Wi-Fi6 802.11ax indoor Tri-band Access Point

Introduction

VAP7760I is a Tri-band 802.11ax access point., the 2.4G frequency band supports 4×4 MIMO and 4 spatial streams; the 5G frequency band supports two radio frequencies, one 5G radio frequency supports 8×8 MIMO and 8 spatial streams, the other 5G radio supports 2×2 MIMO and 2 spatial streams. The theoretical wireless data rate reaches 1150Mbps (2.4GHz) + 4800Mbps (5GHz) + 867Mbps (5GHz). VAP7760I has a built-in Bluetooth module.   It is suitable for WIFI coverage in high-density environments such as enterprises, parks, universities, schools, medical care, hotels, corporate offices, and supermarkets, etc.

Highlights

Wi-Fi 6 (802.11ax) Compatibility

Supports 1024QAM modulation and Tri-band.   the 2.4G frequency band supports 4×4 MIMO and 4 spatial streams; the 5G frequency band supports two radio frequencies, one 5G radio frequency supports 8×8 MIMO and 8 spatial streams, the other 5G radio supports 2×2 MIMO and 2 spatial streams. The theoretical wireless data rate reaches 1150Mbps (2.4GHz) + 4800Mbps (5GHz) + 867Mbps (5GHz).

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 Provision

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 manual intervention.

Easy Maintenance

Supports real-time monitoring and alarms based on AP system status, and sending alarms automatically when detecting faults; supports automatic software update in batch mode based on 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 Specification

Dimensions (L, W, H)	196mm(H) × 196mm(W) × 48.5mm(D)	
Ports	1× 10/100/1000/2500Mbps Ethernet Port (PoE)	
	1 × 10/100/1000/2500Mbps Ethernet Port	
	1× RS232 console	
	1× USB2.0	
	1 DC 12V 3A Jack power supply port	
	1 Reset pinhole	
Memory	DDR3 1GB	
Flash	64MB SPI	
CPU	Qualcomm IPQ8074v2	
RF	2.4GHz ✓ 802.11ax 2.4GHz 4x4	
	5GHz(1) ✓ 802.11ax 5GHz 8x8	
	5GHz(2) 802.11ax 5GHz 2x2	
	BT/BLE	
Antenna Index	Frequency: 2.4GHz ✓ Max gain: ≥4dBi ✓ Antenna Pattern: 180 degree	
	Frequency: 5.15~5.85GHz ✓ Max gain: ≥5dBi ✓ Antenna Pattern: 180 degree	
	BT/BLE: ≥2dBi	
Max transmit power ±2dB	2.4GHz	5GHz
11 g (6Mbps)	17	-
11 g (54Mbps)	15	-
11 a (6Mbps)	-	20
11 a (54Mbps)	-	14
HT20 MSC 0	17	20
HT20 MSC 7	15	14
HT40 MSC 0	17	19
HT40 MSC 7	15	14
VHT20 MCS9		13
VHT40 MCS9		12

VHT80 MCS9	-	12
HE 20 MCS11	10	11
HE 40 MCS11	10	11
HE80 MCS11		11
Single Stream Receive Sensitivity ± 2 dB	2.4GHz	5GHz
11 g (6Mbps)	-90	-
11 g (54Mbps)	-74	-
11 a (6Mbps)	-	-90
11 a (54Mbps)	-	-72
HT20 MSC 0	-91	-90
HT20 MSC 7	-73	-72
HT40 MCS 0	-88	-87
HT40 MCS 7	-70	-69
VHT80 MCS 0		-84
VHT80 MCS 9	-	-60
Power Supply	External DC power supply: 12 V DC (not included in the package) PoE power supply	
LED Description	6× LED(Power,LAN1,LAN2,2.4G,5G,Radio3)	
Support Standard	IEEE802.11a/b/g/n/ac/ax	
	2.4GHz 和 5GHz	
Installation	Ceiling mounting bracket (provided with AP)	
Working Environment	Temp: 0° C to +45° C (+32° F to +113° F)	
	Humidity: 5% to 95% non-condensing	

Software Specification

WLAN Characteristic	Comply with IEEE801.11a/b/g/n/ac/ax standard
	Support dynamic rate adjustment
	Support 1024QAM modulation
	Support 802.11ax standard, support OFDMA and other features, OFDMA scheduling enables multiple users to receive and send information at the same time, reducing delay and improving network efficiency
	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 Chinese SSID function
	Support WMM, realize application-based data processing and forwarding functions
	Support 5G access priority function
	Support load balancing based on AP traffic, frequency band and number of users
Security Characteristic	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 Characteristic	Support local forwarding and centralized forwarding data traffic
	Support user access isolation under the same SSID
	Support user access (ACL)
	Support bandwidth control based on each user
	Support speed limit based on WAN port bandwidth
	Support network detection based on Ping and Arp
	When supporting local forwarding mode and AC bypass deployment, traffic will not be interrupted after AP and AC are disconnected
	Support AC active/standby selection
	Support DHCP Server, client obtains IP address through AP
	Support static IP/DHCP/PPOE and other network access methods
	Support IPV6 function
	Support Soft-GRE function
	Support VPDN function
Management & Maintenance	Support AP cross-Internet access AC mode deployment
	Support Web user management (HTTP)
	Support CLI-based management
	Support SSH-based management
	Support remote modification of AP login password
	Support AP to go online automatically and load configuration (plug and play)
	Support LED light control
	Support schedule restart setting
	Support batch modification of AP's AC access address
	Support batch upgrade based on AP location, AP model and AP version