

# Omada Business Cloud SDN Solution

Omada EAP - Business Wi-Fi Series



Omada SDN Controller



EAP653

# EAP Product List

## Ceiling Mount 802.11ax Wi-Fi 6 AP

Picture	
Model	EAP653
Product	AX3000 Ceiling Mount Dual-Band Wi-Fi 6 Access Point
Speed	2.4 GHz: 574 Mbps 5 GHz: 2402 Mbps
Ethernet Port	1x Gigabit Ethernet Port
Power Supply	<p><b>V2:</b> 48V Passive PoE or 802.3at PoE or 12V/1.2A DC PoE Adapter Is Not Included</p> <p><b>V1:</b> EU: 48V Passive PoE or 802.3at PoE or 12V/1A DC US: 48V Passive PoE or 802.3at PoE or 12V/1.5A DC PoE Adapter Is Not Included</p>
Internal Antennas	<p><b>V2:</b> 2.4 GHz: 2x 3 dBi 5 GHz: 3x 5 dBi (one auxiliary antenna included)</p> <p><b>V1:</b> 2.4 GHz: 2x 4 dBi 5 GHz: 2x 5 dBi</p>

# Specifications

## Ceiling Mount 802.11ax Wi-Fi 6 AP

Model		EAP653
Name		AX3000 Ceiling Mount Dual-Band 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	V2: 2.4 GHz: 2x 3 dBi 5 GHz: 3x 5 dBi (one auxiliary antenna included) V1: 2.4 GHz: 2x 4 dBi 5 GHz: 2x 5 dBi
Transmit Power	V2: CE: < 20 dBm(2.4 GHz, EIRP); <23 dBm (5 GHz,band 1&band 2,EIRP); < 27 dBm(5 GHz, band 3,EIRP); FCC: < 24 dBm(2.4 GHz); < 25dBm (5 GHz) V1: CE: < 20 dBm (2.4 GHz, EIRP); < 23 dBm (5 GHz, band1&band 2, EIRP); < 27 dBm (5 GHz, band 3, EIRP); FCC: < 22 dBm (2.4 GHz); < 22 dBm (5 GHz)	
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	•

# Ceiling Mount 802.11ax Wi-Fi 6 AP

Model		EAP653
Wireless Function	Multiple SSIDs	16 (8 on each band)
	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	•
	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		•

