



## IAP7094

### Wi-Fi 7 (802.11be) Ceiling-mounted Tri-band Wireless Access Point

## Product Introduction

IAP7094 is a new-generation 802.11be (Wi-Fi 7) tri-band indoor wireless access point. The product complies with IEEE 802.11a/b/g/n/ac/ax/be standards, utilizes 2x2 MU-MIMO technology, supports six spatial streams and provides wireless access bandwidth of up to 9400Mbps to meet the demands for high-performance indoor wireless coverage.

IAP7094 employs OFDMA, MLO and Multi-RU technology. This allows a single device to occupy multiple channels and simultaneously establish multiple RU resources with terminals.

IAP7094 supports standalone, AC and cloud management mode. It offers both local and PoE power supply modes. Equipped with six independent antennas, it is widely suitable for indoor high-density environments such as schools, train stations, and airports.

## Product Feature

### High-performance Wi-Fi 7 access point

- Complies with Wi-Fi 7 (IEEE802.11be) standards
- Supports 4096QAM and OFDMA to improve the user's Internet experience.
- Provides up to 9400 Mbps bandwidth (5764 Mbps in the 6GHz band, 2882 Mbps in the 5GHz band, 688Mbps in the 2.4GHz band)

### Robust security

- Supports WPA3 256-bit encryption.
- Supports MAC authentication, 802.1X authentication, Web authentication, and transparent authentication
- Supports VPN tunnel technologies such as IPSEC, SoftGRE, and CAPWAP.
- Supports WLAN DOS attack detection and protection, as well as suppression of wireless broadcast messages.
- Supports terminal isolation based on SSIDs, APs, and VLANs.

### Intelligent Wi-Fi access point

- Enables local Portal authentication and customized Portal advertisement push on the web page.
- Provides various local data collection and statistical analysis services. Supports end-user network behavior management, recognition of mainstream domestic apps, and network behavior management and control based on SSID.

### Intelligent Service Continuity

- Actively monitors the link state with the access controller (AC) or gateway.
- Maintains existing terminal sessions and establishes new sessions when the AC is down.

### Energy saving

- Power consumption is lower than 36W.
- Allows users to configure a timed shutdown policy for radio modules.

### Effortless deployment and simplified O&M

- Supports PoE (802.3at) and local power options.
- Offers ceiling or wall-mounted installation options.
- Facilitates remote management via Telnet or SSH and automatic configuration retrieval from the cloud platform.
- Enables intelligent, visualized, and remote O&M, cloud diagnosis, fault alarms, and level-based and domain-based management.
- Supports centralized and local forward mode.

### Feature-rich AP with centralized optimization and management

- Supports flexible operation modes including routing mode, Portal gateway mode, and bridge mode.
- Offers innovative AP functions, such as PPPoE, NAT, DHCP Server/Client, and wireless SSID and encryption settings.
- Supports up to 48 SSIDs and allows for setting parameters and security policies for each SSID individually.

