



EAP | Datasheet

EAP603GP-Desktop

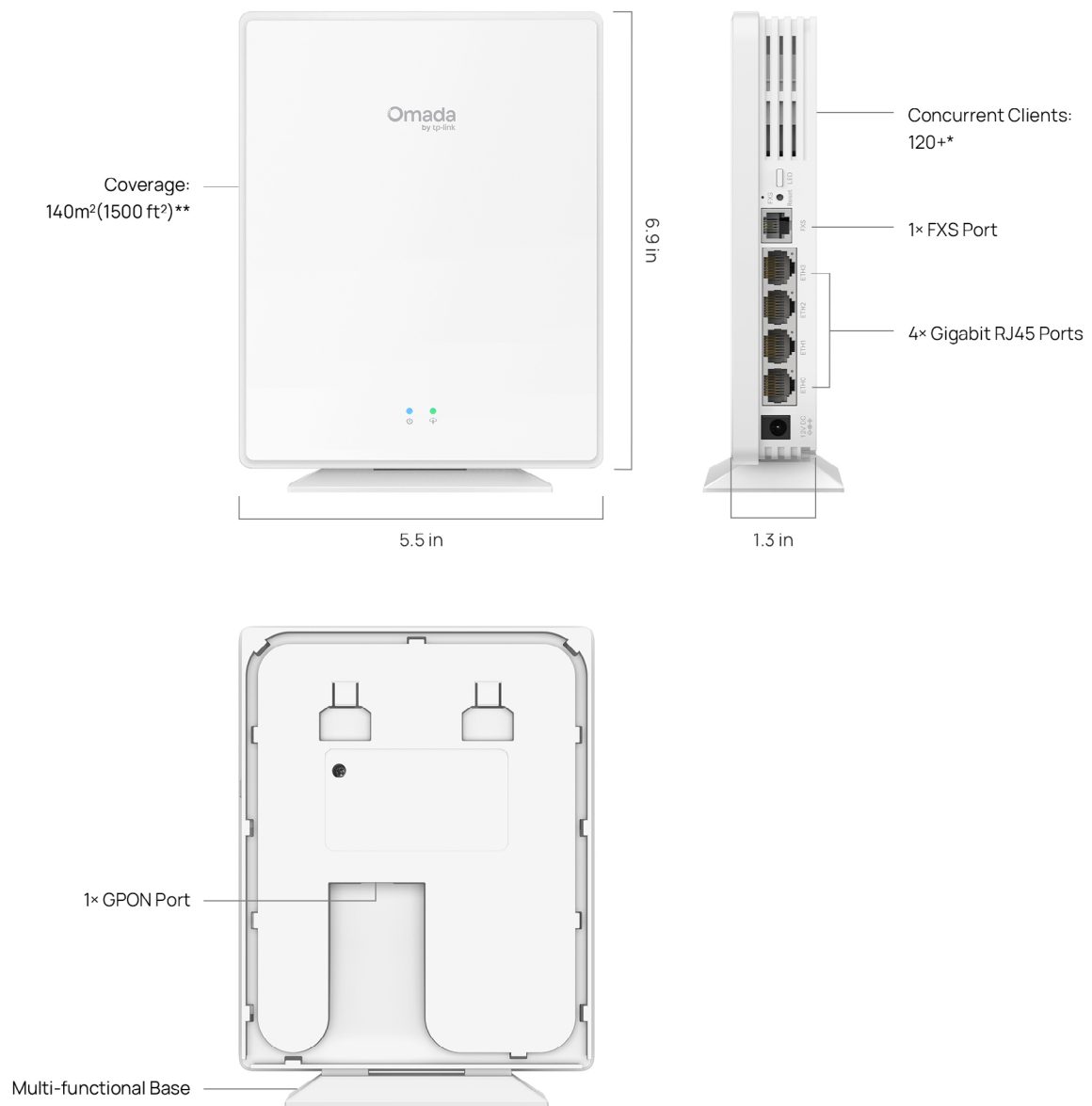
AX1800 Desktop Wi-Fi 6 GPON Access Point



Highlights

- Seamless 1.8 Gbps WiFi 6 Speeds: 1201 Mbps on 5 GHz & 574 Mbps on 2.4 GHz
- Multiple Ports for More Devices: 1× GPON port for high-speed, long-range access and 4× Gigabit RJ45 ports provide high-speed connections to more devices
- One Fiber for Multiple Services: Wired, wireless, voice, data, and HD video services
- Easy Use: One-click pairing and automatic adoption
- High Flexibility: Supports both desktop and wall mounting setups
- Advanced Features: Unified management for Omada devices and OLT, PPSK, multiple portals, Omada mesh, and seamless roaming

Product Pictures



* Coverage is calculated based on laboratory testing. Actual coverage is not guaranteed and will vary as a result of client limitations and environmental factors.

** The actual capacity depends on the wireless environment and client traffic and is generally less than the maximum number of client connections.

