Omada
by tp-link

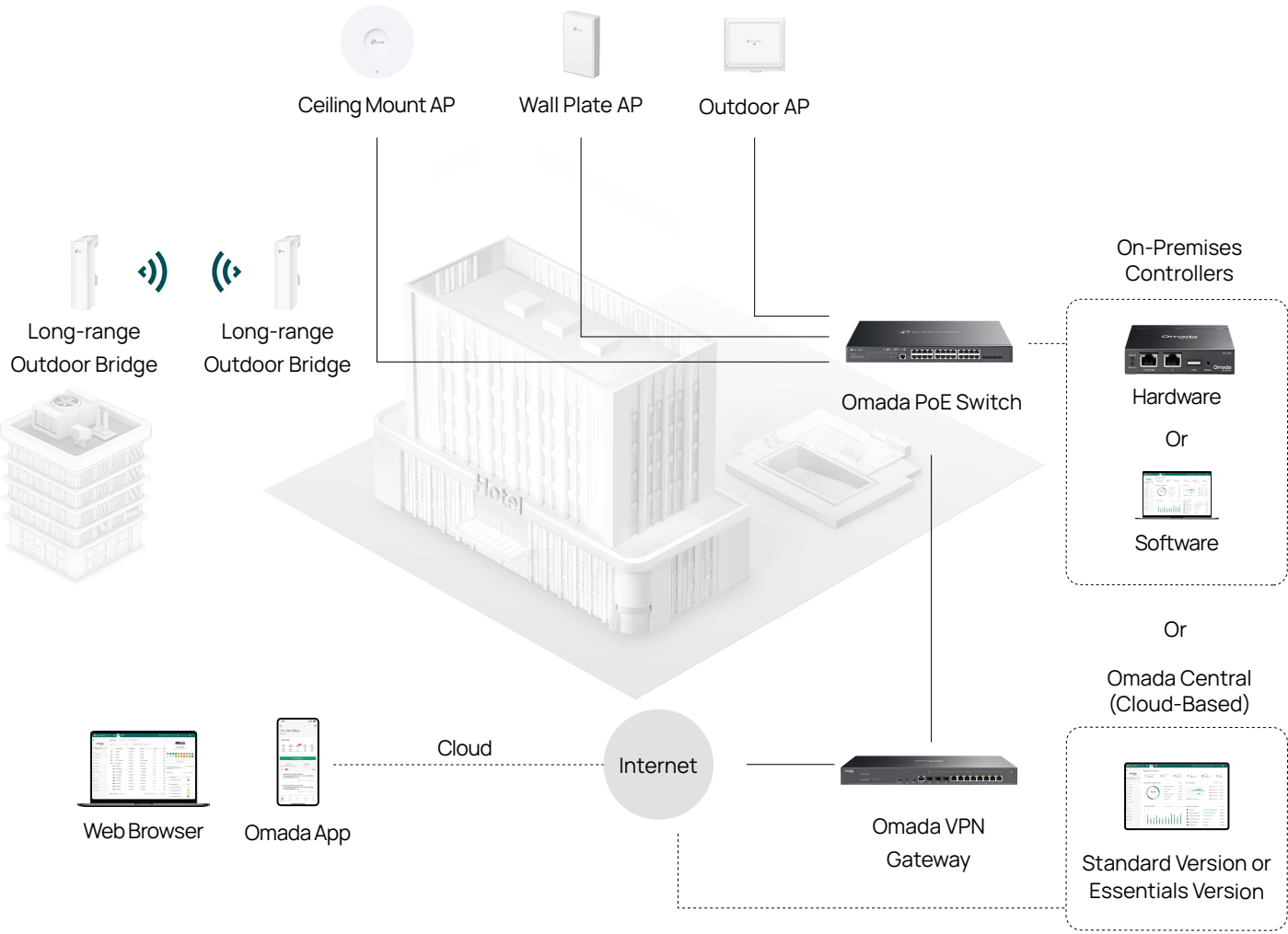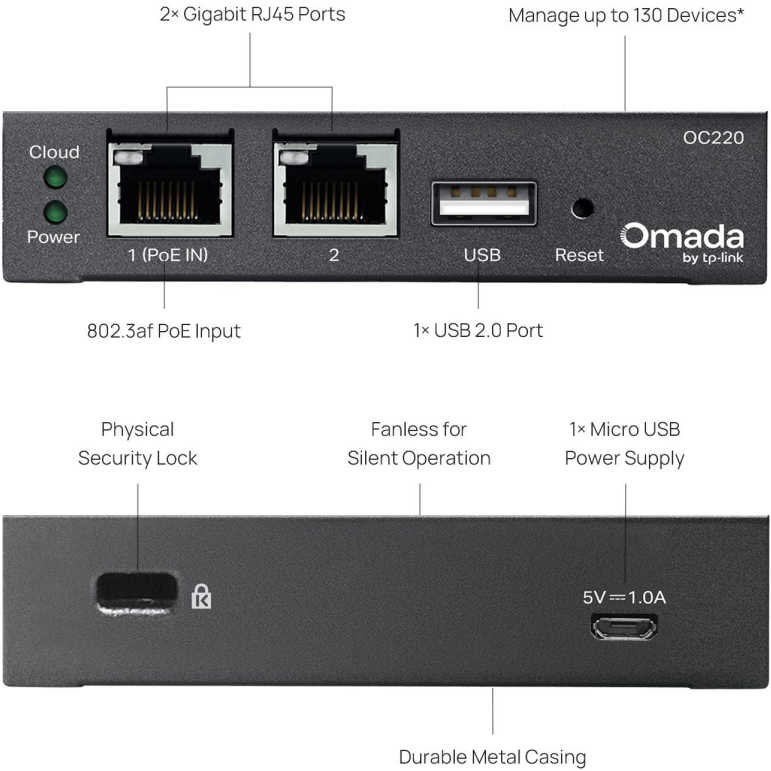# Hardware Controller | Datasheet

