

Omada

Business Cloud SDN Solution

Omada EAP - Business Wi-Fi Series



Omada SDN Controller



EAP650-Outdoor

EAP Product List

Outdoor 802.11n/ac/ax AP

Picture	
Model	EAP650-Outdoor
Product	AX3000 Indoor/Outdoor Wi-Fi 6 Access Point
Speed	2.4 GHz: 574 Mbps 5 GHz: 2402 Mbps
Ethernet Port	1x Gigabit Ethernet Port
Power Supply	802.3at PoE / 48V Passive PoE
Internal Antennas	2 Internal Dual-Band Omni Antennas 2.4 GHz: 4 dBi; 5 GHz: 5 dBi

Specifications

Outdoor 802.11ax AP

Model		EAP650-Outdoor
Name		AX3000 Indoor/Outdoor Wi-Fi 6 Access Point
Main Design	LAN Interfaces	1x Gigabit Ethernet Port
	Wi-Fi Standards	IEEE 802.11a/b/g/n/ac/ax
	Maximum Data Rate	574 Mbps (2.4 GHz) + 2402 Mbps (5 GHz)
	Wireless Client Capacity	250+
	Antennas	2 Internal Dual-Band Omni Antennas 2.4 GHz: 4 dBi; 5 GHz: 5 dBi
	Transmit Power	CE: < 20 dBm (2.4 GHz, EIRP), < 30 dBm (5 GHz, EIRP); FCC: < 25 dBm (2.4 GHz), < 25 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	•
Wireless Function	Multiple SSIDs	16 (8 for 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	8Mbps to 2402Mbps(MCS0-MCS11, NSS = 1 to 2 HE20/40/80/160)
	802.11ac	6.5 Mbps to 1083.3 Mbps (MCS0-MCS9, NSS = 1 to 2 VHT20/40/80)
	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

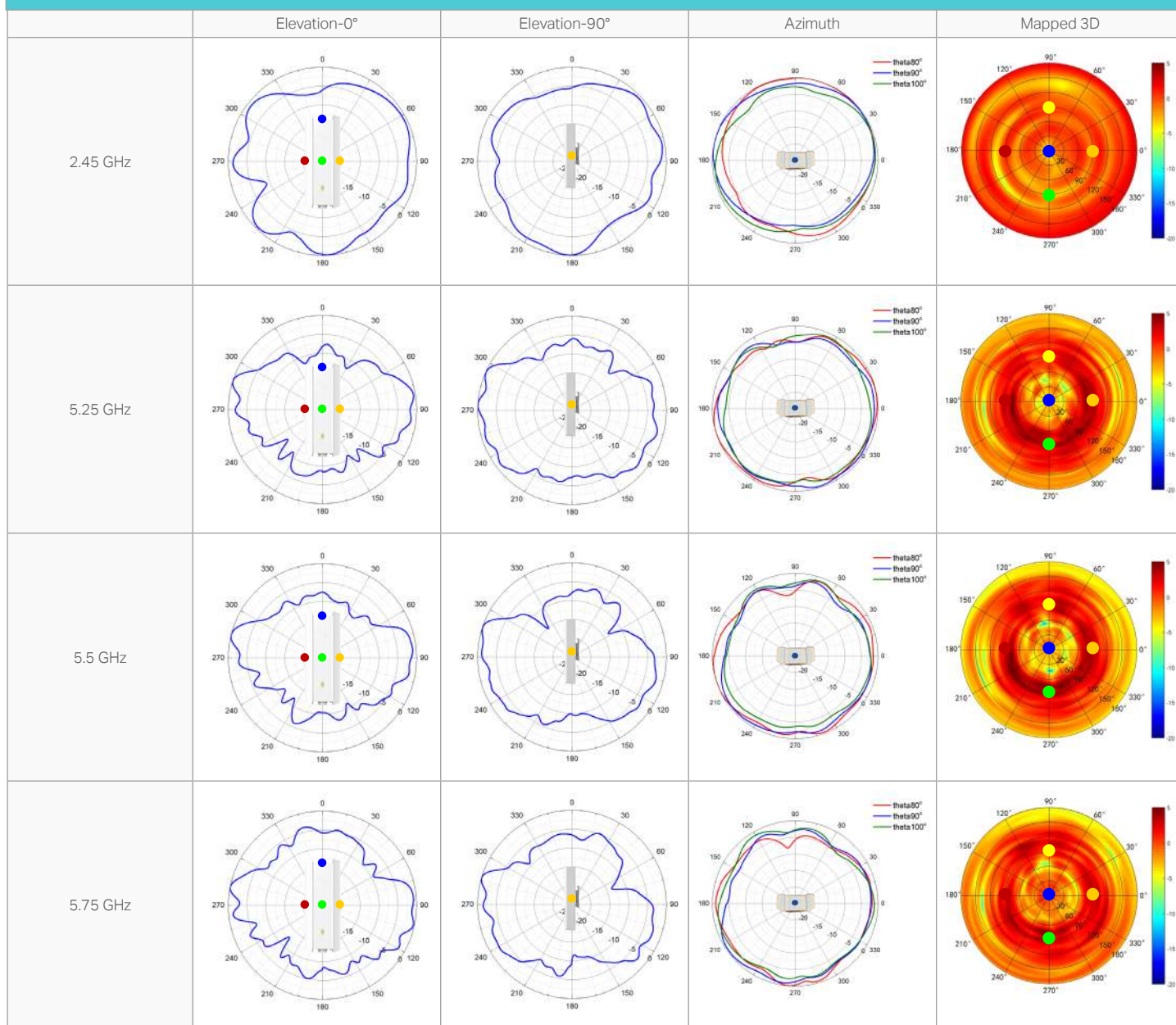
Outdoor 802.11ax AP

Model		EAP650-Outdoor
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	802.3at PoE or 48V Passive PoE (PoE Adapter Included)
	Maximum Power Consumption	EU: 12.5W (802.3at PoE or Passive PoE) US: 14.7W (802.3at PoE or Passive PoE)
	Reset	•
	Mounting	Pole/Wall mouting (Kits included)
Others	Certifications	CE, FCC, RoHS
	Dimensions (W x D x H)	280.4 × 106.5 × 56.8 mm
	Environment	Operating Temperature: -30 °C–70 °C (-22 °F–158 °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

Outdoor AP

EAP650-Outdoor



*EAP650-Outdoor is based on EAP610-Outdoor and adds a set of auxiliary antennas to combat outdoor interference. The two sets of antennas do not work at the same time, and the directivity of the auxiliary antenna will not be better than the original antenna.

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. Specifications are subject to change without notice.

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