Wi-Fi6   802.11ax Outdoor Dual band Wireless AP

Introduction

VAP6660I is an 802.11 ax dual-band enterprise-grade wireless access point (2.4GHz 2*2 ax and 5GHz 2*2 ax). Its total data rate can reach 1.774Gbps. It complies with the requirements of IP67. By seamlessly working with ABLOOMY local AC (CAM), ABLOOMY private cloud (CSP) and ABLOOMY public cloud (ACS), it can build all kinds of customized, enterprise-grade wireless networks through an approach which combines simplicity, scalability, extensibility, reliability, performance and security. it is suitable for ISPs, campus, parks, commercial streets, etc.

Highlights

Wi-Fi 6 (802.11ax)

Supports 1024QAM modulation and 2×2MIMO technology, the data rate of 5GHz air interface is up to 1.2Gbps, and the whole device data rate is 1.774Gbps. Supports OFDMA scheduling, enables multiple users to receive and send data at the same time, reducing the delay and improving the performance.

Load Balancing and Band Steering

Supports load balancing based on the number of access users, traffic, and frequency bands, and the system automatically guides users to the 5GHz frequency band by default, which maximizes network capacity and ensures the best access experience for users.

Zero Touch Provisioning

Fully supports plug-and-play deployment. No matter the network environment is complex or not, whether the device is deployed in the public or private network, as long as the device can access the AC, the system can automatically complete the configuration and the network is up running without touch.

Easy Maintenance

Supports real-time monitoring AP system status and sending alarms automatically when detecting faults; supports automatic software update in the batch mode based on the policies of AP location, model, version, and the update time.

Network Security

Supports L4 stateful firewall, role-based NAC (network access control), white/black lists, URL logging, and full 802.11i security standard.

Auto Power and Auto Channel

Supports automatic Tx power adjustment to automatically detect and compensate the signal coverage; supports automatic/manual adjustment of channels to ensure that the AP is in the best radio frequency environment and provide users with the best QOS.

Hardware Specifications

Dimensions (L, W, H)	245mm(H) × 200mm(W) × 90mm(D)
Ports	1× 10/100/1000Mbps Ethernet port (PoE)
	1 × 10/100/1000Mbps SFP optical port
	1 RS232 RJ-45 Console port
	4 N-type RF ports (2.4GHz×2，5GHz×2), integrated antenna version no RF ports
Memory	DDR3 512MB or 32bit 1GB
Flash	32MB SPI
CPU	Qualcomm IPQ60XX
RF	2.4GHz ✓ 802.11ax 2.4GHz 2x2
	5GHz ✓ 802.11ax 5GHz 2x2
Antenna Index	Frequency: 2.4GHz ✓ Max Gain: ≥11 dBi@ 2.4~2.4835GHz, Azimuth angle is 90 degrees and the elevation angle is 30 degrees.
	Frequency: 5.15~5.85GHz ✓ Max Gain: ≥13 dBi@ 5.15~5.85GHz, Azimuth angle 120 degrees, elevation 30 degree.

Max transmit power ±2dB	2.4GHz	5GHz
11 b (1Mbps)	24	-
11 b (11Mbps)	24	-
11 g (6Mbps)	24	-
11 g (54Mbps)	23	-
11 a (6Mbps)	-	22
11 a (54Mbps)	-	20
HT20(MSC 0/8)	24	22
HT20(MSC 7/15)	23	20
HT40(MSC 0/8)	24	22
HT40(MSC 7/15)	23	18
VHT80 256QAM MCS0	-	20
VHT80 256QAM MCS9	-	16
VHT80 1024QAM MCS0	-	19
VHT80 1024QAM MCS11	-	15
Single Stream Receive Sensitivity ± 2 dB	2.4GHz	5GHz
11 g (6Mbps)	-89	-
11 g (54Mbps)	-72	-

11 a (6Mbps)	-	-88
11 a (54Mbps)	-	-70
HT20 MSC 0	-89	-88
HT20 MSC 7	-68	-68
HT40 MCS 0	-85	-84
HT40 MCS 7	-65	-65
VHT20 256QAM @ 3/4 Code Rate		-63
VHT20 256QAM @ 5/6 Code Rate	-	-61
VHT40 256QAM @ 3/4 Code Rate	-	-60
VHT40 256QAM @ 5/6 Code Rate	-	-58
VHT80 256QAM @ 3/4 Code Rate	-	-57
VHT80 256QAM @ 5/6 Code Rate	-	-55
VHT80 1024QAM MCS11	-	-48
Power Supply	PoE power supply	
LED Description	5× LED(Power,LAN1,LAN2,2.4G,5G)	
Support Standard	IEEE802.11a/b/g/n/ac/ax	
	2.4GHz 和 5GHz	
Installation	Pole or Wall Mount	
Working Environment	Temp: -40° C to +65° C	
	Humidity: 0% to 95% non-condensing	
	Protection: IP67	
	Lightning Protection: 10/700 combined wave surge test, common mode 6KV, differential mode 2KV	
	Electrostatic Protection: contact discharge 6KV, air discharge 8KV	

Software Specification

WLAN	Comply with IEEE801.11a/b/g/n/ac/ax standard
	Support dynamic rate adjustment
	Support 1024QAM modulation
	Support 802.11ax standard,
	Support automatic channel scanning and manual selection
	Support dynamic power adjustment and manual power adjustment
	Support fast roaming protocol (802.11r 802.11k)
	Support Short GI in 20M, 40M, 80M mode
	Support OFDMA scheduling and other features,
	Support WMM

	Support band steering
	Support load balancing based on AP traffic, frequency band and number of users
Security	Support Open-system authentication method
	Support WEP authentication/encryption method
	Support WPA/WPA2-PSK authentication/encryption method
	Support WPA/WPA2-802.1X authentication/encryption method
	Support WPA-WPA2 hybrid authentication method
	Support WPAI authentication/encryption method
	Support 802.1X, Mac, portal, SMS + non-perceptual authentication methods
Network	Support local forwarding and centralized forwarding data traffic
	Support user access isolation under the same SSID
	Support role-based NAC (network access control) and ACL
	Support bandwidth control based on each user
	Support speed limit based on WAN port bandwidth
	Support network detection based on Ping and Arp
	Support switching AP to the standalone mode when the connection between AP and AC is lost to make sure the data traffic is not interrupted
	Support AC active/standby deployment
	Support DHCP Server
	Support static IP/DHCP/PPOE
	Support IPV6 function
	Support Soft-GRE function
	Support VPDN (virtual private dialup network) function
Management& Maintenance	Support AP and AC deployed in the cross-Internet mode
	Support Web UI management (HTTPS)
	Support CLI-based management
	Support SSH-based management
	Support updating AP's local credential remotely
	Support Zero Touch Provisioning
	Support LED light control
	Support scheduled restart of AP
	Support batch modification of AP's AC access address
	Support software update in the batch mode based on the policies of AP location, model, version and update time