Omada by tp-link

Datasheet

Omada BE5000 (US)/BE3600 (EU) Dual Band Wall Plate Wi-Fi 7 Access Point

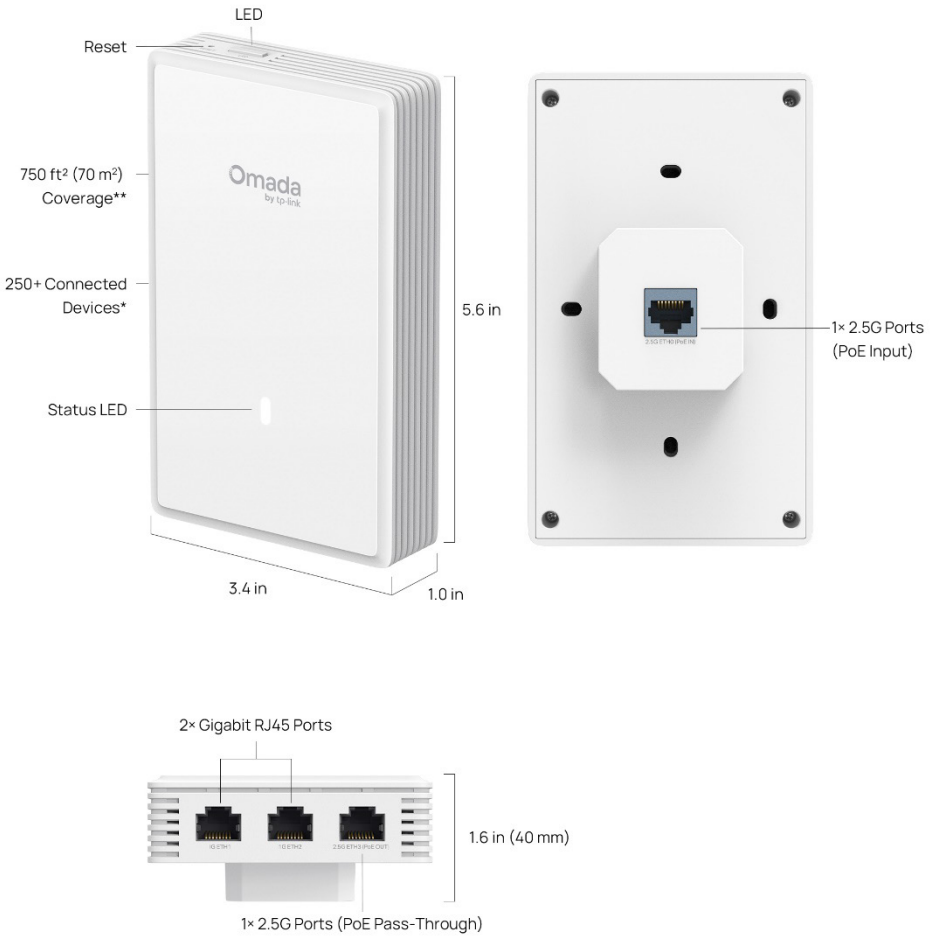
Model: EAP725-Wall

Product Overview

Featuring reliable performance and a compact design, the Omada EAP725-Wall is an ideal choice for business Wi-Fi 7 networking.

- Dual-Band Wi-Fi 7: Up to 5.0 Gbps for the US and up to 3.6 Gbps for the EU.†
- Versatile Ports with PoE Flexibility: 1× 2.5G PoE Input port, 1× 2.5G PoE pass-through port, and 2× Gigabit downlink ports.
- Low Latency and Interference: Multi-Link Operation, Multi-RUs, and 4K-QAM ensure high performance for your network.‡
- Complete In-Room Wi-Fi Coverage: Guaranteed strong signals and corner-to-corner Wi-Fi coverage up to 750 ft² (70 m²).*
- Flexible Deployment and Easy Setup: Supports 802.3at/bt PoE for flexible installation with Omada SDN for one-click setup.
- Advanced Features: Supports centralized management, Mesh, and Seamless Roaming.△
- More Connections: Supports 250+ concurrent connections.**

