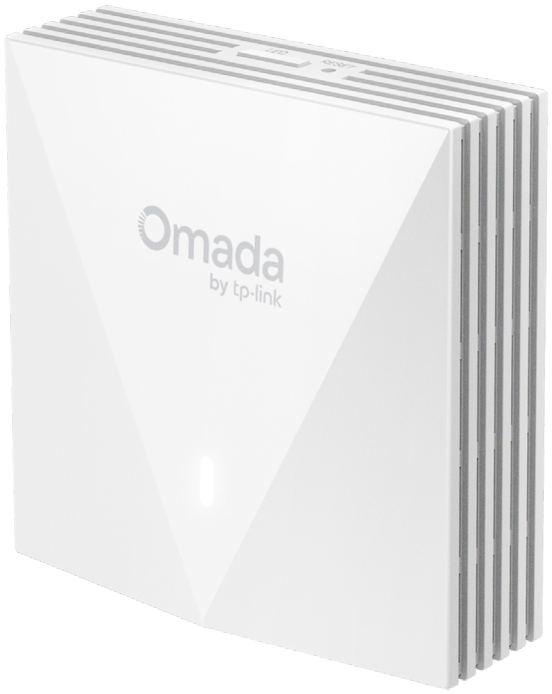
EAP Datasheet

EAP650-Wall

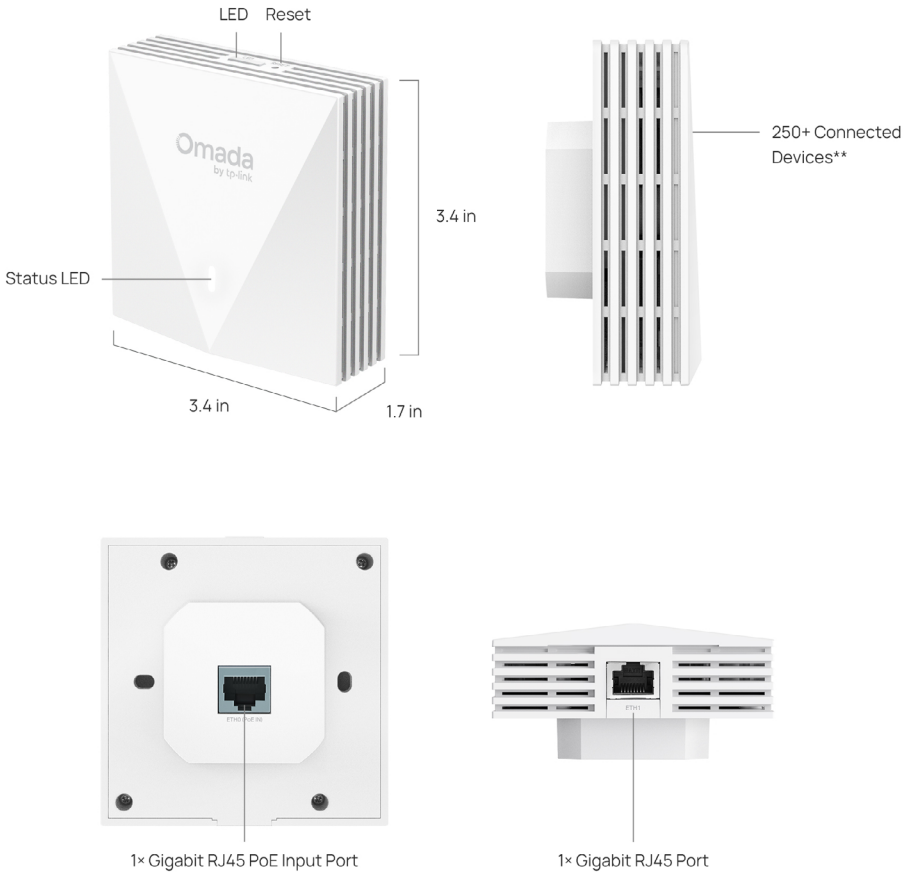
AX3000 Wall Plate Wi-Fi 6 Access Point



Highlights

- Up to 2976 Mbps WiFi 6 Speeds: 574 Mbps on 2.4 GHz and 2402 Mbps on 5 GHz.*
- Full in-room WiFi coverage for a seamless network.
- Connect wired devices with one downlink gigabit port.
- Features an easy-to-install design and supports 802.3af PoE for easy installation.
- Advanced Functions: Centralized management, Mesh, and Seamless Roaming.*

