tp-link | Omada

Omada
Business Cloud SDN Solution

Omada EAP - Business Wi-Fi Series

Omada SDN Controller

EAP225-Outdoor
EAP113-Outdoor
EAP110-Outdoor

Omada Solution

Hospitality

High Quality and Full Coverage Wi-Fi

Education

High-Density Wi-Fi

Retail

Social Marketing for O2O

Office

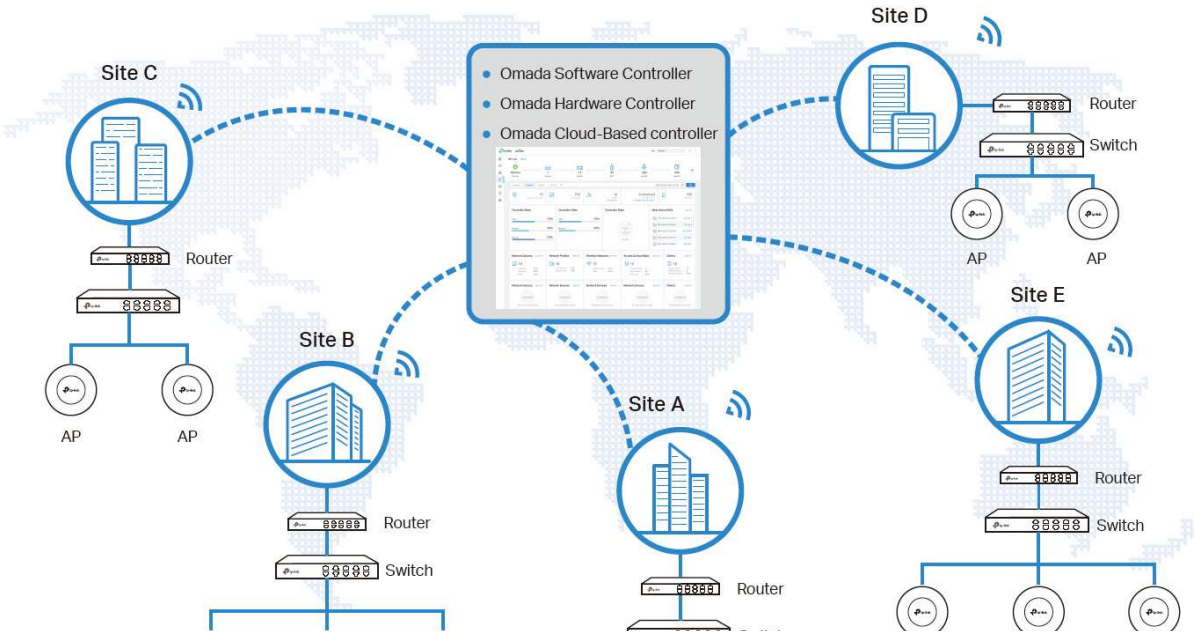
Wireless and Wired Connections

Catering

Full Wi-Fi Coverage in High-Density Environment

Software Defined Networking (SDN) with Cloud Access

Omada Software Defined Networking (SDN) platform integrates network devices, including access points, switches and gateways, providing 100% centralized cloud management. Omada creates a highly scalable network——all controlled from a single interface. Seamless wireless and wired connections are provided, ideal for use in hospitality, education, retail, offices, and more.



Higher Efficiency

- Centralized Cloud Management
- Zero-Touch Provisioning
- AI-Driven Technology
- Auto Channel Selection and Power Adjustment
- Multi-Tenant Privilege Assignment
- Easy and Intelligent Monitoring

Higher Security

- Separate Management and User Data
- Abundant Security Functions

Higher Reliability

- 99.99% SLA Availability
- Reliable Connections with High-Density Clients

Hassle-Free Centralized Cloud Management

100% centralized cloud management of the whole network from different sites——all controlled from a single interface anywhere, anytime.