Product Appearance

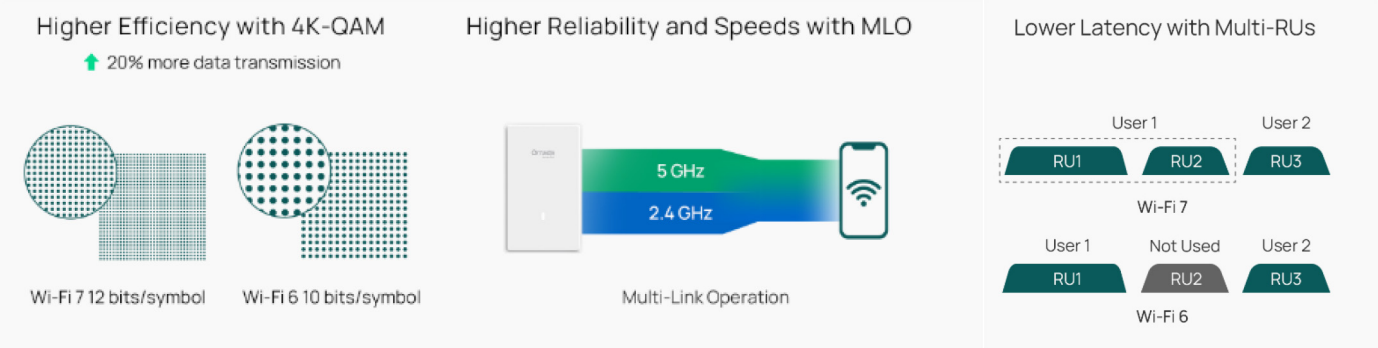


**The actual capacity depends on the wireless environment and client traffic and is generally less than the maximum number of client connections.
*Coverage value is calculated based on laboratory testing. Actual coverage is not guaranteed and will vary as a result of client limitations and environmental factors.

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 EAP725-Wall significantly enhances throughput, connection stability, and concurrent capacity, ensuring faster and higher quality connections for more devices.



2.5G PoE Ports for Optimized Wired Performance

With 2.5G PoE input and pass-through ports, along with two Gigabit RJ45 ports, enjoy high-speed data transfers and connect multiple devices to your gigabit network. Wired devices, such as IP Phones, can be powered without the need for additional electrical cables.

Easy Setup via the Omada App or Web Browser, Powered by SDN

The Omada SDN supports quickly set up the EAP725-Wall through automatic device identification and one-click adoption. Access convenient configuration and on-the-go management via the Omada app or web browser.

Dedicated Complete, Private Wi-Fi Network in Each Room

EAP725-Wall in each room allows users to enjoy their own private Wi-Fi network, delivers a strong signal, and provides corner-to-corner coverage. It also offers advanced security features, including a secure guest network with up to 16 SSIDs, SMS login authentication, WPA2-Enterprise encryption, 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, EAP725-Wall 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 UL/DL MIMO with 2 spatial streams • 5 GHz: 2×2 UL/DL MIMO with 2 spatial streams • Support MIMO
	Frequency Bands	EU: 2.402 to 2.482 GHz ISM 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C US: 2.402 to 2.482 GHz ISM 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C 5.735 to 5.835 GHz U-NII-3/ISM Note: Country-Specific Restriction Apply
	Bandwidth	EU: 2.4 GHz: 20 MHz/40 MHz 5 GHz: 20 MHz/40 MHz/80 MHz/160 MHz US: 2.4 GHz: 20 MHz/40 MHz 5 GHz: 20 MHz/40 MHz/80 MHz/160/240 MHz Note: Country-Specific Restriction Apply
	Wireless Data Rate	EU: • 2.4 GHz: 8.6 Mbps to 688 Mbps (MCS0-MCS13, NSS=1 to 2, EHT20/40) • 5 GHz: 8.6 Mbps to 2882 Mbps (MCS0-MCS13, NSS=1 to 2, EHT20/40/80/160) US: • 2.4 GHz: 8.6 Mbps to 688 Mbps (MCS0-MCS13, NSS=1 to 2, EHT20/40) • 5 GHz: 8.6 Mbps to 4323 Mbps (MCS0-MCS13, NSS=1 to 2, EHT20/40/80/160/240) Note: Country-Specific Restriction Apply
	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

Item	Description	
	Others	• 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 UL/DL MIMO with 2 spatial streams • 5 GHz: 2×2 UL/DL MIMO with 2 spatial streams • Support MIMO
	Frequency Bands	EU: 2.402 to 2.482 GHz ISM 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C US: 2.402 to 2.482 GHz ISM 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C 5.735 to 5.835 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 Note: Country-Specific Restriction Apply
	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) Note: Country-Specific Restriction Apply
	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 Uplink/Downlink MIMO with 2 spatial streams

Item	Description	
	Frequency Bands	EU: 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C US: 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C 5.735 to 5.835 GHz U-NII-3/ISM Note: Country-Specific Restriction Apply
	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
	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	EU: 2.402 to 2.482 GHz ISM 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C US: 2.402 to 2.482 GHz ISM 5.170 to 5.250 GHz U-NII-1 5.250 to 5.330 GHz U-NII-2A 5.490 to 5.730 GHz U-NII-2C 5.735 to 5.835 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)