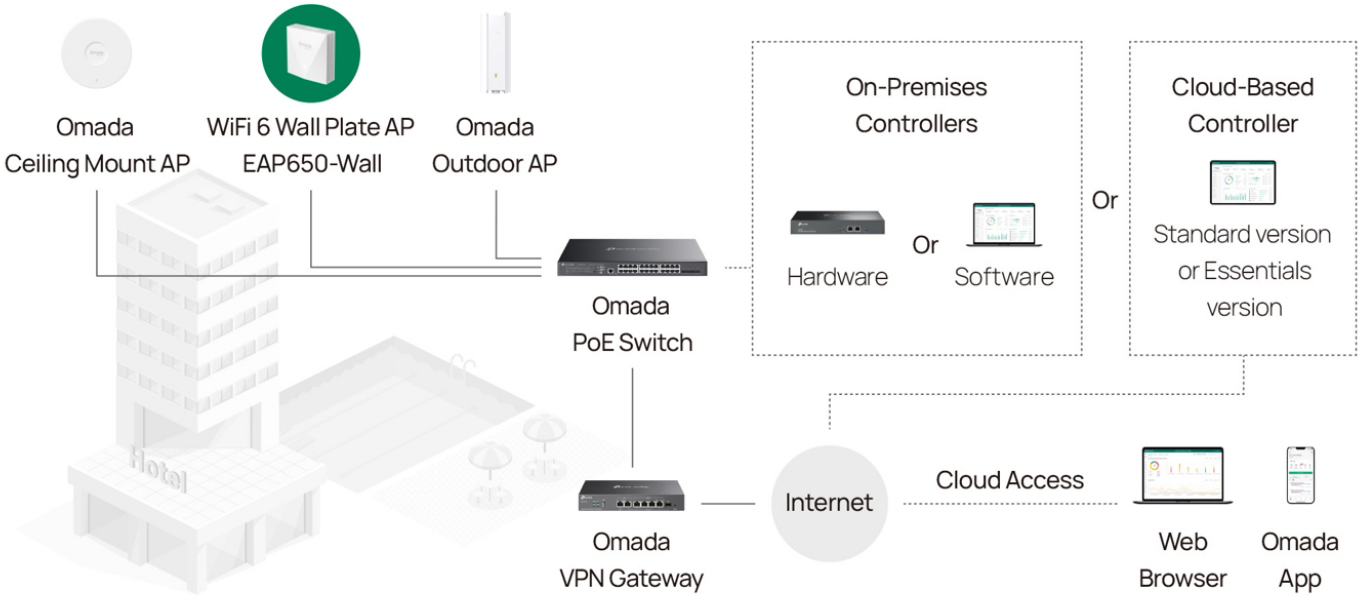
Product Pictures



**The actual capacity depends on the wireless environment and client traffic and is generally less than the maximum number of client connections.

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.



