

MaxComm

4G LTE INDOOR CPE ROUTER

MODEL : WR-111



MaxComm Co.,Ltd

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Purpose and Scope

The purpose of this document is to define product specification of LTE with 3GPP release 9 compliant Indoor CPE.

It describes the HW and SW requirements of the following products:

Company	Model Name	Product Name
MaxComm	WR-111	LTE Indoor CPE

Product Features

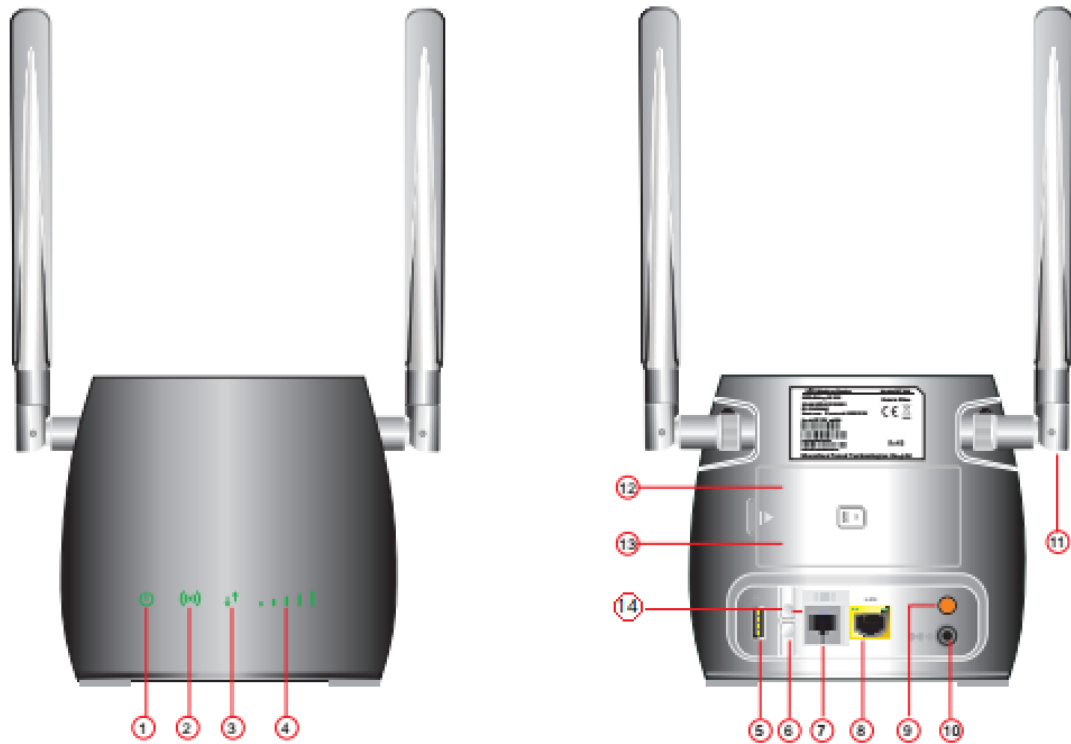
- Support TDD-LTE
- Support FDD-LTE
- Support 3GPP Release 9 compliant
- Support MIMO2*2 1TX/2RX
- Support UE Category 4
- Support QoS service flow initiated by CPE
- Support Dynamic Host Configuration Protocol
- Support Built-in web server for web-based configuration
- Support Password protected access and configuration
- Support IEEE 802.11b/g/n
- Support IEEE 802.3, IEEE 802.3u
- Support RJ45(Ethernet)
- Support LED indicators
- Support USIM Slot
- Support LTE External Antenna
- Support RJ11
- Support VoLTE/VOIP/CSFB

General Specification

No.	Feature	Description	Comments
	LTE BB ASIC	ZX297520V3	ZTE
	LTE RF ASIC	ZX234220A1	ZTE
	Flash	1Gb	
	SDRAM	1Gb	
	WIFI	RTL8192ES	Realtek
	Ethernet LAN port	1*10/100 auto-sensing, auto-MDX	
	LED Indicators	Signal Strength / LTE/WIFI/ETH/POWER	

	Button	Reset 、 WPS 、 WIFI	
	Power supply	Input: Universal range 100~240VAC Output: 12V/1A	


