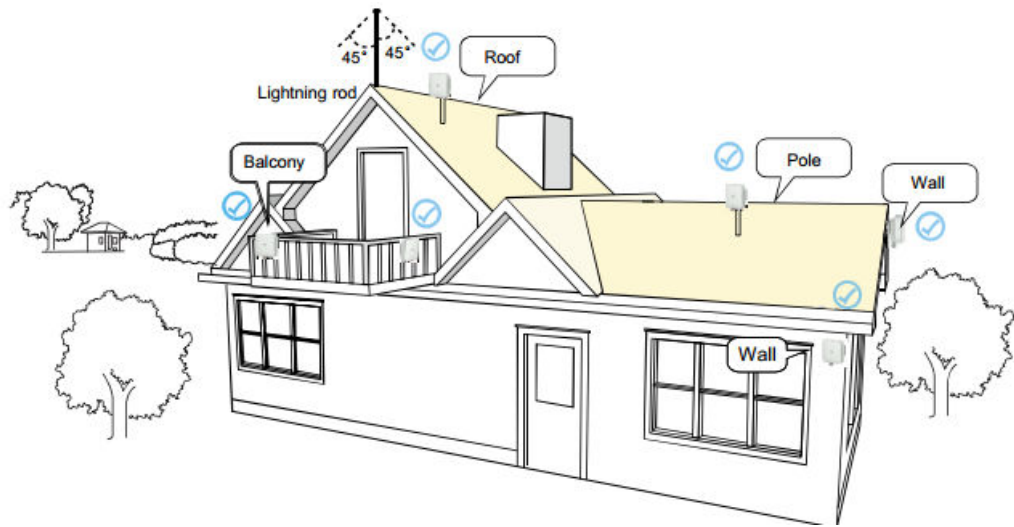
The B2366 connects to a user terminal or power adapter through a CAT5E network cable, as shown in **Figure 2-3**.

Figure 2-3 B2366 cable connections-

3 Features

The main features of the B2366 are as follows:

- LTE connectivity with downlink 2x2 MIMO+3CC CA and uplink 2CC CA+64QAM
  - Support for LTE FDD downlink 2x2 MIMO and downlink 3CC CA (intra-band contiguous and inter-band) (up to 60 MHz)
  - Support for LTE FDD uplink 2CC intra-band contiguous CA (up to 40 MHz) and UL 64QAM
- High-speed transmission
  - Support for LTE UE CAT13 in the uplink and CAT10 in the downlink
  - Support for a maximum throughput of 450 Mbit/s in the downlink and 150 Mbit/s in the uplink for FDD
- Flexible networking capabilities
  - High-speed data transmission capability
  - Support IP Passthrough mode and gateway mode
- Flexible security services

  Support MAC address filtering, LAN IP address filtering and Domain name filtering
- Web-based configuration

  Support for local management and maintenance using a built-in web-based platform featuring a user-friendly web interface
- TR069-based device management
  - Support for the CPE WAN Management Protocol (CWMP) specified in Broadband Forum TR-069
  - Support for remote software image installation with a set of configuration and status parameters
- Antenna and interface

  Built-in high-gain, high-performance LTE antenna
- High compatibility with operating systems

  The following operating systems are supported:
  - Windows 10, Windows 8.1, Windows 8, and Windows 7
  - Mac OS X 10.9, 10.8, and 10.7 with latest upgrades

–   Linux

- High compatibility with browsers

  The following browsers are supported:

  –   IE 11 and later

  –   Firefox 54 and later

  –   Safari 10.1and later

  –   Opera 44 and later

  –   Chrome 57 and later

4 Technical Specifications.

4.1 Hardware Specifications

Table 4-1 Technical specifications of the B2366

Item	Description
Dimensions (W×D×H)	ODU: 220 mm x 220 mm x 89 mm Power supply unit (PSU): 70.6 mm x 56 mm x 27 mm Power adapter: 85.5 mm x 50.9 mm x 45.7 mm
Weight	ODU: < 2 kg PSU adapter+PSU box: < 300 g
Weight (including the package)	< 4.0 kg (including the packing box and kits)
Technical standard	WAN: 3GPP Release 11/12 (CAT13 in the uplink and CAT10 in the downlink)
	LAN: IEEE 802.3
Working frequency band	Band 1, band 3, band 7, band 8, and band 20
Frequency channel bandwidth	5MHz, 10MHz, 15MHz, and 20MHz

