



Omada BE5000(US) / BE3600(EU)

Dual Band Ceiling Mount

Wi-Fi 7 Access Point

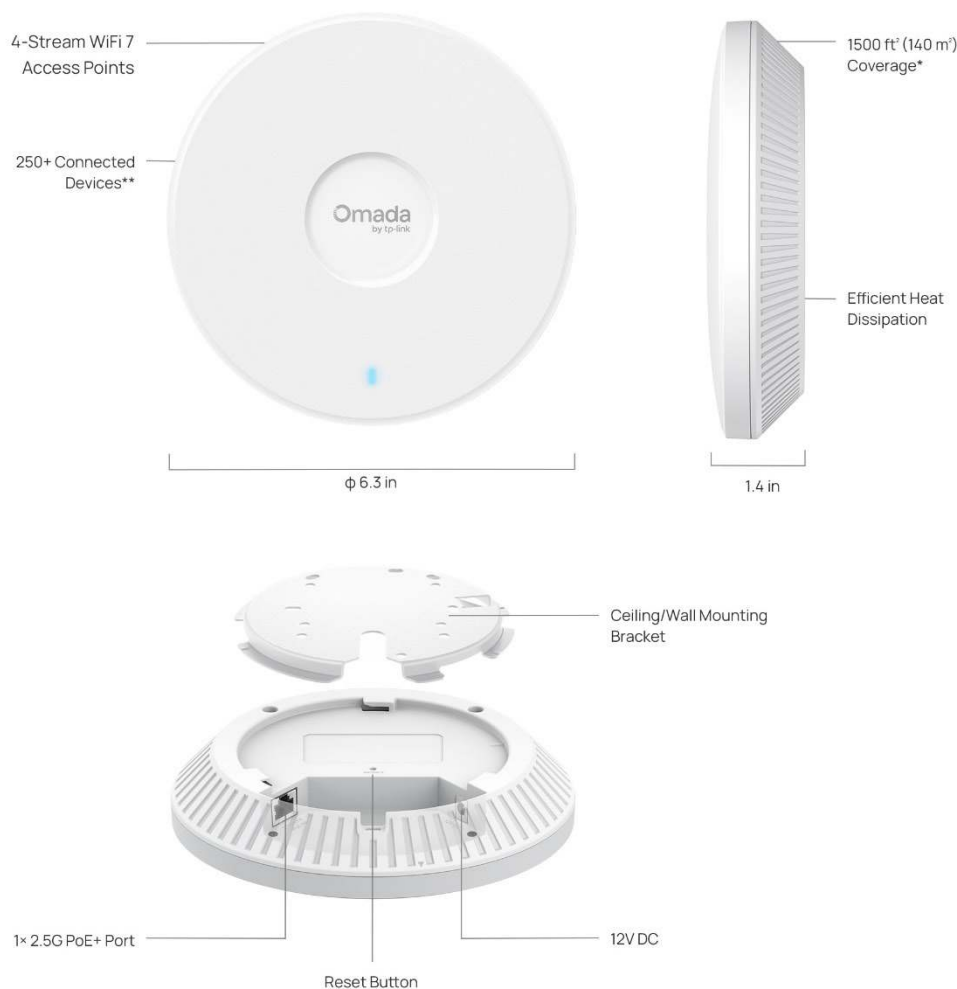
Model: EAP720

Product Overview

The Omada BE5000(US) / BE3600(US) Dual-Band 4-Stream Ceiling Mount Access Point EAP720 is the ideal entry-level choice for a Wi-Fi 7 solution, delivering a fast, reliable, and secure dual-band Wi-Fi 7 experience.

- **4-Stream Dual-Band Wi-Fi 7:** Up to 5.0 Gbps for the US and up to 3.6 Gbps for the EU.[†]
- **1× 2.5G Port:** Ensures fast connectivity throughout the network.
- **Low Latency and Interference:** Multi-Link Operation, Multi-RUs, and 4K-QAM ensure high performance for your network.[‡]
- **Flexible Deployment and Easy Setup:** Supports both 802.3at PoE and DC power supply for flexible installation (power adapter included) with Omada SDN for one-click setup.
- **Advanced Features:** Supports centralized management, Mesh, and Seamless Roaming.^Δ
- **More Connections and Wider Coverage:** Supports 250+ concurrent clients^{**} and covers up to 1500 ft² (140 m²)^{*} for reliable and extensive wireless connectivity.

