EAP | Datasheet

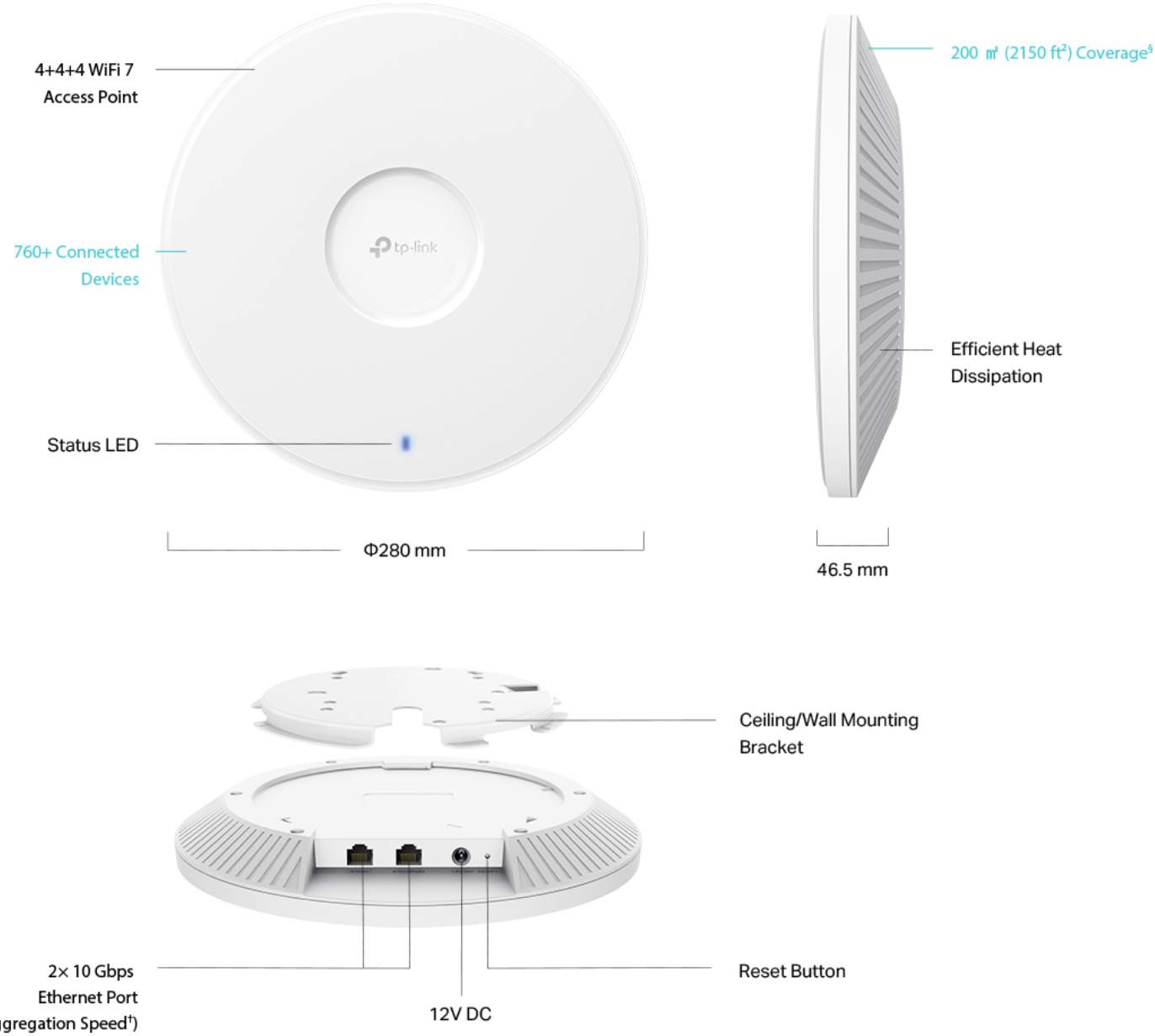
EAP783

US: BE22000 Ceiling Mount Tri-Band Wi-Fi 7 Access Point
EU: BE19000 Ceiling Mount Tri-Band Wi-Fi 7 Access Point

