

# Controller

Hardware Controller: OC200 / OC300

Software Controller



Omada SDN Controller







OC200



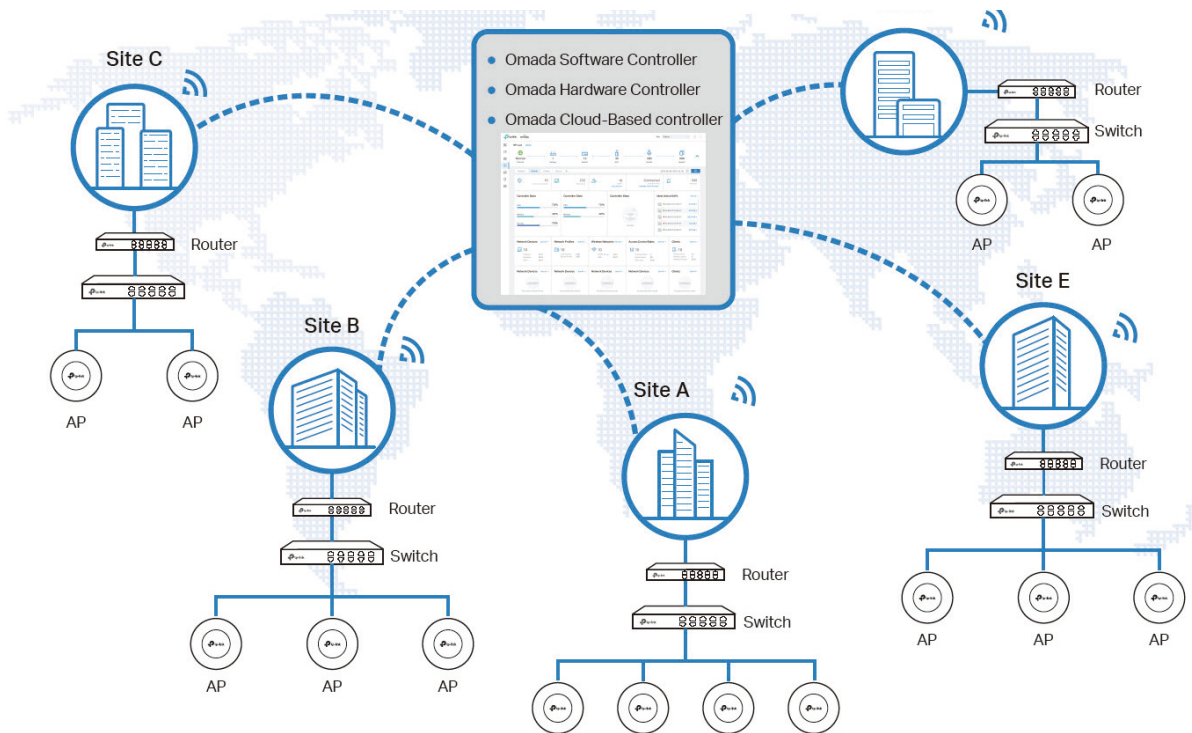
OC300

# Omada Solution

|   |   |   |  |   |
|---|---|---|--|---|
|  |  |  |  |  |
| <b>Hospitality</b>  | <b>Education</b>  | <b>Retail</b>   | <b>Office</b>  | <b>Catering</b>   |
| High Quality and Full Coverage Wi-Fi  | High-Density Wi-Fi  | Social Marketing for O2O  | Wireless and Wired Connections   | Full Wi-Fi Coverage in High-Density Environment                                     |