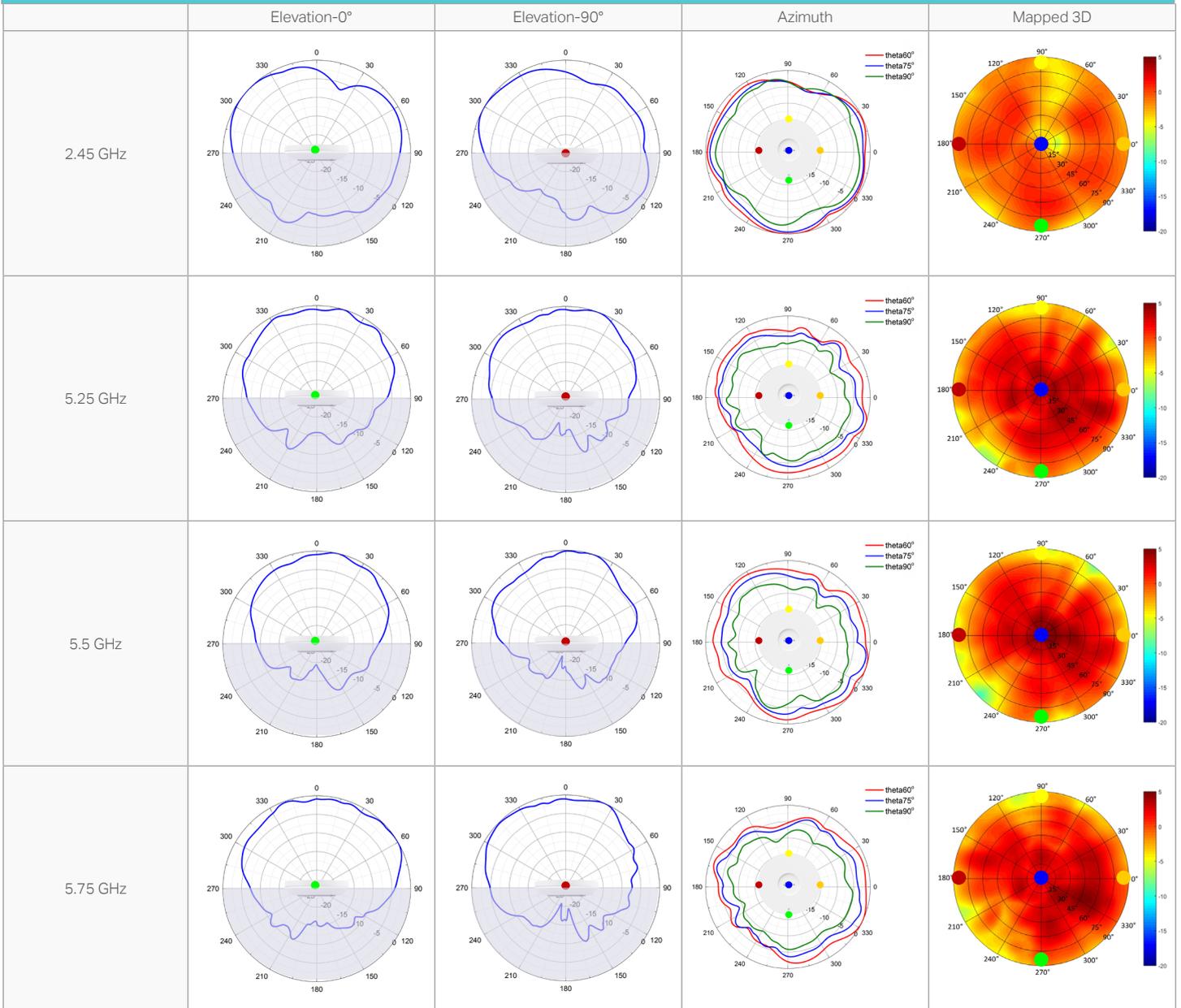
## Ceiling Mount 802.11ax Wi-Fi 6 AP

Model		EAP653
Physical & Environment	Power Supply	<p><b>V2:</b> 48V Passive PoE or 802.3at PoE or 12V/1.2A DC PoE Adapter Is Not Included</p> <p><b>V1:</b> EU: 48V Passive PoE or 802.3at PoE or 12V/1A DC US: 48V Passive PoE or 802.3at PoE or 12V/1.5A DC PoE Adapter Is Not Included</p>
	Maximum Power Consumption	<p><b>V2:</b> EU: 13.3 W (For PoE); 11.8 W (for DC) US: 14.7 W (For PoE); 12.6 W (for DC)</p> <p><b>V1:</b> EU: 13.07 W (For PoE); 11.76 W (for DC) US: 13.98 W (For PoE); 12.58 W (for DC)</p>
	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
	Environment	<p>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;</p>

