

# Wi-Fi 7 BE 9000Mbps Multi Giga PoE Access Point Central & Cloud Management, seamless roaming

AirCloud TOP-90BE-2.5G-6Ghz

airlive®

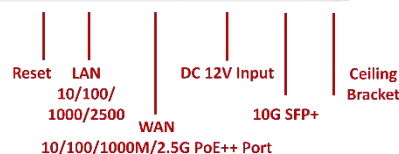


Wi-Fi 7 BE9000	Central Management Supported	Cloud Management supported	Live Status Monitor	AP/Gateway Mode
Qualcomm Chipset	2.5G WAN/LAN 10G SFP+ port	Seamless Roaming	Tri-band Mode	FIT/FAT Mode
				802.3bt PoE input

## Overview

### Ultra Fast 9000Mbps Wi-Fi 7 Tri-band Access Point.

The Airlive TOP-90BE-2.5G-6Ghz is an advanced Wi-Fi 7 compliant 9000Mbps Tri-Band (2.4/5/6GHz) multi function Access Point which features 1x 2.5Gbps LAN port and a 1x 2.5Gbps WAN PoE++ (bt) input port. As well as a 10G SFP+ port for a super high-speed connection to the network. With a total of 6 streams, 2x2 (2.4GHz) + 2x2 (5GHz) + 2x2 (6GHz), The 2.4GHz band provides a maximum access rate of 688Mbps, 5GHz provides a maximum access rate of 2882Mbps, and 6GHz provides a maximum access rate of 5764Mbps. With a total rate of nearly 9Gbps this is would be very suitable for high-density scenarios; It is supported by AirCloud and AirLive Wireless controller. Large Enterprises or organizations can centrally manage large numbers of APs in a single location with the Wireless controller. Or do the management and access from anywhere anytime with an internet connection via AirCloud, cloud-based platform. Moreover, it can work as a standalone AP at home or office when setting in FAT operation mode.



## Wireless Seamless Roaming

Additionally, the TOP-90BE-2.5G-6Ghz supports Wireless Seamless Roaming technology 802.11k/802.11v and Fast BSS Transition (FT) that users can stay connected and productive while on the move. These technologies work together to allow devices to quickly and seamlessly switch between access points without interrupting the connection or requiring the user to manually reconnect. This technology is particularly useful in environments where users need to move around, such as in large offices, airports, shopping malls, and campuses.



## Features

- Wi-Fi 7 11a/b/g/n/ac/ax/be compliant
- 4096QAM, MLO (Multi-Link Operation)
- 9000Mbps Wireless Ultra High Speed
- 20/40/80/160/320Mhz Channel
- Tri-band 2.4Ghz, 5Ghz and 6Ghz
- Seamless Roaming
- 1 x 10/100/1000/2500Mbps WAN RJ-45 Port (PoE++)
- 1 x 10/100/1000/2500Mbps LAN RJ-45 Port
- 1 x 10G SFP+ Port
- 802.3bt PoE power input (WAN)
- FIT/FAT Operation mode
- AP and AP Gateway Operation Mode
- Cloud Management Support via AirCloud (developing)
- AirLive Wireless Controller Supported
- Up to 12 Multiple SSID (4 per band)
- VLAN Support in AP Mode
- QoS in AP Gateway Mode
- URL/MAC/IP Filtering
- Wi-Fi Timer
- Up to 192 users

# Wi-Fi 7 BE 9000Mbps Multi Giga PoE Access Point Central & Cloud Management, seamless roaming



AirCloud TOP-90BE-2.5G-6Ghz

## Wi-Fi 7 Features

### 320MHz Channels & 4K QAM

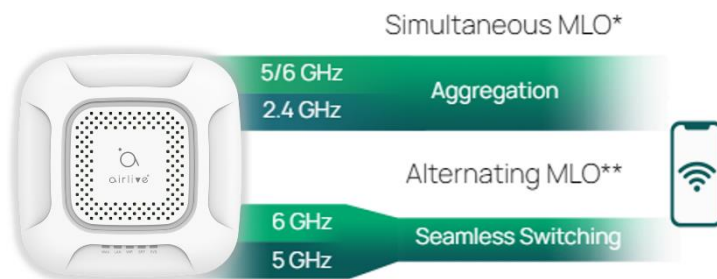
The AirLive TOP-90BE-2.5G-6Ghz Wi-Fi 7 enables significantly faster speeds by packing more data into each transmission. 320MHz channels are twice the size of previous Wi-Fi generations like Wi-Fi 6, which is somewhat like using a semi-truck to move boxes, compared to a moving van.