## Software Defined Networking (SDN) with Cloud Access

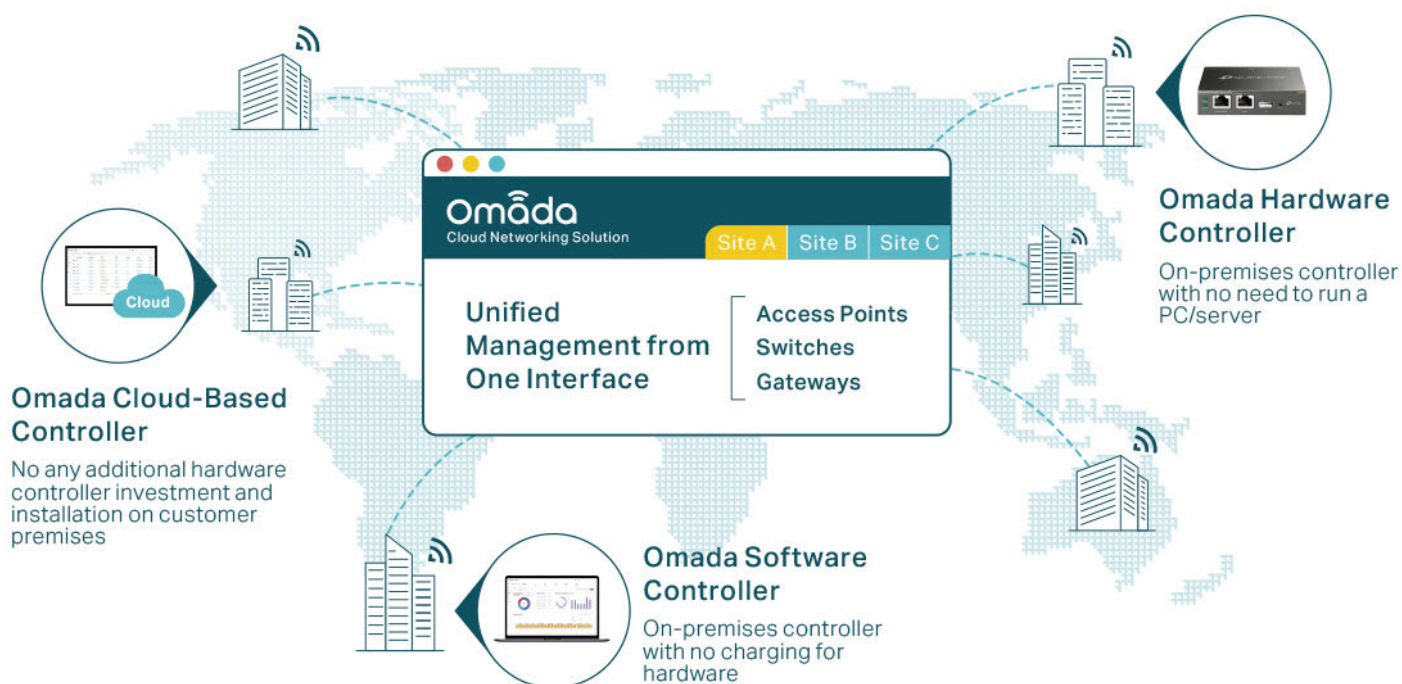
Omada Software Defined Networking (SDN) platform integrates network devices, including access points, switches and gateways, providing 100% centralized cloud management. Omada creates a highly scalable network—all controlled from a single interface. Seamless wireless and wired connections are provided,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



|  |  |  |   |  |   |  |
|--|--|--|---|--|---|--|
|  <p><b>Higher Efficiency</b></p>                |  |  |  <p><b>Higher Security</b></p>        |  |  <p><b>Higher Reliability</b></p>                  |  |
| <br>Centralized Cloud Management                | <br>Zero-Touch Provisioning           | <br>AI-Driven Technology            | <br>Separate Management and User Data |  | <br>99.99% SLA Availability                        |  |
| <br>Auto Channel Selection and Power Adjustment | <br>Multi-Tenant Privilege Assignment | <br>Easy and Intelligent Monitoring | <br>Abundant Security Functions       |  | <br>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<sup>1</sup>

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.



1. 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\*

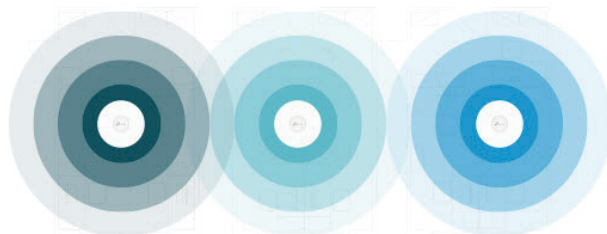
- ▶ Analyzes potential network problems and sends optimization suggestions for higher network efficiency
- ▶ Locates network faults, warns and notify users, and generates solutions to reduce network risk



