EAP | Datasheet

EAP653 UR

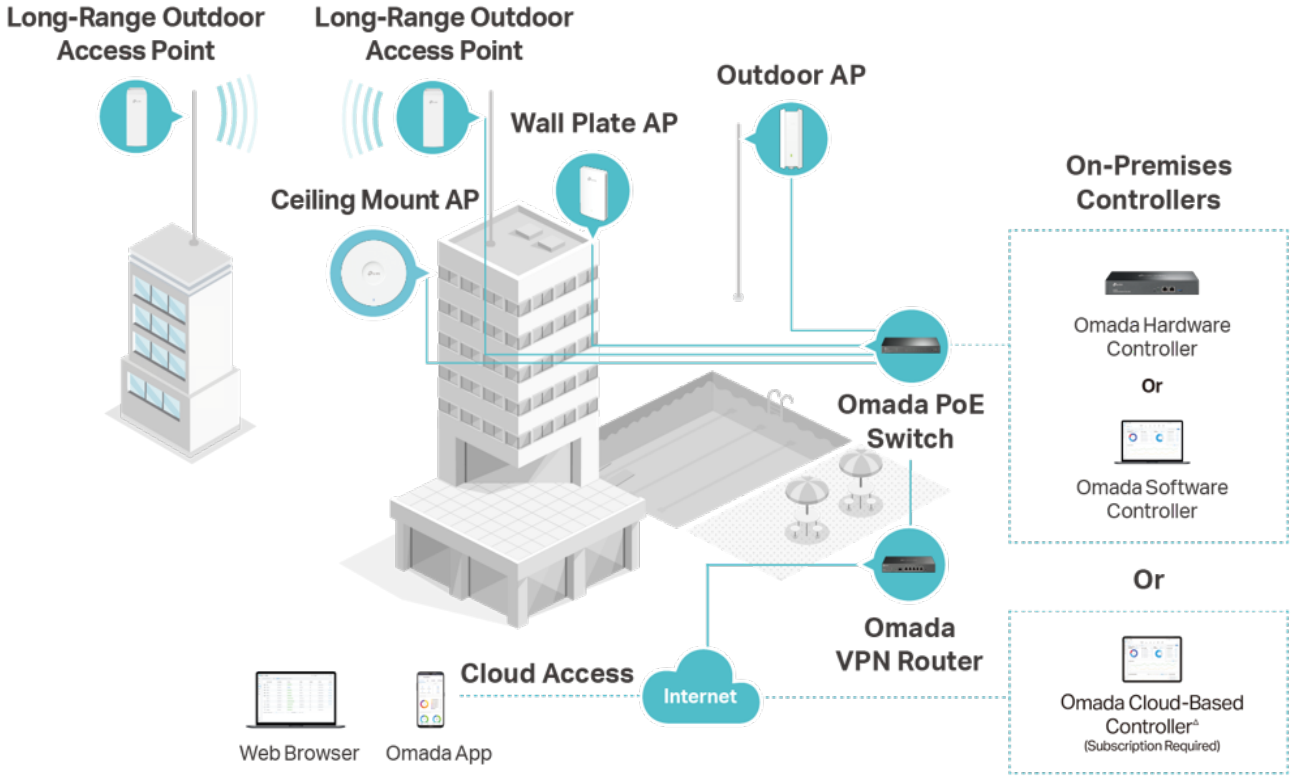
AX3000 Ceiling Mount Wi-Fi 6 Access Point

Highlights

- Ultra-fast WiFi 6 speeds: 2402 Mbps on 5 GHz + 574 Mbps on 2.4 GHz*
- Ultra-range wireless coverage by more antennas with higher transmit power
- Supports WiFi 6 technologies, such as HE160, 1024-QAM, etc*
- Advanced Features: Omada Mesh, Seamless Roaming, etc*
- PoE+ Powered: Supports both 802.3at PoE+ and DC (adapter not included)
- Ultra-Slim Design: Φ6.3 in × 1.3 in elegant design brings more agility
- Integrates with the Omada SDN platform for centralized management

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.



