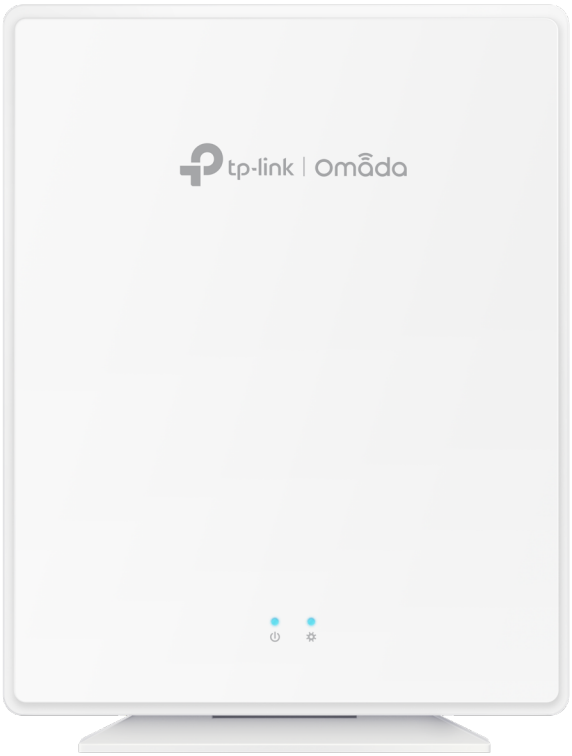
EAP | Datasheet

EAP650-Desktop

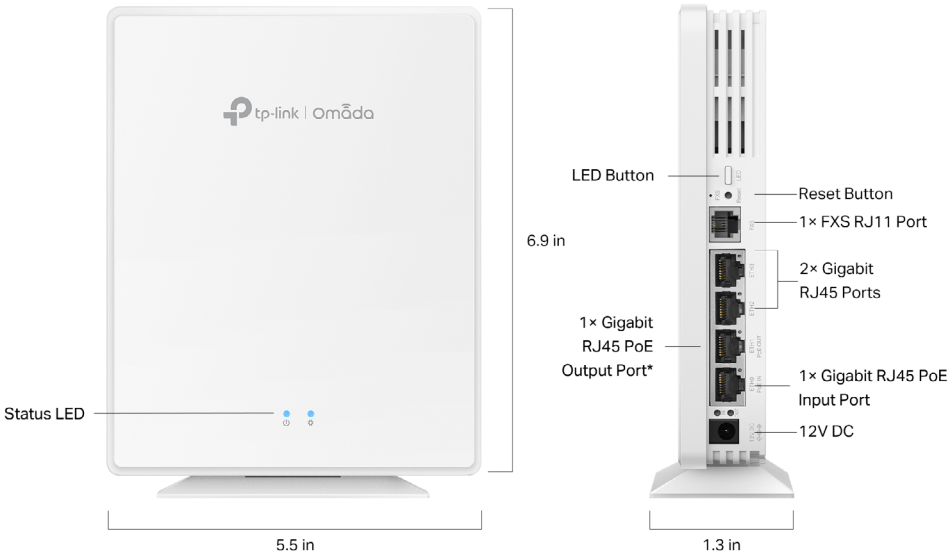
AX3000 Desktop Wi-Fi 6 Access Point

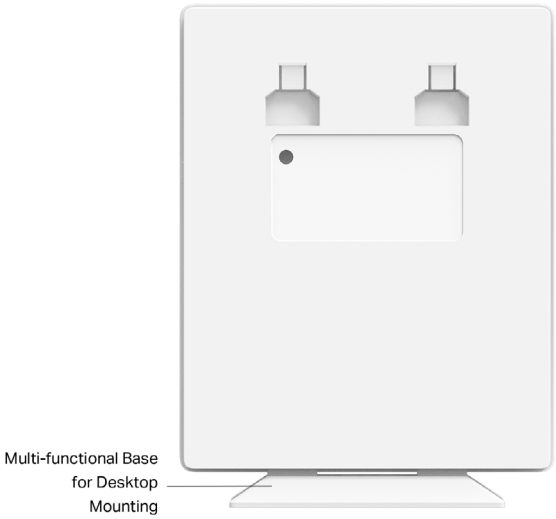


Highlights

- **Blazing-Fast AX3000 WiFi 6 Speeds:** 574 Mbps on 2.4 GHz and 2402 Mbps on 5GHz totals 2976 Mbps WiFi speeds. *
- **Multiple Gigabit Ports:** Connect multiple devices with 4× Gigabit Ethernet Ports.
- **Convenient Deployment:** Supports both 802.3bt PoE++ and DC (adapter included) for easy and quick deployment.
- **No Installation needed:** Supports desktop installation without the need for permanent setup.
- **High Flexibility:** Provide flexible installation solutions for both desktop and wall mounting.
- **Stay Smooth with Seamless Roaming:** Users can enjoy seamless streaming across the property with their devices switching effortlessly between access points. *
- **Centralized Cloud Management:** Integrates with the Omada SDN platform for Centralized Management. *

Product Pictures





*The PoE-out feature requires 802.3at/bt PoE Input.