Highlights

- BE22000 Tri-Band Wi-Fi 7 for US and BE19000 Tri-Band Wi-Fi 7 for EU. *
- A clear 6 GHz band brings cleaner and wider band resources.*
- 2× 10G ports unlock the full potential of Wi-Fi 7.
- 320 MHz bandwidth enables many more simultaneous transmissions.*
- Multi-Link Operation and Multi-RUs ensure the high performance of your network.*
- Advanced Functions: Centralized management, mesh, and Seamless roaming.*

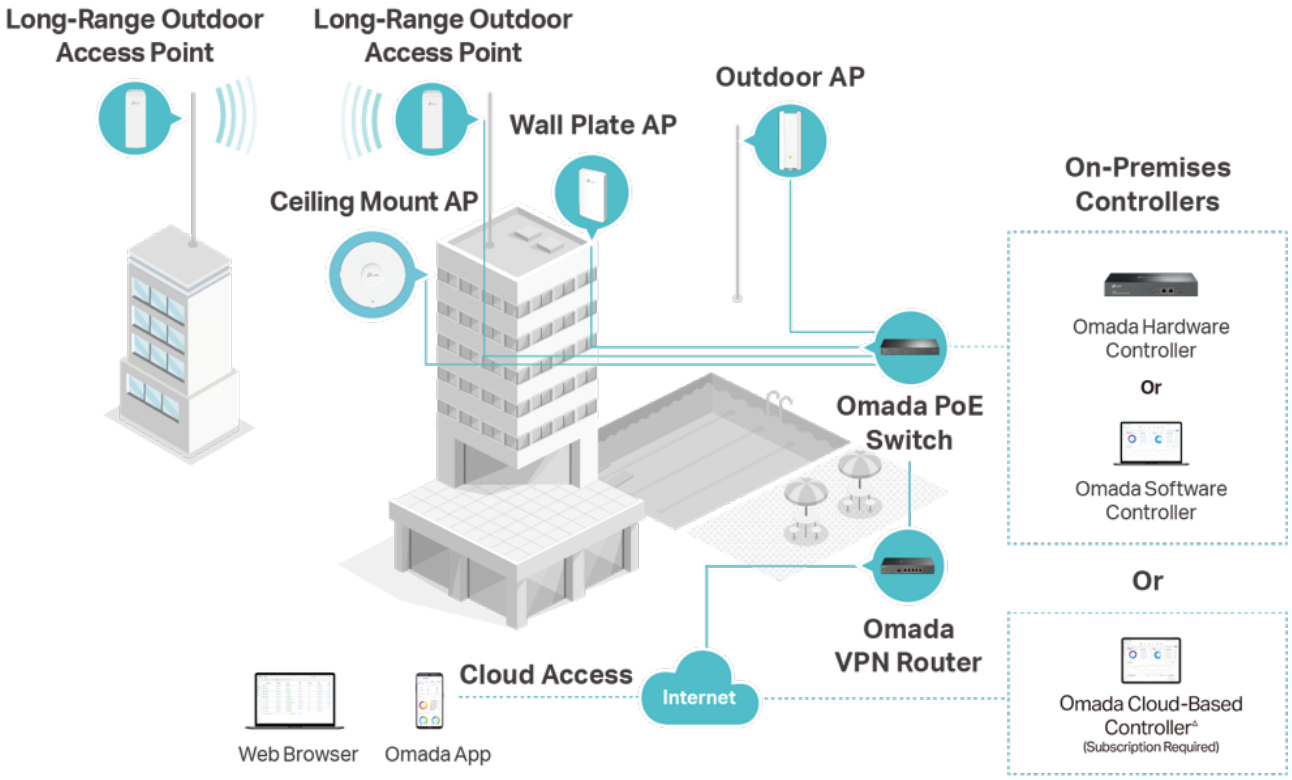
Product Pictures



[5] 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.
[†]Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput, wireless coverage, and connected devices are not guaranteed and will vary as a result of internet service provider factors, network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.

