

Omada

# Business Cloud SDN Solution

Omada EAP - Business Wi-Fi Series



Omada SDN Controller



EAP265 HD  
EAP245  
EAP225 / EAP223  
EAP115 / EAP110

# 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

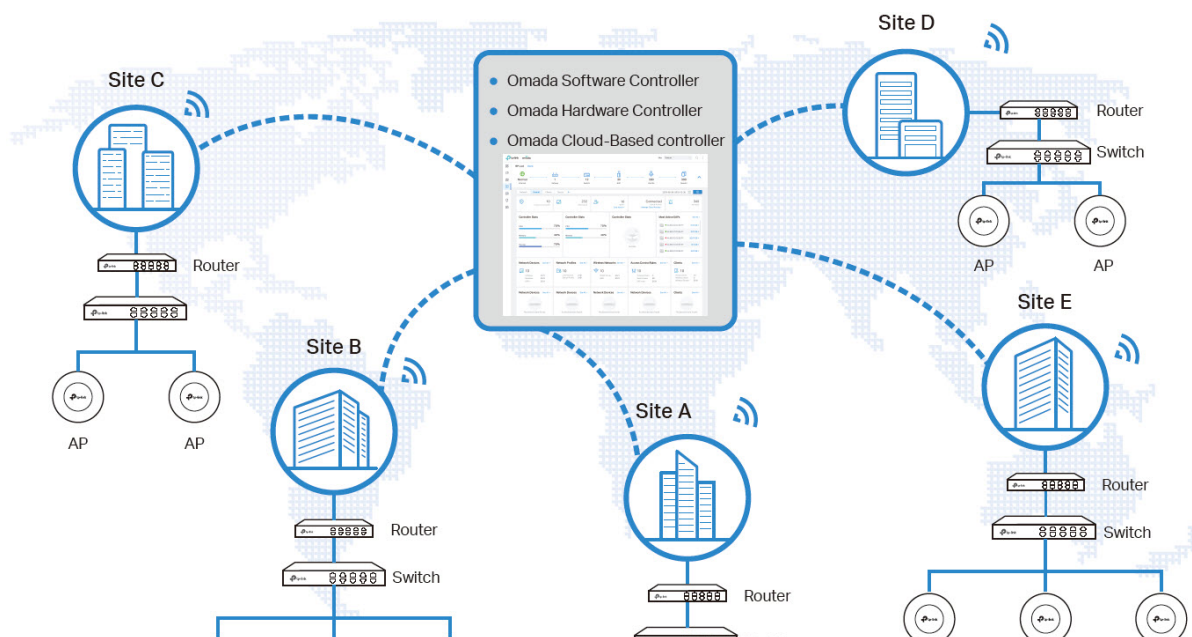


## Catering

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



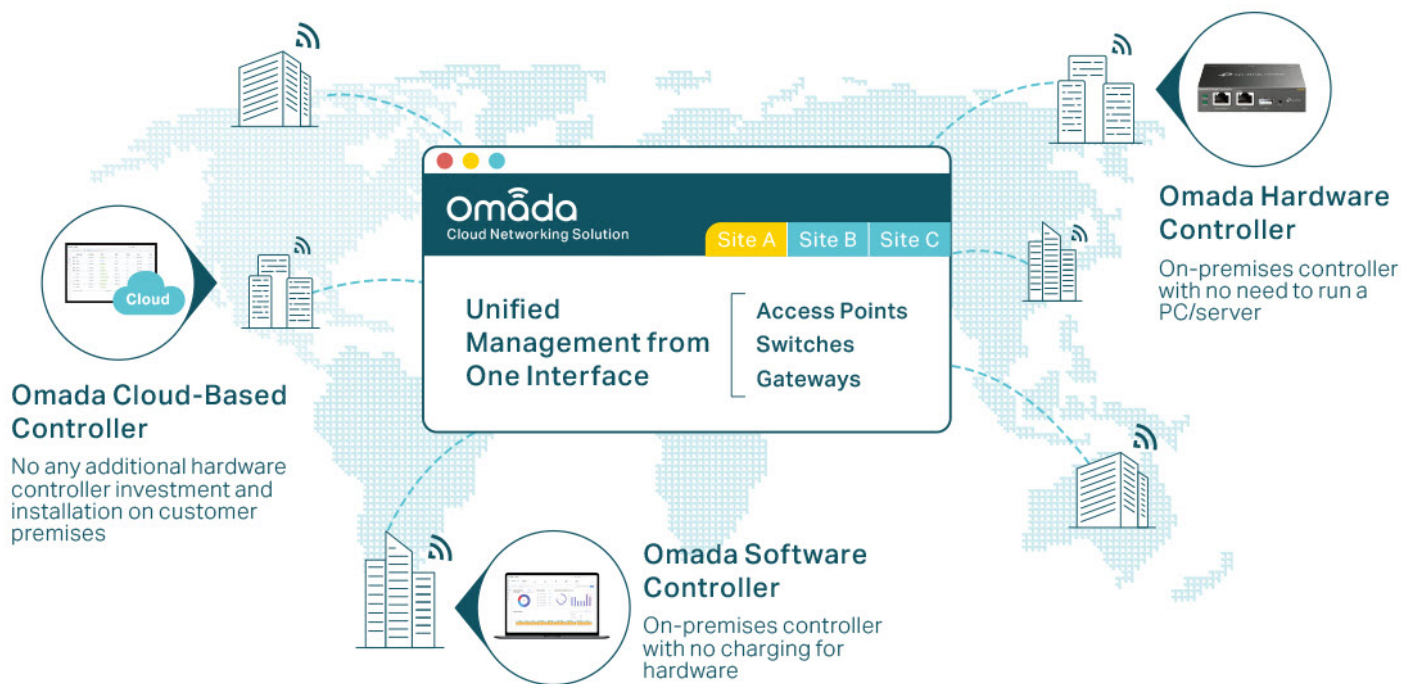