- No additional training needed
- Unlimited scalability
- Batch management
- Devices still work even when not connected to the Cloud

Zero-Touch Provisioning for Efficient Deployment*

Omada zero-touch provisioning allows remotely deployment and configuration of multi-site networks, so there's no need to send out an engineer for on-site configuration. The Omada Cloud ensures efficient deployment with lower costs.

* Zero-Touch Provisioning is supported when using Omada-Cloud Based Controller.

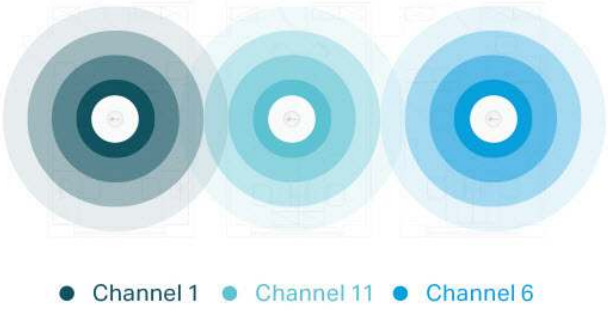
AI-Driven Technology for Stronger Performance and Easy Network Maintenance

Intelligent Network Analysis, Warning, and Optimization*

- Analyzes potential network problems and sends optimization suggestions for higher network efficiency
- Locates network faults, warns and notify users, and generates solutions to reduce network risk

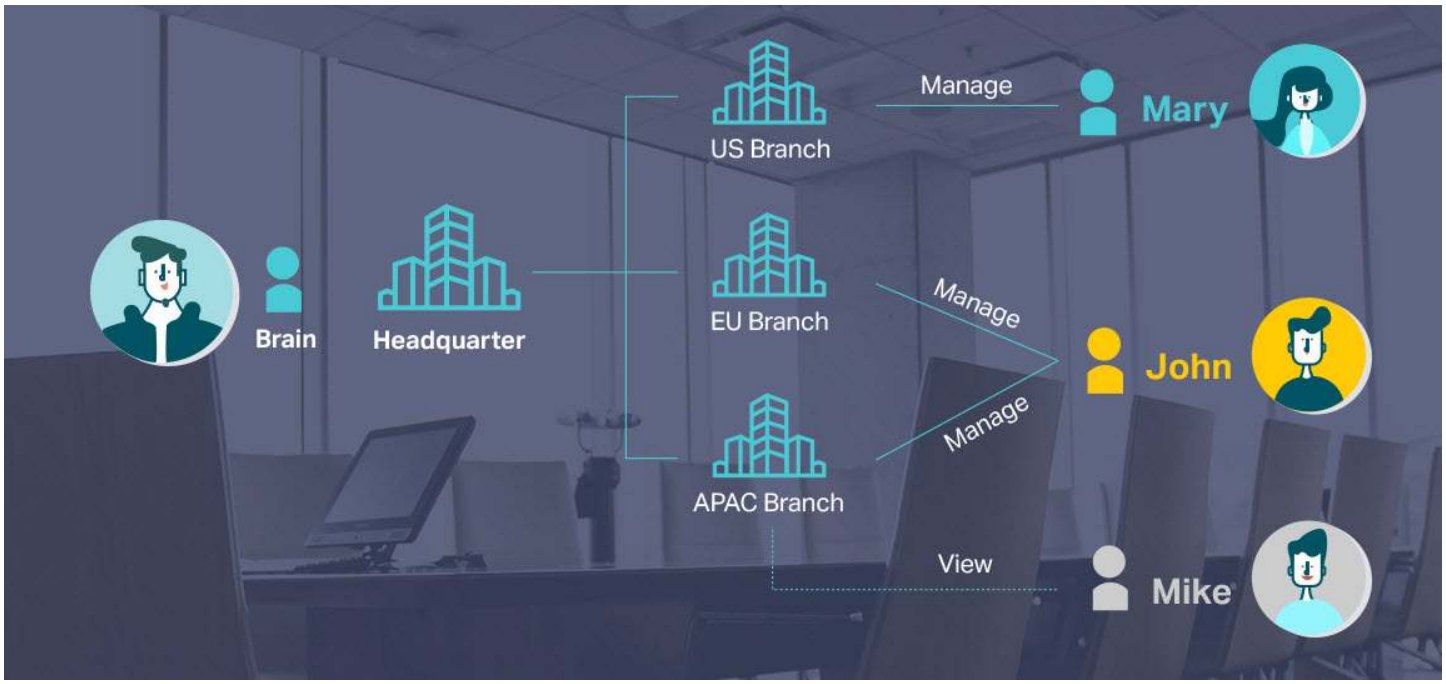
Auto Channel Selection and Power Adjustment

