

AIR-AP666C-BE

Tri-Band Wi-Fi 7 (802.11be) High-Performance Access Point

Delivering Ultra-Fast, Low-Latency Connectivity for
High-Density Enterprise Environments

HIGHLIGHTS

- **Wi-Fi 7 (802.11be) Technology:-**
Delivers next-generation wireless performance with enhanced speed, efficiency, and reduced latency.
- **Tri-Band High-Speed Connectivity:-**
Operates across 2.4GHz + 5GHz (Low) + 5GHz (High) bands for optimized traffic distribution and performance.
- **Ultra-High Throughput up to 6.45 Gbps:-**
Combined wireless speed of up to 6452 Mbps for bandwidth-intensive applications.
- **Dedicated Band Performance:-**
 - 2.4GHz: Up to 688 Mbps
 - 5GHz (Low Band): Up to 2882 Mbps
 - 5GHz (High Band): Up to 2882 Mbps
- **240 MHz Channel Bandwidth:-**
Ensures wider data channels for faster transmission and improved network efficiency.
- **4096-QAM Modulation:-**
Increases data capacity and boosts overall network throughput.
- **High-Density Deployment Ready:-**
Ideal for enterprise, campuses, hospitality, and large-scale environments.
- **Seamless Roaming Experience:-**
Supports smooth handoff for uninterrupted connectivity across multiple APs.



PRODUCT OVERVIEW

Ultra-High Performance:-

- AIR-AP666C-BE supports the 802.11be standard, operates in both 2.4 GHz and 5 GHz band, and provides an access bandwidth up to 6452 Mbps.
- Advanced 4096-QAM technology, delivering higher data rates and enhanced user experiences in demanding scenarios.
- Maximum Ratio Combining (MRC) enhances receiver sensitivity by optimally combining signals from multiple antennas to maximize SNR.

Advanced Radio Channel Coding Technologies:-

- Space-Time Block Coding (STBC) improves transmission reliability extends coverage by using spatial diversity across multiple antennas to enhance signal reception.
- Low-Density Parity-Check (LDPC) provides efficient forward error correction to reduce packet errors and improve overall throughput, especially in high data rate transmissions.
- Transmit beam-forming (TxBF) focuses radio signals toward specific clients to expand effective coverage, enhance link reliability, and increase data rates.

Intelligent RF Management:-

- Working with a wireless controller, AirPro Intelligent wireless APs support automatic channel optimization. Through RF environment detection and management algorithms, the AP can adjust operating channels to mitigate external interference, optimizing coverage and ensuring stable wireless communication.

Powered by PoE port or external power adapter:-

- AIR-AP666C-BE can be powered by PoE port or external power adapter, input 100~240V AC, output: 48 VDC.

Good PoE compatibility:-

- AIR-AP666C-BE can work well with all PoE switch which support 802.3af & at standard, this allows to power up AIR-AP666C-BE directly.

Multi-mode: fit, bridge, Nat:-

- AIR-AP666C-BE can work in fit, Bridge or Nat mode and can flexibly switch between these three modes according to network planning requirements.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AIR-AP666C-BE	
Dimensions (L*W*D) (mm)	260mm x 160mm x 38mm	
Uplink port	1*1/2.5G Ethernet port and 1*1/10G SFP+ port	
Downlink ports	1* 10/100/1000M ports	
USB 2.0	1	
Console port (RJ-45)	1	
BLE	Yes	
Indicator LED	Yes	
Reset button	Yes	
Power supply	802.3af & at and External power adapter (Input: 100~240V AC , Output: 48 V DC)	
Maximum power consumption	<25W	
RF port	Built-in 2.4 GHz 3 dBi antenna, 5GHz low-frequency 3 dBi antenna and 5GHz high-frequency 3 dBi	
Working frequency band	802.11b/g/n/ax/be: 2.4 GHz to 2.483 GHz 802.11a/n/ac/ax/be: 5.150GHz to 5.350GHz 5.725GHz to 5.850GHz	
Modulation technology	802.11b: BPSK, QPSK, CCK 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM 802.11be: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-QAM	
Transmit power	2.4G: 20 dBm (Per Chain) 5G low-frequency: 20 dBm (Per Chain) 5G high-frequency: 20 dBm (Per Chain) (Note : final output power comply with deployment regulation might be different)	
Power adjustment granularity	1 dBm	
Working/Storage temperature	0°C to 40°C	
Working/Storage RH	-40°C to +70°C	
Protection level	10% to 95% (non-condensing)	
	IP41	
Software Specifications		
WLAN	Product positioning	Indoor dual-frequency
	Working frequency band	2.4GHz and 5GHz low-frequency and 5GHz high-frequency
	Bandwidth performance	2.4G: 688Mbps 5G low-frequency: 2882Mbps 5G high-frequency: 2882Mbps
	Virtual AP (BSSID)	48
	Concurrent user	360
	Number of spatial streams	2.4GHz: 2 5GHz low-frequency: 4 5GHz high-frequency: 4
	Dynamic channel adjustment (DCA)	Yes
	Transmit power control (TPC)	Yes
	Blind area detection and repair	Yes
	SSID hiding	Yes
	RTS/CTS	Yes
	RF environment scanning	Yes
	Hybrid access	Yes
	Restriction on the number of access users	Yes
	Link integrity check	Yes
	Accessing control of terminals based on signal strength	Yes
	Forcing terminals to roam based on signal strength	Yes
Intelligent control of terminals based on airtime fairness	Yes	
High-density application optimization	Yes	
802.11be enhancements	Space streams	6
	Frequency band	2.4GHz, 5GHz low-frequency and 5GHz high-frequency
	Multi-Link Operation (MLO)	Yes
	4096-QAM	Yes
	Frame aggregation (A-MPDU)	Yes
	Frame aggregation (A-MSDU)	Yes
	Maximum likelihood demodulation (MLD)	Yes
	Transmit beamforming (TxBF)	Yes
	Maximum ratio combining (MRC)	Yes
Space-time block coding (STBC)	Yes	
Low-density parity-check code (LDPC)	Yes	

