

## WLA-9000AP

### Dual Radio Dual Band 108 Mbps POE AP

The WLA-9000AP is a dream device for WISP to build their wireless networks. The AP features 2 Atheros 11a/b/g radios that run in 5GHz or 2.4GHz frequency band. Moreover, it provides hi-power at 11a mode for extra long distance application. There is an intergraded 802.3af POE port to let you run the AP at up to 100 meter distance away from the power source. Advanced software functions such as 14 wireless modes, Wireless Duplexing, Bandwidth Control, Multiple SSID&VLAN, SNMP.

Dual  
Radio

5GHz

2.4GHz

Atheros  
108Mbps

POE

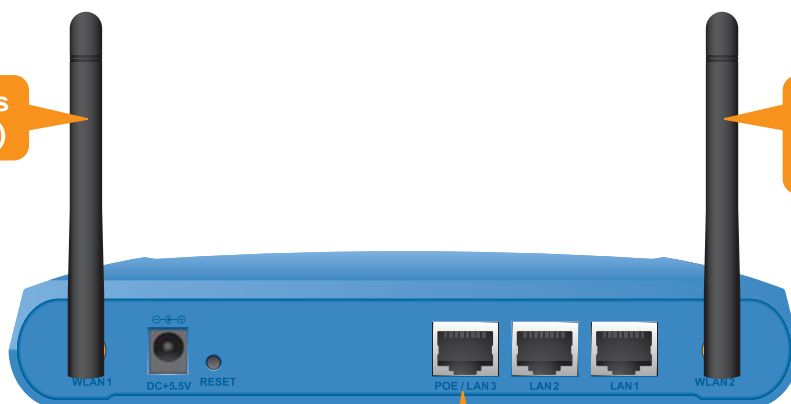


### Dual Wireless + Hi Power + 3 LAN Ports

The WLA-9000AP is equipped with 2 high-powered Atheros radios. The radio 1 runs in the 11a 5GHz mode only while the radio 2 runs at the 11a/b/g dual band mode. AirLive adds high power amplifier to run the AP at 23dBm in 11a and 11g modes(200mW), that's 4 times the output power of normal 11a radio(50mW). In addition, 3 programmable LAN ports are available for multi-mode AP/Gateway configuration.

Atheros 108Mbps  
11a radio(23dbm)

Atheros 108Mbps  
11a/b/g Radio  
(23dBm)