ID design



1	POWER LED	2	WIFI LED
3	LTE LED	4	Signal Strength LED
5	USB Port	6	WIFI Button
7	Voice Port	8	LAN Port
9	POWER KEY	10	DC POWER
11	Antenna	12	SIM Slot(Under the SIM cover)
13	SIM Cover	14	WPS Button

Physical Size	Description
Size	130x120x52(mm)
Weight	220g (Without Battery)

Unit Interface

Connector	Description
LAN – RJ 45	The LAN port allows you to connect Modem to PC
RJ11	Support CPE own voice
USIM Slot	Support standard 1.8V /3.3V
SMA Interface	Support LTE external antennas
LED	

LTE Radio Specification

No.	Feature	Capability				Comments
		min	type	max	Units	
1	Supported LTE Bands	FDD: 1/3/7/20				Customization
2	Channel Band Width	1.4/3/5/10/15/20			MHz	Bandwidth supported follow the 3GPP
3	Channel Step Size	100			kHz	
4	Output Power optional		23		dBm	
5	Modulation	UP: QPSK/16QAM DOWN: QPSK/16QAM/64QAM				
6						

Environmental Specification

No.	Feature	Capability				Comments
		min	Type	max	units	
1	Operating temperature	0		40	°C	
2	Storage temperature	-20		85	°C	
3	Operating humidity	5		95	%	
4	Storage humidity	5		95	%	

Regulatory Specification

No.	Feature	Requirement Specification	Comments
1	Radio	CE	Follow CE regulatory
2	Safety	CE	Follow CE regulatory
3	EMC	CE	Follow CE regulatory

Reliability Specification

No.	Feature	Requirement Specification	Comments
	MTBF	300,000 @ 55 °C	

LTE Capability

No	Feature	Status	Comments
1	3GPP Release 9	Ready	
2	2x2 MIMO	Ready	
3	UE Cat 4	Ready	
4	Inbuilt and External Antennas Auto Switch	Ready	

Networking Security

No	Feature	Status	Comments
1	User Name/Password configuration	Ready	
2	Firewall	Ready	
3	Port Forwarding	Ready	
4	DMZ	Ready	

Wi-Fi Specification

No	Feature	Status	Comments
1	Network Name (SSID)	Ready	
2	SSID Broadcast Enable	Ready	
3	Operating Frequency	Ready	
	2.412 GHz~2.472GHz		
4	Adaptive / non-adaptive equipment	Ready	
	Adaptive Equipment		

5	Antenna Type/Gain	Ready	
	PCB Antenna /4.33dBi		
6	Support Channels	Ready	
	13 Channels (iEEE802.11b/g/n)		
	01:2412MHZ 03:2422MHZ 04:2427MHZ 06:2437MHZ 07:2442MHZ 09:2452MHZ 10:2457MHZ 12:2467MHZ 13:2472MHZ	02:2417MHZ 05:2432MHZ 08:2447MHZ 11:2462MHZ	
7	802.11 Mode selection	Ready	
	<ul style="list-style-type: none"> 802.11b 	Ready	
	<ul style="list-style-type: none"> 802.11g 	Ready	
	<ul style="list-style-type: none"> 802.11n – 20MHz 	Ready	
	<ul style="list-style-type: none"> 802.11n – 40MHz 	Ready	
	<ul style="list-style-type: none"> 802.11b+g+n mode – This is the Factory Default option 	Ready	
8	Security	Ready	
	<ul style="list-style-type: none"> Open (Unsecured) 	Ready	
	<ul style="list-style-type: none"> WPA/WPA2-PSK(TKIP)-ASCII string, 8 to 63 characters in length 	Ready	
	<ul style="list-style-type: none"> WPA/WPA2-PSK(AES) – ASCII string, 8 to 63 characters in length 	Ready	
9	WIFI TX power output (dBm) (Max)	Ready	
	<ul style="list-style-type: none"> 18dBm 		
10	Maximum work range in open ground	90 meters	

System/Debug Utility

No	Feature	Status	Comments
1	Power Switch	Ready	
2	Software reset button	Ready	
3	LED for LTE Link Diagnostic	Ready	
4	System log	Ready	
5	Firmware Verification	Ready	
6	Diagnostic & Monitoring	Ready	