99.99% SLA Availability



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

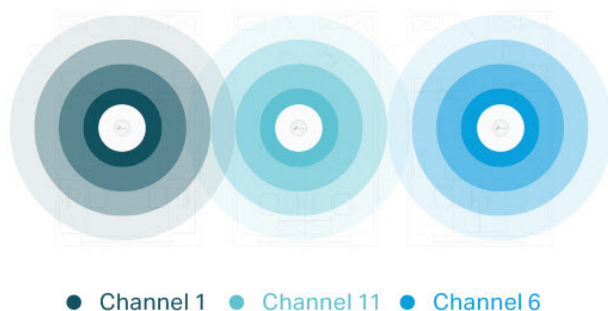
## Intelligent Network Analysis, Warning, and Optimization\*

- 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



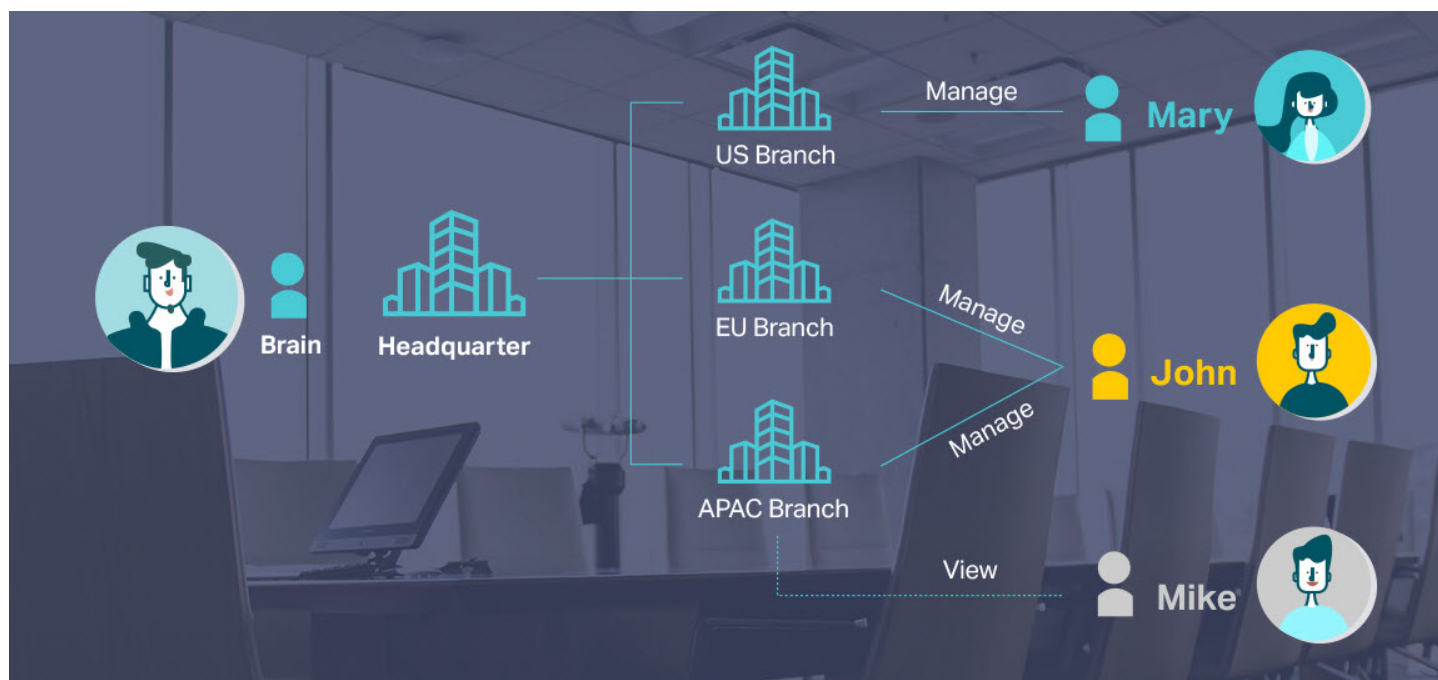
## Auto Channel Selection and Power Adjustment

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.

