

# Omada Business Cloud SDN Solution

Omada EAP - Business Wi-Fi Series




Omada SDN Controller



EAP690E HD

# EAP Product List

## Ceiling Mount 802.11ax Wi-Fi 6E AP

Picture	
Model	EAP690E HD
Product	AXE11000 Ceiling Mount Quad-Band Wi-Fi 6E Access Point
Speed	2.4 GHz: 1148 Mbps, 5 GHz-1: 2402 Mbps, 5 GHz-2: 2402 Mbps, 6 GHz: 4804 Mbps
Ethernet Port	1x 10Gbps Ethernet Port
Power Supply	802.3bt PoE or 12V/4.5A DC
Internal Antennas	2.4 GHz: 4 × 4.0 dBi, 5 GHz-1: 4 × 5.0 dBi (Smart Antennas), 5 GHz-2: 4 × 5.5 dBi (Smart Antennas), 6 GHz: 4 × 5.0 dBi

# Specifications

## Ceiling Mount 802.11ax Wi-Fi 6E AP

Model		EAP690E HD
Name		AXE11000 Ceiling Mount Quad-Band Wi-Fi 6E Access Point
Main Design	LAN Interfaces	1x 10Gbps Ethernet Port
	Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax
	Maximum Data Rate	1148 Mbps (2.4 GHz) + 2402 Mbps (5 GHz-1) + 2402 Mbps (5 GHz-2) + 4804 Mbps (6 GHz)
	Wireless Client Capacity	2000+
	Antennas	2.4 GHz: 4 × 4.0 dBi, 5 GHz-1: 4 × 5.0 dBi (Smart Antennas), 5 GHz-2: 4 × 5.5 dBi (Smart Antennas), 6 GHz: 4 × 5.0 dBi
	Bluetooth	1 × 4.0 dBi, Bluetooth 5.2 *Firmware update may be required.
	Transmit Power	CE: < 20 dBm (2.4 GHz, EIRP); < 23 dBm (5 GHz, band 1&band 2, EIRP); < 30 dBm (5 GHz, band 3, EIRP); <23dBm (6 GHz, EIRP) FCC:< 28 dBm (2.4 GHz); < 28 dBm (5 GHz, band 1); < 28 dBm (5 GHz, band 4); < 25 dBm (6 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, OWE
802.1X Support	•	
Wireless Function	Multiple SSIDs	32 (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	•	