Provides powerful wireless performance while greatly reducing Wi-Fi interference by automatically adjusting the channel settings and transmission power levels of neighboring APs in the same network.



Assign Different Management Roles

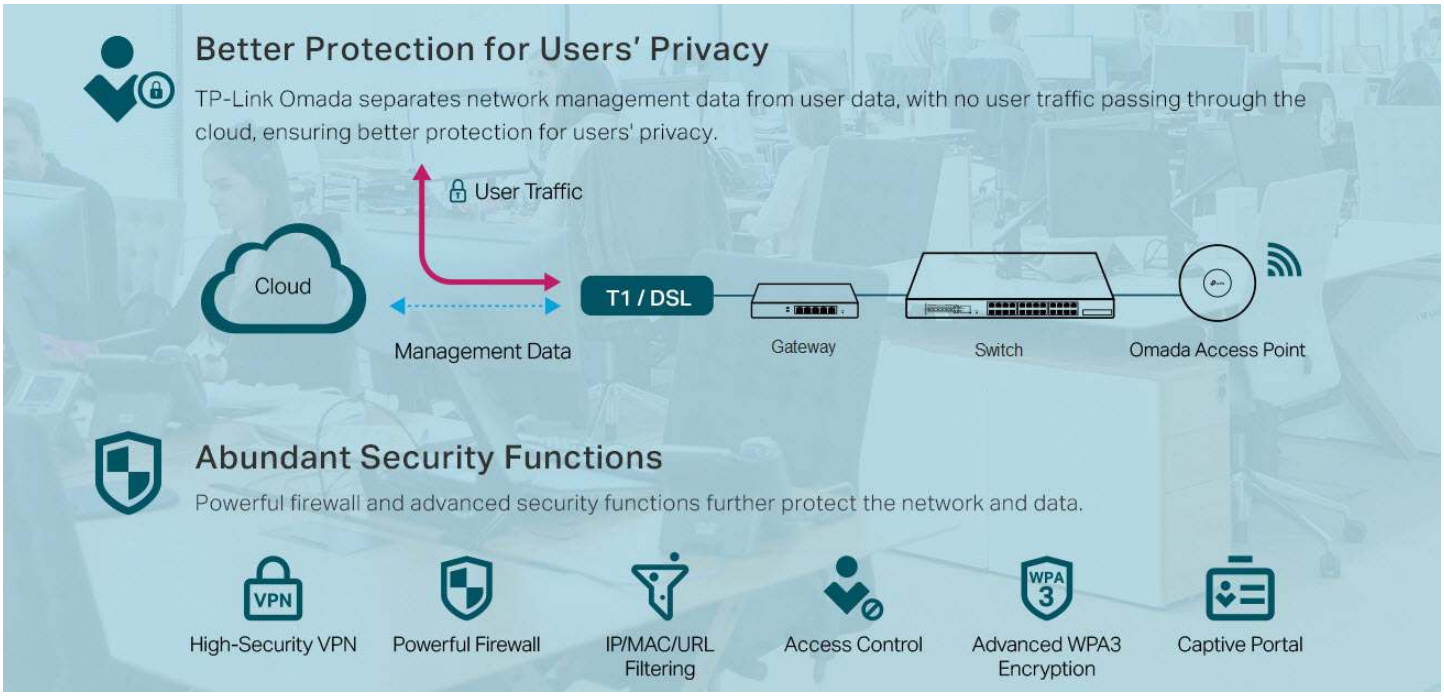
Multi-user privilege assignment is available to increase management efficiency and security. Multi-person management, multi-level permissions, and the ability to add admins as needed, enable flexible network operation and maintenance.



