



KA5312 +KA5113

LTE Outdoor CPE with
Indoor Wireless Router

3GPP Release

10/11

CAT6

ALL LTE Bands

PoE

IP65

802.11 b/g/n/ac



KA5312 is a high-performance LTE ODU device, which can provide strong accessibility to the LTE network, and has been designed to meet industrial-grade IP65 dust-proof and water-proof standard. KA5113 is a AC1200 wireless router which can provide ODU power supply. KA5312 ODU with KA5113 IDU in combination is the ideal solution for residential LTE network.

Hardware Specifications

Spec		Description
LTE Chipset		GCT GDM7243QT
LTE standard		3GPP Release 10/11 CAT 6 ⁽¹⁾
Host Chipset		MT7621A
Flash		7243QT - 2Gb; MT7621A – 1Gb
RAM		7243QT - 1Gb; MT7621A – 1Gb;
Power Supply		Gigabit PoE, ⁽²⁾ Typical value 24V 1.0A
Maximum Power Consumption		<14W
IP rating		IP65 (ODU)
LED	ODU	Power/WAN/LAN/SIM/Sig nal Strength ⁽³⁾
	IDU	Power/Internet/WiFi 2.4G/ WiFi 5G/USIM/Signal Strength ⁽⁴⁾
USIM		Support 1.8V/3.0V 2FF USIM
Antenna		4 directional antennas

(1) Can Support Cat5, Cat6

(2) KA5113 has 2 LAN ports & 1 WAN/POE port, supply +12V DC
to CW7100B

(3) 4 Bars

(4) 4 Bars

Environment

Specifications

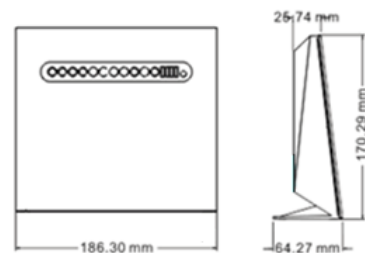
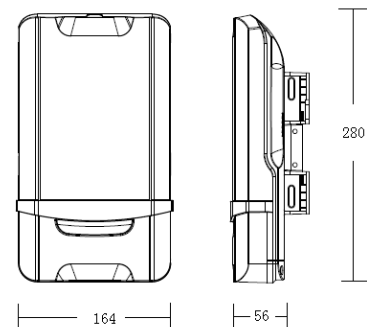
Feature		Capability
Temperature	Operating	-30℃ ~ 55℃
	Storage	-40℃ ~ 85℃
Humidity	Operating	10 ~ 90%
	Storage	5 ~ 95%

RF Specifications

Feature		Capability
Support Bands		FDD 1/2/3/4/5/7/8/20/28 TDD 38/40/41/42/43/48
CA		Inter/Intra 2CA
MIMO		DL 2*2, DL 4*4
Tx		1 Tx
Output Power@25℃		23±2 dBm
LTE Antenna		4 directional antennas
LTE Antenna Gain ⁽¹⁾	700M~1G	5dBi
	1.7G~2.7G	8dBi
	3.4G~3.8G	11 dBi

(1) If the antenna supports all frequency, the antenna gain will be
lower than the value in table

Dimensions



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 access level and display	
Throughput	TDD DL 260Mbps UL30Mbps
	FDD DL 300Mbps UL50Mbps
LAN	1000Mbit/s
	MDI/MDIX auto-sensing
	IEEE802.3/802.3u 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)	
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
TR069	Random Time
	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 periodic 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

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	Can be set dynamic or static.
Router protocol	Not support current
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

WiFi Features

Users can turn on/off WLAN function through two ways, one is touch the WLAN button, the second is Web UI.

Support configuration WLAN functions through Web UI, include: SSID, SSID broadcasting turn on/off, AP Isolate function, Channel, rate and mode

Support encryption: Un-encrypted, WEP-OPEN, WEP-SHARED, WPA-PSK (TKIP), WPA-PSK (AES), WPA2-PSK (TKIP), WPA2-PSK (AES)

Support WPS: Support PBC mode

WiFi protocol support: IEEE 802.11b/g/n/ac 2.4GHz 5GHz

WiFi support max. users: 32

Support SSID broadcasting

Support multi SSID

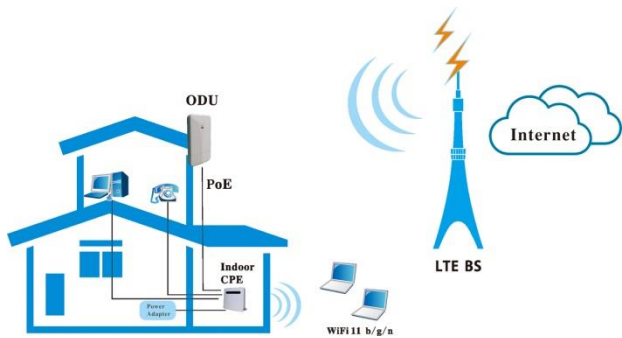
Support WiFi channel self-adapt and select

Support WDS

Firewall Features

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

Application Diagram



Appendix-Deliver

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KA5312 Outdoor CPE	1 PCS
KA5113 Indoor CPE	1 PCS
Gigabit POE, Typical value 24V 1.0A	1 PCS
Accessories for pole mounting	1 PCS
Quick Start Manual	1 PCS

(1) Detail Delivers need to be defined by customer agreement