4K QAM (Quadrature Amplitude Modulation) enables each signal to more densely embed greater amounts of data compared to the 1K QAM with Wi-Fi 6/6E.



## MLO (Multi-Link Operation)

Supports more efficient load balancing of traffic among links, resulting in increased throughput and enhanced reliability. Normally, your wireless device picks a single channel to connect on whether it's on the 2.4 GHz, 5 GHz, or the new 6 GHz band. But if there's interference or that channel gets crowded, your connection slows down or even drops. This is where MLO comes in. Instead of limiting a wireless device to one channel, MLO allows it to use multiple channels across different bands at the same time. The result is, A stronger, faster connection that can handle network interference without any issue. MLO offers a multi-link connection function\*\* and multi-frequency concurrency\*.



## Multi Resource Units (RU) and Puncturing

The Airlive TOP-90BE-2.5G-6Ghz Supports Multi Resource Units (RU) and Puncturing. Multiple Resource Unit (MRU) is a new feature in Wi-Fi that's helps reducing multiple-user latency. By providing enhanced interference mitigation and efficiency. It achieves this by selectively puncturing overlapping portions of the spectrum, ensuring data travels only on unique frequencies. MRU reduces multiple-user latency by an additional 25% compared to OFDMA alone.

Puncturing: Before, busy channels meant bands could not be fully used. Data would only be sent through the primary channel. Now, with Puncturing, the interference can be blocked, opening more channels to use.

It ensures reliable connectivity, faster speeds, and seamless experiences for users.

### With Multi-RU and Puncturing



### Without Multi-RU and Puncturing



# Wi-Fi 7 BE 9000Mbps Multi Giga PoE Access Point

## Central & Cloud Management, seamless roaming



### AirCloud TOP-90BE-2.5G-6Ghz

## Advanced Management

### Flexible Operation - Central Management, Cloud Management, Stand-Alone AP

The AirLive TOP-90BE-2.5G-6Ghz can be a FIT AP or FAT AP. It can work as a standalone Access Point or Gateway for home or small WLAN applications. For Large Enterprises or organizations, the TOP-90BE-2.5G-6Ghz is supported by the AirLive Wireless Controller and AirCloud with advanced and efficient central or/and cloud management.

### 24/7 365 Central and Cloud management for unlimited APs via AirCloud for Large Enterprises or Public Access

**Cloud Control:** The AirLive TOP-90BE-2.5G-6Ghz can be managed through the AirCloud once it has been added to the Cloud. This provides remote control from any location, making it advantageous for large networks of Access Points as local access is not necessary and support can be provided from a remote office. Additionally, multiple levels of control can be assigned in the Cloud, ranging from admin to viewer rights. Access Points can be easily added or removed at any time.



### Central Management via AirLive Wireless Controller for SMB

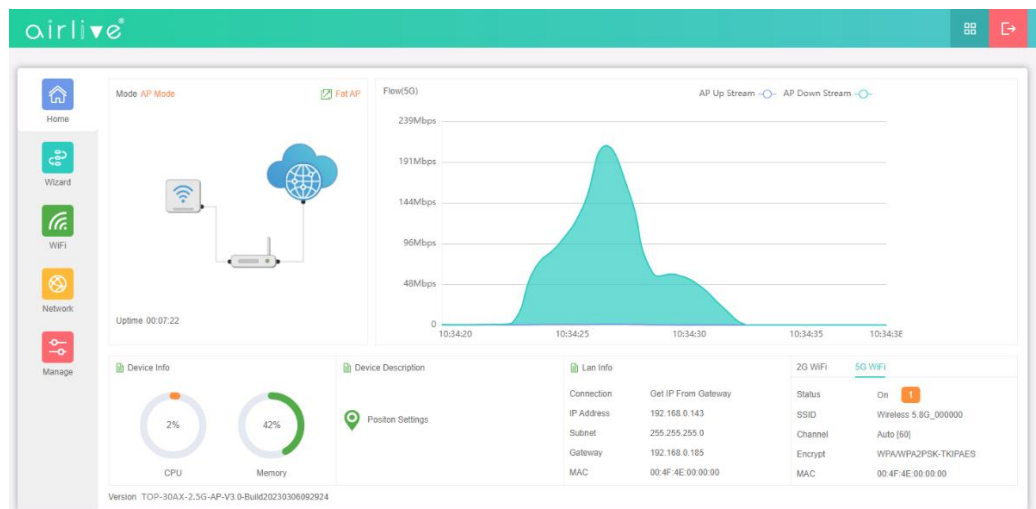
**FIT Mode:** Is a setting for the TOP-90BE-2.5G-6Ghz Access Point that allows it to be controlled by an AirLive WLAN Access Controller. The WLAN controller manages all wireless settings, encryption, and other functions, serving as the central control hub for the TOP-90BE-2.5G-6Ghz Access Point. FIT mode is ideal for SMB or large enterprise setups where multiple access points need to be controlled at once. By using FIT mode and a WLAN Access Controller, it can manage all connected APs in a single location; setup time and complexity can be greatly reduced.