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Hardware Specifications

Security	Encryption	WPA (TKIP), WPA-PSK, WPA2 (AES) WPA3, WEP(64/128 bits), WPA2/3 Enterprises 802.1x
	802.11i,	Yes
	802.11i authentication	Yes
	Portal authentication	Yes
	WAPI	Yes
	MAC address authentication	Yes
	LDAP authentication	Yes
	PSK authentication	Yes
	PEAP authentication	Yes
	WIDS/WIPS	Yes
	Protection against DoS attacks	Anti-DoS for wireless management packets
	Forwarding security	Frame filtering, white list, static blacklist, and dynamic blacklist
	User isolation	wireless user layer 2 isolation, wireless user isolation based on SSID
	Periodic SSID enabling and disabling	Yes
	Access control of free resources	Yes
	Wireless SAVI	Yes
ACL	Access control of various data packets such as MAC, IPv4, and IPv6 packets	
Secure access control of APs	MAC authentication, password authentication, or digital certificate authentication between an AP and an AC	
Forwarding	802.11W	Yes, encryption of management frames
	IP address setting	Static IP address configuration or dynamic DHCP address allocation
	IPv6 forwarding	Yes
	IPv6 portal	Yes
	Local forwarding	Yes
	Multicast	IGMP snooping
	Roaming	Yes
AP switching reference	Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.	
QoS	WDS	Yes
	WMM	Yes
	Priority mapping	Ethernet port 802.1P identification and marking Mapping from wireless priorities to wired priorities
	QoS policy mapping	Mapping of different SSIDs/VLANs to different QoS policies Mapping of data streams that match with different packet fields to different QoS policies
	L2-L4 packet filtering and flow classification	Yes: MAC, IPv4, and IPv6 packets
	Load balancing	Load balancing based on the number of users Load balancing based on user traffic Load balancing based on frequency bands
	Bandwidth limit	Bandwidth limit based on Aps Bandwidth limit based on SSIDs Bandwidth limit based on terminals Bandwidth limit based on specific data streams
	Call admission control (CAC)	CAC based on the number of users
	Power saving mode	Yes
	Automatic emergency mechanism of APs	Yes
Management	Intelligent identification of terminals	Yes
	Multicast enhancement	Multicast to unicast
	Network management	Centralized management through an AC; both fit and Bridge, Nat Cloud management
	Mesh networking	Yes
	Maintenance mode	Both local and remote maintenance
	Log function	Local logs, Syslog, and log file export
	Alarm	Yes
	Fault detection	Yes
	Statistics	Yes
	Switching between the fat, fit and bridge modes	An AP working in fit mode can switch to the fat mode through a wireless AC; An AP working in fat mode can switch to the fit or bridge mode through a local control port or Telnet(web)
	Remote probe analysis	Yes
Watchdog	Yes	

Order Information

Product	Description
AIR-AP666C-BE	AirPro new generation wifi7 indoor AP, tri-band and total 6 spatial streams, max 6452Mbps access rate, IEEE 802.11a/b/g/n/ac/ax/be supported (2.4GHz 2*2, 2*2, 5GHz low-frequency 2*2 and 5GHz high-frequency 2*2, default no power adapter), BLE, 10G SFP+ and 2.5GE uplink, 1 Gigabit downlink port, could be managed by AirPro AP controller.



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