Easy and Intelligent Network Monitoring

The easy-to-use dashboard makes it easy to see your real-time network status; check network usage and traffic distribution; receive network condition logs, abnormal event warnings, and notifications; or even track key data for better business results. Network topology helps IP admins quickly see and troubleshoot connection at a glance.

Comprehensive Protection for the Whole Network



Multiple Factors Guarantee Higher Reliability

Higher reliability of cloud service is guaranteed with 99.9% SLA availability, 24/7 automated fault detection, geographically isolated backup servers, and reliable product quality. Your network functions even if management traffic is interrupted.

Reliable Connections Even with High-Density Clients

Equipped with enterprise chipsets, dedicated antennas, advanced RF functions, auto channel selection, and power adjustment, Omada APs have high concurrency capacities for remarkable performance in high-density environments.

EAP Product Features

Easy-Mount Design

The Ceiling Mount EAP's elegant appearance and easy-mount design promote fast installation on any wall or ceiling surface, and allow it to blend in seamlessly with most interior decorating styles. The slimline, inconspicuous Wall Plate EAP can be easily installed into any standard EU/US wall junction box or 86 mm wall junction box.

PoE Power Supply*

With IEEE 802.3af/at/bt PoE or Passive PoE, you can use Ethernet cables to transfer both electrical power and network data, making deployment more flexible and removing the need to install additional power cabling.

Business-Class Hardware Design

Enterprise-class chipsets offer outstanding performance and support longer running time, higher client capacity and greater range. Dedicated high-power amplifiers, specialized antennas and professionally designed RF shields ensure excellent wireless performance.

Seamless Roaming*

802.11k, 802.11v, and 802.11r seamless roaming provide seamless switching to the access point with optimal signal when moving between APs.

Mesh*

Omada Mesh technology enables wireless connectivity between access points for extended range, making wireless deployments more flexible and convenient.

Increased Efficiency with OFDMA*

The Wi-Fi 6 and above standards use OFDMA for more efficient channel use and reduced latency. Imagine your WiFi connection as a series of delivery trucks delivering data packets to your devices. With 802.11ac Wi-Fi, each delivery truck could only deliver one parcel to one device at a time. But with OFDMA, each truck can deliver multiple parcels to multiple devices simultaneously. This vast improvement in efficiency works for both uploads and downloads.

Advanced RF Management

MU-MIMO, Airtime Fairness, Beamforming, and Band Steering Technologies guarantee optimal RF performance for business-level applications.

Easy Centralized Management

Configure and monitor hundreds of Omada EAPs with ease using the Omada controller.

* PoE support varies by model. For detailed information, refer to the specifications.
* Only certain devices support Seamless Roaming. For detailed information, refer to the specifications.
* Only certain devices support Mesh. For detailed information, refer to the specifications.
* Only 802.11ax and 802.11be devices support OFDMA.

EAP Product List

Outdoor 802.11n/ac AP			
Picture			
Model	EAP225-Outdoor	EAP113-Outdoor	EAP110-Outdoor
Product	AC1200 Wireless MU-MIMO Gigabit Indoor/ Outdoor Access Point	300Mbps Wireless N Outdoor Access Point	300Mbps Wireless N Outdoor Access Point
Speed	2.4 GHz: 300Mbps 5 GHz: 867Mbps	2.4 GHz: 300Mbps	2.4 GHz: 300Mbps
Ethernet Port	1x Gigabit Ethernet Port	1x 10/100Mbps Ethernet Port	1x 10/100Mbps Ethernet Port
Power Supply	802.3af PoE / 24V Passive PoE	802.3af PoE / 48V Passive PoE	24V Passive PoE
Internal Antennas	2 Dual-Band Omni Antennas (External Detachable) 2.4 GHz: 3 dBi; 5 GHz: 5 dBi	2 Omni Antennas (External Detachable) 2.4 GHz: 3 dBi	2 Omni Antennas (External Detachable) 2.4 GHz: 3 dBi