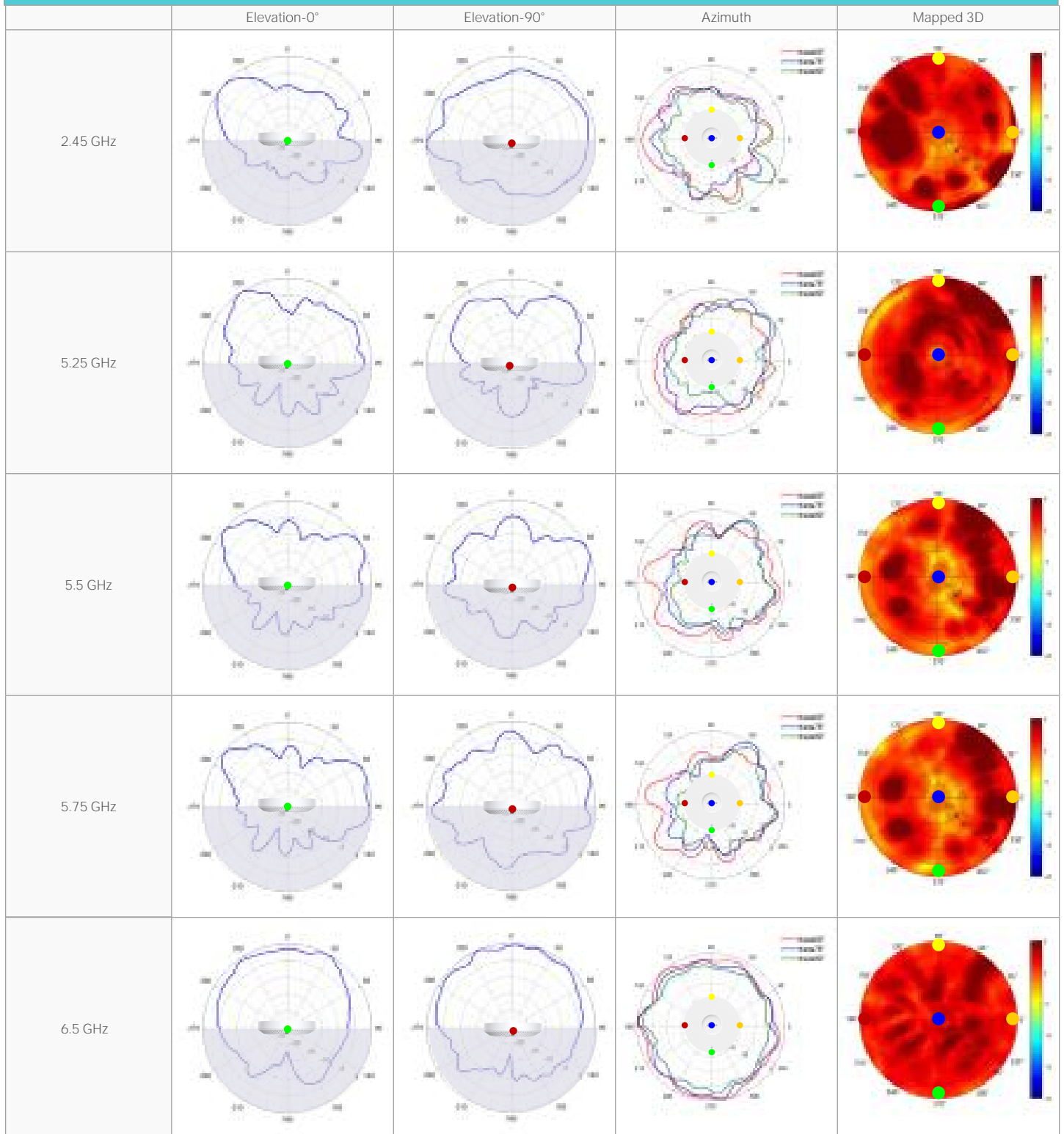
# Ceiling Mount 802.11ax Wi-Fi 6E AP

Model		EAP690E HD
Support Data Rates	802.11ax	2.4G Band: 8 Mbps to 1148 Mbps (MCS0-MCS11, NSS = 1 to 4 HE20/40) 5G-1/5G-2 Band: 8 Mbps to 2402 Mbps (MCS0-MCS11, NSS = 1 to 4 HE20/40/80) 6G Band: 8 Mbps to 4804 Mbps (MCS0-MCS11, NSS = 1 to 4 HE20/40/80/160)
	802.11ac	6.5 Mbps to 2166.7 Mbps (MCS0-MCS11, NSS = 1 to 4 VHT20/40/80)
	802.11n	6.5 Mbps to 600 Mbps(MCS0-MCS31, 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	•	
Physical & Environment	Power Supply	802.3bt PoE or 12V/4.5A DC
	Maximum Power Consumption	Support Smart Power Consumption Management EU: 44.9 W (802.3bt, full functionality); 40.6 W (12/4.5A, full functionality); 25.5 W (802.3at, 5GHz-2 and 6 GHz off); 12.95 W (802.3af, radio off, only main chip and LAN working) US: 50.5 W (802.3bt, full functionality); 44.2 W (12/4.5A, full functionality); 25.5 W (802.3at, 5GHz-2 and 6 GHz off); 12.95 W (802.3af, radio off, only main chip and LAN working)
	Reset	•
	Mounting	Ceiling / Wall mouting (Kits included)
Others	Certifications	CE, FCC, RoHS, IC
	Dimensions (W x D x H)	280 x 280 x 59.1 mm
	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

## Ceiling Mount AP

EAP690E HD



## 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.