POE Port

## Wireless Duplexing mode

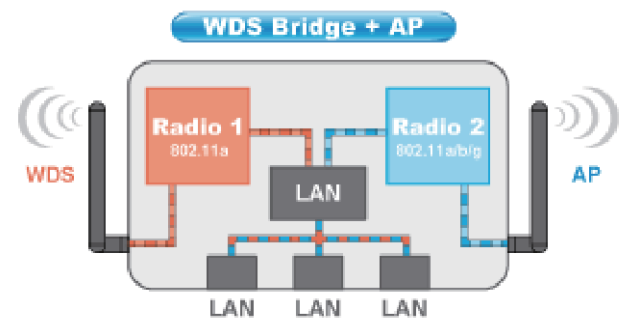
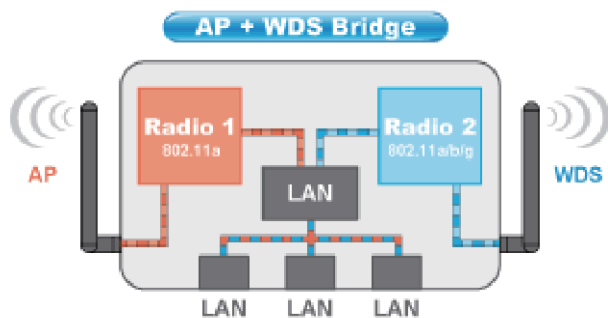
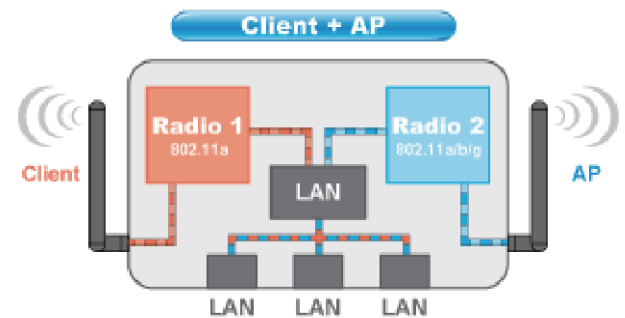
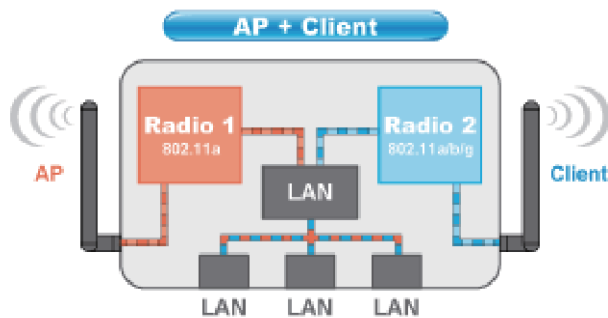
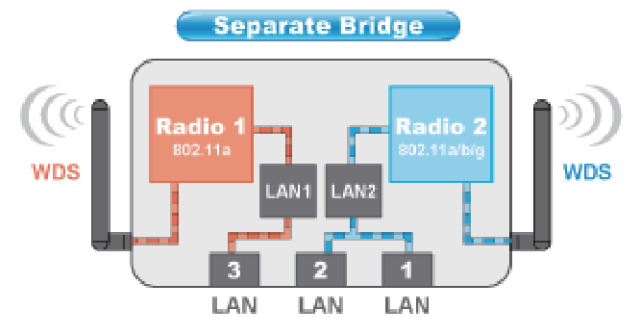
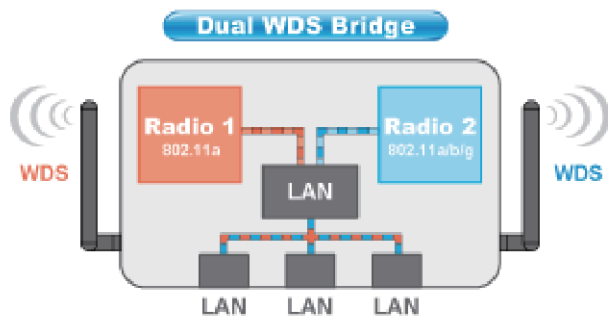
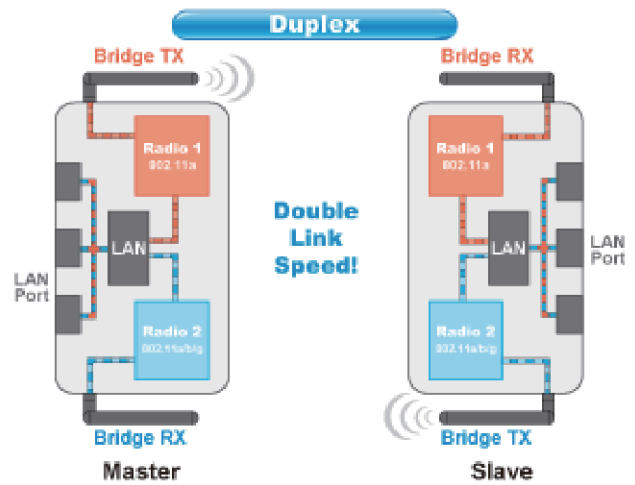
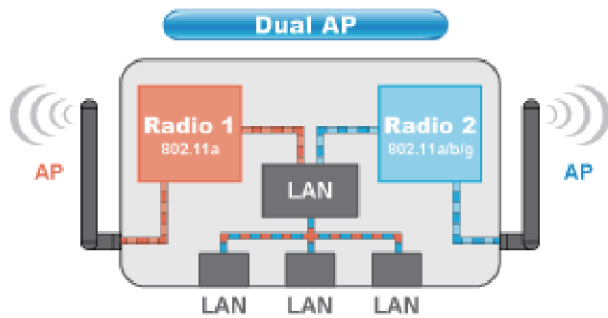
Under the wireless duplexing mode, the WLA-9000AP is capable of combining the 2 radios into one single high speed link. This mean when you are 2 WLA-9000AP linking together, it can go as high as 60Mbps real thoroughpput in Duplex Super-A mode, that's 3 times faster than normal 11a/g link! It is perfect for use in wireless backbone application. Please click the flash below to see details explanation and configurations.