Product Appearance



^{*}Coverage value is calculated based on laboratory testing. Actual coverage is not guaranteed and will vary as a result of client limitations and environmental factors.

^{**}The actual capacity depends on the wireless environment and client traffic and is generally less than the maximum number of client connections.

Feature Descriptions

Omada Wi-Fi 7 Technology: Swifter, Smoother, Stronger

Featuring superb Wi-Fi 7 technologies including Multi-Link Operation, Multi-RUs, and 4K-QAM, Omada EAP720 significantly enhances throughput, connection stability, and concurrent capacity, ensuring faster and higher quality connections for more devices.



2.5G PoE+ Port for Optimized Wired Performance

With a 2.5 Gigabit Ethernet Port, EAP720 delivers remarkable multi-gigabit performance for higher bandwidth and faster Wi-Fi. Compatibility with 802.3at PoE is ideal for flexible deployment.

Easy Setup

Push up and rotate to lock for easy installation. Benefit from convenient setup and on-the-go network management via the Omada app or web interface.

Boosted Network Security

EAP720 offers advanced security features, including a secure guest network with up to 16 SSIDs, SMS login for enhanced business authentication, WPA3 encryption for worry-free open public access, and rogue AP detection, ensuring safer and more reliable network experiences for both guests and business operations.

Cloud-Based Centralized Management

As part of Omada's unified SDN ecosystem, EAP720 integrates seamlessly with Omada switches, gateways, and controllers, delivering end-to-end visibility, automated optimization, zero-touch provisioning, and batch configuration—all managed from a single cloud interface.

Specifications

Hardware Specifications

Item	Description	
Wi-Fi Standards	5 GHz: IEEE 802.11a/n/ac/ax/be 2.4 GHz: IEEE 802.11b/g/n/ax/be	
802.11be	Spatial Streams	2.4 GHz: 2×2 MIMO with 2 spatial streams 5 GHz: 2×2 MIMO with 2 spatial streams
	Frequency Bands	2.400 to 2.4835 GHz ISM 5.150 to 5.250 GHz U-NII-1 5.250 to 5.350 GHz U-NII-2A 5.470 to 5.725 GHz U-NII-2C 5.725 to 5.850 GHz U-NII-3/ISM *Note: Country-Specific Restriction Apply
	Bandwidth	2.4 GHz: 20 MHz/40 MHz 5 GHz: 20 MHz/40 MHz/80 MHz/160 MHz/240 MHz *Note: Country-Specific Restriction Apply
	Wireless Data Rate	2.4 GHz + 5 GHz: 5012 Mbps 2.4 GHz: 8.6 Mbps to 688 Mbps (MCS0-MCS13, NSS=1 to 2, EHT20/40) 5 GHz: 8.6 Mbps to 4324 Mbps (MCS0-MCS13, NSS=1 to 2, EHT20/40/80/160/240)
	Radio Technology	Uplink/downlink OFDMA (Orthogonal Frequency-Division Multiple Access)
	Modulation Type	4096-QAM, 1024-QAM, 256-QAM, 64-QAM, 16-QAM, QPSK, BPSK
	Frame Aggregation	- A-MPDU (Aggregate MAC Protocol Data Unit) for Tx/Rx - A-MSDU (Aggregate MAC Service Data Unit) for Tx/Rx
	Others	- Preamble Puncturing - BSS Coloring - Multi-Link Operation (MLO) - Maximal Ratio Combining (MRC) - Transmit Beamforming (TxBF) - Wi-Fi Protect Access 3 (WPA3) - Dynamic Frequency Selection (DFS) - Cycle Delay Diversity (CDD) - Cycle Shift Diversity (CSD) - Space-Time Block Coding (STBC) - Low-Density Parity Check (LDPC)
802.11ax	Spatial Streams	2.4 GHz: 2×2 MIMO with 2 spatial streams 5 GHz: 2×2 MIMO with 2 spatial streams