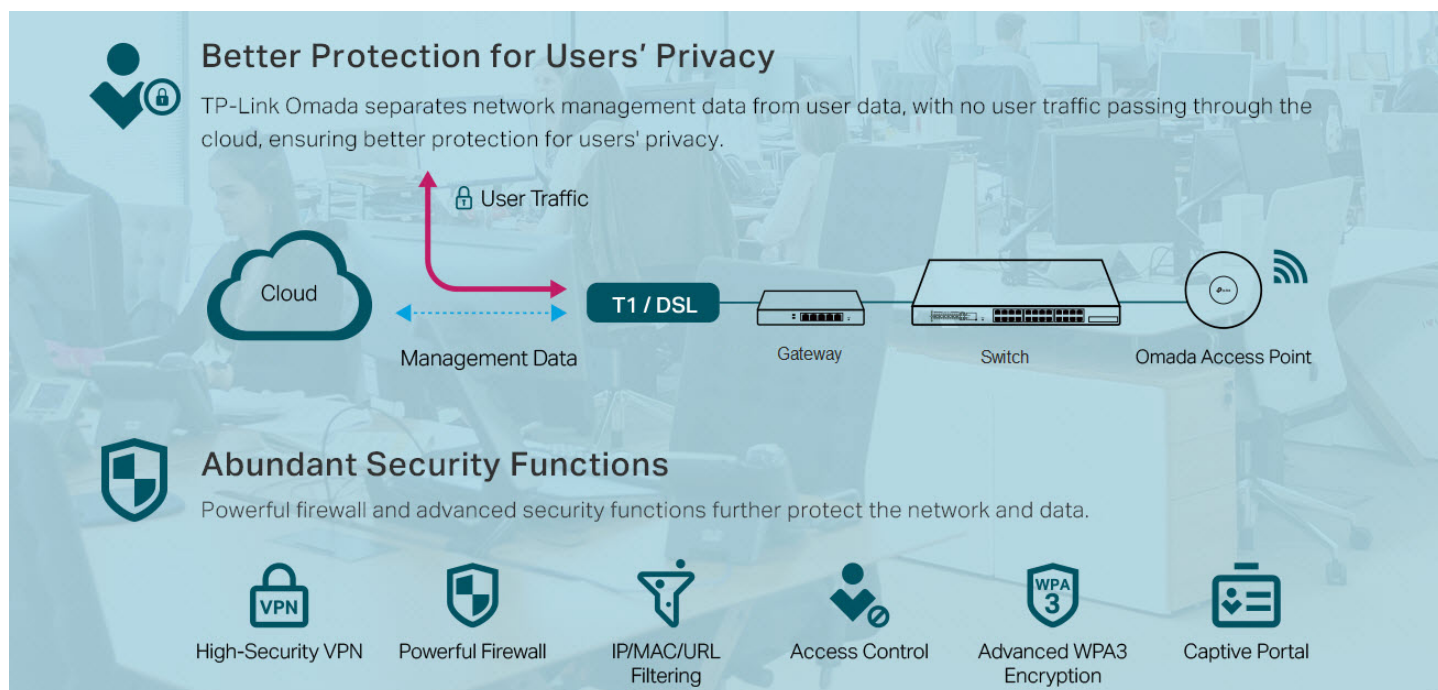


## Easy and Intelligent Network Monitoring

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.

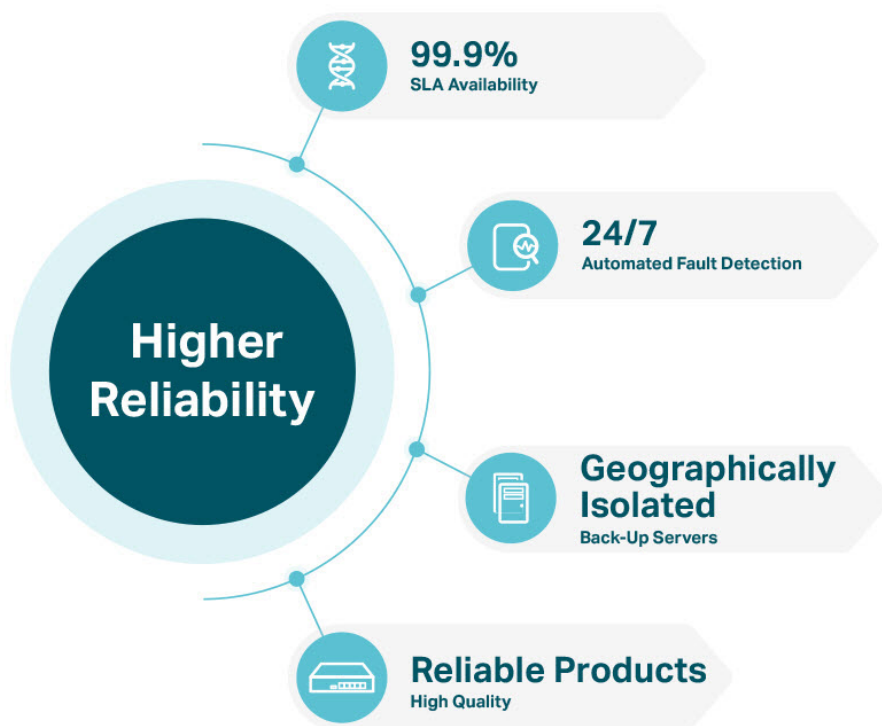


## Comprehensive Protection for the Whole Network



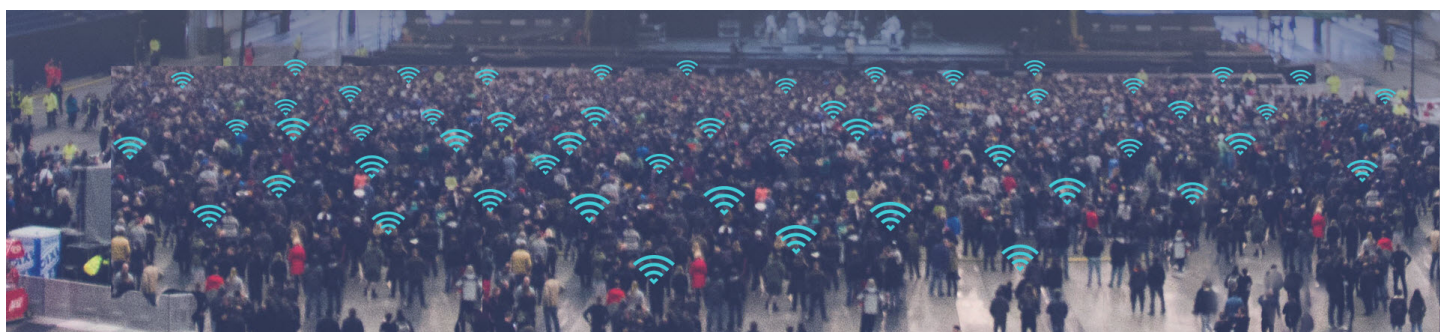
## Multiple Factors Guarantee Higher Reliability