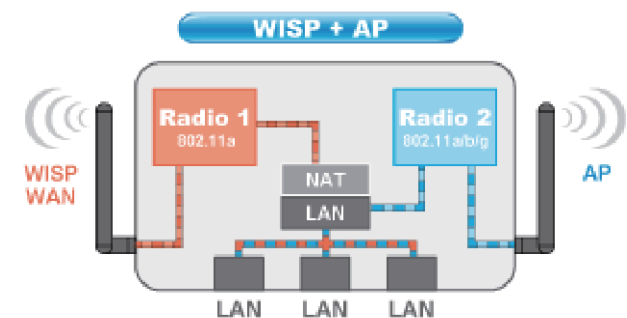
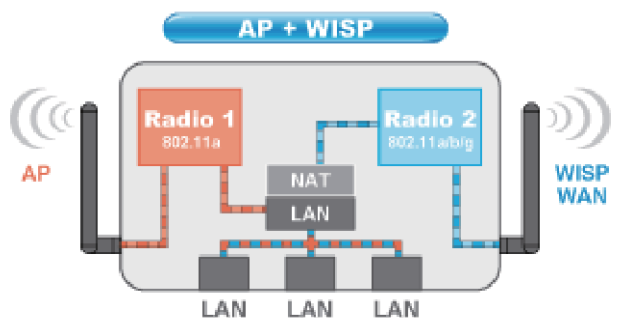
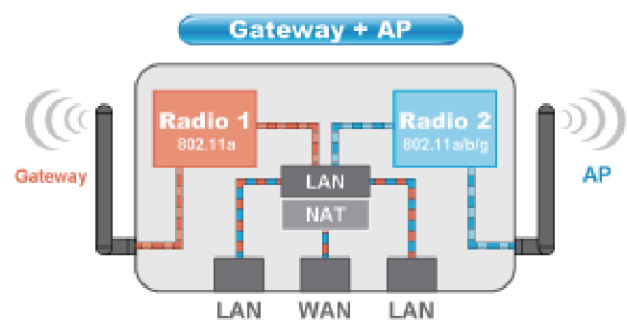
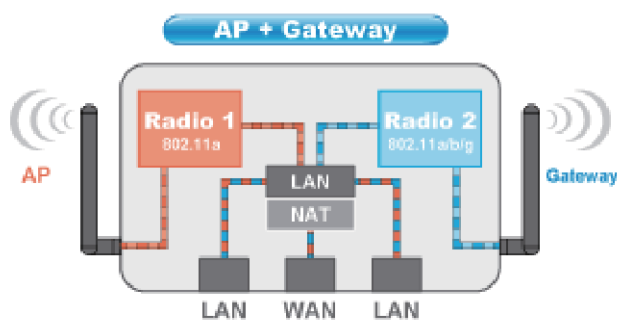
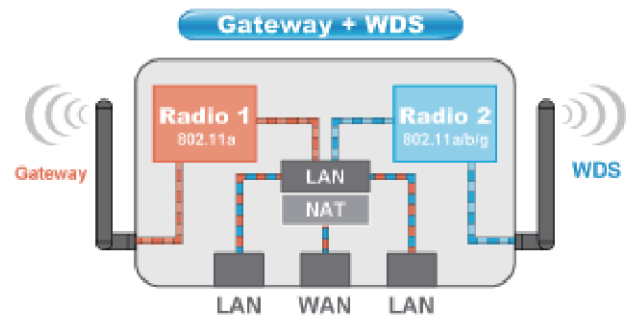
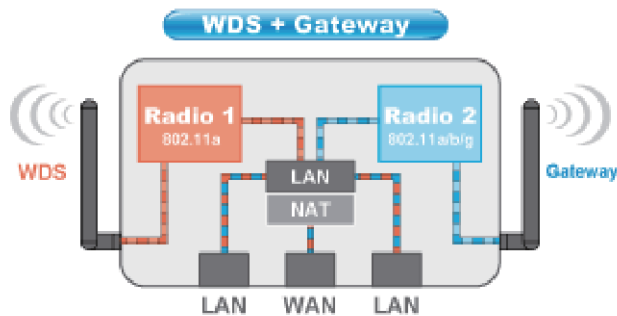


## 14 Wireless Operation Modes

The WLA-9000AP can operate in multiple wireless modes for different application environments. Up to 14 Wireless Operation Modes are available.