Item	Description	
	Frequency Bands	2.400 to 2.4835 GHz ISM 5.150 to 5.250 GHz U-NII-1 5.250 to 5.350 GHz U-NII-2A 5.470 to 5.725 GHz U-NII-2C 5.725 to 5.850 GHz U-NII-3/ISM <i>*Note: Country-Specific Restriction Apply</i>
	Bandwidth	2.4 GHz: 20 MHz/40 MHz 5 GHz: 20 MHz/40 MHz/80 MHz/160 MHz <i>*Note: Country-Specific Restriction Apply</i>
	Wireless Data Rate	2.4 GHz: 8.6 Mbps to 573 Mbps (MCS0-MCS11, NSS=1 to 2, HE20/40) 5 GHz: 8.6 Mbps to 2402 Mbps (MCS0-MCS11, NSS=1 to 2, HE20/40/80/160) <i>*Note: Country-Specific Restriction Apply</i>
	Radio Technology	Uplink/downlink OFDMA (Orthogonal Frequency-Division Multiple Access)
	Modulation Type	1024-QAM, 256-QAM, 64-QAM, 16-QAM, QPSK, BPSK
	Frame Aggregation	- A-MPDU (Aggregate MAC Protocol Data Unit) for Tx/Rx - A-MSDU (Aggregate MAC Service Data Unit) for Tx/Rx
	Others	- MRC (Maximal Ratio Combining) - TxBF (Transmit Beamforming) - WPA3 (Wi-Fi Protect Access 3) - DFS (Dynamic Frequency Selection) - CDD (Cycle Delay Diversity) - CSD (Cycle Shift Diversity) - STBC (Space-Time Block Coding) - LDPC (Low-Density Parity-Check)
802.11ac	Spatial Streams	5 GHz: 2×2 MIMO with 2 spatial streams
	Frequency Bands	5.150 to 5.250 GHz U-NII-1 5.250 to 5.350 GHz U-NII-2A 5.470 to 5.725 GHz U-NII-2C 5.725 to 5.850 GHz U-NII-3/ISM <i>*Note: Country-Specific Restriction Apply</i>
	Bandwidth	5 GHz: 20 MHz/40 MHz/80 MHz/160 MHz
	Wireless Data Rate	5 GHz: 6.5 Mbps to 1732 Mbps (MCS0-MCS9, NSS=1 to 2, VHT20/40/80/160)
	Radio Technology	OFDM (Orthogonal Frequency-Division Multiplexing)
	Modulation Type	256-QAM, 64-QAM, 16-QAM, QPSK, BPSK
	Frame Aggregation	- A-MPDU (Aggregate MAC Protocol Data Unit) for Tx/Rx - A-MSDU (Aggregate MAC Service Data Unit) for Tx/Rx

Item	Description	
	Others	• MRC (Maximal Ratio Combining) • TxBF (Transmit Beamforming) • DFS (Dynamic Frequency Selection) • CDD (Cycle Delay Diversity) • CSD (Cycle Shift Diversity) • STBC (Space-Time Block Coding) • LDPC (Low-Density Parity-Check)
802.11n	Spatial Streams	• 2.4 GHz: 2×2 MIMO with 2 spatial streams • 5 GHz: 2×2 MIMO with 2 spatial streams
	Frequency Bands	2.400 to 2.4835 GHz ISM 5.150 to 5.250 GHz U-NII-1 5.250 to 5.350 GHz U-NII-2A 5.470 to 5.725 GHz U-NII-2C 5.725 to 5.850 GHz U-NII-3/ISM *Note: Country-Specific Restriction Apply
	Bandwidth	20 MHz/40 MHz
	Wireless Data Rate	• 2.4 GHz: 6.5 Mbps to 300 Mbps (MCS0-MCS7, NSS=1 to 2, HT20/40) • 5 GHz: 6.5 Mbps to 300 Mbps (MCS0-MCS7, NSS=1 to 2, HT20/40)
	Radio Technology	OFDM (Orthogonal Frequency-Division Multiplexing)
	Modulation Type	64-QAM, 16-QAM, QPSK, BPSK
	Frame Aggregation	• A-MPDU (Aggregate MAC Protocol Data Unit) for Tx/Rx • A-MSDU (Aggregate MAC Service Data Unit) for Tx/Rx
	Others	• MRC (Maximal Ratio Combining) • TxBF (Transmit Beamforming) • DFS (Dynamic Frequency Selection) • CDD (Cycle Delay Diversity) • CSD (Cycle Shift Diversity) • STBC (Space-Time Block Coding) • LDPC (Low-Density Parity-Check)
Antenna	Wi-Fi	• 2.4 GHz: 2 × 4 dBi (peak gain), Internal Onboard antenna • 5 GHz: 2 × 5 dBi (peak gain), Internal Onboard antenna *Note: The gains above are the single-antenna peak gains.
	IoT	• Bluetooth: 1 × 3 dBi (peak gain), PCB printed antenna
Interfaces	• 1 × 10M/100M/1000M/2.5Gbps Multigigabit Ethernet Port (RJ45); PoE in	
IoT	BLE 5.2, 1Mbps	
Memory	• Flash: 128Mbit • DRAM: 4096Mbit	
Button	1 × Reset button: Press the button for longer than 5 seconds to make the device restore to factory settings.	

