



5G WIFI6 AX3000

Indoor CPE

Model: Y3000 -500UEA

Product Specification

Version 1.0

Purpose and Scope

The purpose of this document is to define product specification of 5G NR with 3GPP release 15 compliant Indoor CPE.

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

Company	Model Name	Product Name
Haiguang	Y3000 -500UEA	5G WIFI6 AX 3000 Indoor CPE

Product Features

- Support 5G NR
- Support TDD-LTE
- Support FDD-LTE
- Support 3GPP Release 15 5G NSA/SA compliant
- 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 LAN*4,WAN *1
- Support 2.4G Wi-Fi
- Support 5G Wi-Fi



5G WIFI6 AX3000

Indoor CPE

General Specification

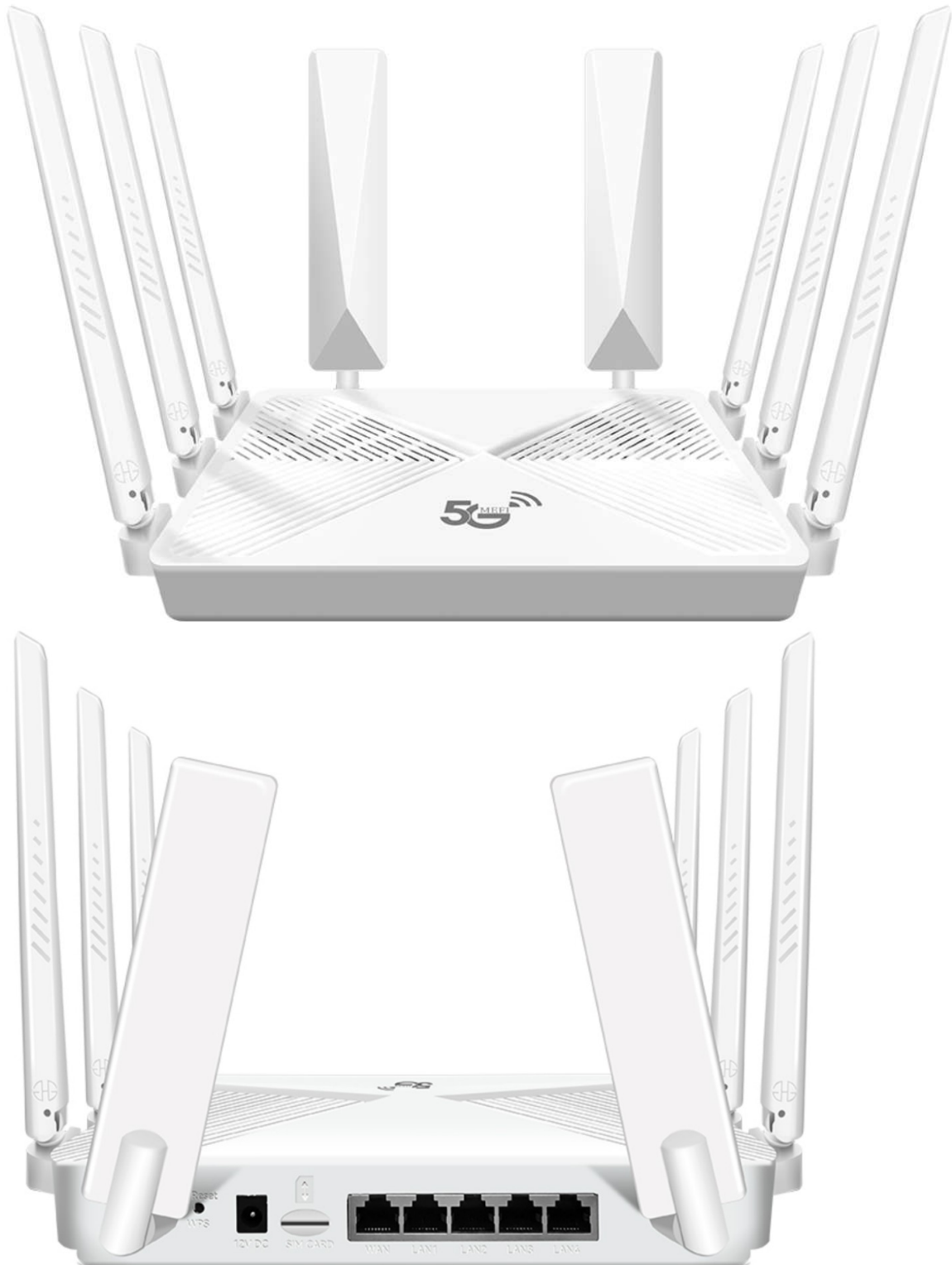
Spec	Description
Chipset	5G/LTE:UNISOC IVY510, dual-core ARM Cortex-A55 processor, up to 1.35GHz
	Wi-Fi: MT7981 (dua-core ARM Cortex-A53(1.3GHz)) +MT7976C+MT7531A
RF standard	5G NR (3GPP Release 15), FDD-LTE,TDD-LTE,HSPA+
Memory	5G Module: Nand flash 2Gbits + RAM 4Gbits LPDDR4x
	Router: ROM 128Mbits + RAM 2Gbits
Indictors	1. Power 2. Wi-Fi Switch Status 3. 4G Internet 4. 5G Internet 5. Signal Bar Indicator
Buttons	Reset Key + WPS Button
Interfaces	1. GE LAN Port * 4, GE WAN Port * 1 2. SIM Slot * 1 (3FF) 3. DC Socket 4. USB2.0 for Manufacture
LAN/WAN	5. GE LAN Port * 4, GE WAN Port * 1 (Currently DHCP/STATIC mode).
Power Supply	AC100V~240V,50Hz~60Hz DC 12V DC±10% 2A
Power Consumption	< 24W
Dimensions	255mm*130mm*35.5mm
Weight	495g



