VAP6750I Outdoor Tri-band Wireless AP

Introduction

VAP6750I is a Tri-band 802.11ac wave2 access point supporting 2x2 MIMO and a data rate of up to 1.7Gbps. 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

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 Specification

Dimension (L,W,H)	213.9mm×213.9mm×67.5mm
Weight	1.75kg
Port	2 10/100/1000M auto negotiate RJ45 support POE 802.3at
	Support SFP port
	Reset Button：Factory reset
	6 LED
Memory	256M
Flash	64M
Antenna	2.4G gain：≥7.4dBi （HPBW horizontal 88 degree，vertical 74 degree)
	5G gain：≥8.15dBi （HPBW horizontal 131 degree，vertical 60 degree) 5G gain：≥8 dBi （HPBW horizontal 131 degree, vertical 60 degree)
Support Standard	IEEE802.11a/b/g/n/ac/ac wave2
	2.4GHz and 5GHz
Max TX	2.4G：24dBm
	5GHz Radio1：24dBm 5GHz Radio2：18dBm
	Subject to local regulations
Frequency	IEE802.11b/g/n:2.4000GHz~2.4835GHz；
	IEE802.11a/ac:5.15~5.25GHz;5.25~5.35GHz;5.47-5.725GHz;5.725~5.85GHz；
	Applicable to country/area regulations
Channel	America/Canada:1-11、Europe（ETSI X30）:1-13、Japan X41:1-13；
	5GHz Channel：depend on the regulatory of the country/area
Throughput	802.11n（HT）support：HT20/40 802.11ac（VHT）support：VHT20/40/80
Adaptive Modulation	11a/g：OFDM:64QAM@48/54Mbps, 16QAM@24Mbps, QPSK@12/18Mbps, BPSK@6/9Mbps 11b：DSS: CCK@5.5/11Mbps, DQPSK@2Mbps, DBPSK@1Mbps 11n：MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM 11ac：MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM,256QAM
Installation	Ceiling mounting bracket (provided with AP)
Operating Temperature	-40~65℃
Storage Temperature	-40℃~85℃
Operating Humidity	5%~95% non-condensing

Software Specification

WLAN	Comply with IEEE801.11a b/g/n/ac wave2 standard
	Support dynamic rate adjustment
	Support channel automatic scanning and manual selection
	Support dynamic and manual power adjustment
	Support fast roaming protocol (802.11r 802.11k)
	Support ShortGI in 20M, 40M, 80M mode
	Support WMM
	Support band steering
	Support load balancing based on AP traffic, frequency band and number of users
	Support Hotspot 2.0

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 combine Authentication method
	Support WPAI Authentication/Encryption method
	Support 802.1X, MAC, portal, SMS and some social-media authentication methods
	Support data traffic local forwarding and centralized forwarding
Network	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
	Support Soft GRE
	Support VPDN
	Support AP and AC deployed in the cross-Internet mode
Management	Support Cloud or AC based centralized management
	Support Web UI Management (HTTP)
	Support CLI (SSH) management
	Support console-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
	Support AP status alarm

Receive Sensitivity

Min RSSI: 2.4GHz   -90dBm   5GHz   -89dBm

RSSI (2.4GHz/5GHz) ± 2dB		
	2.4GHz	**5GHz**
11g(6Mbps)	-93	-
11g(54Mbps)	-76	-
11a(6Mbps)	-	-93
11a(54Mbps)	-	-76
HT20(MSC 0/8/16)	-92	-92
HT20(MSC 7/15/23)	-73	-71
HT40(MSC 0/8)	-90	-89
HT40(MSC 7/15)	-70	-68
VHT20 MCS 9	-	-65
VHT40 MCS 9	-	-64
VHT80 MCS 9	-	-60