Item	Description
External interface	**ODU:** 1 x Giga PSU LAN port (RJ45); 10 Mbit/s, 100 Mbit/s, or 1000 Mbit/s 1 x USIM card slot (3FF, micro SIM card) **PSU (only the ODU is supported):** 1 x PSU WAN port (RJ45) 1 x Ethernet port (RJ45) (10 Mbit/s, 100 Mbit/s, or 1000 Mbit/s) 1 x DC IN port
LED indicator	**ODU:** 1 x System power indicator 1 x LAN indicator 3 x LTE signal strength indicator **PSU:** 1 x System power indicator
Maximum transmit power (LTE)	200 mW (23 dBm)
Receiving sensitivity (LTE)	**Band 1:** －100 dBm/5 MHz, －97 dBm/10 MHz, －95.2 dBm/15 MHz, －94 dBm/20 MHz **Band 3:** －97 dBm/5 MHz, －94 dBm/10 MHz, －92.2 dBm/15 MHz, －91 dBm/20 MHz **Band 7:** －98 dBm/5 MHz, －95 dBm/10 MHz, －93.2 dBm/15 MHz, －92 dBm/20 MHz **Band 8:** －97 dBm/5 MHz, －94 dBm/10 MHz **Band 20:** －97 dBm/5 MHz, －94 dBm/10 MHz, －91.2 dBm/15 MHz, －90 dBm/20 MHz
Power consumption	Average power consumption of the ODU only during peak hours: <13 W Average power consumption of the ODU only: < 8 W
AC/DC power supply	AC: 100 V–240 V, 50 Hz/60 Hz DC: 12 V/2 A

Item	Description
Temperature	**ODU:** Working temperature: －40°C to +50°C Storage temperature: －40°C to +70°C **PSU and power adapter:** ● Working temperature: －5°C to +40°C ● Storage temperature: －40°C to +70°C
Humidity	5% to 95%
Environmental	IP65 for ODU
Certification/ compliance	CE certification IEC/EN62368 Wireless Safety IEC/EN60950-22 Environmental CE CISPR 32 Class B ROHS REACH WEEE

4.2 CA Combinations

The following tables describe the CA combinations supported by the B2366.

Table 4-2 Downlink 2CC CA configurations

No.	Allowed Band Combinations		Remarks
	PCC	SCC	
1	Band 1	Band 1	Up to 40 MHz bandwidth, contiguous
2	Band 3	Band 3	Up to 40 MHz bandwidth, contiguous
3	Band 7	Band 7	Up to 40 MHz bandwidth, contiguous
4	Band 8	Band 8	Up to 20 MHz bandwidth, contiguous
5	Band 20	Band 20	Up to 30 MHz bandwidth, contiguous
6	Band 1	Band 3	Up to 40 MHz bandwidth, inter-band
7	Band 1	Band 7	Up to 40 MHz bandwidth, inter-band
8	Band 1	Band 8	Up to 40 MHz bandwidth, inter-band
9	Band 1	Band 20	Up to 40 MHz bandwidth, inter-band
10	Band 3	Band 1	Up to 40 MHz bandwidth, inter-band

11	Band 3	Band 7	Up to 40 MHz bandwidth, inter-band
12	Band 3	Band 8	Up to 40 MHz bandwidth, inter-band
13	Band 3	Band 20	Up to 40 MHz bandwidth, inter-band
14	Band 7	Band 1	Up to 40 MHz bandwidth, inter-band
15	Band 7	Band 3	Up to 40 MHz bandwidth, inter-band
16	Band 7	Band 8	Up to 40 MHz bandwidth, inter-band
17	Band 7	Band 20	Up to 40 MHz bandwidth, inter-band
18	Band 8	Band 1	Up to 40 MHz bandwidth, inter-band
19	Band 20	Band 1	Up to 40 MHz bandwidth, inter-band
20	Band 20	Band 3	Up to 40 MHz bandwidth, inter-band
21	Band 20	Band 7	Up to 40 MHz bandwidth, inter-band

Table 4-3 Downlink 3CC CA configurations

No.	Allowed Band Combinations			Remarks
	PCC	SCC1	SCC2	
1	Band 1	Band 3	Band 3	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
2	Band 1	Band 1	Band 3	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
3	Band 1	Band 7	Band 7	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
4	Band 1	Band 1	Band 7	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
5	Band 1	Band 8	Band 8	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
6	Band 1	Band 1	Band 8	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
7	Band 1	Band 1	Band 20	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
8	Band 3	Band 1	Band 1	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
9	Band 3	Band 3	Band 1	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
10	Band 3	Band 7	Band 7	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous