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		EAP783
Name		US: BE22000 Ceiling Mount Wi-Fi 7 Access Point EU: BE19000 Ceiling Mount Wi-Fi 7 Access Point
Main Design	LAN Interfaces	2x 10Gbps Ethernet Ports (20G Aggregation Speed)
	Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax/be
	Maximum Data Rate	**US:** 1376 Mbps (2.4 GHz)+8640 Mbps (5 GHz)+11520 Mbps (6 GHz) **EU:** 1376 Mbps (2.4 GHz)+5760 Mbps (5 GHz)+11520 Mbps (6 GHz)
	Wireless Client Capacity	640
	Antennas	2.4 GHz: 4 x 4 dBi, 5 GHz: 4 x 5.5 dBi, 6 GHz: 4 x 5 dBi
	Bluetooth	Supported
	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); <23 dBm (6 GHz EIRP) **FCC:** <28 dBm (2.4 GHz); <28 dBm (5G band 1&band 4); <24 dBm (5G band 2&band 3); <28 dBm (6 GHz)
	Reception Sensitivity	2.4GHz: 11ax HE20 MCS0:-95dBm; 11ax HE20 MCS11:-66dBm 11ax HE40 MCS0:-93dBm; 11ax HE40 MCS11:-64dBm 5GHz: 11be EHT20 MCS0:-95dBm; 11be EHT20 MCS11:-65dBm 11be EHT40 MCS0:-92dBm; 11be EHT40 MCS11:-63dBm 11be EHT80 MCS0:-89dBm; 11be EHT80 MCS11:-60dBm 11be EHT160 MCS0:-86dBm; 11be EHT160 MCS11:-59dBm 11be EHT240 MCS0:-84dBm; 11be EHT240 MCS11:-57dBm 6GHz: 11be EHT20 MCS0:-95dBm; 11be EHT20 MCS11:-64dBm 11be EHT40 MCS0:-92dBm; 11be EHT40 MCS11:-63dBm 11be EHT80 MCS0:-89dBm; 11be EHT80 MCS11:-60dBm 11be EHT160 MCS0:-86dBm; 11be EHT160 MCS11:-58dBm 11be EHT320 MCS0:-83dBm; 11be EHT320 MCS11:-55dBm
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