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 and 802.11v 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

## Ceiling Mount 802.11n/ac AP

| Picture           |  |                |               |                                                                            |  |  |
|-------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model             | EAP265 HD                                                                         | EAP245                                                                                          | EAP225                                                                                         | EAP223                                                                                                                                                       | EAP115                                                                              | EAP110                                                                              |
| Product           | AC1750 Wireless MU-MIMO Gigabit Ceiling Mount Access Point                        | AC1750 Wireless MU-MIMO Gigabit Ceiling Mount Access Point                                      | AC1350 Wireless MU-MIMO Gigabit Ceiling Mount Access Point                                     | AC1350 Wireless MU-MIMO Gigabit Ceiling Mount Access Point                                                                                                   | 300Mbps Wireless N Ceiling Mount Access Point                                       | 300Mbps Wireless N Ceiling Mount Access Point                                       |
| Speed             | 2.4 GHz: 450Mbps<br>5 GHz: 1300Mbps                                               | 2.4 GHz: 450Mbps<br>5 GHz: 1300Mbps                                                             | 2.4 GHz: 450Mbps<br>5 GHz: 867Mbps                                                             | 2.4 GHz: 450Mbps<br>5 GHz: 867Mbps                                                                                                                           | 2.4 GHz: 300Mbps                                                                    | 2.4 GHz: 300Mbps                                                                    |
| Ethernet Port     | 2x Gigabit Ethernet Port                                                          | 2x Gigabit Ethernet Port                                                                        | 1x Gigabit Ethernet Port                                                                       | 1x Gigabit Ethernet Port                                                                                                                                     | 1x 10/100Mbps Ethernet Port                                                         | 1x 10/100Mbps Ethernet Port                                                         |
| Power Supply      | 802.3af/at PoE / 48 V Passive PoE                                                 | <b>V4:</b><br>802.3at PoE / 48 V Passive PoE<br><b>V3:</b><br>802.3af/at PoE / 48 V Passive PoE | <b>V5:</b><br>802.3af/at PoE/48 V Passive PoE<br><b>V4:</b><br>802.3af/at PoE /24V Passive PoE | <b>V2:</b><br>802.3af/at PoE /24V Passive PoE<br>PoE Adapter Is Not Included<br><b>V1:</b><br>802.3af/at PoE/48 V Passive PoE<br>PoE Adapter Is Not Included | 802.3af/at PoE / External 9 V/0.6 A DC power supply                                 | 24V Passive PoE                                                                     |
| Internal Antennas | 2.4 GHz: 3x 3.5 dBi<br>5 GHz: 3x 4 dBi                                            | 2.4 GHz: 3x 3.5 dBi<br>5 GHz: 3x 4 dBi                                                          | 2.4 GHz: 3x 4 dBi<br>5 GHz: 2x 5 dBi                                                           | 2.4 GHz: 3x 4 dBi<br>5 GHz: 2x 5 dBi                                                                                                                         | 2x 4 dBi                                                                            | 2x 4 dBi                                                                            |

# Specifications

## Ceiling Mount 802.11n/ac AP

| Model                  |                                    | EAP265 HD                                                                                         | EAP245                                                                                            | EAP225                                                                                            | EAP223                                                                                                                                           | EAP115                                 | EAP110                                 |
|------------------------|------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|
| Name                   |                                    | AC1750<br>Wireless MU-MIMO Gigabit<br>Ceiling Mount<br>Access Point                               | AC1750<br>Wireless MU-MIMO Gigabit<br>Ceiling Mount<br>Access Point                               | AC1350<br>Wireless MU-MIMO Gigabit<br>Ceiling Mount<br>Access Point                               | AC1350<br>Wireless MU-MIMO Gigabit<br>Ceiling Mount<br>Access Point                                                                              | 300 Mbps<br>Wireless N<br>Access Point | 300 Mbps<br>Wireless N<br>Access Point |
| Main Design            | LAN Interfaces                     | 2x Gigabit Ethernet Port                                                                          |                                                                                                   | 1x Gigabit Ethernet Port                                                                          |                                                                                                                                                  | 1x 10/100 Mbps Ethernet Port           |                                        |
|                        | Wi-Fi Standards                    | IEEE 802.11 a/b/g/n/ac                                                                            |                                                                                                   |                                                                                                   |                                                                                                                                                  | IEEE 802.11 a/b/g/n                    |                                        |
|                        | Maximum Data Rate                  | 450 Mbps (2.4 GHz) + 1300 Mbps (5 GHz)                                                            |                                                                                                   | 450 Mbps (2.4 GHz) + 876 Mbps (5 GHz)                                                             |                                                                                                                                                  | 300 Mbps (2.4 GHz)                     |                                        |
|                        | Wireless Client Capacity           | 500+                                                                                              | 220+                                                                                              | 220+                                                                                              | 220+                                                                                                                                             | 100+                                   |                                        |
|                        | Antennas                           | 2.4G: 3x 3.5 dBi<br>5GHz: 3x 4 dBi                                                                | 2.4 GHz: 3x 3.5 dBi, 5 GHz: 3x 4 dBi                                                              | 2.4 GHz: 3x 4 dBi, 5 GHz: 2x 5 dBi                                                                | 2.4 GHz: 3x 4 dBi, 5 GHz: 2x 5 dBi                                                                                                               | 2x 4 dBi                               |                                        |
|                        | Transmit Power                     | CE: < 20 dBm (2.4 GHz, EIRP); < 28 dBm (5 GHz, EIRP)<br>FCC: < 24 dBm (2.4 GHz); < 24 dBm (5 GHz) | CE: < 20 dBm (2.4 GHz, EIRP); < 28 dBm (5 GHz, EIRP)<br>FCC: < 24 dBm (2.4 GHz); < 24 dBm (5 GHz) | CE: < 20 dBm (2.4 GHz, EIRP); < 27 dBm (5 GHz, EIRP)<br>FCC: < 24 dBm (2.4 GHz); < 22 dBm (5 GHz) | CE: < 20 dBm (2.4 GHz, EIRP); < 23 dBm (5 GHz, band 1&band 2, EIRP); < 27 dBm (5 GHz, band 3, EIRP)<br>FCC: < 24 dBm (2.4 GHz); < 22 dBm (5 GHz) | CE: < 19 dBm (EIRP), FCC: < 21 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                     | •                                                                                                 |                                                                                                   |                                                                                                   |                                                                                                                                                  |                                        |                                        |