\*Intelligent Network Analysis, Warning, and Optimization are being developed and are scheduled to be released in 2020

## Auto Channel Selection and Power Adjustment

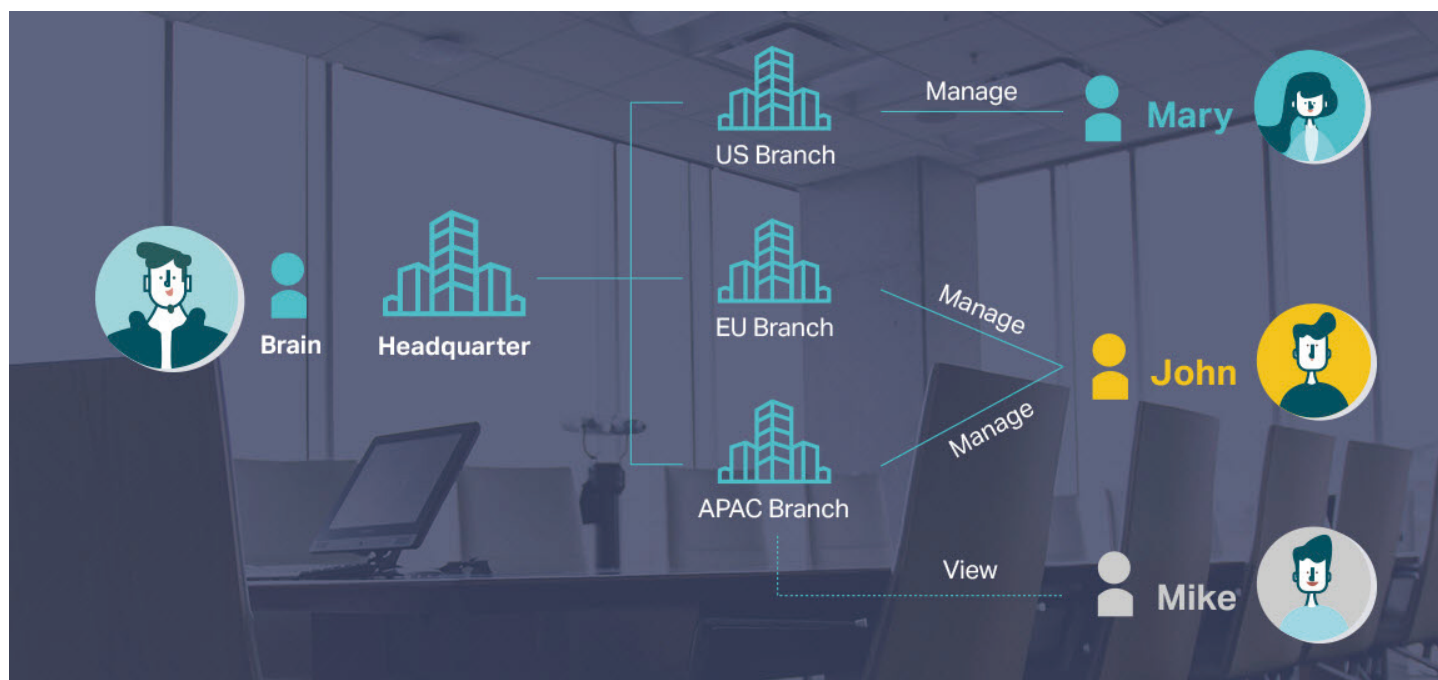
Provides powerful wireless performance while greatly reducing Wi-Fi interference by automatically adjusting the channel settings and transmission power levels of neighboring APs in the same network.



● Channel 1 ● Channel 11 ● Channel 6

## Assign Different Management Roles

Multi-tenant 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.