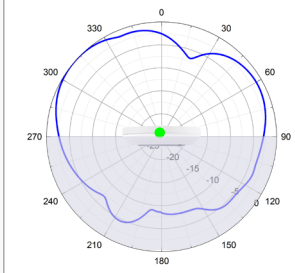
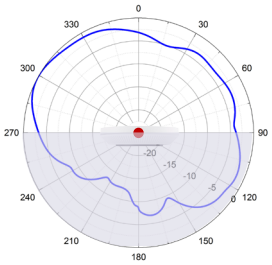
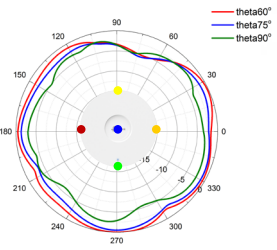
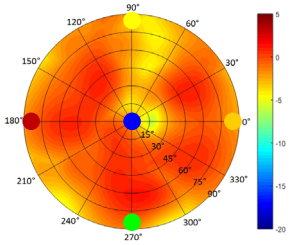
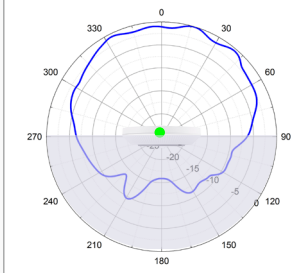
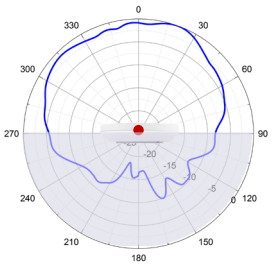
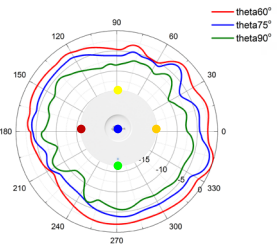
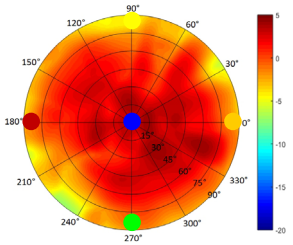
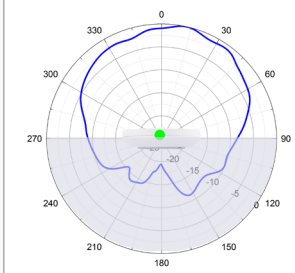
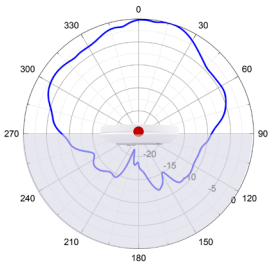
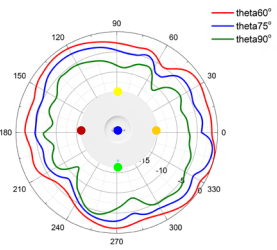
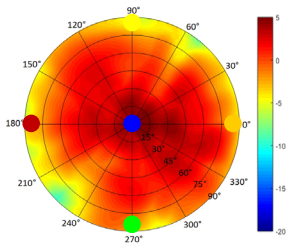
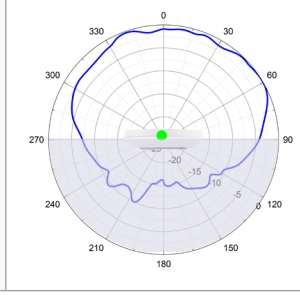
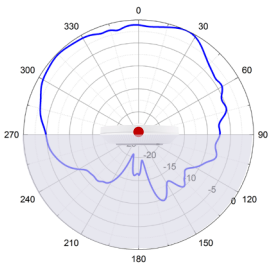
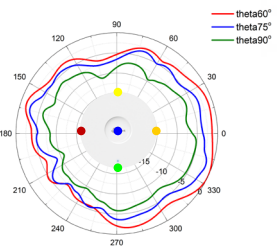
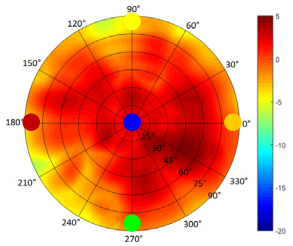
Specifications

Model		EAP653 UR
Name		AX3000 Ceiling Mount Wi-Fi 6 Access Point
Main Design	LAN Interfaces	1x 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	2.4GHz: 2*3dBi 5GHz: 3*2dBi
	Transmit Power	CE: < 20 dBm (2.4 GHz, EIRP); < 23 dBm (5 GHz, Band1&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:-96dBm; 11ax HE20 MCS11:-66dBm 11ax HE40 MCS0:-94dBm; 11ax HE40 MCS11:-64dBm 5GHz: 11ax HE20 MCS0:-95dBm; 11ax HE20 MCS11:-65dBm 11ax HE40 MCS0:-93dBm; 11ax HE40 MCS11:-63dBm 11ax HE80 MCS0:-91dBm; 11ax HE80 MCS11:-61dBm 11ax HE160 MCS0:-87dBm; 11ax HE160 MCS11:-58dBm
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		EAP653 UR
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	2G 2*2 MU-MIMO DL/UL 5G 3*3 MU-MIMO DL/UL
	MIMO	2*2 (2.4GHz) and 3*3 (5GHz) 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 2166.7 Mbps (MCS0-MCS11, 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
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	•

Model		EAP653 UR
Physical & Environment	Power Supply	48V Passive PoE or 802.3at PoE or 12V/1.5A DC DC and PoE Adapter Is Not Included
	Maximum Power Consumption	EU:14.2W (For PoE); 12.5W (For DC) US:15.5W (For PoE); 13.8W (For DC)
	Reset	•
	Mounting	Ceiling / Wall mouting (Kits included) / Junction Box mouting
	Certifications	CE, FCC, RoHS, IC
	Dimensions (W x D x H)	160 x 160 x 33.6 mm
	Net Weight	352g
	Enclosure Material / Rack Material	Top cover: PC Bottom shell: aluminum alloy Mounting rack: stainless steel
	Lightning Protection	Air discharge: ±8kV Contact discharge: ±4kV Common mode 10/700: ±4kV
	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

EAP653 UR				
	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 and 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.

* Use of WiFi 6 (802.11ax) and its features, including OFDMA, HE160, and 1024-QAM, require clients to support the corresponding features. The 160 MHz bandwidth is only available on the 5 GHz band. It may be unavailable in some regions/countries due to regulatory restrictions. The double channel width refers to 160 MHz compared to 80 MHz for general WiFi 6 APs.

* Omada Mesh, Seamless Roaming, Captive Portal, and Cloud Access require the use of 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 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.

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

* 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.

* 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.tp-link.com**. Specifications are subject to change without notice.