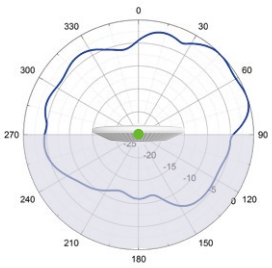
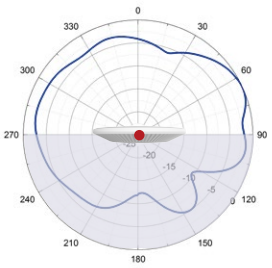
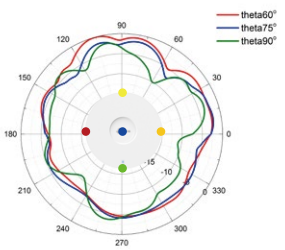
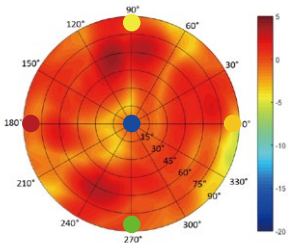
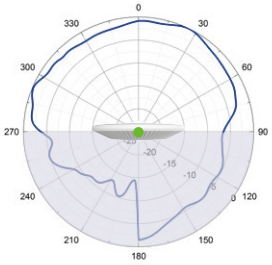
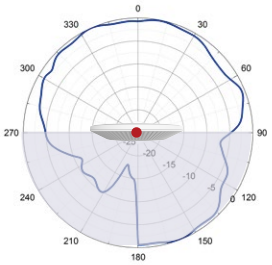
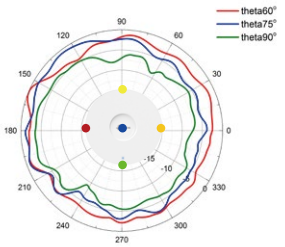
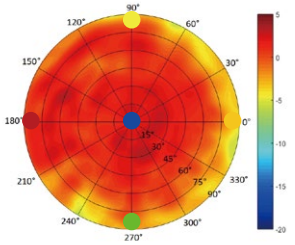
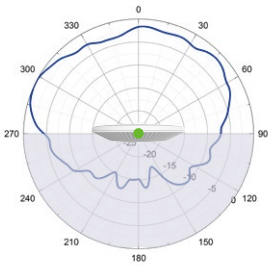
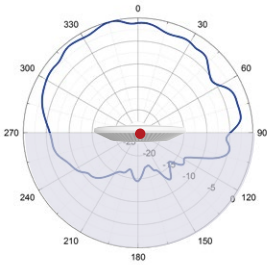
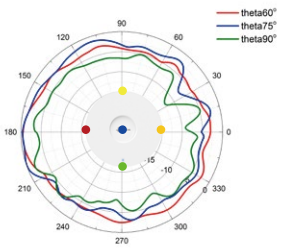
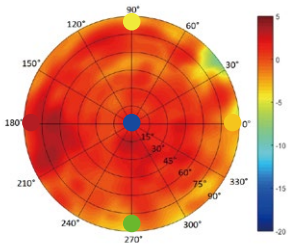
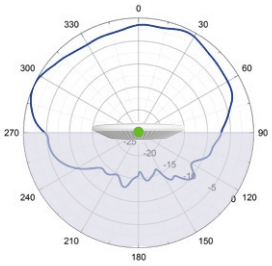
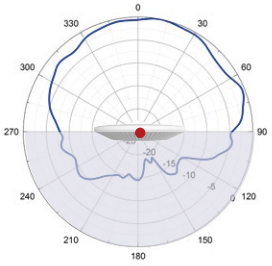
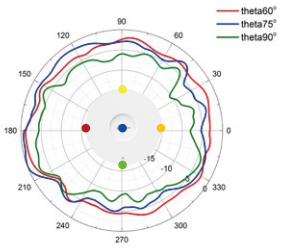
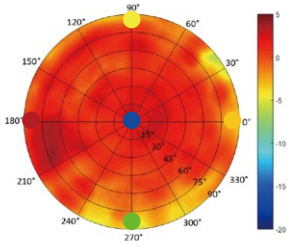
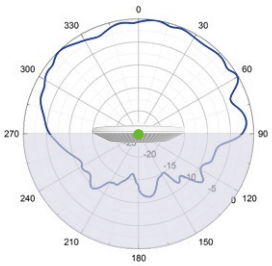
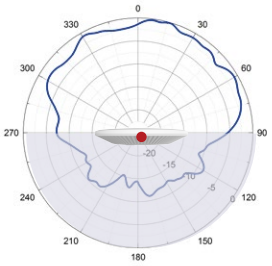
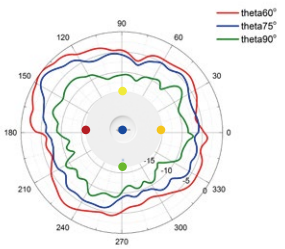
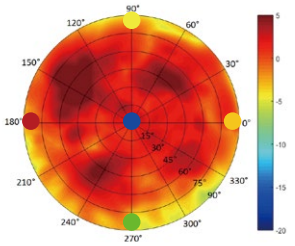
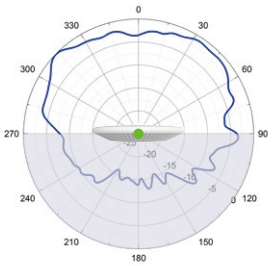
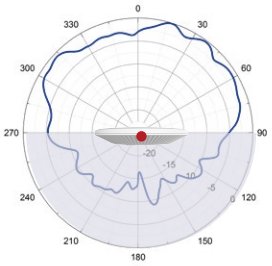
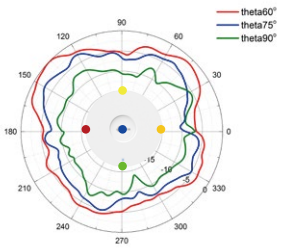
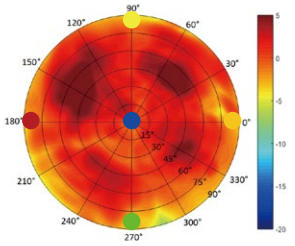
Model		EAP783
Wireless Function	Multiple SSIDs	24 (8 on each band)
	Channel	US: 2G:1 - 11 5G: 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140,149,153,157,161,165 6G: 33,37,41,45,49,53,57,61,65,69,73,77,81,85,89,93,97,101,105,109,113,117,121,125,129,133,137,141,145,149,153,157,161, 165,169,173,177,181,185,189,193,197,201,205,209,213,217,221,225,229,233 EU: 2G:1 - 13 5G: 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140 6G: 33,37,41,45,49,53,57,61,65,69,73,77,81,85,89,93
	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	4x4 MU-MIMO DL/UL
	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	802.11be	8.6Mbps to 11520 Mbps (MCS0-MCS13,NSS=1-4 ETH20/40/80/160/240/320)
	802.11ax	8.6Mbps to 4804 Mbps (MCS0-MCS11,NSS=1-4 HE20/40/80/160)
	802.11ac	6.5Mbps to 4334 Mbps (MCS0-MCS11,NSS=1-4 VHT20/40/80/160)
	802.11n	6.5Mbps to 600 Mbps (MCS0-MCS7,NSS=1-4 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		EAP783		
Physical & Environment	Power Supply	802.3bt PoE or 12V/4.5A DC		
	Maximum Power Consumption	**Mode**	**Power Consumption**	**System Configuration**
		DC power	34W	2*10Gbps Ethernet Enable BLE Enable
		802.3bt	39W	2*10Gbps Ethernet Enable BLE Enable
		802.3at	20W	2*10Gbps Ethernet Enable BLE Enable
	Reset	•		
	Mounting	Ceiling / Wall mouting (Kits included)		
Others	Certifications	CE, FCC, RoHS, IC		
	Dimensions (W x D x H)	280 x 280 x 46.5 mm		
	Net Weight	1384.6g		
	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