Specifications

Outdoor 802.11n/ac AP

Model		EAP225-Outdoor	EAP113-Outdoor	EAP110-Outdoor
Name		AC1200 Wireless MU-MIMO Gigabit Indoor/Outdoor Access Point	300 Mbps Wireless N Outdoor Access Point	300 Mbps Wireless N Outdoor Access Point
Main Design	LAN Interfaces	1 x Gigabit Ethernet Port	1 x 10/100 Mbps Ethernet Port	1 x 10/100 Mbps Ethernet Port
	Wi-Fi Standards	IEEE 802.11 b/g/n/ac	IEEE 802.11 b/g/n	IEEE 802.11 b/g/n
	Maximum Data Rate	300 Mbps (2.4 GHz) + 867 Mbps (5 GHz)	300 Mbps (2.4 GHz)	300 Mbps (2.4 GHz)
	Wireless Client Capacity	220+	100+	100+
	Antennas	2 Dual-Band Omni Antennas (External Detachable) 2.4 GHz: 3 dBi; 5 GHz: 5 dBi	2 Omni Antennas (External Detachable) 2.4 GHz: 3 dBi	2 Omni Antennas (External Detachable) 2.4 GHz: 3 dBi
	Transmit Power	CE: < 20 dBm (2.4 GHz, EIRP), < 27 dBm (5 GHz, EIRP); FCC: < 23 dBm (2.4 GHz), < 22 dBm (5 GHz)	CE: < 20 dBm (EIRP), FCC: < 22 dBm	CE: < 20 dBm (EIRP), FCC: < 22 dBm
Centralized Management	Omada Software Controller	•		
	Omada Hardware Controller	•		
	Omada APP	•		
Security	Captive Portal Authentication	•		
	Access Control	•		
	Maximum number of MAC Filter	4000		
	Wireless Isolation between Clients	•		
	VLAN	•		
	Rogue AP Detection	•		
	Wireless Encryption	WPA-Personal/Enterprise, WPA2-Personal/Enterprise		
	802.1X Support	•		
Wireless Function	Multiple SSIDs	16 (8 for each band)	8	8
	Enable/Disable Wireless Radio	•		
	Enable/Disable SSID Broadcast	•		
	Guest Network	•		
	Automatic Channel Assignment	•		
	Transmit Power Control	Adjust transmit Power on dBm		
	QoS (WMM)	•		
	Seamless Roaming	•	-	-
	Mesh	•	-	-
	Beamforming	•	-	-
	MU-MIMO	•	-	-
	Rate Limit	Based on SSID/Client		
	Load Balance	•		
	Airtime Fairness	•	-	-
	Band Steering	•	-	-
	RADIUS Accounting	•		
	MAC Authentication	•		
	Reboot Schedule	•		
	Wireless Schedule	•		
	Wireless Statistics	•		
	Static IP/Dynamic IP	•		