Mode	Radio 1 (11a)	Radio 2 (11a/b/g)
Dual AP	Access Point	Access Point
Duplex	WDS Bridge	WDS Bridge
Dual WDS Bridge	WDS Bridge	WDS Bridge
Separate Bridge	WDS Bridge	WDS Bridge
AP + Client	Access Point	Wireless Client
Client + AP	Wireless Client	Access Point
AP + WDS Bridge	Access Point	WDS Bridge
WDS Bridge + AP	WDS Bridge	Access Point
WDS + Gateway	WDS Bridge	Gateway (AP Router)
Gateway + WDS	Gateway (AP Router)	WDS Bridge
AP + Gateway	Access Point	Gateway (AP Router)
Gateway + AP	Gateway (AP Router)	Access Point
AP + WISP	AP Router	WISP Bridge
WISP + AP	WISP mode	AP Router





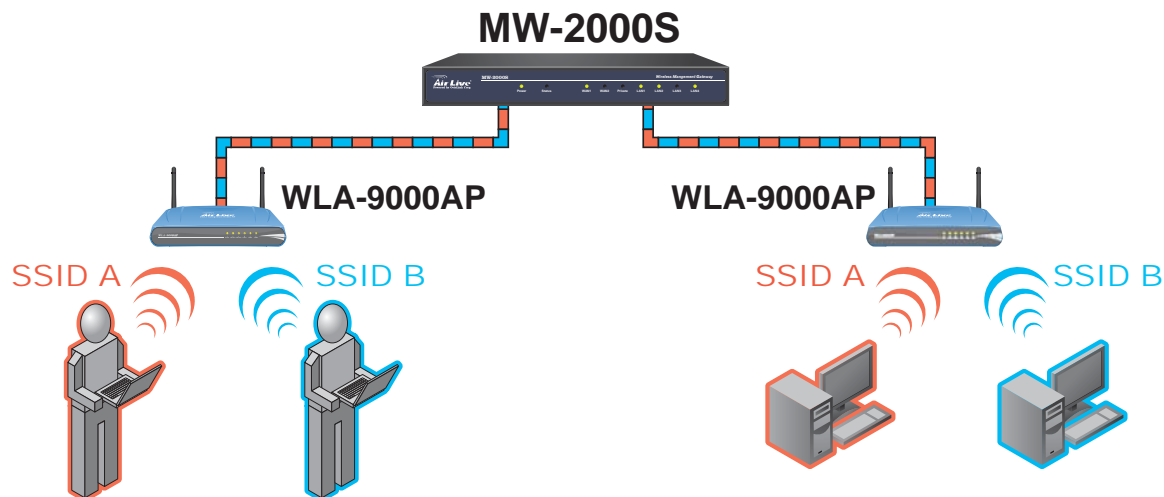
## 802.3af PoE Port

WLA-9000AP is equipped with an 802.3af Power Over Ethernet port. Therefore, you do not need a separate POE Splitter. When used with the optional POE adapter and DC Injector, it can operate at up to 100 meter away from the power source. Standard DC power adapter is provided for non-POE application.

## Multiple SSID and TAG VLAN

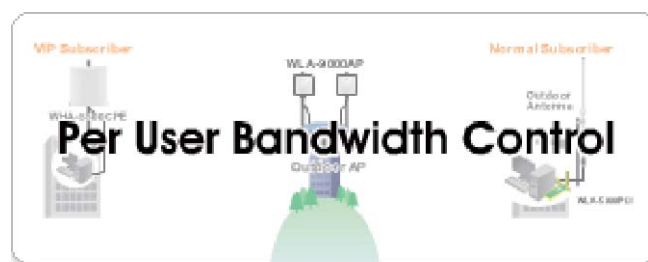
WLA-9000AP provides Multiple-SSID function to create different wireless networks using one AP. Each SSID can have its own encryption policy. The TAG VLAN feature allows service provider to control service content of each SSID network all the way back to core router. Together with the built-in WMM priority, it is possible to create different wireless networks with different priority levels across a large network.