## Ceiling Mount 802.11n/ac AP

| Model              |                               | EAP265 HD                                                                                    | EAP245 | EAP225                                                     | EAP223 | EAP115                                     | EAP110 |
|--------------------|-------------------------------|----------------------------------------------------------------------------------------------|--------|------------------------------------------------------------|--------|--------------------------------------------|--------|
| Wireless Function  | Multiple SSIDs                | 16 (8 on each band)<br>*15 SSIDs (8 for 2.4GHz, 7 for 5GHz): EAP225 V5, EAP223 V1, EAP245 V4 |        |                                                            |        | 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          | •                                                                                            |        |                                                            |        |                                            |        |
| Support Data Rates | 802.11ac                      | 6.5 Mbps to 1300 Mbps (MCS0-MCS9, NSS = 1 to 3 VHT20/40/80)                                  |        | 6.5 Mbps to 867 Mbps (MCS0-MCS9, NSS = 1 to 2 VHT20/40/80) |        | -                                          |        |
|                    | 802.11n                       | 6.5 Mbps to 450 Mbps (MCS0-MCS23, HT20/40)                                                   |        |                                                            |        | 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                  | •                                                                                            |        |                                                            |        |                                            |        |

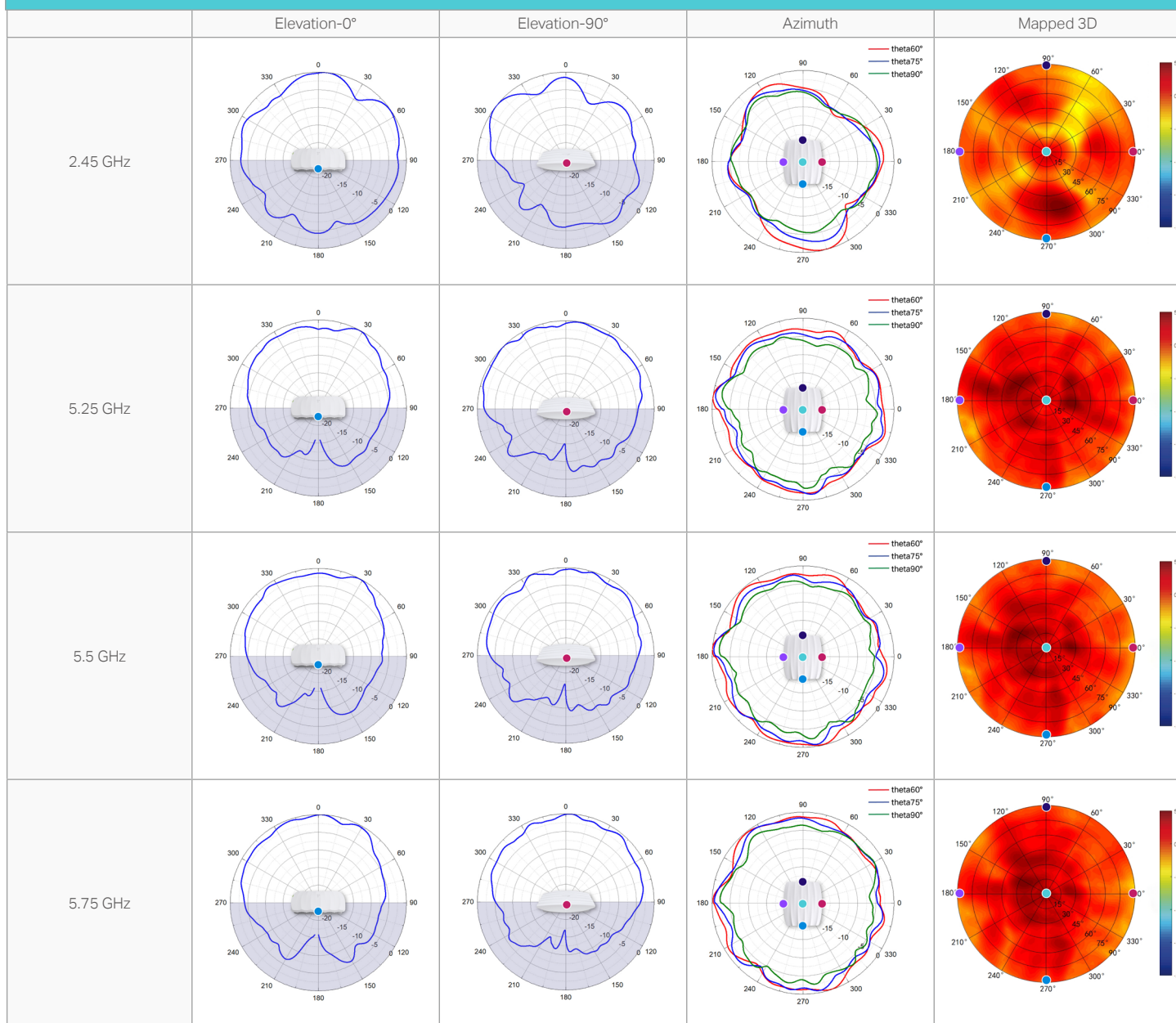
## Ceiling Mount 802.11n/ac AP

| Model                  |                           | EAP265 HD                                                                                                                                                                                      | EAP245                                                                                                                                                                                      | EAP225                                                                                                                                                                                       | EAP223                                                                                                                                                                                                   | EAP115                                               | EAP110                                                        |
|------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------|
| Physical & Environment | Power Supply              | 802.3af/at PoE or 48 V Passive PoE (+4,5 pins; -7,8 pins. PoE Adapter Included)                                                                                                                | <b>V4:</b><br>802.3at PoE or 48 V Passive PoE (+4,5 pins; -7,8 pins. PoE Adapter Included)<br><b>V3:</b><br>802.3af/at PoE or 48 V Passive PoE (+4,5 pins; -7,8 pins. PoE Adapter Included) | <b>V5:</b><br>802.3af/at PoE or 48 V Passive PoE (+4,5 pins; -7,8 pins. PoE Adapter Included)<br><b>V4:</b><br>802.3af/at PoE or 24V Passive PoE (+4,5pins; -7,8 pins. PoE Adapter Included) | <b>V2:</b><br>802.3af/at PoE or 24V Passive PoE (+4,5pins; -7,8 pins) PoE Adapter Is Not Included<br><b>V1:</b><br>802.3af/at PoE or 48 V Passive PoE (+4,5 pins; -7,8 pins) PoE Adapter Is Not Included | 802.3af/at PoE or external 9 V/0.6 A DC power supply | 24 V Passive PoE (+4,5 pins; -7,8 pins. PoE Adapter Included) |
|                        | Maximum Power Consumption | 12.3 W                                                                                                                                                                                         | 12.3 W                                                                                                                                                                                      | <b>V4:</b><br>12.6W<br><b>V5:</b><br>EU: 9.7W (802.3at PoE or Passive PoE)<br>US: 12.1W (802.3at PoE or Passive PoE)                                                                         | <b>V1:</b><br>EU: 9.7W (802.3at PoE or Passive PoE)<br>US: 12.1W (802.3at PoE or Passive PoE)<br><b>V2:</b><br>12.6W                                                                                     | 3.1 W                                                | 2.8 W                                                         |