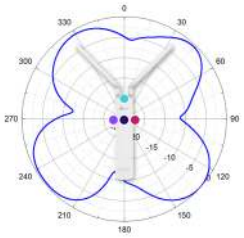
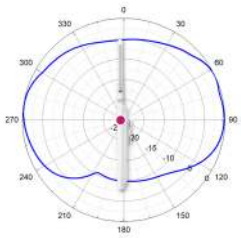
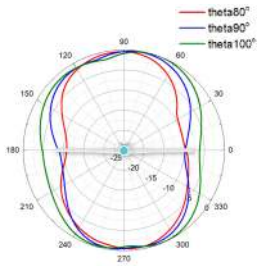
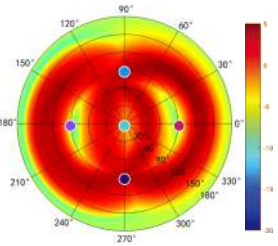
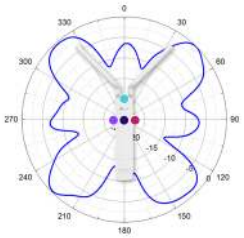
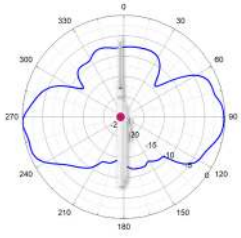
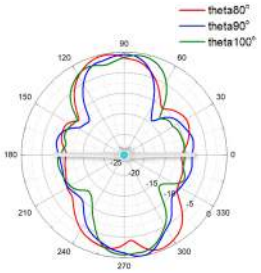
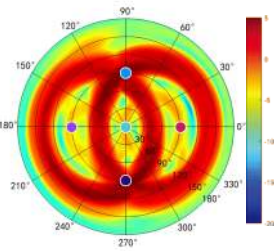
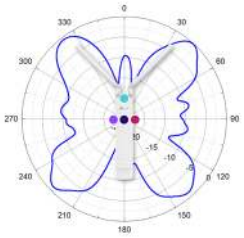
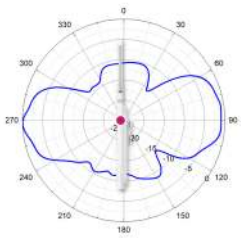
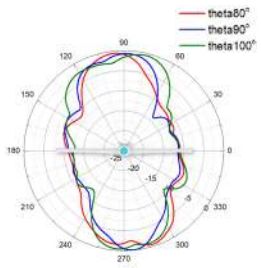
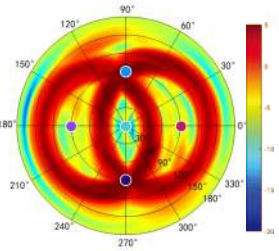
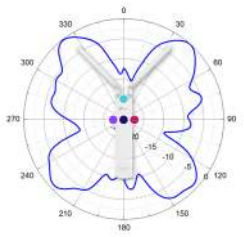
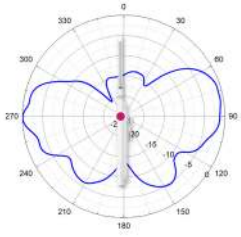
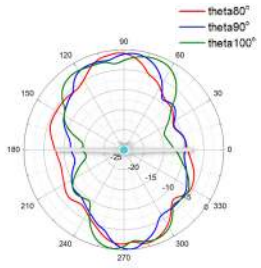
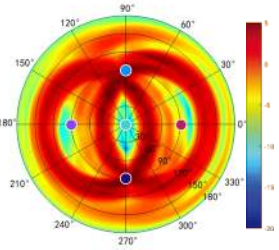
Outdoor 802.11n/ac AP

Model		EAP225-Outdoor	EAP113-Outdoor	EAP110-Outdoor
Support Data Rates	802.11ac	6.5 Mbps to 867 Mbps (MCS0-MCS9, NSS=1 to 2 VHT20/40/80)	-	-
	802.11n	6.5 Mbps to 300 Mbps (MCS0-MCS15, HT20/40)		
	802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps		
	802.11b	1, 2, 5.5, 11 Mbps		
	802.11a	6, 9, 12, 18, 24, 36, 48, 54 Mbps	-	-
Management	LED ON/OFF Control	•		
	Management MAC Access Control	•		
	Web-based Management	•		
	SNMP	v1, v2c		
	SSH	•		
	Restore & Backup	•		
	Firmware update via Web	•		
	NTP	•		
	System Log	•		
	Email Alerts	•		
Physical & Environment	Power Supply	802.3af PoE or 24 V Passive PoE (+4,5 pins; -7,8 pins. PoE Adapter Included)	802.3af PoE / 48V Passive PoE	24 V Passive PoE (+4,5 pins; -7,8 pins. PoE Adapter Included)
	Maximum Power Consumption	10.5W	3.1 W	3.1 W
	Reset	•		
	Mounting	Pole/Wall mouting (Kits included)		
Others	Certifications	CE, FCC, RoHS		
	Dimensions (W x D x H)	214.9 x 46 x 26.7 mm		
	Environment	Operating Temperature: -30 °C–70 °C (-22 °F–158 °F); Storage Temperature: -40 °C–70 °C (-40 °F–158 °F); Operating Humidity: 10%–90% non-condensing; Storage Humidity: 5%–90% non-condensing;	Operating Temperature: -30 °C–65 °C (-22 °F–149 °F); Storage Temperature: -40 °C–70 °C (-40 °F–158 °F); Operating Humidity: 10%–90% non-condensing; Storage Humidity: 5%–90% non-condensing;	Operating Temperature: -30 °C–65 °C (-22 °F–149 °F); Storage Temperature: -40 °C–70 °C (-40 °F–158 °F); Operating Humidity: 10%–90% non-condensing; Storage Humidity: 5%–90% non-condensing;

