

LTE Indoor CPE Model: WR-112

MaxComm

4G LTE Indoor CPE Router

Model:WR-112



Product Specification

Version 0.1

Revision History

Revision	Date	Description	Author
0.1	2018-12-06	Documents Created	Zhengwe

Purpose and Scope

The purpose of this document is to define product specification of FDD-LTE with 3GPP release 9/10 compliant Indoor CPE operating at 4G/LTE Band1/3/7/8/20/38

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

Company	Model Name	Product Name
MaxComm	WR112	LTE Indoor CPE

Product Features

- Support TDD-LTE/FDD-LTE
- Support 3GPP Release 8/9 compliant
- Support 1TX/2RX with TX switched diversity
- Support UE Category 3/4
- Support QoS service flow initiated by CPE
- Built-in web server for web-based configuration
- Password protected access and configuration
- Support IEEE 802.3, IEEE 802.3u ,IEEE 802.11 b/g/n
- USIM Slot
- Support VPN pass-through
- Support VOLTE/CSFB/VOIP
- Support 1*RJ11(Voice)
- Support 4*RJ45(Ethernet)
- Support LED indicators
- Support External Antenna
- Battery 4400mAh
- Support TR069

General Specification

No.	Feature	Description	Comments
	LTE BB ASIC	ZX297520V3	Sanechips
	LTE RF ASIC	ZX234220	
	Flash	512MByte	GD
	SDRAM	128MB	
	WIFI	RTL8192ES	Realtek
	Ethernet LAN port	4 RJ-45 port 10/100 auto-sensing, auto-MDX	
	Voice port	1 RJ11 ports extend from 1 internal voice port	1 RJ11 ports are connected Inside
	LED Indicators	Signal Strength / Power / WLAN / WPS / BAT / TEL / 4G_LTE	
	Reset/Reboot button	Press button	In side box
	Power supply	Input: Universal range 100~240VAC Output: 12V/1A	

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ID design



Physical Size	Description
Size	180x132x48(mm)
Weight	450g

Unit Interface

Connector	Description
LAN – RJ 45	The LAN port allows you to connect Modem to PC
USIM Slot	Support standard 1.8V USIM
RJ11	Support voice

Radio Specification

No.	Feature	Capability			
		min	typ	max	units
1	Supported Bands	Band1/3/7/8/20/38			
2	Channel Band Width	5/10/15/20			MHz

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3	Channel Step Size	100			kHz	
4	Output Power optional		23		dBm	
5	Modulation	UP: QPSK/16QAM DOWN :QPSK/16QAM/64QAM				
6						
7	Antenna Gain		>4		dBI	

Environmental Specification

No.	Feature	Capability				
		min	Typ	max	units	
1	Operating temperature	0		40	°C	
2	Storage temperature	-20		55	°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

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Reliability Specification

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

LTE

No	Feature	Status	Comments
1	3GPP Release 9/10	ready	9:Default 10:SW configuration
2	2x2 MIMO	ready	
3	UE Cat 4	ready	

No	Feature	Status	Comments
1	IPv4/v6 dual stack	ready	
2	Gateway Mode	ready	
3	DHCP Client in WAN	ready	
4	DHCP Server in LAN	ready	For Gateway Mode, Supports 253 clients max.
5	NTP Client	ready	
6	DNS Relay	ready	For Gateway Mode
7	HTTP(s) Server	ready	
8	Dynamic NAT/NAPT	ready	For Gateway Mode

Networking

Security

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

WiFi Function

No	Feature	Status	Comments
1	Network Name (SSID)	ready	
2	SSID Broadcast Enable	ready	
3	802.11 Mode selection	ready	
	● 802.11b		
	● 802.11g		
	● 802.11n – 20MHz		
	● 802.11b+g+n mode – This is the FactoryDefault option		
4	Security	ready	
	● Open (Unsecure)		
	● WEP 64 – 5 ASCII characters or 10 HEXcharacters		
	● WEP 128 – 13 ASCII characters or 26 HEXcharacters		
	● WPA Personal / PSK (TKIP) – ASCII string, 8 to 63 characters in length		
	● WPA Personal / PSK (AES) – ASCII string, 8 to 63 characters in length		

System/Debug Utility

No	Feature	Status	Comments
1	Software reset button	ready	
2	LED for LTE Link Diagnostic	ready	
3	System log	ready	
4	Multilanguage	ready	