11	Band 3	Band 3	Band 7	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
12	Band 3	Band 3	Band 8	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
13	Band 3	Band 3	Band 20	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
14	Band 7	Band 1	Band 1	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
15	Band 7	Band 7	Band 1	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
16	Band 7	Band 3	Band 3	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
17	Band 7	Band 7	Band 3	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
18	Band 7	Band 7	Band 8	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
19	Band 7	Band 7	Band 20	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
20	Band 8	Band 1	Band 1	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
21	Band 20	Band 1	Band 1	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
22	Band 20	Band 3	Band 3	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous
23	Band 20	Band 7	Band 7	Up to 60 MHz bandwidth, inter-band，Same band in-band contiguous

Table 4-4 Uplink CA configurations

No.	Allowed Band Combinations		Remarks
	PCC	SCC	
1	Band 1	Band 1	Up to 40 MHz bandwidth, contiguous
2	Band 3	Band 3	Up to 40 MHz bandwidth, contiguous
3	Band 7	Band 7	Up to 40 MHz bandwidth, contiguous
4	Band 8	Band 8	Up to 20 MHz bandwidth, contiguous

| 5 | Band 20 | Band 20 | Up to 30 MHz bandwidth, contiguous |

4.3 Antenna Specifications

Table 4-5 LTE antenna specifications

Item	Description
Frequency	● Band 1: 1920－1980 MHz in the uplink and 2110－2170 MHz in the downlink ● Band 3: 1710－1785 MHz in the uplink and 1805－1880 MHz in the downlink ● Band 7: 2500－2570 MHz in the uplink and 2620－2690 MHz in the downlink ● Band 8: 880－915 MHz in the uplink and 925－960 MHz in the downlink ● Band 20: 832－862 MHz in the uplink and 791－821 MHz in the downlink
Input impedance	50 Ω
Standing wave ratio	≤4.5@700-960MHz ≤2.0@1710~2690MHz
Efficiency	≥40%@700~960MHz ≥50%@1710~2690MHz
Gain	Band 1/band 3/band 7: 10 dBi Band 8/band 20: 2 dBi
Isolation	> 8 dB
Tx/Rx	1T2R

4.4 Software Specifications

Table 4-6 LTE features

Item	Description
LTE features	FDD downlink 2x2 MIMO+3CC CA (intra-band contiguous+inter-band) FDD uplink 2CC CA (intra-band contiguous)
	LTE MIMO: TM2/TM3/TM4
	Uplink 64QAM

Table 4-7 Software specifications

Item	Description		
Start time	Power-on duration: < 3 minutes		
	Restart duration: < 1 minutes		
Gateway	Router		- Support configuration of static routing table entries . - Support the general route. - Support manual configuration of LAN IP addresses. - Support Address Resolution Protocol (ARP). - Support for port mapping - Support for SIP ALG - Support for DMZ
	DHCP server		- The DHCP server can be enabled or disabled. - The address pool of the DHCP server can be configured. - The lease can be configured.
	NAT		Support NAT and NAPT (compliant with RFC2663, RFC3022, and RFC3027).
	ARP		
	ICMP		
	IPv4		
IP passthrough	IP passthrough mode		Support for transparent transmission of IP addresses allocated by the network to back-end devices
Mobile network	Support for five APNs (one for data services, one for CPE management, one for router management, one for voice services, and one for IPTV services)		
	Support MTU size setting		
	Support APN AAA authentication		
	Support roaming		
Firewall setup	Firewall enabling and disabling		
	MAC address filtering		
	LAN IP address filtering		
	Domain name filtering		

Item	Description
	Disalbe WAN port ping
LAN	Auto-negotiation among 10 Mbit/s, 100 Mbit/s, and 1000 Mbit/s
	MDI/MDIX auto-sensing
	IEEE 802.3/802.3u-compatible
Remote management	TR069
USIM	PIN management and USIM card authentication
Maintenance	Support for export of current diagnosis results and operation logs
	Support Ping diagnostics
	Support Traceroute diagnostics
	Support one key system diagnostics
TR143	Download diagnostics
	Upload diagnostics
	UDP Echo
Time	Support time synchronization with LTE core network
	SNTP Supports three authentication modes: None, MD5, and HMAC-SHA256
	Support daylight saving time (DST)
System requirement	Supported operating systems: ● Windows 10, Windows 8.1, Windows 8, and Windows 7 ● Mac OS X 10.9, 10.8, and 10.7 with latest upgrades ● Linux
	Supported web browsers: ● IE 11 and later (Windows 7 and later) ● Firefox 54 and later ● Safari 10.1 and later (Mac) ● Opera 44 and later ● Chrome 67 and later
	The hardware system of your computer must meet or exceed the recommended system requirements for the installed OS version. If the IE is used, the IE compatible mode cannot be used, especially for the IE 8.