Antenna Radiation Patterns

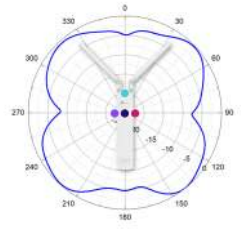
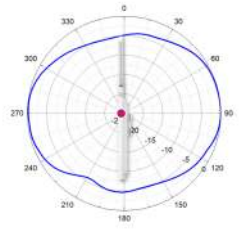
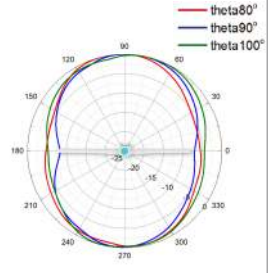
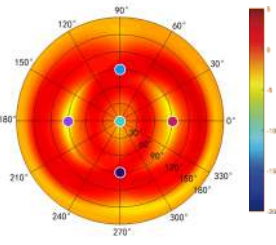
Outdoor AP

EAP225-Outdoor

	Elevation-0°	Elevation-90°	Azimuth	Mapped 3D
2.45 GHz				
5.25 GHz				
5.5 GHz				
5.75 GHz				

Outdoor AP

EAP113-Outdoor / EAP110-Outdoor

	Elevation-0°	Elevation-90°	Azimuth	Mapped 3D
2.45 GHz				

Disclaimers

Wireless Speed and Range Disclaimer

Maximum wireless transmission rates are the physical rates derived from IEEE Standard 802.11 specifications. Range and coverage specifications were defined according to test results under normal usage conditions. Actual wireless transmission rate and wireless coverageare not guaranteed, and will vary as a result of 1) environmental factors, including building materials, physical objects and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead and 3) client limitations, including rated performance, location, connection quality, and client condition.

Wireless Client Capacity Disclaimer

Wireless client capacity specifications were defined according to test results under normal usage conditions. Actual wireless client capacity is not guaranteed, and will vary as a result of 1) environmental factors, including building materials, physical objects and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead and 3) client limitations, including rated performance, location, connection quality, and client condition.

Ethernet Port Limitation Disclaimer

Actual network speed may be limited by the rate of the product's Ethernet WAN or LAN port, the rate supported by the network cable, Internet service provider factors and other environmental conditions.

MU-MIMO Disclaimer

(Only for certain devices)
MU-MIMO capability requires client devices that also support MU-MIMO.

Seamless Roaming Disclaimer

(Only for certain devices)
Seamless roaming requires both the access point and client devices to support 802.11k, 802.11v, and 802.11r protocols.

Lightning and Electro-Static Discharge Protection Disclaimer

(Only for outdoor devices)
Protection against lightning and electro-static discharge may be achieved through proper product setup, grounding and cable shielding. Refer to the instruction manual and consult an IT professional to assist with setting up this product.

PoE Disclaimer

PoE budget calculations are based on laboratory testing. Actual PoE power budget is not guaranteed and will vary as a result of client limitations and environmental factors.

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