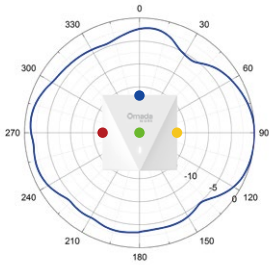
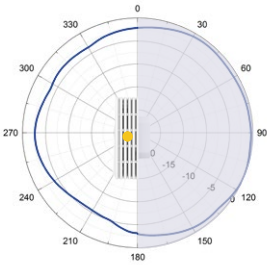
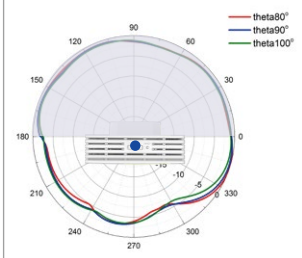
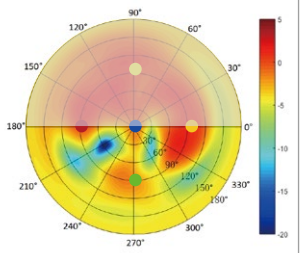
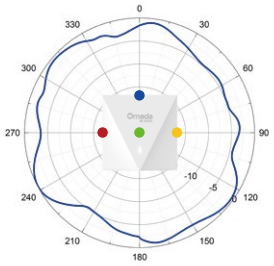
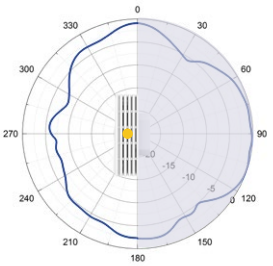
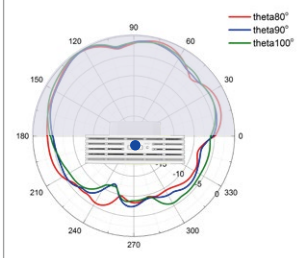
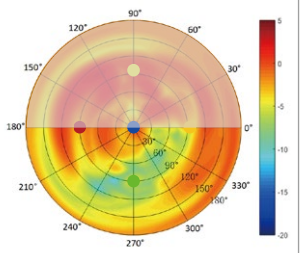
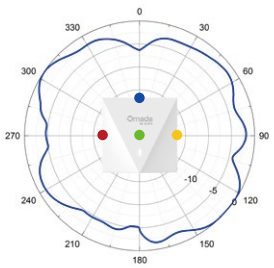
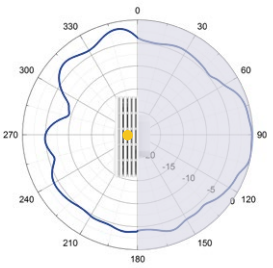
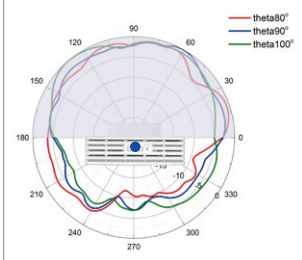
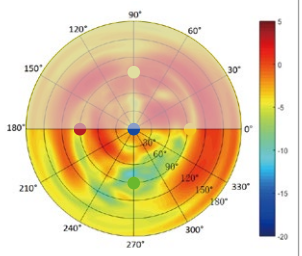
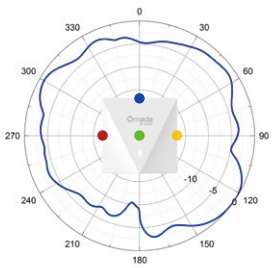
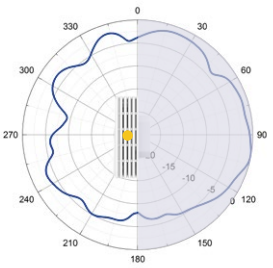
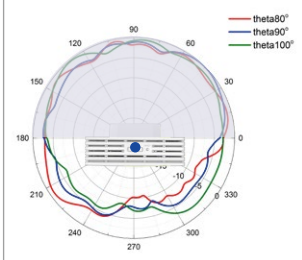
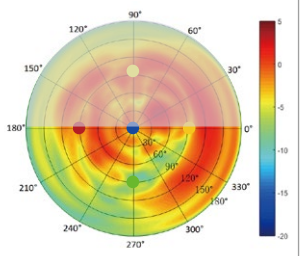
Specifications