5G WIFI6 AX3000

Indoor CPE

ID design





5G WIFI6 AX3000

Indoor CPE

Unit Interface

Connector	Description
LAN – RJ 45	The LAN port allows you to connect PC to surf internet via CPE
USIM Slot	Support standard 1.8V / 3.3V USIM
WPS Button	Click to start WPS connection
USB	USB2.0, for test
DC	DC 2.0
WPS Indicator	Indicate WPS connection status
Network Indicator	Indicate network link status
Signal Bar Indicator	Indicate network signal strength

Radio Specification

Feature	Capability
Support Bands	5G NR: n1/n3/n7/n38/n40/n41/n77/n78/n79
	4G FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28A/B28B/B66
	4G TDD: B38/B40/B41
ENDC	B4/B5/B7/B8/B28/B66-N78
3CC	B66+B66+B5/B7/B8/B28 B4+B4+B5/B8/B28 B4/B66+B7+B8 B4/B66+B7+B7
CA (Inter/Intra 2CA)	2CC DL intra-band contiguous: 66C,4C,7C 2CC DL inter-band:4A-7A
MIMO	5G : DL: 4 × 4 MIMO on n1/n3/n7/n38/n40/n41/n77/n78/n79 UL: 2 × 2 MIMO on n38/n40/n41/n77/n78/n79 DL: 2 × 2 MIMO on n8/n20 /n28 LTE : DL: 2 × 2 MIMO B1/B2/B3/B4/B5/B7/B8/B20/B28A/B28B/B38/B40/B41/B66
5G/4G TX/RX	2T4R/1T2R
Output Power@25 °C	5G NR: 23+-2dBm LTE: 23+-2dBm
5G/4G/ Wi-Fi Antenna	4G*2; 5G*2; 2.4G *2; 5.8G *2



5G WIFI6 AX3000

Indoor CPE

5G/4G/ Wi-Fi Antenna Gain	5dBi
Wi-Fi Frequency	2.4GHz/5GHz
Wireless	MU-MIMO 802.11a/b/g/n/ac/ax WiFi6 2.4GHz 2T2R 574Mbps,B mode@23dBm(Max) 5.8GHz 3T3R 2.4Gbps,A mode@23dBm(Max)
Wi-Fi Output Power	23 dBm/2.4G; 23dBm/5G;
Wi-Fi Channel BW	20MHz,40MHz,80MHz (AC) ,160MHz(AX) 11ax: OFDMA/MU-MIMO: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM. MCS0~MCS11
Peak Throughput	5G NR: 1Gbps (UL), 2Gbps (DL) , LTE 1Gbps(DL),200Mbps(UL) HSPA+ 42Mbps(DL),5.76Mbps(UL)

Software Specifications

Spec	Description
Language	English
	Simple Chinese,
	Could be customized
Https/Http	Both
Network Status	Signal strength
	Network type(5G/4G..)
	SIM card status
	Wi-Fi Status
	LAN Status
System Status	Mobile parameters, APN/DHCP/Wi-Fi information,, Version/Device information
Internet Settings	Network mode setup, Data switch,
APN Setup	APN name, PDP(IPV4/IPV6/IPV4V6),
SIM Card	PIN Management
DHCP Setup	Enable/disable DHCP server Configure DHCP IP Pool Configure DHCP Lease Time
Static Route	Route Setup on WAN/LAN interface



5G WIFI6 AX3000

Indoor CPE

DDNS	Support
Backup/restore	Encryption backup current settings and restore the backup settings (Export/Import Configuration)
Work Mode	NAT/ Router mode

Environmental Specification

Feature	Capability
Operating Temperature	0 °C ~ 40 °C (32 °F ~104 °F)
Storage Temperature	-40 °C ~ 70 °C (-40 °F ~ 158 °F)
Operating humidity	10% ~ 90% non-condensing
Storage humidity	5% ~ 90% non-condensing

Device Management

Spec	Description
Software Update	WebUI update TR069 update
TR069	HTTP/HTTPS Supports upload / download the ACS specified file Support download CPE configuration file Support configure & queries parameters Support remote upgrade Support cycle monitor
Diagnostics	Ping/Trace/Tcpdump
	Export current diagnosis results and operation logs

Firewall Features

Functions
DMZ
Port Mapping
IP-Port Filter
MAC Filter
URL Filter
Speed Limit
UPnP



5G WIFI6 AX3000

Indoor CPE

WIFI Features

Functions
Support Wi-Fi Switch turn on/off,
Support Wi-Fi SSID/KEY setup
Support Encryption: OPEN, WPA2-PSK, WPA/WPA2-PSK,
Support SSID broadcasting
Support Wi-Fi protocol IEEE 802.11 b/g/n, IEEE 802.11 ac, IEEE 802.11 ax WIFI6
Support Wi-Fi bandwidth setup
Support Wi-Fi channel self-adapt and select
Support Wi-Fi maximum users 2.4G Wi-Fi: 64 5G Wi-Fi: 64
Support WPS: Support WPS PBC