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

Ceiling Mount AP

Wall Plate AP

Outdoor AP

Long-range
Outdoor Bridge

Long-range
Outdoor Bridge

Omada PoE Switch

On-Premises
Controllers

Hardware

Or

Software

Or

Omada Central
(Cloud-Based)

Cloud

Internet

Web Browser

Omada App

Omada VPN
Gateway

Standard Version or
Essentials Version

Product Pictures

2× Gigabit RJ45 Ports

Manage up to 130 Devices*

Cloud

Power

OC220

1 (PoE IN)

2

USB

Reset

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802.3af PoE Input

1× USB 2.0 Port

Physical
Security Lock

Fanless for
Silent Operation

1× Micro USB
Power Supply

5V ⎓ 1.0A

Durable Metal Casing

Desktop/Wall Mount

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OC220

Cloud

Power

1 (PoE IN)

2

USB

Reset

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1.0 in (25 mm)

3.9 in (98 mm)

3.9 in (100 mm)

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; 1 Micro-USB Port (only for power supply)
	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	11.2 W (powered by a PoE device, with USB 2.0 connected); 3.5 W (powered via Micro-USB port, no USB 2.0 connected)
	Dimensions	3.9 × 3.9 × 1.0 in (100 × 98 × 25 mm)
	Net Weight	0.305 Kg
	MTBF	1475648H @25℃ 733104H @40℃
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	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: Gateway: 64 Switch: 32*** 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 acutual number depens on the device capability.

Model		OC220
Network Management	Wired Network	√
	Wireless Network	√
	WLAN Optimization	√
	Network Security (ACL/URL Fitering/Attack Defense)	√
	Transmission (Routing/NAT/Session Limit/Bandwidth Control)	√
	VPN (IPSec/L2TP/PPTP/OpenVPN/WireGuard VPN)	√
	Portal (Voucher/Local User/SMS/RADIUS/External Portal Server)	√
	802.1x	√
	RADIUS (Authentication/MAC Auth/Accounting)	√
Device Management	Management Device Type	Omada EAP, Omada Switch*, Omada Gateway*, DeltaStream GPON OLTs*
	Management Scale**	100APs, 10 Gateways, up to 20 Switches, up to 2 DeltaStream GPON OLTs 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 (Performance/Switch Statistics)	√
	Network topology	√
	Network Map	√
	Devices List (Custom Table)	√
	Clients List (Custom Table)	√
	Insights (Known Clients/Past Connections/Past Portal Authorizations/Rogue APs)	√
	Logs (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.