5 Services and Applications

5.1 Data Services

The B2366 supports high-speed data services on LTE networks. By connecting to the B2366 using a network cable, users can access high-speed Internet services and establish a LAN.

5.2 Security Services

The B2366 supports comprehensive and robust security services, including the firewall and PIN protection mechanisms. These features allow users to connect computers to the Internet and protect the computers from the security threats on the Internet.

5.2.1 Firewall Services

The B2366 can enable or disable the firewall for a network connection to protect the device and network from cyber attacks and control unauthorized access.

5.2.2 MAC Address Filtering

The B2366 can prevent specified MAC addresses from network access.

5.3 IP Pass-through

The CPE obtains the WAN IP address and sends it to PC. The PC behind the CPE can directly use the WAP IP address to access the network.
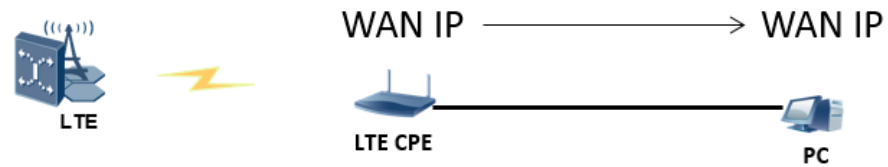
5.4 Multi-APN Configuration

The B2366 supports establishment and maintenance of five APNs (one for data services, one for CPE management, one for router management, one for voice services, and one for IPTV services).

5.5 Local Management and Maintenance

The B2366 supports local configuration to perform device management, network configuration, and ensure normal and stable performance.

5.6 FOTA

The B2366 supports FOTA to allow operators to upgrade the device firmware using the FOTA server remotely.

6 System Structure and Scenario Constraints

- The B2366 adopts the LTE access technology on the WAN side.
- The B2366 obtains the WAN IP address and sends it to PC. The PC behind the CPE can directly use the WAP IP address.
- Web-based management: You can configure the B2366, modify, and query the configuration of the B2366 using a web platform remotely.

7 Technical References

7.1 Standards and Communication Protocols Which the Products Comply With

Table 7-1 Standards and communication protocols of the DATACOM products

Item	Description
Physical layer	RFC894
ARP	RFC826
IP	RFC791, RFC1122, RFC1071, RFC1141, RFC1624, RFC792, RFC950, and RFC1256
ICMP	RFC792, RFC950, and RFC1256
TCP	RFC793
UDP	RFC768
DHCP	RFC1531 and RFC1533

7.2 Standards and Communication Protocols Which the Wireless Uu Interface Complies With

The B2366 supports 3GPP Release 11/12, CAT10 in the downlink, and CAT13 in the uplink.

8 Packing List

Table 8-1 shows the devices and accessories of the B2366.

Table 8-1 Packing list

Description	Quantity	Unit	Remarks
ODU	1	PCS	Standard
PSU	1	PCS	Standard
Power adapter	1	PCS	Standard
Mounting kit	1	SET	Standard
Quick start guide	1	PCS	Standard
Expansion bolt	4	PCS	Standard
Waterproof connector	1	PCS	Standard
Hose clamp	2	PCS	Standard
1 m CAT5E Ethernet cable	1	PCS	Standard

9 Acronyms and Abbreviations

Acronym/ Abbreviation	Full Spelling
ARP	address resolution protocol
APN	access point name
CPE	customer-premises equipment
DHCP	dynamic host configuration protocol
DL	downlink
IP	Internet Protocol
ICMP	Internet Control Message Protocol
LAN	local area network
LED	light emitting diode
LTE	Long Term Evolution
SOHO	small office and home office
SCP	service control point
SDRAM	synchronous dynamic random access memory
UL	uplink
WAN	wide area network
WPS	Wi-Fi protected setup

Valor del equipo	$232,75