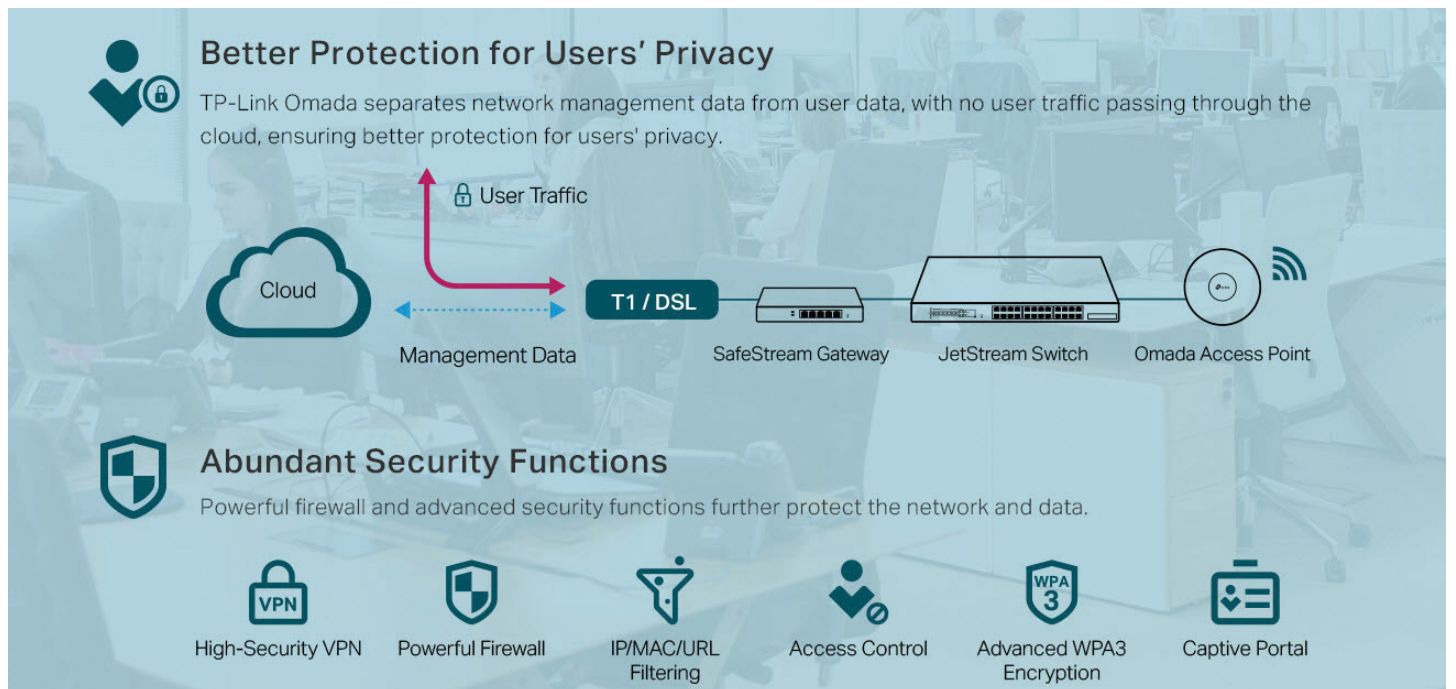


# Easy and Intelligent Network Monitoring

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.