Item	Description			
	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 dipole antenna • 5 GHz: 2 × 5 dBi (peak gain), Internal dipole antenna Note: The gains above are the single-antenna peak gains.		
	IoT	• Bluetooth: 1 × 1.5 dBi (peak gain), internal omnidirectional antennas		
Interfaces	• 1 x 10M/100M/1000M/2.5Gbps Multigigabit Ethernet Port (RJ45); PoE In; • 1 x 10M/100M/1000M/2.5Gbps Multigigabit Ethernet Port (RJ45); PoE Out; • 2 x 10M/100M/1000M Gigabit Ethernet Port (RJ45)			
IoT	BLE 5.2, 1Mbps			
Memory	• Flash: 1024Mbit • DRAM: 4096Mbit			
Button	1 × Reset button: Press the button for longer than 5 seconds to make the device restore to factory settings. 1 x LED Button			
Indicator	1 × white LED on the front: • Power-on status • Firmware initialization or upgrade status • Error status			
Reliability	MTBF (Mean Time between Failure)	372121H@25℃; 162774H@40℃		
Power Supply	Input	1*802.3at PoE+: 42.5 - 57 V ⎓ 0.6A, or 1*802.3bt PoE: 42.5 - 57 V ⎓ 0.95A		
	Output	Passive PoE: Polarity1/2 (-), 3/6 (+), 40-54.5V, 0.175A (802.3at input only), 40-54.5V, 0.385A (802.3bt input only)		
Power Consumption	MODE	POWER CONSUMPTION	SYSTEM CONFIGURATION	WI-FI RADIOS (COMBINED POWER)
	802.3at PoE	17W (PoE out not included)	PoE Out Enabled (7W) BLE Enabled	2.4GHz(2x2) Tx 22dBm 5GHz(2x2) Tx 22dBm
	802.3bt PoE	17W (PoE out not included)	PoE Out Enabled (15.4W) BLE Enabled	2.4GHz(2x2) Tx 22dBm 5GHz(2x2) Tx 22dBm

Item	Description	
Surge/Lightning Protection	Ethernet Ports: ±4 kV	
ESD/EMP Protection	• Air discharge: ±8 kV • Contact discharge: ±4 kV Note: ESD/EMP Protection means Electrostatic Discharge/Electromagnetic Pulse Protection independently.	
Tx Power	Maximum transmit power	CE (EIRP) • 2.4 GHz: 20 dBm • 5 GHz: 23 dBm in U-NII-1, 23 dBm in U-NII-2A, 25 dBm in U-NII-2C FCC • 2.4 GHz: 22 dBm • 5 GHz: 22dBm in U-NII-1, 22 dBm in U-NII-2A, 22 dBm in U-NII-2C, 22dBm in U-NII-3/ISM Note: MIMO combined power, excluding antenna gains. The actual transmit power depends on local laws and regulations.
	Minimum transmit power	CE (EIRP) • 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 FCC • 2.4 GHz: 4 dBm • 5 GHz: 4dBm in U-NII-1, 4 dBm in U-NII-2A, 4 dBm in U-NII-2C, 4dBm in U-NII-3/ISM Note: MIMO combined power, excluding antenna gains. The actual transmit power depends on local laws and regulations.
	Adjustable power increment	1 dBm
Environment	Temperature	• Operating: 0℃ to +40℃ (32℉ to +104℉) • Storage: -30℃ to +70℃ (-22℉ to +158℉)
	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: 143 × 86 × 40 mm (5.6 × 3.4 × 1.6 in) • Shipping Unit: 184 × 117 × 56mm (7.3 × 4.6 × 2.2 in)
	Weight	• Main Unit: 0.36 kg (0.79 lb) • Shipping Unit: 0.49 kg (1.1 lb)
	Mounting	• Wall Plate Mounting (Screws 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
	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
Management methods	Omada Controller	• Omada Controller V5.14.25 and above • Omada Essential V5.14.25 and above
	App	Omada App V4.24 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 • Port 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 802.3bt • IEEE 802.3ab • IEEE 802.3bz • IEEE 802.3x
	Radio Standards	• ETSI EN 300 328 • ETSI EN 301 893 • 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	• FCC/CE/NCC/VCCI/JRF/BSMI	