Specifications

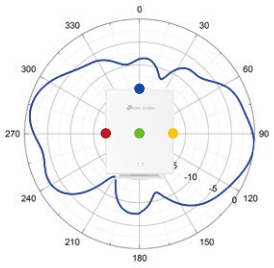
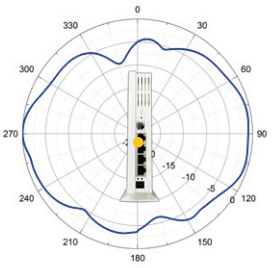
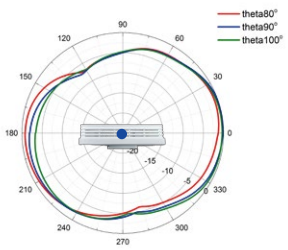
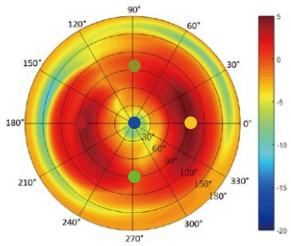
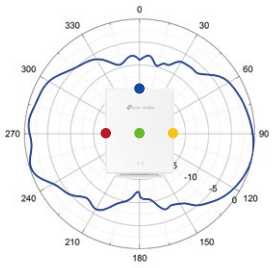
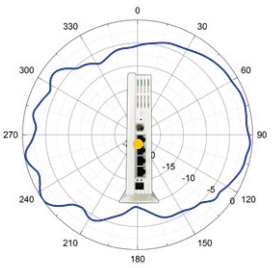
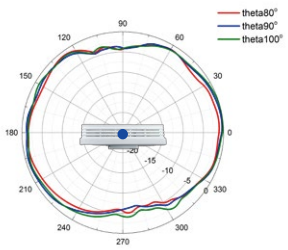
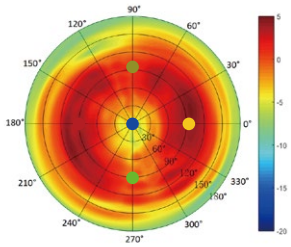
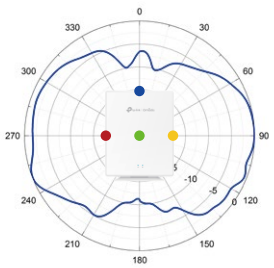
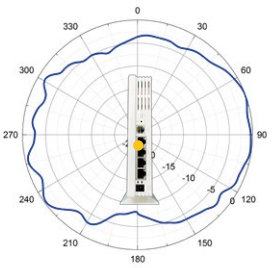
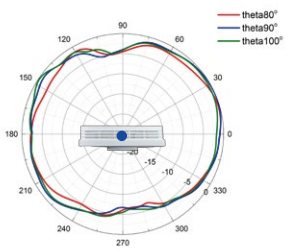
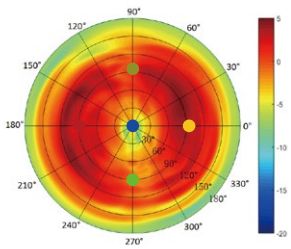
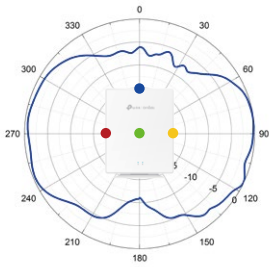
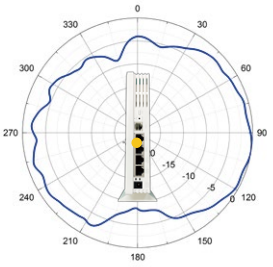
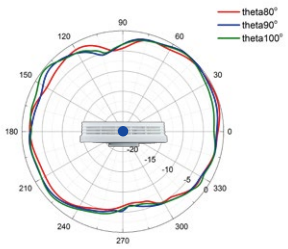
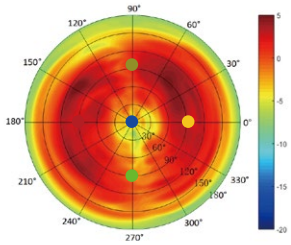
Model		EAP650-Desktop
Name		AX3000 Desktop Wi-Fi 6 Access Point
Main Design	Interfaces	4 x 1Gbps Ethernet Ports + 1 x FXS Port (One Ethernet port supports PoE Out: 802.3at/af output at 802.3bt input, 802.3af class 2 output at 802.3at input)
	Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax
	Maximum Data Rate	574 Mbps (2.4 GHz) +2402 Mbps (5 GHz)
	Wireless Client Capacity	250+
	Antennas	2.4 GHz: 2x 5 dBi 5 GHz: 3x 4.7 dBi
	Transmit Power	CE: < 20 dBm (2.4 GHz, EIRP); < 23 dBm (5 GHz, band 1&band 2, EIRP); < 29 dBm (5 GHz, band 3, EIRP); FCC: < 26 dBm (2.4 GHz); < 27 dBm (5 GHz)
	Reception Sensitivity	2.4GHz: 11ax HE20 MCS0:-95.5dBm; 11ax HE20 MCS11:-65.5dBm 11ax HE40 MCS0:-94dBm; 11ax HE40 MCS11:-64.5dBm 5GHz: 11ax HE20 MCS0:-94.5dBm; 11ax HE20 MCS11:-64.5dBm 11ax HE40 MCS0:-92.5dBm; 11ax HE40 MCS11:-62.5dBm 11ax HE80 MCS0:-90dBm; 11ax HE80 MCS11:-60.5dBm 11ax HE160 MCS0:-86.5dBm; 11ax HE160 MCS11:-57dBm
Centralized Management	Omada Software Controller	•
	Omada Hardware Controller	•
	Omada Cloud-Based 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-Desktop
Wireless Function	Multiple SSIDs	16 (8 on each band)
	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 US: 2G:1-11 5G: 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140,149,153,157,161,165
	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	2*2 MU-MIMO DL/UL
	MIMO	2×2 (2.4G & 5G) MU-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 866 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-Desktop			