Item	Parameter description
Interface	<ul style="list-style-type: none"> <li>1 x 10/100/1000/2500 Mbps Ethernet WAN port</li> <li>1 x 10/100/1000/2500 Mbps LAN port</li> <li>1 x 10 Gbps SFP+ optical port</li> </ul>
Reset button	<ul style="list-style-type: none"> <li>1 x Reset button</li> </ul>
Power supply	<ul style="list-style-type: none"> <li>PoE(802.3 bt)      • DC(12V/3A)</li> <li>PoE power supply requires high-quality network cables and crystal heads</li> </ul>
Operating frequency	<ul style="list-style-type: none"> <li>802.11be:5.925~7.125 GHz</li> <li>802.11a/n/ac/ax/be:5.150~5.350GHz;5.470~5.725 GHz; 5.725~5.850 GHz</li> <li>802.11b/g/n/ax/be:2.40~2.483GHz</li> </ul>
Spatial streams	<ul style="list-style-type: none"> <li>2.4 / 5 / 6GHz: 2 × 2 MU-MIMO</li> </ul>
Max transmit power	<ul style="list-style-type: none"> <li>23dBm</li> </ul>
Modulation technique	<ul style="list-style-type: none"> <li>IEEE 802.11b: DSSS (DBPSK, DQPSK, CCK)</li> <li>IEEE 802.11g/a: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)</li> <li>IEEE 802.11n/ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)</li> <li>IEEE 802.11ax: OFDMA (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM)</li> <li>IEEE 802.11be: OFDMA (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-QAM)</li> </ul>
Data rates	<ul style="list-style-type: none"> <li>IEEE 802.11b: 11/5.5/2/1Mbps</li> <li>IEEE 802.11g/a: 54/48/36/24/18/12/9/6Mbps</li> <li>IEEE 802.11n: 20 MHz: 6.5–144.4 Mbps 40 MHz: 13.5–400Mbps</li> <li>IEEE 802.11ac: 20 MHz: 6.5–173.3 Mbps 40 MHz: 13.5–400 Mbps 80 MHz: 29.3–867 Mbps</li> <li>IEEE 802.11ax: 20MHz: 7.3 Mbps~286.8 Mbps 40MHz: 14.6 Mbps~573.6 Mbps 80MHz: 30.6 Mbps~1201 Mbps 160MHz: 61.2 Mbps~2402 Mbps</li> <li>IEEE 802.11be: 20MHz: 7.3 Mbps~344.1 Mbps 40MHz: 14.6 Mbps~688.2 Mbps 80MHz: 30.6 Mbps~1441.2 Mbps 160MHz: 61.2 Mbps~2882.4 Mbps 320MHz: 122.4 Mbps~5764.8 Mbps</li> </ul>
Indicator	<ul style="list-style-type: none"> <li>WAN /LAN /SFP:green; Wi-Fi:Red, green and blue; SYS:green and red</li> </ul>
Power consumption	<ul style="list-style-type: none"> <li>36 W</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>208 mm x 208 mm x 46 mm</li> </ul>
Weight	<ul style="list-style-type: none"> <li>0.55 kg</li> </ul>
Operating temperature	<ul style="list-style-type: none"> <li>-10° C to +55° C</li> </ul>
Storage temperature	<ul style="list-style-type: none"> <li>-40° C to +70° C</li> </ul>
Relative humidity	<ul style="list-style-type: none"> <li>5%–95% (no condensation)</li> </ul>

Item	Parameter description
Max SSIDs	<ul style="list-style-type: none"> <li>48</li> </ul>
Max concurrent users	<ul style="list-style-type: none"> <li>512</li> </ul>
802.11n/ac/ax	<ul style="list-style-type: none"> <li>Automatic channel scanning</li> <li>20 MHz/40 MHz/80 MHz channel bandwidth</li> <li>A-MPDU, A-MSDU</li> <li>Dynamic frequency selection(DFS)</li> <li>Transmit power control(TPC)</li> <li>Unscheduled automatic power save delivery (U-APSD)</li> </ul>
Antenna	<ul style="list-style-type: none"> <li>Internal antenna</li> <li>1.7dBi gain in 2.4 Ghz band</li> <li>4 dBi gain in 5 Ghz band</li> <li>4 dBi gain in 6 Ghz band</li> </ul>
802.11ax/be	<ul style="list-style-type: none"> <li>OFDMA、BSS Coloring、TWT</li> </ul>
802.11be	<ul style="list-style-type: none"> <li>MLO、MRU、Preamble puncture</li> </ul>
Wi-Fi security and authentication	<ul style="list-style-type: none"> <li>WEP 64/128</li> <li>WPA/WPA2-PSK-TKIP</li> <li>WPA/WPA2-PSK-CCMP</li> <li>WPA/WPA2-802.1X-TKIP</li> <li>WPA/WPA2-802.1X-CCMP</li> <li>WPA/WPA2-PPSK</li> <li>WPA3-ASE, WPA2/WPA3, WPA3-802.1X</li> <li>WAPI-PSK/CA</li> <li>MAC, Portal, Transparent Authentication and Dot1x Authentication (EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-SIM/AKA, EAP-FAST)</li> </ul>
Local AP functions	<ul style="list-style-type: none"> <li>PPPoE Client, NAT, DHCP Server, DHCP Client</li> <li>Configuration of local SSID, encryption and shared keys</li> </ul>
QoS	<ul style="list-style-type: none"> <li>Rate limitation based on STAs, SSIDs, and APs</li> <li>Maximum concurrent user limitation based on SSIDs</li> <li>Radius bandwidth property delivery</li> <li>voice QoS</li> </ul>
Management	<ul style="list-style-type: none"> <li>Cloud platform management</li> <li>APP management</li> <li>Network management and control: Telnet/SSH/CAPWAP</li> <li>Remote upgrades through FTP</li> <li>NTP, FTP/TFTP, local CLI command reference, local Web (Web pages can be opened and closed locally or remotely.)</li> </ul>

## Note:

- Specifications are subject to change.
- Actual operating frequency and transmit power vary depending on regulations in different countries and regions.
- The actual number of concurrent users depends on the application environment and other factors.