

# Hardware Controller | Datasheet

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## OC220

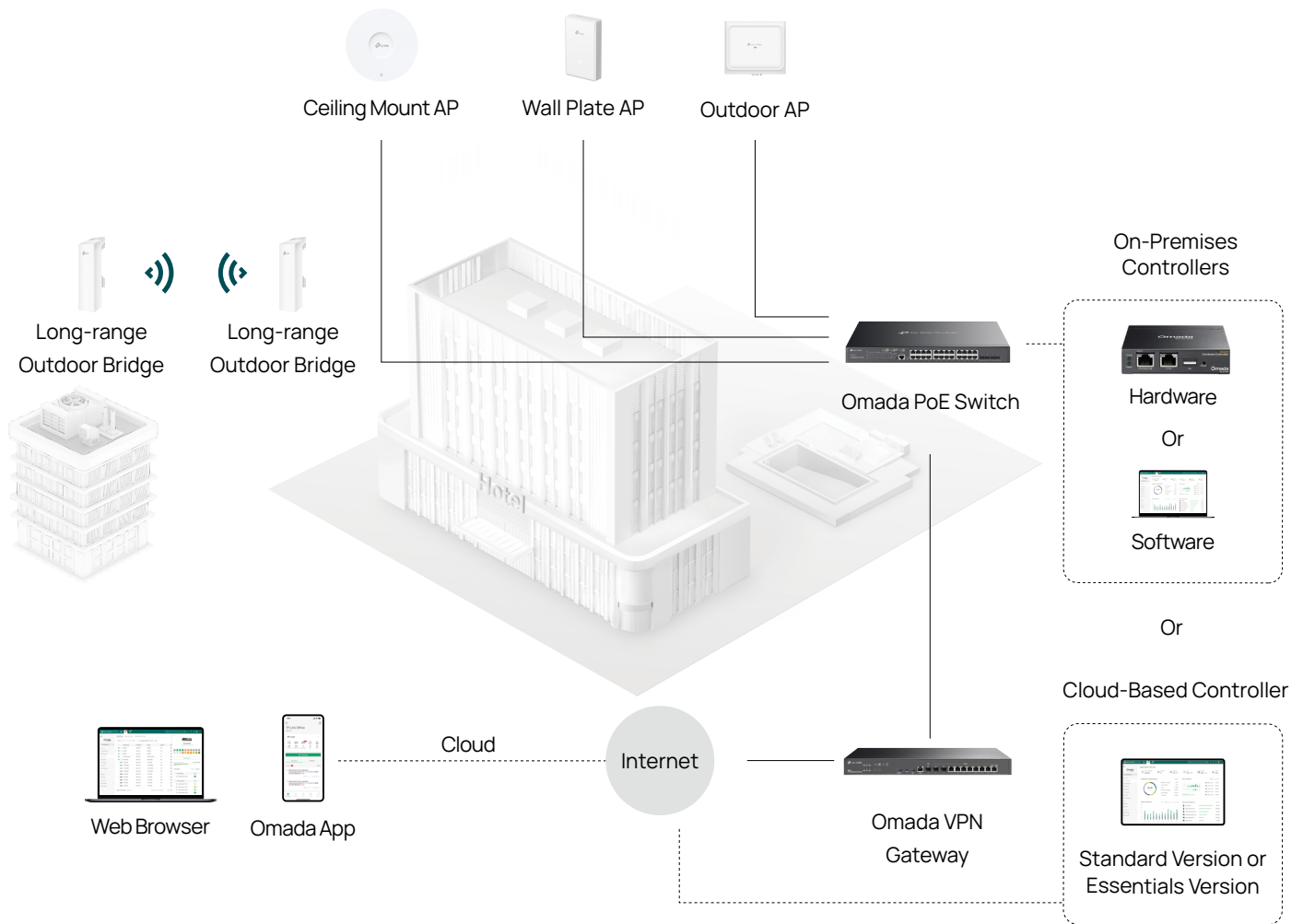


## Highlights

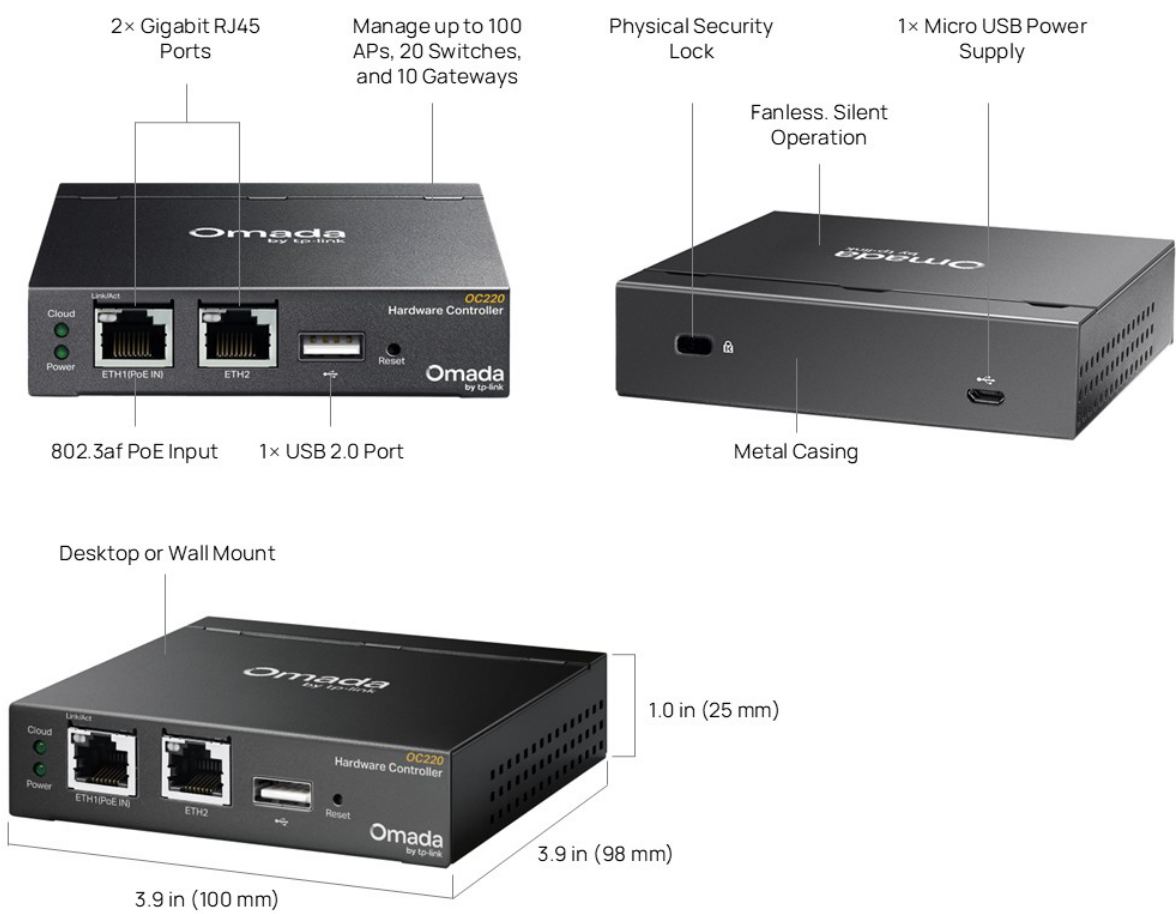
- **Centralized Management:** Supports up to 100 Omada access points, 10 Omada gateways, a maximum of 20 Omada switches, and a maximum of 2 certain DeltaStream GPON OLTs
- **Free Cloud Access:** Manage and monitor with the Omada app or Web UI from anywhere, anytime.
- **On-Premises Management:** Locally monitor and manage devices with the ultimate stability and complete privacy.
- **Hardware Design for Businesses:** A powerful chipset, durable metal casing, USB 2.0 port for data backup, and two Gigabit Ethernet ports.
- **Flexible Deployment:** 802.3af PoE or Micro USB (DC 5V/Minimum 1A) power supply and compact desktop or wall mount installation.

# Omada Solution

Omada's 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.