### Works as standalone AP for Home or SOHO Office

**FAT Mode:** The TOP-90BE-2.5G-6Ghz Access Point functions as a standalone device with all wireless and encryption functions being controlled within the AP itself. This mode is more suitable for small setups like residential or offices with fewer APs. The FAT mode supports two operation modes: AP mode and AP Gateway mode. In AP Gateway mode, the TOP-90BE-2.5G-6Ghz works as a gateway and uses its WAN port connecting to a modem/router via PPPoE, DHCP, or Static IP. In AP mode, the TOP-90BE-2.5G-6Ghz can be connected to an existing network and work without the WAN port features.

## Live Status and Monitor

Monitoring your wireless internet usage by live stream graph, you can gain real-time insight into your network activity and make informed decisions about managing your internet resources.



Model	TOP-90BE-2.5G-6Ghz BE9000 Access Point
<b>Device Interface</b> <ul style="list-style-type: none"><li><b>Main Chip:</b> Qualcomm IPQ5322+QCN6274+ QCA8386</li><li><b>Flash:</b> NAND 128MB</li><li><b>RAM:</b> 1024MB</li><li><b>LAN:</b> 1 x RJ45 10/100/1000/2500Mbps</li><li><b>WAN (PoE+):</b> 1x RJ-45 10/100/1000/2500Mbps</li><li><b>SFP:</b> 1 x SFP+ 10G</li><li><b>Wi-Fi:</b> 802.11b/g/n/ax/be (2.4Ghz), 802.11a/n/ac/ax/be (5Ghz) and (6Ghz), Total of 6 streams, 2×2 (2.4GHz) + 2×2 (5GHz) + 2×2 (6GHz)</li><li><b>Button:</b> Reset x 1</li><li><b>Power Input:</b> 1 x DC 12V-3A or 1 x PoE++ 802.3bt</li><li><b>Power Usages Max:</b> ≤ 36W</li><li><b>Antenna:</b> Internal Wireless Antenna 2x 2.4G@1.7dBi, 2x 5G@4Bi, 2x 6Ghz@4dBi</li><li><b>LED:</b> WAN: Green, LAN: Green, Wi-Fi: Red, Green and Blue; SFP: Green, SYS: Red and Green</li></ul> <b>WAN</b> <ul style="list-style-type: none"><li><b>WAN:</b> PPPoE, DHCP, Static IP, (Bridge (AP Mode))</li></ul> <b>Wi-Fi</b> <ul style="list-style-type: none"><li><b>Standard:</b> IEEE 802.11a/b/g/n/ac/ax/be 20/40/80/160/320 MHz channels</li><li><b>Functions:</b> Multi-SSID 12 (4 per radio), SSID hidden, SSID isolation, Support 5G Prior for a faster Ethernet, Band Steering, RF power adjustable, Wi-Fi time on/off to save energy</li><li><b>Security:</b> OPEN, WPA/WPA2PSK-TKIPAES, WPA3PSK-TKIPAES</li><li><b>Modulation:</b> OFDMA, 4096QAM, MLO</li><li><b>Seamless Roaming:</b> 802.11k, 802.11v</li><li><b>Wi-Fi Advanced:</b> Wireless client isolation to improve the wireless stability</li><li><b>Wireless Channel</b><ul style="list-style-type: none"><li>2.4G: 1~13 (CE Channel) (region dependent)</li><li>5.8G: 36~48, 36~64, 100~140, 149~165 (region dependent), 6G: 1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65, 69, 73, 77, 81, 85, 89, 93, 97, 101, 105, 109, 113, 117, 121, 125, 129, 133, 137, 141, 145, 149, 153, 157, 161, 165, 169, 173, 177, 181, 185, 189, 193, 197, 201, 205 209, 213, 217, 221, 225, 229, 233 (region dependent)</li></ul></li><li><b>Wireless Frequency:</b> 2.4Ghz: 2.4GHz ~ 2.484GHz, 5Ghz: 5.150GHz~5.850GHz, 6Ghz: 5.925Ghz ~ 7.125GHz (region dependent)</li></ul>	<ul style="list-style-type: none"><li><b>Wireless Speed:</b> 9000Mbps: 2.4GHz: 688Mbps, 5GHz: 2882Mbps, 6GHz: 5764Mbps</li><li><b>Wireless TX Power:</b> 2.4G:≤24±2dBm, 5.8G:≤21±2dBm, 6G:≤20±2dBm (region dependent)</li><li><b>2.4G EVM:</b> 802.11b: ≤-10dB; 802.11g: ≤-25 dB; 802.11n: ≤-28dB; 802.11ax: ≤-35dB</li><li><b>5G EVM:</b> 802.11a: ≤-25dB; 802.11n: ≤-28dB; 802.11ac: ≤-32dB; 802.11ax: ≤-35dB, 802.11be: ≤-38 dB</li><li><b>6G EVM:</b> 802.11a: ≤-25dB; 802.11n: ≤-28dB; 802.11ac: ≤-32dB; 802.11ax: ≤-35dB, 802.11be: ≤-38 dB</li><li><b>ppm:</b> ±20ppm</li><li><b>Wireless seamless roaming technology</b><p>A combination of technologies, including Fast BSS Transition (FT), 802.11k and 802.11v. These technologies work together to allow devices to quickly and seamlessly switch between access points without interrupting the connection or requiring the user to manually reconnect. <b>802.11k</b> provides better signal information for device decisions on which access point to connect to. <b>802.11v</b> offers QoS information for device selection of the best access point based on its needs.</p></li></ul> <b>Security</b> <ul style="list-style-type: none"><li><b>Filter Rule:</b> URL Filter/MAC Filter/IP Filter</li><li><b>URL/MAC/IP filtering:</b> White list/Black List.</li></ul> <b>DMZ</b> DMZ <b>Port Forwarding Rule/Range</b> TCP/UDP <b>VLAN</b> VLAN support SSID Max 4 per Band <b>Cloud</b> <ul style="list-style-type: none"><li>AirCloud access support in Gateway/AP Mode</li></ul> <b>FIT/FAT Operation Mode</b> <ul style="list-style-type: none"><li>FIT Mode: AP works with AC Controller (Enterprise)</li><li>FAT Mode: AP works standalone (Home use)</li></ul> <b>Management</b> <ul style="list-style-type: none"><li>Web-UI, Remote Management, WLAN Controller, Cloud Management System AirCloud</li></ul> <b>Max Concurrent users:</b> 192 <b>Parental Control (Gateway Mode)</b> <ul style="list-style-type: none"><li>MAC Address Filtering, URL Filtering, IP Filtering</li></ul>

