Indoor 5G CPE

BRAX FA521

Product Introduction

MegaTower

Wuhan Da Ta Technologies Co. Ltd

BRAX FA521 is a cost-effective indoor 5G cellular communication router product launched by Wuhan Da Ta Technology, which provides users 5G wireless network access service with high-speed, low latency and high reliability. It converts NR/LTE wireless data to Ethernet data and WiFi data. Together with a wireless router or working alone, the product can easily connect wired or WiFi-connected devices to high-speed 5G network, such as PCs, laptops, tablets, smartphones etc.

Product Overview

BRAX FA521 is an indoor 5G CPE that supports 3GPP Release 15 and is responsible for converting 5G NR wireless data into Ethernet wired data and WiFi data, providing users with high-speed, low-delay, strong-reliability 5G wireless network access services. The product can work alone as a lightweight WiFi router, or co-operate with a wireless router to build up a more complex wireless network.

Product Highlights

Cost-effective with High Performance

- The product supports both SA and NSA network environment with global main bands, and provides high throughput 5G Internet access.
- Adopting cost-effective solutions, unnecessary costs are cut off as much as possible while keeping high performance and high reliability.

New generation Wifi6 standard

- Support AX900 standard WiFi6, fulfill users' network requirement, and improve games and live broadcast experience by eliminating delays.
- BSS coloring mechanism helps to reduce the intra-frequency interference, to improve the network speed, and to optimize the network experience.

Mesh Networking

- Supports mesh networking, quickly builds mesh networks with corresponding wireless routers, and expands the coverage of WiFi network.

Product Specification

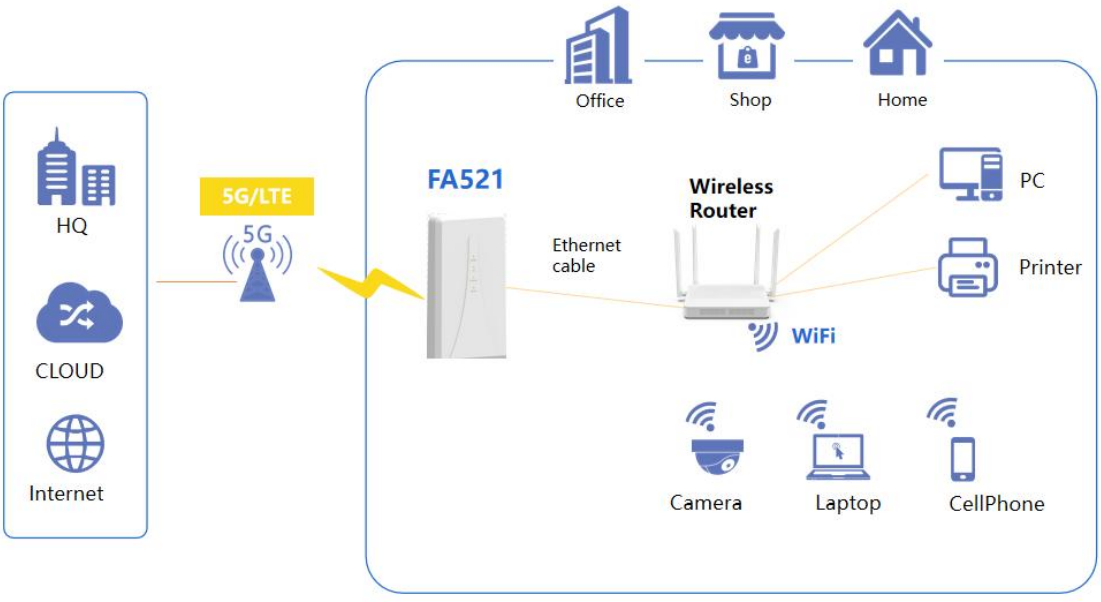
Hardware Specifications	
System Parameters	
CPU	UNISOC V510
Memory	RAM: 512MB Flash: 256MB
5G Chip	UNISOC V510
Interface Parameters	
5G NR	NSA & SA
5G Antennas	4 * built-in antennas
SIM Card	1 * Nano SIM + 2 * eSIM (optional)
LAN Port	1 * GE, 10/100M/1000M adaptive, PoE supported
WiFi protocol	2.4 GHz IEEE 802.11 b/g/n/ax 1T1R 5 GHz IEEE 802.11 a/n/ac/ax 1T1R
WiFi Theoretical	Overall theoretical WiFi throughput: 900Mbps

Throughput	2.4GHz: 300Mbps (1ss 40MHz) 5GHz: 600Mbps (1ss 80MHz)
WiFi Antenna	Built-in omnidirectional 2.4GHz 1x1 MIMO antenna Built-in omnidirectional 5GHz 1x1 MIMO antenna
USB Port	1 * USB Type-C
Physical Parameters	
Dimension	TBD
Materials	ABS
Color	White
Weight	TBD
Installation	Tabletop
Button	Reset, WPS, Power
Indicator	5G NR Indicator 4G LTE Indicator Power Indicator Signal Strength Indicator WiFi Internet
Power Parameters	
Power Supply	Adaptor
Output Voltage	12V
Output Current	1.5A
Environment Parameters	
Working Temperature	-10°C ~ +45°C
Storage Temperature	-40℃ ~ +70℃
Working Humidity	5%—95% (Non condensing)
Storage Humidity	5%—95% (Non condensing)

Software Specification	
5G Access	SA&NSA Network, 5G/LTE, network auto-searching, manual configuration, APN management, data statistics, SMS Management, Cell Locking, Band Locking, SIM locking

WAN Access	Routing mode，Bridge mode
LAN Access	VLAN Management，MAC Management，IGMP Snooping*，IGMP Proxy*
WiFi Access	Support 802.11 a/b/g/n/ac/ax standard，Channel Adaptive，Multi-SSID ，WPS: PBC/PIN mode，WPA/WPA2/WPA3 security encryption，Mesh Networking, WMM
IP Application	IPv4，IPv6，IPv4/IPv6 dual stack，ARP，PPPOE，DHCP Client/Server，DNS，NAT ，ALG，Virtual Server
Routing	Static routing V4/V6
VPN Protocols	PPTP, L2TP, IPSEC*, Vxlan*
Security	Basic firewall，Anti-attack (ARP，DDOS etc)，Anti-scan，Port filtering，MAC filtering，DMZ，DNS/URL filtering
Device Management	TR069, SNMP, Local WEB

Networking



Product Views

To be supplemented after product development finished.