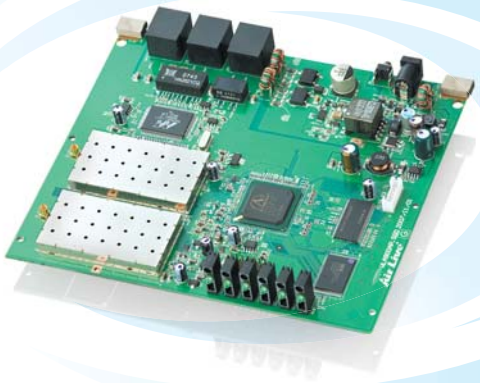
Air Live®
Powered by OvisLink Corp.

WLA-9000AP-PCBA

108Mbps 802.11a/b/g Dual Radio AP PCBA*

The WLA-9000AP PCBA 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.



Dual Radio | 5GHz | 2.4GHz | Atheros 108Mbps | POE Port

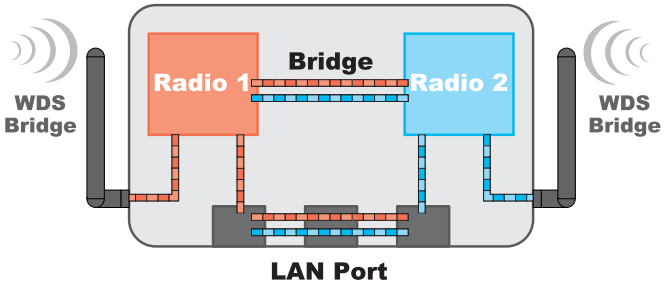
Dual Wireless + Hi Power + 3 LAN Ports

The WLA-9000AP PCBA 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 mode(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.

Multiple Operation Modes

The WLA-9000AP PCBA can operate in multiple wireless modes for different application environments. Here are some examples:

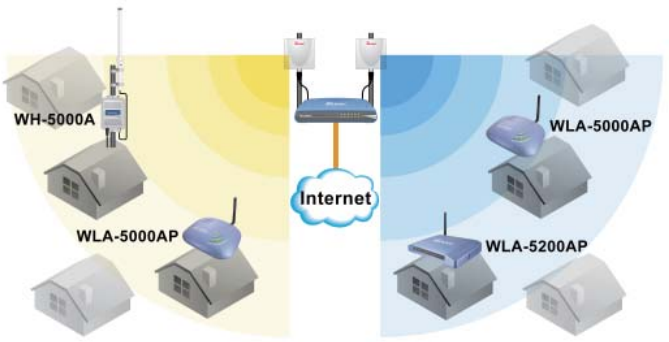
- **Dual WDS Bridge Mode**
  In this mode, the AP can act as a signal repeating station in a wireless backbone network. In addition, it can also function as directing station for NLOS application.

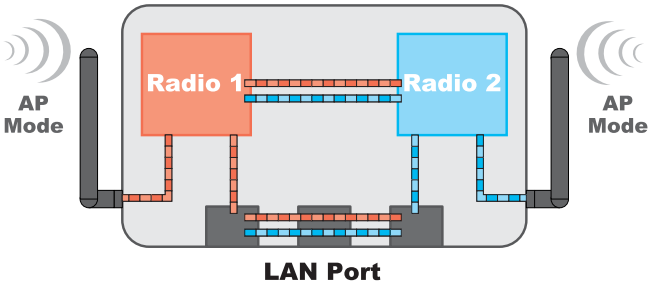


Manufacturer
OvisLink Corp.
5F, No.96, Min-ChuanRd, Hsin-tien City, Taipei, Taiwan

- **Dual AP Mode**

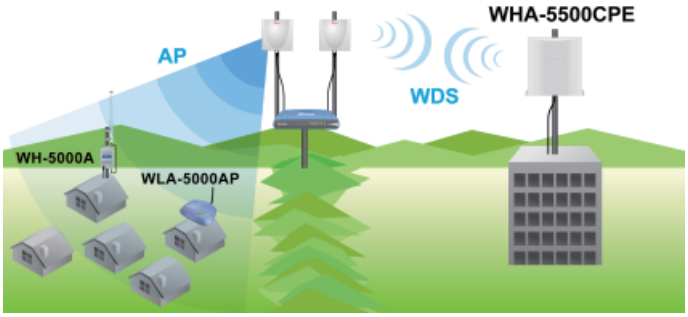
  In this mode, each of AP's radio will work as broadcast station. Having 2 radios means the coverage can be much stronger and further than 1 radio device.