Model		EAP650-Wall
Name		AX3000 Wall Plate Wi-Fi 6 Access Point
Main Design	LAN Interfaces	2x Gigabit Ethernet Port
	Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax
	Maximum Data Rate	574 Mbps (2.4 GHz) + 2402 Mbps (5 GHz)
	Wireless Client Capacity	250+
	Antennas	2.4 GHz: 2 x 3 dBi 5 GHz: 3 x 5 dBi
	Transmit Power	CE: < 20 dBm (2.4 GHz, EIRP); < 23 dBm (5 GHz, EIRP)
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, WPA3-Personal/Enterprise
	802.1X Support	•

Model		EAP650-Wall
Wireless Function	Multiple SSIDs	16 (8 on each band)
	Enable/Disable Wireless Radio	•
	Channel	EU: 2G:1 - 13 5G: 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140
	Enable/Disable SSID Broadcast	•
	Guest Network	•
	Automatic Channel Assignment	•
	Transmit Power Control	Adjust transmit Power on dBm
	Reception Sensitivity	2.4GHz: 11ax HE20 MCS0: -95dBm; 11ax HE20 MCS11:-66dBm 11ax HE40 MCS0: -93dBm; 11ax HE40 MCS11:-64dBm 5GHz: 11ax HE20 MCS0: -95dBm; 11ax HE20 MCS11: -65dBm 11ax HE40 MCS0: -92dBm; 11ax HE40 MCS11: -63dBm 11ax HE80 MCS0: -88dBm; 11ax HE80 MCS11: -59dBm 11ax HE160 MCS0: -85dBm; 11ax HE160 MCS11: -56dBm
	QoS (WMM)	•
	Seamless Roaming	•
	Mesh	•
	Beamforming	•
	MU-MIMO	2x2 MU-MIMO DL/UL
	MIMO	2*2 (2.4G and 5G) MU-MIMO 2*2 (2.4G and 5G) SU-MIMO
	OFDMA	UL/DL OFDMA
	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	802.11ax	8 Mbps to 2402 Mbps (MCS0-MCS11, NSS = 1 to 2 HE20/40/80/160)
	802.11ac	6.5 Mbps to 2166.7 Mbps (MCS0-MCS9, NSS = 1 to 2 VHT20/40/80/160)
	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

Model		EAP650-Wall
Management	LED ON/OFF Control	•
	Management MAC Access Control	•
	Web-based Management	•
	SNMP	v1, v2c, v3
	SSH	•
	Restore & Backup	•
	Firmware update via Web	•
	NTP	•
	System Log	•
	Email Alerts	•
Physical & Environment	Power Supply	802.3af PoE
	Maximum Power Consumption	EU: 10.5 W (For 802.3af PoE)
	Reset	•
	Mounting	Wall mouting (Kits included)
Others	Certifications	CE, RoHS
	Dimensions (W x D x H)	3.4 × 3.4 × 1.7 in (86 × 86 × 42.2 mm)
	Net Weight	185.9g
	Enclosure Material / Rack Material	Top Cover: PC-V0 Middle Frame: PC-V0 Bottom Shell: Aluminum alloy ADC-12
	Environment	Operating Temperature: 0 °C–40 °C (32 °F–104 °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

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

Disclaimers

* Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage are not guaranteed. They 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.

* The actual capacity depends on the wireless environment and client traffic and is generally less than the maximum number of client connections.

* Use of WiFi 6 (802.11ax) and its features, including OFDMA and 1024-QAM, require clients to support the corresponding features.

* Omada Mesh, Seamless Roaming, and Captive Portal require Omada SDN controllers. Go to https://www.tp-link.com/en/omada-mesh/product-list/ to find all the models supported by Omada mesh technology, and refer to the User Guides of Omada SDN controllers for configuration methods.

* Zero-Touch Provisioning and Auto Channel Selection and Power Adjustment require the use of Omada Cloud-Based Controller. Go to https://www.tp-link.com/en/omada-cloud-based-controller/product-list/ to confirm which models are compatible with Omada Cloud-Based Controller.

* Coverage value is calculated based on laboratory testing. Actual coverage is not guaranteed and will vary as a result of client limitations and environmental factors.

* 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.

* 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: **https://www.omadanetworks.com**. Specifications are subject to change without notice.