# Product Images



# Specifications

| Model             |  | OC220  |
|-------------------|--|--|
| Main Design       | Processor  | Quad-Core CA53 @ 2.0 GHz/Core  |
|                   | Memory Information   | 2 GB DDR4  |
|                   | Storage  | 4MB Nor Flash; 8 GB eMMC   |
|                   | RJ45 Port  | 2 10/100/1000 Mbps Ethernet Ports  |
|                   | USB Port   | 1 USB 2.0 Port;<br>1 Micro-USB Port  |
|                   | Interface  | 1 Kensington Lock; 1 Reset   |
| Hardware Design   | Power Supply   | 802.3af/at PoE; Micro-USB (DC 5 V/ Minimum 1 A)  |
|                   | Max Power Consumption  | 9.5 W (powered by a PoE device, with USB 2.0 connected);<br>3.3 W (powered via Micro-USB port, no USB 2.0 connected) |
|                   | Dimensions   | 3.9 × 3.9 × 1.0 in<br>(100 × 98 × 25 mm)   |
|                   | MTBF   | 1475648H @25°C<br>733104H @40°C  |
| System Management | Multi-Site Management  | ✓  |
|                   | Multi-tenant Management<br>(Role/Site/Device Privileges)         | ✓  |
|                   | Cloud Access   | ✓  |
|                   | Migration<br>(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                                       | 10,000   |
|                   | Maximum Number of Local Users                                    | 10,000   |
|                   | Maximum Simultaneously Used VLANs                                | 4,090 per site*  |
|                   | Maximum Number of WLAN Groups                                    | 100  |
|                   | Maximum Number of SSIDs  | 24 in each WLAN Group**  |
|                   | Maximum Number of ACL  | For each site:<br>Gateway: 64<br>Switch: 32***<br>EAP: 16  |
|                   | Maximum Number of Free Authentication/ Pre-Authentication Access | 64 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  | 62 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  | ✓  |
|                   | Open API   | ✓  |

\* The actual number of VLANs depends on the switch capacity and it may be less than 4090.

\*\*The maximum number depends on the connected device type.

\*\*\* The actual number of ACL depends on the configuration and it may be less than 32.

\*\*\*\*The actual number depends on the device capability.

| Model              |   | OC220  |
|--------------------|---|--|
| Network Management | Wired Network   | √  |
|                    | Wireless Network  | √  |
|                    | WLAN Optimization   | √  |
|                    | Network Security<br>(ACL/URL Filtering/Attack Defense)                            | √  |
|                    | Transmission<br>(Routing/NAT/Session Limit/Bandwidth Control)                     | √  |
|                    | VPN (IPSec/L2TP/PPTP/OpenVPN/WireGuard VPN)                                       | √  |
|                    | Portal<br>(Voucher/Local User/SMS/RADIUS/External Portal Server)                  | √  |
|                    | 802.1x  | √  |
|                    | RADIUS<br>(Authentication/MAC Auth/Accounting)                                    | √  |
|                    | Management Device Type  | Omada EAP, Omada Switch*, Omada Gateway*, DeltaStream GPON OLTs*   |
| Device Management  | Management Scale**  | 100APs, 10 Gateways, up to 20 Switches, up to 2 DeltaStream GPON OLTs<br>Note: The number of supported switches decreases by 5 for each DeltaStream GPON OLT added. The DeltaStream GPON OLTs supported by the controller are DS-P7001-04 and DS-P7001-08. |
|                    | Device Automatic Discovery  | √  |
|                    | Batch configuration   | √  |
|                    | Online upgrade  | √  |
|                    | Reboot Schedule   | √  |
|                    | PoE Schedule  | √  |
|                    | WLAN Scheduler  | √  |
|                    | DDNS  | √  |
|                    | SNMP  | √  |
|                    | SSH   | √  |
| Monitoring         | DPI   | √  |
|                    | IPS/IDS   | √  |
|                    | Dashboard (Custom Dashboard)  | √  |
|                    | Statistics<br>(Performance/Switch Statistics)                                     | √  |
|                    | Network topology  | √  |
|                    | Network Map   | √  |
|                    | Devices List (Custom Table)   | √  |
|                    | Clients List (Custom Table)   | √  |
|                    | Insights<br>(Known Clients/Past Connections/Past Portal Authorizations/Rogue APs) | √  |
|                    | Logs<br>(Alerts/Events/Custom Notifications)                                      | √  |
| Others             | Certifications  | CE, FCC, RoHS  |
|                    | Operating Temperature   | -5 °C–50 °C (23 °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.