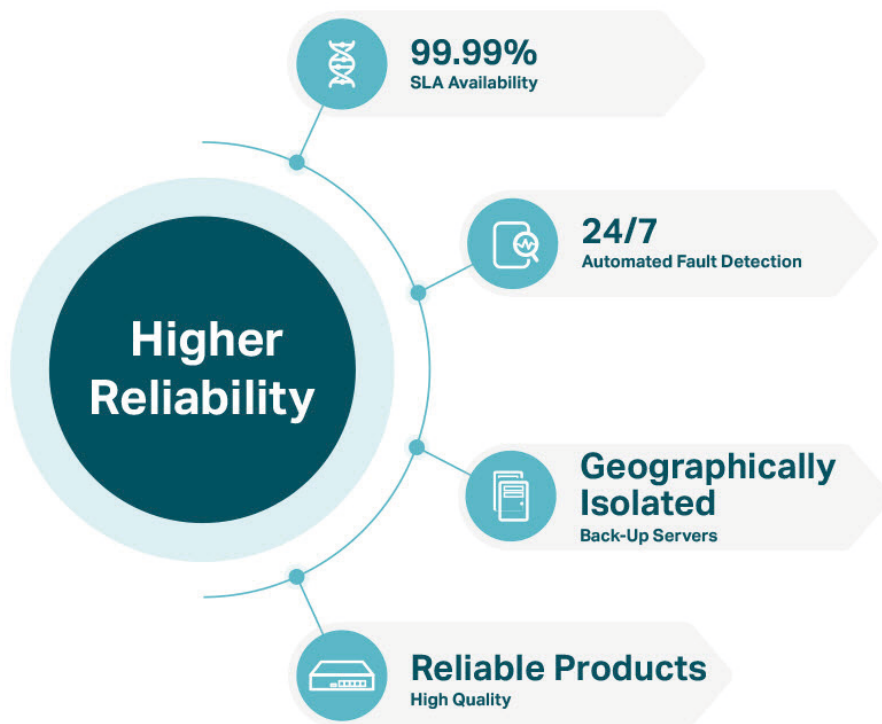


# Comprehensive Protection for the Whole Network



## Multiple Factors Guarantee Higher Reliability

Higher reliability of cloud service is guaranteed with 99.99% 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 Wi-Fi 6 and Wi-Fi 5 APs have high concurrency capacities for remarkable performance in high-density environments.



# Specifications

| Controller Type                  |  | Hardware Controller  |  | Software Controller |
|----------------------------------|--|--|--|---------------------|
| Model                            |  | OC200  | OC300  | -                   |
| Main Design                      | Processor  | Dual-Core A53 @ 1.2 GHz  | Quad-Core A72 @ 1.2 GHz  | -                   |
|                                  | Memory Information                                       | 1 GB DDR3  | 2 GB DDR4  | -                   |
|                                  | Storage  | 1MB Nor Flash; 4 GB eMMC   | 2MB Nor Flash; 8 GB eMMC   | -                   |
|                                  | RJ45 Port  | 2 10/100 Mbps Ethernet Ports   | 2 10/100/1000 Mbps Ethernet Ports                                | -                   |
|                                  | USB Port   | 1 USB 2.0 Port; 1 Micro-USB Port   | 1 USB 3.0 Port   | -                   |
|                                  | Interface  | 1 Kensington Lock; 1 Reset   |  | -                   |
| Hardware Design                  | Power Supply   | 802.3af/at PoE; Micro-USB (DC 5 V/ Minimum 1 A)  | 100-240 V ~ 50/60 Hz AC  | -                   |
|                                  | Max Power Consumption                                    | 7.5 W (powered by a PoE device, with USB 2.0 connected);<br>3.5 W (powered via Micro-USB port, no USB 2.0 connected) | 9.0 W (no USB 3.0 connected);<br>14.8 W (with USB 3.0 connected) | -                   |
|                                  | Dimensions   | 3.9 × 3.9 × 1.0 in (100 × 98 × 25 mm)  | 11.6 × 7.1 × 1.7 in (294 × 180 × 44 mm)                          | -                   |
| System Management                | Multi-Site Management                                    | √  |  |                     |
|                                  | Multi-tenant Management (Role/Site/Device Privileges)    | √  |  |                     |
|                                  | Cloud Access   | √  |  |                     |
|                                  | Migration (Site Migration/Controller Migration)          | √  |  |                     |
|                                  | Account Management                                       | √  |  |                     |
|                                  | Maximum Number of Sites                                  | 100  |  |                     |
|                                  | Maximum Number of Accounts                               | 1000   |  |                     |
|                                  | Maximum Number of Local Accounts                         | 500  |  |                     |
|                                  | Maximum Number of Cloud Accounts                         | 500  |  |                     |
|                                  | Maximum Number of Vouchers                               | 50,000   |  |                     |
|                                  | Maximum Number of Local Users                            | 50,000   |  |                     |
|                                  | Maximum Number of WLAN Groups                            | 500  |  |                     |
|                                  | Maximum Number of SSIDs                                  | 16 in each site  |  |                     |
|                                  | Maximum Number of ACL                                    | Router: 64<br>Switch: 32<br>EAP: 16  |  |                     |
|                                  | Maximum Number of Free Authentication                    | 32 in each site  |  |                     |
|                                  | Maximum Number of Pre-Authentication Access              | 32 in each site  |  |                     |
|                                  | Maximum Number of Authentication Free Policy             | 96 in each site  |  |                     |
|                                  | Maximum Number of Reboot Schedule                        | 8 in each site   |  |                     |
|                                  | Maximum Number of PoE Schedule                           | 8 in each site   |  |                     |
|                                  | Maximum Number of MAC Filter Groups                      | 8 in each site   |  |                     |
|                                  | Maximum Number of MAC Addresses in Each MAC Filter Group | 500 (4,000 in total per controller)  |  |                     |
|                                  | Maximum Number of VPN                                    | 64 in each site  |  |                     |
|                                  | Maximum Number of Static Routing                         | 64 in each site  |  |                     |
| Maximum Number of Policy Routing | 64 in each site  |  |  |                     |
| Backup & Restore                 | √  |  |  |                     |
| Auto Backup                      | √  |  |  |                     |
| Customized UI Interface          | √  |  |  |                     |