\* Specification will be changed without prior notice

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Model	TOP-90BE-2.5G-6Ghz AX3000 Access Point
<div><b>AP/AP Gateway Mode</b><ul style="list-style-type: none"><li><b>AP:</b> In this mode, the AP Wireless and Cable Interface are bridging together. Without NAT, Firewall and all network related functions.</li><li><b>AP Gateway:</b> In this mode, the WAN page is enabled and PPPoE, DHCP or Static IP can be selected. NAT is enabled and PC's in LAN ports share the IP to ISP through WAN port.</li></ul></div> <div><b>VPN Pass Through (Gateway Mode)</b><ul style="list-style-type: none"><li>IPsec, PPTP, L2TP</li></ul></div> <div><b>Data Statistics</b><ul style="list-style-type: none"><li>WAN Down Stream, WAN UP Stream</li><li>Wi-Fi Analyzer (2.4, 5, 6Ghz)</li></ul></div> <div><b>Multiple Language</b> English</div> <div><b>ESD/Surge Protection</b><ul style="list-style-type: none"><li><b>ESD:</b> Air Discharge: ±8KV, Contact Discharge: ±6KV</li><li><b>Electrical Surge:</b> Common Mode: 2K, Differential Mode: 1K</li></ul></div> <div><b>Environment</b><ul style="list-style-type: none"><li><b>Operating temperature:</b> -10°C ~ +55°C</li><li><b>Storage Temperature:</b> -40°C ~ +70°C</li><li><b>Storage Humidity:</b> 5% ~ 95% (non-condensing)</li></ul></div> <div><b>Standard package</b><ul style="list-style-type: none"><li><b>Product size:</b> 20.8 x 20.8 x 4.60 cm(L*W*H)</li><li><b>Package size:</b> 24.5 x 23.5 x 7.5 cm(L*W*H)</li><li><b>Package Weight:</b> G.W: 0.55kg</li><li><b>Package content:</b> 1x TOP-90BE-2.5G-6Ghz, 1x Ceiling mount, 1x QIG</li></ul></div> <div><b>Ordering information</b><ul style="list-style-type: none"><li><b>AirLive AirCloud TOP-90BE-2.5G-6Ghz</b> 11be 9000Mbps Multi Giga PoE Access Point, Central and Cloud management supported</li></ul></div>	

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