|                        | Reset                     | •                                                                                                                                                                                              |                                                                                                                                                                                             |                                                                                                                                                                                              |                                                                                                                                                                                                          |                                                      |                                                               |
|                        | Mounting                  | Ceiling/Wall mounting (Kits included)                                                                                                                                                          |                                                                                                                                                                                             |                                                                                                                                                                                              |                                                                                                                                                                                                          |                                                      |                                                               |
| Others                 | Certifications            | CE, FCC                                                                                                                                                                                        |                                                                                                                                                                                             |                                                                                                                                                                                              |                                                                                                                                                                                                          |                                                      |                                                               |
|                        | Dimensions (W x D x H)    | 205.5 x 181.5 x 37.1 mm                                                                                                                                                                        |                                                                                                                                                                                             |                                                                                                                                                                                              |                                                                                                                                                                                                          | 189.4 x172.3 x 29.5 mm                               |                                                               |
|                        | Environment               | Operating Temperature: 0 °C–40 °C (32 °F–104 °F)<br>Storage Temperature: -40 °C–70 °C (-40 °F–158 °F)<br>Operating Humidity: 10%–90% non-condensing<br>Storage Humidity: 5%–90% non-condensing |                                                                                                                                                                                             |                                                                                                                                                                                              |                                                                                                                                                                                                          |                                                      |                                                               |