Item	Description	
Indicator	1 × blue LED on the front: • Power-on status • Firmware initialization or upgrade status • Uplink service status • Error status	
Reliability	MTBF (Mean Time between Failure)	408000 hours at the operating temperature of 25°C (77°F)
Power Supply	Input	802.3at PoE+: 42.5 - 57 V=0.6A ;DC: 12V 1.5A
	Output	/
Power Consumption	• 802.3at (PoE+): 17.8w, 2.4GHz radio 2×2, 5GHz radio 2×2 , wired link rate can be up to 2.5 Gbps, etc. • Idle mode: 6.7W(PoE)	
Surge/Lightning Protection	Ethernet Ports: ±4 kV	
ESD/EMP Protection	• Air discharge: ±8 kV • Contact discharge: ±4 kV <i>*Note: ESD/EMP Protection means Electrostatic Discharge/Electromagnetic Pulse Protection independently.</i>	
Tx Power	Maximum transmit power	CE (ERIP) • 2.4 GHz: 20 dBm • 5 GHz: 23 dBm in U-NII-1, 23 dBm in U-NII-2A, 28 dBm in U-NII-2C, FCC (Conducted Power) • 2.4 GHz: 25 dBm • 5 GHz: 25 dBm in U-NII-1, 24 dBm in U-NII-2A, 24 dBm in U-NII-2C, 25 dBm in U-NII-3 <i>*Note: MIMO combined power, excluding antenna gains. The actual transmit power depends on local laws and regulations.</i>
	Minimum transmit power	CE (ERIP) • 2.4 GHz: 7 dBm • 5 GHz: 7 dBm in U-NII-1, 7 dBm in U-NII-2A, 7 dBm in U-NII-2C, 7 dBm in U-NII-3 FCC (Conducted Power) • 2.4 GHz: 4 dBm • 5 GHz: 4 dBm in U-NII-1, 4 dBm in U-NII-2A, 4 dBm in U-NII-2C, 4dBm in U-NII-3 <i>*Note: MIMO combined power, excluding antenna gains. The actual transmit power depends on local laws and regulations.</i>
	Adjustable power increment	1 dBm
Environment	Temperature	• Operating: 0°C to +40°C (32°F to +104°F) • Storage: -40°C to +70°C (-40°F to +158°F)

Item	Description	
	Humidity	• Operating: 10% to 90% (non-condensing) • Storage: 5% to 90% (non-condensing)
	Altitude	• Storage: up to + 2000 m (6561 feet) • Operating: up to + 2000 m (6561 feet)
Unit	Dimensions (W×D×H)	• Main Unit: 160 × 160 × 36.7 mm (6.3 × 6.3 × 1.4 in.) • Shipping Unit: 245 × 228 × 65 mm (9.7 × 9.0 × 2.6 in.)
	Weight	• Main Unit: 0.41 kg (0.9 lb) • Mounting Bracket: 0.05 kg (0.11 lb) • Shipping Unit: 0.792 kg (1.75 lb)
	Mounting	• Ceiling /Wall Mounting (Kits included) • Junction Box Mounting (Kits included) • T-Bar Mounting (Kits included)