# Antenna Radiation Patterns

Ceiling Mount AP

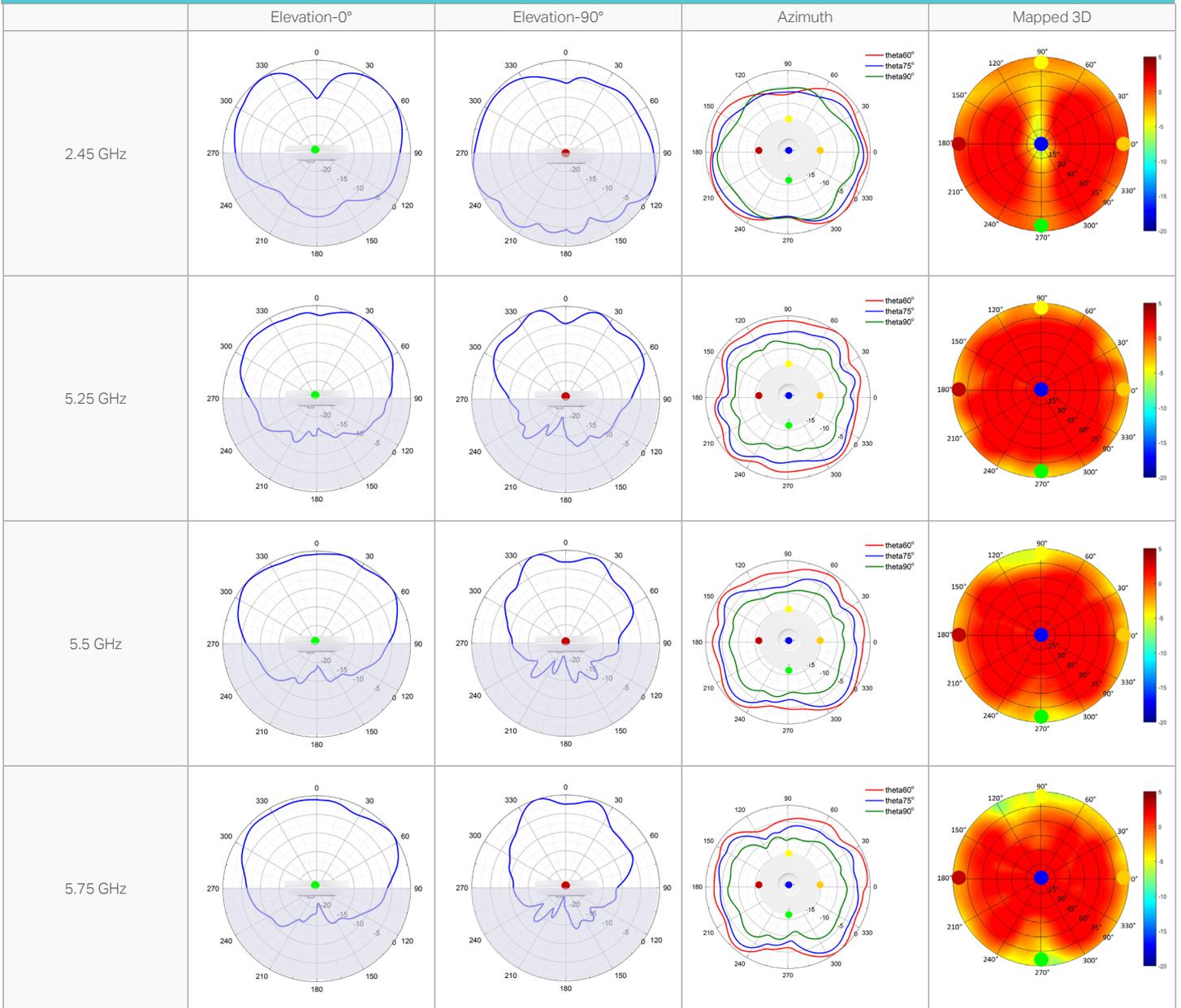
EAP653 V2



# Antenna Radiation Patterns

Ceiling Mount AP

EAP653 V1



# Disclaimers

## Wireless Speed and Range Disclaimer

Maximum wireless transmission rates are the physical rates derived from IEEE Standard 802.11 specifications. Range and coverage specifications were defined according to test results under normal usage conditions. Actual wireless transmission rate 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.

## Wireless Client Capacity Disclaimer

Wireless client capacity specifications were defined according to test results under normal usage conditions. Actual wireless client capacity is 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.

## Ethernet Port Limitation Disclaimer

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.

## MU-MIMO Disclaimer

(Only for certain devices)

MU-MIMO capability requires client devices that also support MU-MIMO.

## Seamless Roaming Disclaimer

(Only for certain devices)

Seamless roaming requires both the access point and client devices to support 802.11k and 802.11v protocols.

## Lightning and Electro-Static Discharge Protection Disclaimer

(Only for outdoor devices)

Protection against lightning and electro-static discharge may be achieved through proper product setup, grounding and cable shielding. Refer to the instruction manual and consult an IT professional to assist with setting up this product.

## PoE Disclaimer

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: [www.tp-link.com](http://www.tp-link.com). Specifications are subject to change without notice.

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