| Controller Type    |  | Hardware Controller                              |                                   | Software Controller |
|--------------------|--|--|-----------------------------------|---------------------|
| Model              |  | OC200  | OC300                             | -                   |
| Network Management | Wired Network  |  | √                                 |                     |
|                    | Wireless Network   |  | √                                 |                     |
|                    | Network Security<br>(ACL/URL Filtering/Attack Defense)                               |  | √                                 |                     |
|                    | Transmission<br>(Routing/NAT/Session Limit/Bandwidth Control)                        |  | √                                 |                     |
|                    | VPN (IPSec/L2TP/PPTP/OpenVPN)  |  | √                                 |                     |
|                    | Portal<br>(Voucher/Local User/SMS/RADIUS/Facebook/<br>External Portal Server)        |  | √                                 |                     |
|                    | 802.1x   |  | √                                 |                     |
|                    | RADIUS<br>(Authentication/MAC Auth/Accounting)                                       |  | √                                 |                     |
| Device Management  | Management Device Type   | Omada EAP, JetStream Switch*, SafeStream Router* |                                   |                     |
|                    | Management Scale**   | ≤ 100 Devices<br>≤ 1,000 Clients                 | ≤ 500 Devices<br>≤ 15,000 Clients | ≤ 1,500 Devices***  |
|                    | Device Automatic Discovery   |  | √                                 |                     |
|                    | Batch configuration  |  | √                                 |                     |
|                    | Online upgrade   |  | √                                 |                     |
|                    | Reboot Schedule  |  | √                                 |                     |
|                    | PoE Schedule   |  | √                                 |                     |
|                    | WLAN Scheduler   |  | √                                 |                     |
|                    | DDNS   |  | √                                 |                     |
|                    | SNMP   |  | √                                 |                     |
|                    | SSH  |  | √                                 |                     |
| Monitoring         | Dashboard (Custom Dashboard)   |  | √                                 |                     |
|                    | Statistics<br>(Performance/Switch Stats/Speed Test Stats)                            |  | √                                 |                     |
|                    | Network topology   |  | √                                 |                     |
|                    | Network Map  |  | √                                 |                     |
|                    | Devices List (Custom Table)  |  | √                                 |                     |
|                    | Clients List (Custom Table)  |  | √                                 |                     |
|                    | Insights<br>(Known Clients/Past Connections/Past Portal<br>Authorizations/Rogue APs) |  | √                                 |                     |
|                    | Logs<br>(Alerts/Events/Custom Notifications)   |  | √                                 |                     |
| Others             | Certifications   | CE, FCC, RoHS                                    |                                   | -                   |
|                    | Operating Temperature  | 0 °C–40 °C (32 °F–104 °F)                        | 0 °C–50 °C (32 °F–122 °F)         | -                   |
|                    | Storage Temperature  | -40 °C–70 °C (-40 °F–158 °F)                     |                                   | -                   |
|                    | Operating Humidity   | 10%–90% non-condensing                           |                                   | -                   |
|                    | Storage Humidity   | 5%–90% non-condensing                            |                                   | -                   |

\*Some models are manageable, please refer to the TP-Link official website for more information.

\*\*The actual management scale will vary as a result of network environment, bandwidth and different settings.

\*\*\*Omada Software Controller can manage up to 1500 EAPs if the Controller Host has enough hardware resources. To guarantee operational stability for managing 1500 EAPs, we recommend that you use the hardware which meets or exceeds the following specifications:

-CPU: Intel Core i3-8100, i5-6500, or i7-4700 with 2 or more cores and 4 or more threads.

-Memory: 6 GB RAM or more.