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	802.3 af/at/bt PoE or 12V/1.5A DC *PoE Out requires 802.3at/bt PoE power supply			
	Maximum Power Consumption	**Mode**	**Power Consumption**	**System Configuration**	**Wi-Fi Radios**
		DC power	EU: 15.8W US: 16.8W (PoE Out off)	• 4*1Gbps Ethernet Enable • BLE Enable • FXS Enable • PoE Out Disable	EU: 2.4GHz(2x2) Tx 20dBm (EIRP) 5GHz(2x2) Tx 23dBm(band 1&band 2, EIRP), 29 dBm (band 3, EIRP) US: 2.4GHz(2x2) Tx 26dBm 5GHz(2x2) Tx 27dBm(band 1&band 4), 23.5 dBm (band 2&band 3)
		802.3bt	EU: 18.7W US: 19.9W (PoE Out off)	• 4*1Gbps Ethernet Enable • BLE Enable • FXS Enable • PoE Out Enable Supports 802.3at/af (selectable)	EU: 2.4GHz(2x2) Tx 20dBm (EIRP) 5GHz(2x2) Tx 23dBm(band 1&band 2, EIRP), 29 dBm (band 3, EIRP) US: 2.4GHz(2x2) Tx 26dBm 5GHz(2x2) Tx 27dBm(band 1&band 4), 23.5 dBm (band 2&band 3)
		802.3at	EU: 18.7W US: 19.9W (PoE Out off)	• 4*1Gbps Ethernet Enable • BLE Enable • FXS Enable • PoE Out Enable Supports 802.3af class2(selectable)	EU: 2.4GHz(2x2) Tx 20dBm (EIRP) 5GHz(2x2) Tx 23dBm(band 1&band 2, EIRP), 29 dBm (band 3, EIRP) US: 2.4GHz(2x2) Tx 26dBm 5GHz(2x2) Tx 27dBm(band 1&band 4), 23.5 dBm (band 2&band 3)
		802.3af	EU: 10W US: 12W (PoE Out off)	• 4*1Gbps Ethernet Enable • BLE Enable • FXS Enable • PoE Out Disable	EU: 2.4GHz(2x2) Tx 20dBm (EIRP) 5GHz Disable US: 2.4GHz(2x2) Tx 26dBm 5GHz Disable
	Reset	•			
	Mounting	Desktop / Wall mouting (Kits included)			

Model		EAP650-Desktop
Others	Certifications	CE, FCC, RoHS, IC
	Dimensions (W x D x H)	175×140×33 mm
	Net Weight	452g (excluding mounting base)
	Enclosure Material / Rack Material	Shell: PC Mounting base: PC
	Lightning Protection	AC 2KV (Adapter)
	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

EAP650-Desktop				
	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.
* 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.
* Use of WiFi 6 (802.11ax) and its features, such as 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, 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.

Some models featured in this guide may be unavailable in your country or region. Visit TP-Link website for local sales information: **https://www.tp-link.com**. Specifications are subject to change without notice.