Software Specifications

Item	Description	
Wireless Functions	Maximum number of BSSIDs	16 (8 on each band)
	Maximum number of associated STAs	250+
	Guest Network	Yes
	ACS (Automatic Channel Selection)	Yes
	Airtime Fairness	Yes
	Band Steering	Yes
	802.11 Rate Control	Yes
	Rogue AP Detection	Yes
	URL Filtering	Yes
	RF Scan	Yes
	WLAN Optimization	Yes
	WIDS/WIPS	No
	Lock to AP	Yes
	Rate Limit	- SSID Rate Limit - Client Rate Limit
	Load Balance	- Maximum Associated Clients - RSSI Threshold
	MLO	2.4 GHz+5 GHz
	Roaming	802.11 k 802.11v 802.11r - AI Roaming *Note: Only support Layer 2 Roaming currently.
	Multicast/Broadcast Management	- Multicast-to-Unicast Conversion - ARP-to-Unicast Conversation - Multicast Filtering
	QoS (Quality of Service)	- WMM (Wi-Fi Multimedia) - DSCP (Differentiated Services Code Point) - U-APSD (Unscheduled Automatic Power Save Delivery)
Security and Authentication	ACL	
	MAC Filter	
	802.1X Authentication	

Item	Description	
	MAC-Based Authentication	
	• None • Enhanced Open • WPA/WPA2/WPA3-Personal • WPA/WPA2/WPA3-Enterprise	
	Radius Accounting	
	• PPSK without Radius • PPSK with Radius (Generic Radius with bound MAC/EKMS/Generic Radius with unbound MAC)	
	Captive Portal	• No Authentication • Simple Password • Hotspot (Voucher / Local User / SMS / RADIUS / Form Auth) • RADIUS Server • External LDAP Server • External Portal Server • Pre-Authentication Access • Authentication-Free Client
Management methods	EAP Types	• EAP-TLS • EAP-TTLS • EAP-PEAP • EAP-CHAP • EAP-SIM • EAP-AKA • EAP-GTC • EAP-FAST • EAP-PEAP • EAP-MD5 • EAP-MSCHAPv2 • PEAPv0 • PEAPv1
	Omada Controller	• Omada Controller V5.9.x and above • Omada Essential V5.9.x and above
	App	Omada App V4.20 and above
	Standalone Management	Yes
	Standalone Mesh	No
	SSH	Yes
	SNMP	v1, v2c, v3
Operating Modes	AP	Yes
	Mesh	Yes
System Feature	System Log	Yes

Item	Description	
	Reboot Schedule	Yes
	WLAN Schedule	Yes
	NTP (Network Time Protocol)	Yes
	Email Alerts	Yes
	Firmware Upgrade	Yes
	Restore & Backup	Yes
	LED Control	Yes
Network Features	VLAN	• SSID VLAN • Dynamic VLAN • Management VLAN
	Static IP / DHCP Client	Yes
	IPv4/IPv6	Yes
	LLDP (Link Layer Discovery Protocol)	Yes
	mDNS	Yes
	Tools	• Ping / Traceroute / DNSLookup • Packet Capture • Terminal

Standards Compliance and Certifications

Item	Category	Description
Standards compliance	IEEE Standards	• IEEE 802.11a/b/g/n/ac/ax/be • IEEE 802.11e/i/k/v/r • IEEE 802.1x/q • IEEE 802.3at • IEEE 802.3ab • IEEE 802.3bz • IEEE 802.3x
	Radio Standards	• ETSI EN 300 328 • ETSI EN 301 893 • EN 303 413 • EN 303 687 • EN 50385 EN50665 EN IEC 62311 • FCC Part 15E • RSS-247, RSS-GEN • LP0002
	EMC standards	• EN 55032 • EN 55035 • EN 301489-1 • EN 301489-17 • EN 301489-19 • FCC Part 15C • ICES-003 issue7 • CNS 15936
	Safety Standards	• EN 62368-1 • IEC 62368-1 • CNS 15598-1
	Security Standards	• WPA-Personal/Enterprise • WPA2-Personal/Enterprise • WPA3-Personal/Enterprise
	RoHS	• Directive 2011/65/EU, Directive (EU) 2015/863 • EN IEC 63000: 2018
	Others	• Equipment Radio Regulations: 2008 (including amendments) • VCCI-CISPR 32
Certifications		• Wi-Fi Alliance: Wi-Fi 7 (R1), Wi-Fi 6 (R2), Wi-Fi 6E, WPA3-R3, WPA3-Suite B, • FCC/CE/NCC/VCCI/JRF/BSMI

