

# EAP | Datasheet

### EAP683 UR

AX6000 Ceiling Mount WiFi 6 Access Point



## Highlights

- Up to 5952 Mbps WiFi 6 Speeds: 1148 Mbps on 2.4 GHz + 4804 Mbps on 5 GHz\*
- Supports WiFi 6 technologies, such as HE160, 1024-QAM, etc.\*
- Integrates with Omada SDN platform for centralized management.
- Advanced Features: Omada Mesh, Seamless Roaming, and more.\*
- PoE+ Powered: Supports both 802.3at PoE+ and DC (adapter not included).

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#### **Product Pictures**



#### **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		EAP683 UR	
Name		AX6000 Ceiling Mount Wi-Fi 6 Access Point	
	LAN Interfaces	1x 2.5Gbps Ethernet Port	
	Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax	
	Maximum Data Rate	2.4 GHz: 1148 Mbps, 5 GHz: 4804 Mbps	
	Wireless Client Capacity	2GHz: 256, 5GHz: 256	
	Antennas	2.4 GHz: 4 × 4.0 dBi, 5 GHz: 4 × 5.0 dBi	
	Transmit Power	CE: <20 dBm(2.4 GHz EIRP); <23dBm(5 GHz band 1 & band 2 EIRP); <28dBm(5 GHz band 3 EIRP)	
Main Design		FCC: <26 dBm(2.4 GHz); <26dBm(5 GHz)	
Main Dooigin		2.4GHz:	
		11ax HE20 MCS0:-95dBm;11ax HE20 MCS11:-65dBm	
		11ax HE40 MCS0:-92dBm;11ax HE40 MCS11:-64dBm	
	Reception Sensitivity	5GHz:	
	Reception Sensitivity	11ax HE20 MCS0:-94dBm;11ax HE20 MCS11:-64dBm	
		11ax HE40 MCS0:-91dBm;11ax HE40 MCS11:-61dBm	
		11ax HE80 MCS0:-88dBm;11ax HE80 MCS11:-58dBm	
		11ax HE160 MCS0:-85dBm;11ax HE160 MCS11:-55dBm	
	Omada Software	•	
	Controller		
Centralized	Omada Cloud-Based	•	
Management	Controller		
Management	Omada Hardware	•	
	Controller		
	Omada APP	•	
	Captive Portal	•	
	Authentication		
	Access Control	•	
	Maximum number of MAC	4000	
Security	Filter	4000	
	Wireless Isolation	•	
	between Clients		
	VLAN	•	
	Rogue AP Detection	•	
	Wireless Encryption	WPA-Personal/Enterprise, WPA2-Personal/Enterprise, WPA3-Personal/Enterprise, OWE	

Model		EAP683 UR			
	Multiple SSIDs	16 (8 on each band)			
		US: 2G:1~11; 5G: 36-48, 52-64 (DFS), 100-140 (DFS), 149-165			
	Channel	EU: 2G: 1~13; 5G: 36-48, 52-64 (DFS), 100-140 (DFS)			
	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	•			
Wireless	Beamforming	•			
Function	MU-MIMO	4*4 MU-MIMO DL&UL			
		4*4 (2.4G and 5G) MU-MIMO			
	MIMO	4*4 (2.4G and 5G) SU-MIMO			
	OFDMA	OFDMA UL/DL			
	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	•			
	802.11ax	2G Band: 8Mbps to 1148Mbps(MCS0—MCS11,NSS=1 to 4 HE20/40) 5G Band: 8Mbps to 4804Mbps(MCS0—MCS11, NSS=1 to 4 HE20/40/80/160)			
Support Data Rates	802.11ac	6.5Mbps to 4333Mbps(MCS0—MCS11,NSS=1 to 4 VHT20/40/80/160)			
	802.11n	6.5Mbps to 800Mbps (MCS0—MCS9,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			
	LED ON/OFF Control	•			
	Management MAC Access Control	•			
Management	Web-based Management	•			
	SNMP	v1, v2c, v3			
	SSH	•			
	Restore & Backup	•			
	Firmware update via Web	•			
	NTP	•			
	System Log	•			
	Email Alerts	•			
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Model		EAP683 UR
Physical & Environment	Power Supply	802.3at PoE or 12V/2A DC DC Power Adapter Is Not Included
	Maximum Power Consumption	EU: 20.43W(For PoE); 17.7W(For DC) US: 23.51W(For PoE); 20.63W(For DC)
	Reset	•
	Mounting	Ceiling / Wall mouting (Kits included)
	Certifications	CE, FCC, RoHS
	Dimensions (W x D x H)	220 x 220 x 32.5 mm
	Net Weight	694.6g
Others	Enclosure Material / Rack Material	Top cover: PC-V0 Bottom shell: aluminum alloy ADC-12 Mounting rack: SUS304 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**

	Elevation-0°	Elevation-90°	Azimuth	Mapped 3D
2.45 GHz			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	99° 60° 60° 180° 60° 60° 60° 180° 60° 60° 60° 180° 60° 60° 60° 60° 180° 60° 60° 60° 60° 60° 60° 60° 60° 60° 6
5.25 GHz			0 0 0 0 0 0 0 0 0 0 0 0 0 0	90 <sup>°</sup> 150 <sup>°</sup> 150 <sup>°</sup> 210 <sup>°</sup> 240 <sup>°</sup> 270 <sup>°</sup> 90 <sup>°</sup>
5.5 GHz			0 0 0 0 0 0 0 0 0 0 0 0 0 0	90 <sup>°</sup> 0 <sup>°</sup>
5.75 GHz			50 theta50'	120 <sup>-</sup> 150 <sup>-</sup> 210 <sup>-</sup> 240 <sup>-</sup> 270 <sup>-</sup> 30 <sup>-</sup> 50 <sup>-</sup>

#### 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.
- \* 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.
- \* 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. © 2024 TP-Link