## Multiple-SSID+VLAN



## Bandwidth Control

WLA-9000AP provides capability to control each user's bandwidth individually. It can control either "Total Bandwidth" or "Each IP/MAC Bandwidth". Therefore, the WISP operators can offer different class of connection speeds for different subscription fees - just like the ADSL service!



The WLA-9000AP has additional features such as Site Survey wizard to make client and bridge connection easier. It is the most featured rich and high performance access point in the market.

\* Radio 1(WLAN1) works in 11a (5GHz) mode only. Radio2 (WLAN2) works in either 11a(5GHz) or 11b/g(2.4GHz) mode

\*\* Optional POE adapter and DC Injector might be required

## Specifications

### Hardware

- High power design , 23dBm average power, to extend the wireless range
- Dual wireless interface 11a, 11a/b/g + 11a, operation simultaneously.
- Super A/G mode support (Atheros Proprietary)
- RoHS compliant
- IEEE 802.3af (PoE) compliance
- 8MB Flash, 32MB SDRAM
- PoE support by one LAN port

### Antenna

- 2 dBi x 2 detachable omni antenna
- R-SMA connector

### Frequency range

- WLAN1(Radio 1) & WLAN2(Radio 2)  
802.11a : 5.15 to 5.825 GHz
- WLAN2 (Radio 2)  
802.11b/g:2.412~2.472GHz

### Frequency channel

- WLAN1(Radio 1) & WLAN2(Radio 2)  
802.11a  
USA(FCC) : 12  
Europe(ETSI) : 19
- WLAN2(Radio 2)  
802.11b/g  
USA(FCC) : 11  
Europe(ETSI) : 13

### Power Supply

- (Standard) External DC Power Adapter : input 100~240Vac/50~60Hz , output 5.5V/2.5A
- (Optional) 48V/0.4A Power Over Ethernet Adapter

### Modulation Technology

- IEEE802.11a 5GHz OFDM
- IEEE802.11b 2.4GHz CCK
- IEEE802.11g 2.4GHz OFDM
- Atheros Proprietary Super A/G mode 802.11a Orthogonal

### Wireless transfer Data Rate with Automatic Fallback

- 802.11b: 1, 2, 5.5, 11Mbps
- 802.11g: 1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, 54Mbps
- 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps

### Output Power

802.11a	802.11g
54 Mbps @ 17dBm	54 Mbps @ 19dBm
48 Mbps @ 18dBm	48 Mbps @ 20dBm
36 Mbps @ 19 dBm	36 Mbps @ 21 dBm
6, 9, 12, 18, 24 Mbps @ 23 dBm	6, 9, 12, 18, 24 Mbps @ 23 dBm

### RSSI

802.11a	802.11g
6Mbps @ -90 dBm	6Mbps @ -89 dBm
9Mbps @ -89 dBm	9Mbps @ -88 dBm
12Mbps @ -88 dBm	12Mbps @ -88 dBm
18Mbps @ -86 dBm	18Mbps @ -86 dBm
24Mbps @ -82 dBm	24Mbps @ -82 dBm
36Mbps @ -79 dBm	36Mbps @ -79 dBm
48Mbps @ -73dBm	48Mbps @ -75dBm
54Mbps @ -71dBm	54Mbps @ -73dBm

### Software

- Wi-Fi, WPA compatible interoperability
- Support WDS Bridge Mode, Client Mode, AP Mode on interface under each predefined operational mode..
- Client Isolation supported
- SNMP v1/v2 support
- Support adjustable output power
- ACK Timeout setting
- User Limitation (Static Load Balancing)
- Multiple SSID, VLAN, QoS
- WPA with PSK/TKIP/AES support ,WPA2 support
- 152-bit WEP support (Atheros Proprietary)
- Super A/G mode support (Atheros Proprietary)

- Bootloader Protection and Emergency Firmware Upload Code in bootloader
- Radius Support
- HTB QoS
- P2P Bandwidth Control

#### **Dimension**

- 191.0(L) x 145.5(w) x 29.0(H) mm
- Weight :341 g (without antennas)

#### **Ordering Information:**

**AirLive WLA-9000AP**

Dual Radio Dual Band 108 Mbps POE AP

**AirLive WLA-9000AP-PCB**

Dual Band Dual Radio 802.11a/b/g 108Mbps Access Point PCBA only

**AirLive POE-1000PB**

POE adapter kit for WLA-9000AP