Ceiling Mount AP

EAP783

	Elevation-0°	Elevation-90°	Azimuth	Mapped 3D
2.45 GHz				
5.25 GHz				
5.5 GHz				
5.75 GHz				
6.5 GHz				
7.1 GHz				

Disclaimers

* †Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. The 320 MHz bandwidth is only available on the 6 GHz band. Simultaneously, the 320 MHz bandwidth on the 6 GHz band and 160 MHz bandwidth on the 5 GHz band may be unavailable in some regions/countries due to regulatory restrictions. Double channel width and speed refer to 320 MHz compared to 160 MHz for WiFi 6 routers. Actual wireless data throughput, wireless coverage, and connected devices are not guaranteed and will vary as a result of internet service provider factors, network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.

* Use of Wi-Fi 7 (802.11be), Wi-Fi 6 (802.11ax), and features including Multi-Link Operation (MLO), 320 MHz Bandwidth, 6 GHz, 4K-QAM, Multi-RUs, OFDMA, MU-MIMO, and BSS Color require clients to also support the corresponding features.

* Zero-Touch Provisioning, Auto Channel Selection and Power Adjustment require the use of the 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 the 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.

* Omada Mesh, Seamless Roaming, Captive Portal, and Cloud Access require the use of an Omada SDN controller. Please refer to the User Guides of Omada SDN controllers for configuration methods.

* 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.

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.