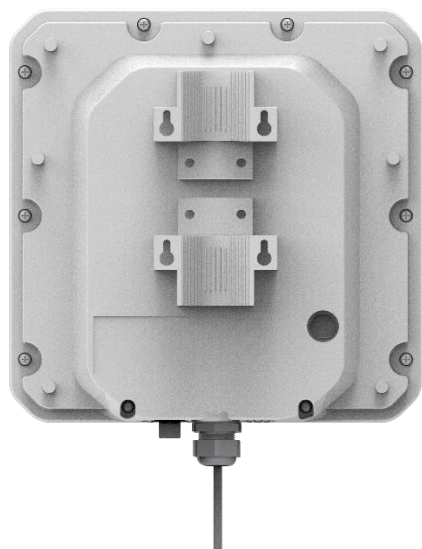# MaxComm

OWR-105

LTE Outdoor CPE

3GPP Release 12
CAT12
ALL LTE Bands
PoE
IP67

OWR-105 is a highly advanced LTE outdoor multi-service product solution specifically designed to meet integrated data needs for residential, business and enterprise users. The product supports advanced Gigabit networking functionalities. It enables wide service coverage and provides high data throughput and networking features to customers who needs easy broadband access.

Hardware Specifications

Spec	Description
LTE chip set	GCT GDM7243A
LTE standard	3GPP Release 12 CAT 12
Flash	2Gb
DDR	2Gb
Power Supply	Typical value 24VDC/48VDC or compliant to IEEE 802.3at
Ethernet LAN Port/POE input	1 * Gigabit RJ45 PoE LAN Port 10/100/1000 auto-sensing, auto-MDI/MDIX
IP rating	IP67
LED	8 LED Indicators (PWR, SYS, NET, SIM, RF Signal*4)
USIM	Support 1.8V/3.0V 2FF USIM
RJ45	1 * Gigabit RJ45
Reset	Reset and restore factory setup
Antenna	4 directional antenna
Dimensions	288mm x 288 mm x 88mm
Weight	ODU < 2Kg
Power Consumption	< 7W
Power adapter	AC 90~240V DC 24V/0.5A

Environment Specifications

Feature		Capability
Temperature	Operating	-40℃ ～ 65℃
	Storge	-40℃ ～ 85℃
Humidity	Operating	10 ~ 90%
	Storge	5 ~ 95%

RF Specifications

Feature		Capability
Support Bands	FDD	B28
	TDD	
CA[1]		Support both intra and inter band CA DL 2CA 4x4 MIMO DL 4CA 2x2 MIMO UL 2CA
MIMO		DL 2x2 (4CA 256QAM); DL 4x4 (2CA 64QAM); UL 2x2 64QAM;
Tx		1Tx, 2Tx
Transmission Mode		TM1/2/3/4/5/6/7/8/9
Output Power@25℃		23±2 dBm
Receiving Sensitivity	FDD	-100dBm/10MHz@QPSK
	TDD	-97dBm/20MHz@QPSK
LTE Antenna		4 directional antenna
LTE Antenna Gain[2]	0.7~1G	6 dBi
	1.7~2.7G	10 dBi
	3.4~3.8G	14dBi

(1) More CA information could get from CA configurations doc.

(2) 4 antennas in diversity mode can get 3 dB diversity gain (with the algorithm) against 2 antennas.

Topology

OWR-105
PoE Switch
Adapter
RJ45

OWR-105 CPE DATASHEET
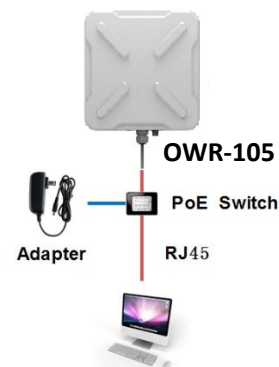
Software Specifications

Language Settings: Simple Chinese, English[1]		
Support NAT/Bridge/Router mode		
Support the http or https web server		
Support two users (admin user and normal user) and different limitation and display		
Peak Throughput	FDD DL 800Mbps (4CC 256QAM);	
	TDD DL 560Mbps (4CC 256QAM);	
	FDD UL 150Mbps (Configuration 2:7);	
	TDD UL 30Mbps (Configuration 2:7);	
LAN	1000Mbit/s	
	MDI/MDIX auto-sensing	
	IEEE802.3/802.3u/802.3ab is compatible	
PIN Management, SIM card Authentication		
Encryption backup current settings and restore the backup settings		
Export current diagnosis results and operation logs		
Statistics	Link Status (LAN)	
	Transmit / receive traffic in packets	
	Up Time	
Support multi-APN		
VPN	L2TP V2/V3	
	PPTP	
	GRE L2/L3	
	GRE over IPSec	
	L2TP over IPSec	
	IPSec	
IPv6/IPv4 dual stack		
Status[2]	Signal strength	
	Network type	
	Network connection status	
	SIM card status	
	Operator name, system mode	
Support full band or preferred band and frequency		
Support PCI lock (Cell lock), band lock, PLMN lock		

Only carrier SIM shall work in the CPE
Support BIP

(1) Multiple languages can be customized

(2) Can be customized

Device Management

Integrity Check	Image One Version
	Image One Checksum
	Image Two Version
	Image Two Checksum
Version Rollback	Auto Rollback to previous version when upgrade fail
Software Upgrade HTTP/FTP Auto Upgrade	Full image upgrade
	Firmware upgrade manually
	Enable / Disable Upgrade Firmware
	Upgrade URL
	Version file
	Check new firmware every (hr.: 1~744)
	Start Time
	Random Time
TR069	Supports upload / download the ACS specified file
	Support download CPE configuration file
	Support configure & queries parameters[1]
	Support remote upgrade
	Support CPE version update
	Supports debugging operations
	Support cycle monitor
Port mirror	Can enable or disable the port mirror function
syslog	Support the syslog function can send the log to the PC via LAN.
Diagnostics	Support the Ping and trace route

(1) Can be customized

OWR-105 CPE DATASHEET

Bridge Mode

Data traffic forward	Forward the data traffic between the LTE network and PCs.
Maximum 4 PCs support	Each PC connect to the LTE public network via one APN
Module can be managed	One APN can be allocation for the module and the module can be managed via TR069 such remote update version
Public IP allocation	PC get the public IP dynamic from the DHCP server in the CPE. The IP is public CPE get from LTE network.
Multiple APN	Up to 4 APNs support, and can set the static router for each APN

Router Mode

LAN	Can be set 2 IP addresses on the LAN and for 2 different Network.
WAN	WAN IP can be set dynamic or static.
Router protocol	Static Route
DNS	Can be set
Multiple APN	Up to 4 APNs support, and can set the static router for each APN

NAT Mode

NAT	Support NAT function
Firewall	Can enable or disable the firewall
Multiple APN	Up to 4 APNs support, and can set the static router for each APN
DMZ	The DMZ can be set.
DHCP server	Support the DHCP server
DNS	Support the auto DNS or manual DNS configuration

Firewall Features

	Allow Ping from WAN
Firewall Configuration	Allow HTTPs login from WAN
	HTTPs Login Port from WAN
	DMZ
	DDOS
	Redirect ICMP to the Host
Support the IP filter	
Support the MAC Filter	
Support the URL Filter	
Support UPnP	
Support the Port forwarding	

Appendix-Delivers

OWR-105 Outdoor CPE	1 PCS
PoE adapter	1 PCS
Accessories for pole mounting	1 PCS
Quick Start Manual	1 PCS

(1)   Detail Delivers need to be defined by customer