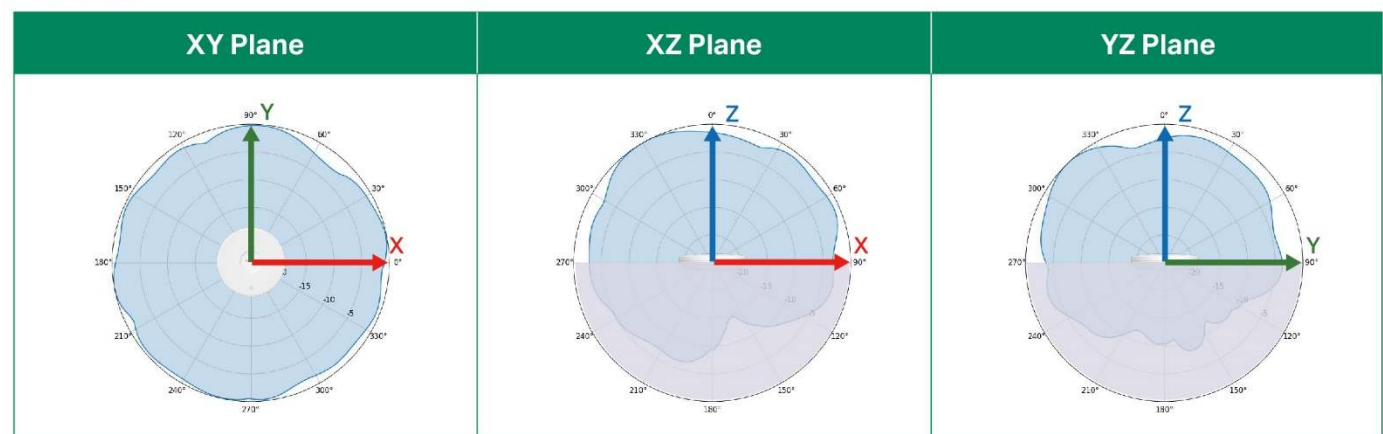
RF Performance

Frequency Band	Wi-Fi Protocol & Bandwidth	MCS Index / Data Rate	EU/US Maximum Transmit Power (dBm) per transmit chain	Receiver Sensitivity (dBm) per receive chain
2.4 GHz	802.11n, HT20	MCS0	14/22	-96
		MCS7	14/22	-77
	802.11n, HT40	MCS0	14/22	-93
		MCS7	14/22	-74
	802.11ax, HE20	MCS0	14/22	-96
		MCS11	14/20	-66
	802.11ax, HE40	MCS0	14/22	-94
		MCS11	14/20	-63
	802.11be, EHT20	MCS0	14/22	-96
		MCS13	14/19	NA
	802.11be, EHT40	MCS0	14/22	-93
		MCS13	14/19	NA
5 GHz	802.11n, HT20	MCS0	22/22	-96
		MCS7	21/21	-76
	802.11n, HT40	MCS0	22/22	-93
		MCS7	21/21	-72.5
	802.11ac, VHT20	MCS0	22/22	-96
		MCS7	21/21	-76
	802.11ac, VHT40	MCS0	22/22	-93
		MCS9	20/20	-67
	802.11ac, VHT80	MCS0	22/22	-89.5
		MCS9	20/20	-64
	802.11ax, HE20	MCS0	22/22	-96
		MCS11	19/19	-67
	802.11ax, HE40	MCS0	22/22	-93
		MCS11	19/19	-64.5
	802.11ax, HE80	MCS0	22/22	-89.5
		MCS11	19/19	-61
	802.11ax, HE160	MCS0	22/22	-88