# Antenna Radiation Patterns

## Ceiling Mount AP

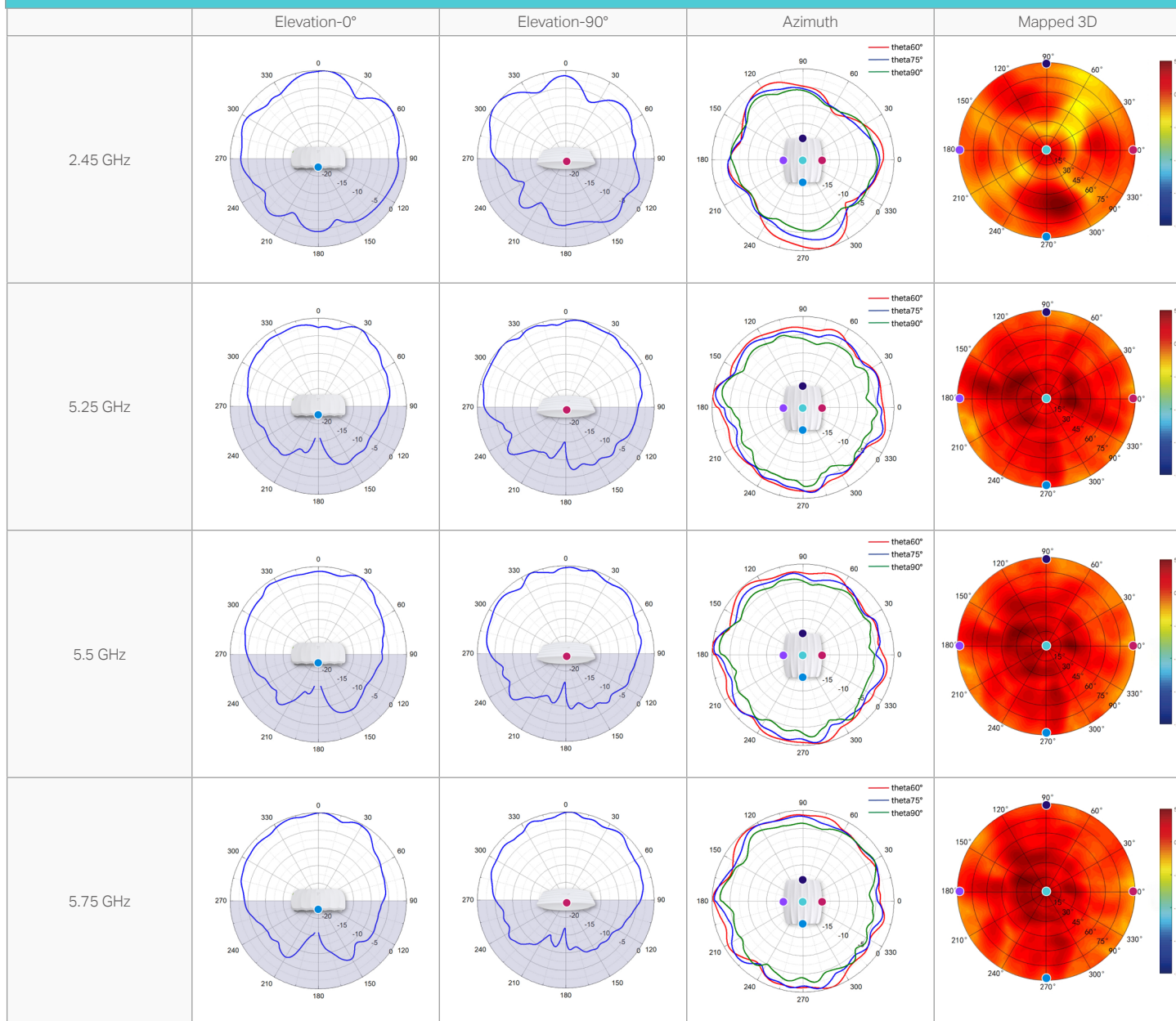
EAP265 HD



# Antenna Radiation Patterns

## Ceiling Mount AP

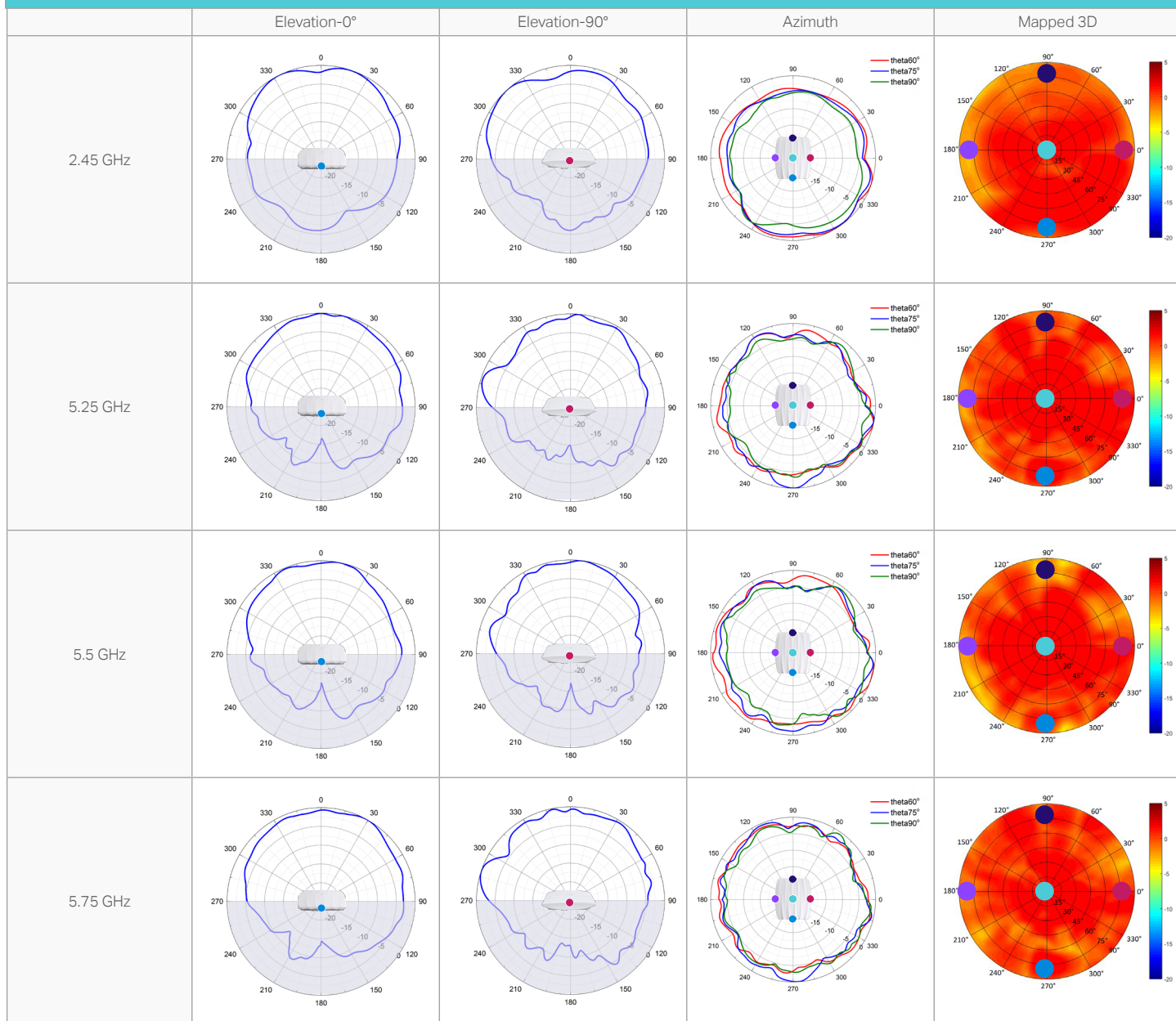
EAP245



# Antenna Radiation Patterns

## Ceiling Mount AP

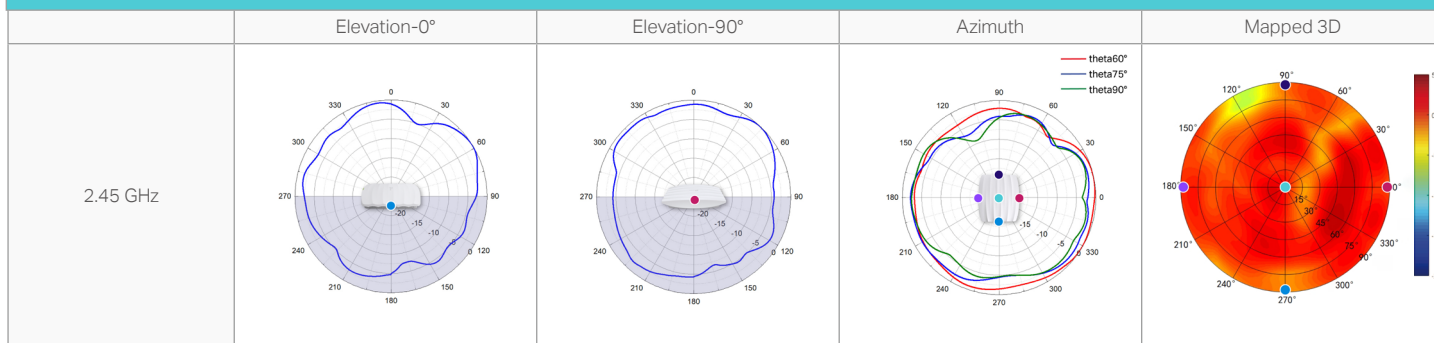
EAP225 / EAP223



# Antenna Radiation Patterns

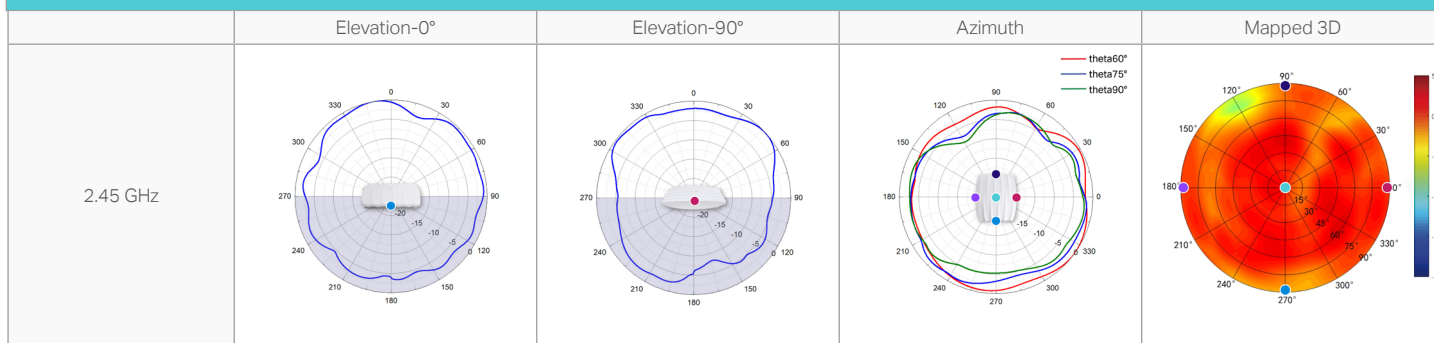
## Ceiling Mount AP

EAP115



## Ceiling Mount AP

EAP110



# 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 coverage are 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 and 802.11v 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](http://www.tp-link.com). Specifications are subject to change without notice.

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