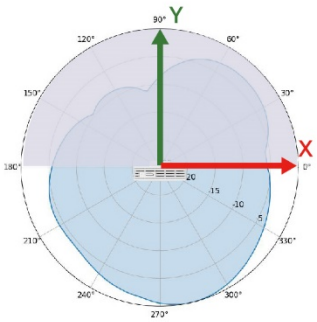
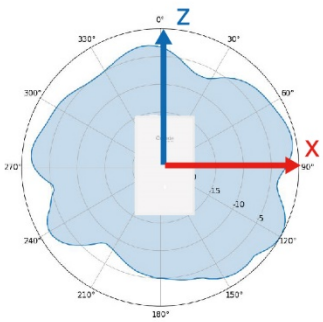
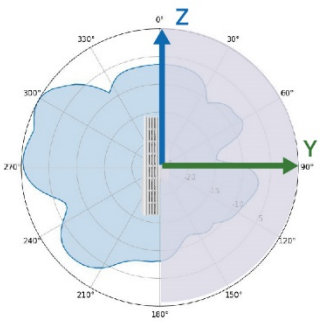
RF Performance

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	14/19	-96
		MCS7	14/17	-76
	802.11n, HT40	MCS0	14/19	-92
		MCS7	14/17	-73
	802.11ax, HE20	MCS0	14/19	-97
		MCS11	14/16	-66
	802.11ax, HE40	MCS0	14/19	-94
		MCS11	14/16	-65
	802.11be, EHT20	MCS0	14/19	-97
		MCS11	14/16	-66
	802.11be, EHT40	MCS0	14/19	-94
		MCS11	14/16	-65
5 GHz	802.11n, HT20	MCS0	19/19	-96
		MCS7	16/16	-74
	802.11n, HT40	MCS0	19/19	-92
		MCS7	16/16	-72
	802.11ac, VHT20	MCS0	19/19	-97
		MCS9	15/15	-72
	802.11ac, VHT40	MCS0	19/19	-94
		MCS9	15/15	-69
	802.11ac, VHT80	MCS0	19/19	-91
		MCS9	15/15	-66
	802.11ac, VHT160	MCS0	19/19	-87
		MCS9	15/15	-62
	802.11ax, HE20	MCS0	19/19	-97
		MCS11	15/15	-66
	802.11ax, HE40	MCS0	19/19	-94
		MCS11	15/15	-64
	802.11ax, HE80	MCS0	19/19	-91

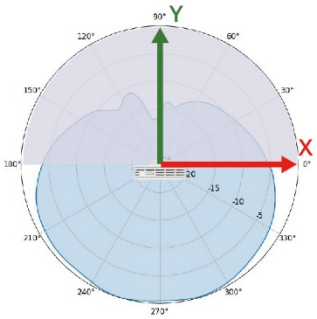
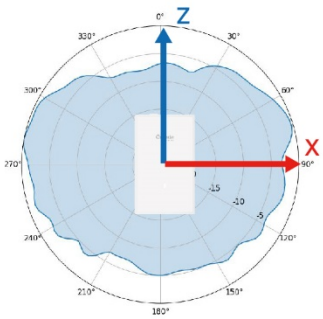
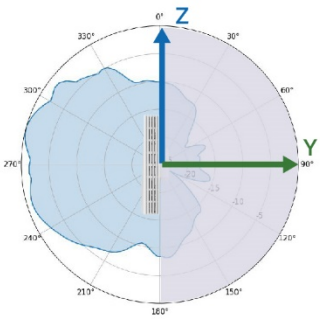
Frequency Band	Wi-Fi Protocol & Bandwidth	MCS Index / Data Rate	EU/US Maximum Transmit Power (dBm) per transmit chain	Receiver Sensitivity (dBm) per receive chain
		MCS11	15/15	-60
	802.11ax, HE160	MCS0	19/19	-88
		MCS11	15/15	-59
	802.11be, EHT20	MCS0	19/19	-97
		MCS13	14/14	-62
	802.11be, EHT40	MCS0	19/19	-94
		MCS13	14/14	-58
	802.11be, EHT80	MCS0	19/19	-91
		MCS13	14/14	-55
	802.11be, EHT 160	MCS0	19/19	-88
		MCS13	14/14	-54

Antenna Radiation Patterns

2.4 GHz

XY Plane	XZ Plane	YZ Plane
		

5 GHz

XY Plane	XZ Plane	YZ Plane
		

Package Contents

Item	Quantity
EAP725-Wall	1
Installation Guide	1
Screws	2

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 Omada products.

- Contact Support: https://support.omadanetworks.com/#contact-us
- Warranty Services: https://www.omadanetworks.com/support/replacement-warranty/

Revision History

Version	Date	Description
V1.0	2026-04-01	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.