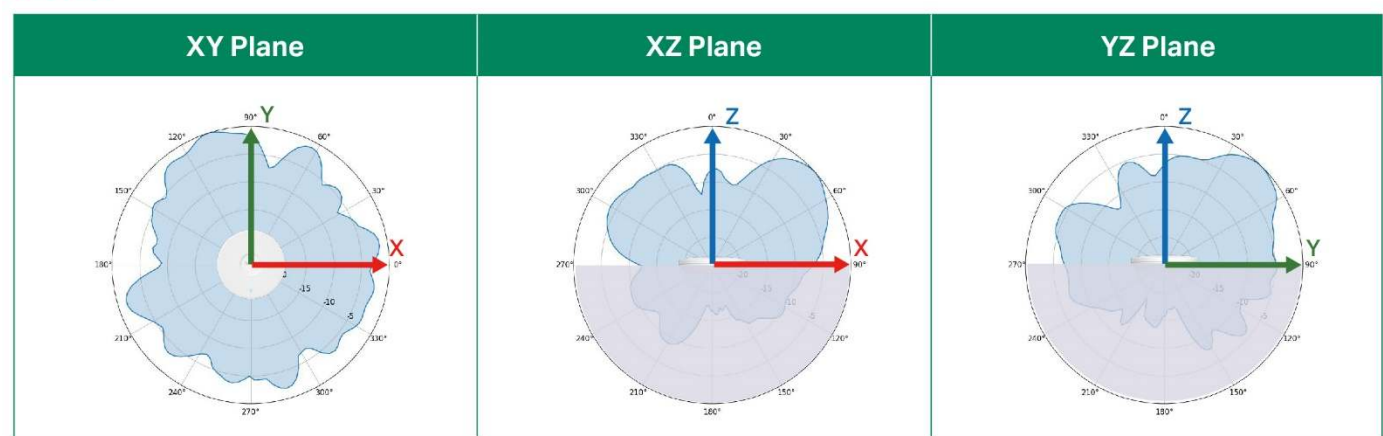
Frequency Band	Wi-Fi Protocol & Bandwidth	MCS Index / Data Rate	EU/US Maximum Transmit Power (dBm) per transmit chain	Receiver Sensitivity (dBm) per receive chain
	802.11be, EHT20	MCS11	18/18	-61
		MCS0	22/22	-96
	802.11be, EHT40	MCS13	18/18	-60
		MCS0	22/22	-93
	802.11be, EHT80	MCS13	18/18	-57
		MCS0	22/22	-90
	802.11be, EHT160	MCS13	18/18	-55
		MCS0	22/22	-88

Antenna Radiation Patterns

2.4 GHz



5 GHz



Package Contents

Item	Quantity
EAP720	1
Installation Guide	1
Power Adapter	1
Mounting Kit	1 (See the picture below for details)



*The accessories may vary by country/region. Please refer to the actual product.

Support Services

We are committed to providing you with comprehensive and reliable support services to ensure seamless experience with TP-Link Business products.

- Email Contact: <https://support.omadanetworks.com/email-feedback/>
- Online Chat Contact: <https://support.omadanetworks.com/contact-support/>
- Warranty Services: <https://www.omadanetworks.com/support/replacement-warranty/>

Revision History

Version	Date	Description
V1.0	2025-06-12	Initial release.

[†] Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. The 240 MHz bandwidth and 160 MHz are only available on the 5GHz band and may be unavailable in some regions/countries due to regulatory restrictions. Actual wireless data throughput, wireless coverage, and connected devices are not guaranteed and will vary as a result of internet service provider factors, network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.

[‡] Use of Wi-Fi 7 (802.11be), Wi-Fi 6 (802.11ax), and features including Multi-Link Operation (MLO), 240 MHz Bandwidth, 160 MHz Bandwidth, 4K-QAM, Multi-RUs, OFDMA, and MU-MIMO requires clients to also support the corresponding features.

^{*} Coverage value is calculated based on laboratory testing. Actual coverage is not guaranteed and will vary as a result of client limitations and environmental factors.

^{**} The actual capacity depends on the wireless environment and client traffic and is generally less than the maximum number of client connections.

[^] Omada Mesh, Seamless Roaming, Captive Portal, and Cloud Access require the use of an Omada controller. Please refer to the User Guides of Omada controllers for configuration methods.

Some models featured in this guide may be unavailable in your country or region. Visit TP-Link website for local sales information: <https://www.omadanetworks.com>. Specifications are subject to change without notice.

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