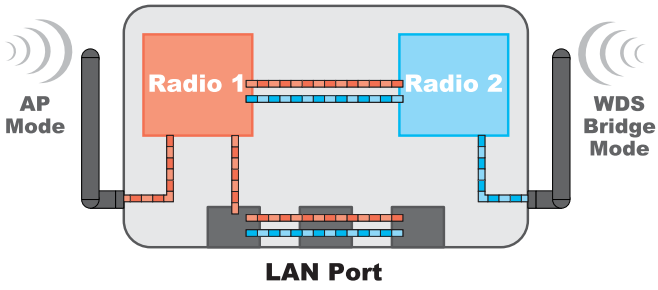




- **AP + WDS Mode**

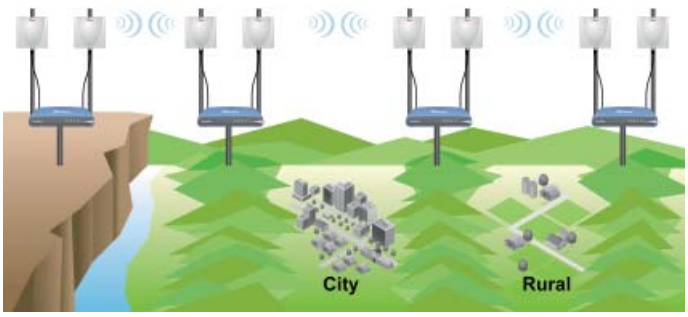
  In this mode, the AP can act as a signal repeating station in a wireless backbone network. In addition, it can also function as directing station for NLOS application.

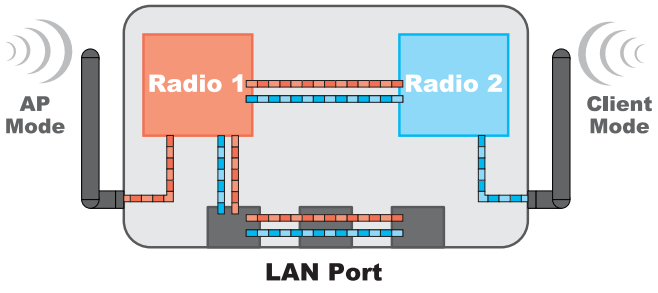




- **Ap + Client Mode**

  In this mode, one station works as an intermediate station. This enable the AP to link with remote stations using client mode, then distribute the signal to other clients using AP mode.





AirLive also plan to have more wireless modes available in the near future.

802.3af PoE Port

WLA-9000AP PCBA 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.

VLAN & QoS

WLA-9000AP PCBA provides Multi-SSID to create different wireless networks using one AP. The TAG VLAN feature allows service provider to control service content of each SSID network all the way back to core router. The QoS feature allows prioritizing the different package according the 802.11e WMM protocol and triple play (Voice, Video and Data).

* 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 Connector
- R-SMA connector

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

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

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

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

Manufacturer
OvisLink Corp.
5F, No.96, Min-ChuanRd, Hsin-tien City, Taipei, Taiwan

Output Power

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

RSSI

802.11a	802.11g
6Mbps @ -90 dBm 9Mbps @ -89 dBm 12Mbps @ -88 dBm 18Mbps @ -86 dBm 24Mbps @ -82 dBm 36Mbps @ -79 dBm 48Mbps @ -73dBm 54Mbps @ -71dBm	6Mbps @ -89 dBm 9Mbps @ -88 dBm 12Mbps @ -88 dBm 18Mbps @ -86 dBm 24Mbps @ -82 dBm 36Mbps @ -79 dBm 48Mbps @ -75dBm 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, QoSWPA with PSK/TKIP/AES support ,WPA2 support
- 152-bit WEP support (Atheros Proprietary)
- Super A/G mode support (Atheros Proprietary)
- WPA over WDS support
- Bootloader Protection and Emergency Firmware Upload Code in bootloader
- Radius Support
- HTB QoS
- P2P Bandwidth Control

Product Weight (g)

- 216 g (without antennas)

Product Size (L x W x H (mm))

- 140 x 162 x 20 mm

Ordering Information:

AirLive WLA-9000AP PCBA	108Mbps 802.11a/b/g Dual Radio AP PCBA
AirLive POE-1000PB	POE adapter kit for WLA-9000AP PCBA

Manufacturer
OvisLink Corp.
5F, No.96, Min-ChuanRd, Hsin-tien City, Taipei, Taiwan