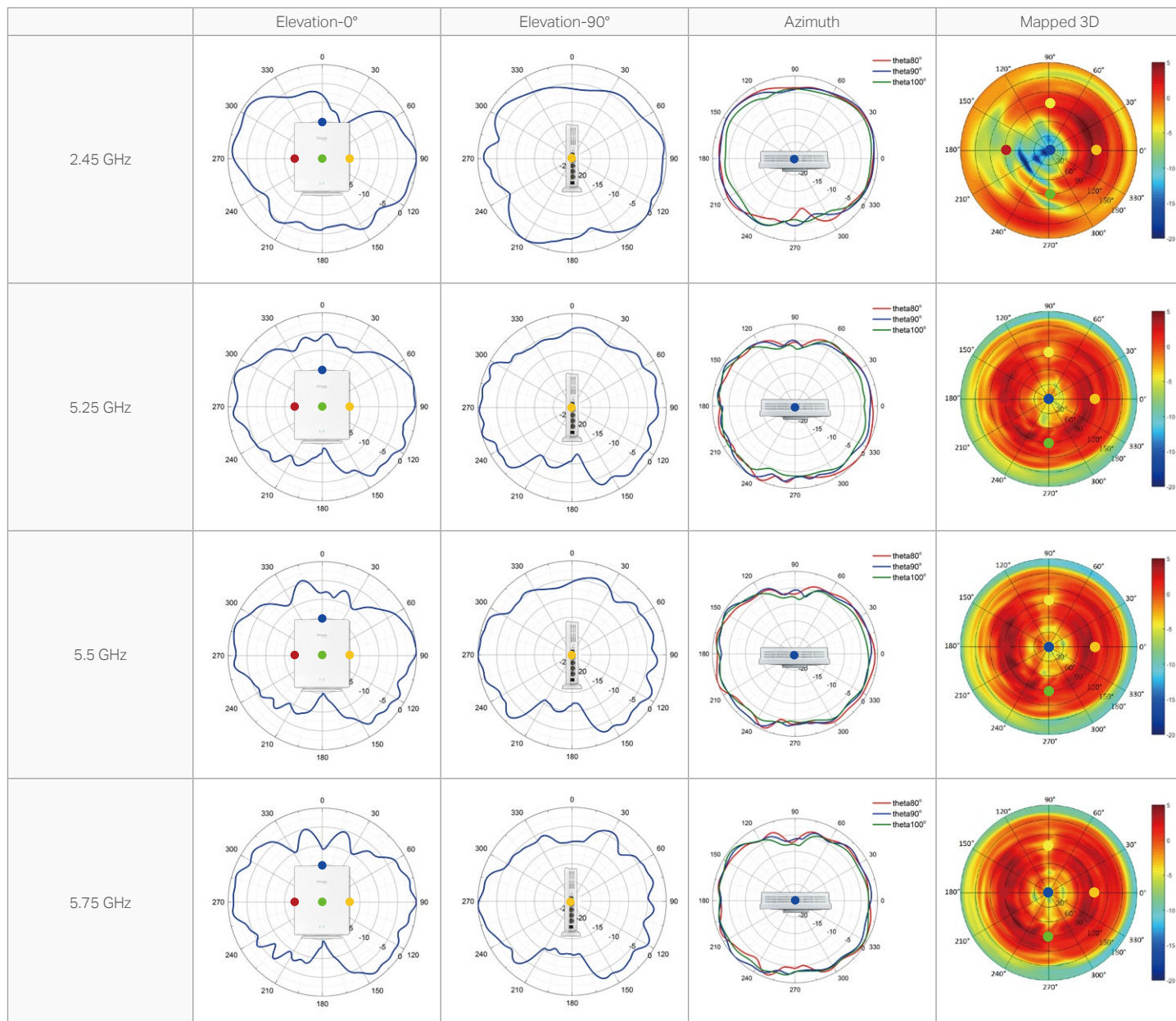
Specifications

Model		EAP603GP-Desktop
Name		AX1800 Desktop Wi-Fi 6 GPON Access Point
Main Design	Interfaces	1x GPON Port + 4 x 1Gbps Ethernet Ports + 1 x FXS Port
	Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax
	Maximum Data Rate	574 Mbps (2.4 GHz) +1201 Mbps (5 GHz)
	Wireless Client Capacity	120+
	Antennas	2.4 GHz: 2x 5 dBi 5 GHz: 2x 4.5 dBi
	Transmit Power	CE: < 20 dBm (2.4 GHz, EIRP); < 23 dBm (5 GHz, band 1&band 2, EIRP); < 27 dBm (5 GHz, band 3, EIRP); FCC: < 25 dBm (2.4 GHz); < 25 dBm (5 GHz)
	Reception Sensitivity	2.4 GHz: 11g 6M -95dBm; 11ax HE40 MCS11 -63dBm 5 GHz: 11a 6M -96dBm; 11ax HE80 MCS11 -63dBm
GPON Spec	Port Type	SC-APC
	Standards and Protocols	ITU-984.x, G.988, Class B+
	Upstream Data Rate	1.244 Gbps
	Downstream Data Rate	2.488 Gbps
	Wave Length	Tx: 1310 nm, Rx: 1490 nm
	Fiber Type	9/125 um Single mode
	Max. Cable Length	20 km
	Transmit Power	0.5~5dBm
	Receiver Sensitivity	-27 dBm
	Overload Power	- 8 dBm
Centralized Management	Omada Software Controller	•
	Omada Hardware Controller	•
	Omada Cloud-Based 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	•

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Wireless Function	Multiple SSIDs	16 (8 on each band)
	Channel	US: 2G:1,2,.....,10,11 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 EU: 2G:1,2,.....,12,13 5G: 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140
	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	2*2 MU-MIMO DL/UL
	MIMO	2×2 (2.4G & 5G) MU-MIMO
	OFDMA	UL/DL OFDMA
	Rate Limit	Based on 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 1201 Mbps (MCS0-MCS11, NSS = 1 to 2 HE20/40/80)
	802.11ac	6.5 Mbps to 866 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

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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	12V/1.5A DC
	Maximum Power Consumption	15.5W
	Reset	•
	Mounting	Desktop / Wall mouting (Kits included)
Others	Certifications	CE, FCC, IC
	Dimensions (W x D x H)	175×140×33 mm
	Net Weight	437g
	Enclosure Material / Rack Material	Shell: PC Mounting racks: PC, SGCC
	Lightning Protection	AC 2KV (Adapter)
	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



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.
- * 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.