

# AirMax DUO

## 802.11a/b/g Dual Radio Base Station

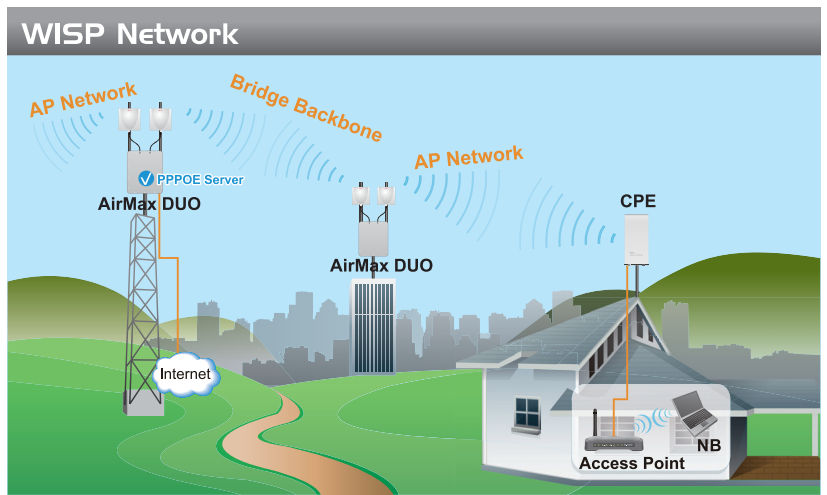
The AirMax DUO is the latest generation of AirLive Outdoor Base Station that incorporates everything we know about wireless—a feat from the company that starts the WISP industry in 2002 with the first WISP multi-function AP. From its sturdy IP-67 case to the incredible easy-to-use AirLogic interface, it is meticulously designed inside out to be an outdoor device you can use and rely on.



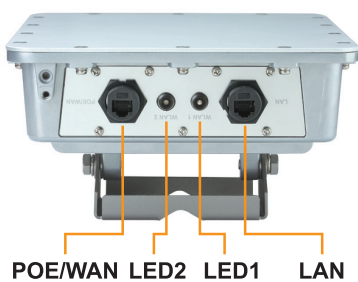
- 5GHz
- 2.4GHz
- Dual Radio
- PPPoE Server
- 28dBm Peak
- IP-67
- RSSI LED
- I4 Mode
- SNMP
- 5/10/20 40MHz Channel Width
- Super Channels
- SSH
- 802.3af
- Tag VLAN
- Virtual AP
- HTTPS
- WISP
- Bridge

### Hi-Power Dual Band

The AirMax DUO includes 2 radios that can deliver up to 28dBm peak power in 5GHz spectrum. The Radio1 works in 11a mode while Radio2 work in 11a/b/g mode. This combination allows one radio for backbone link while the other radio works as the AP for WISP clients.



### IP-67 Weatherproof Design

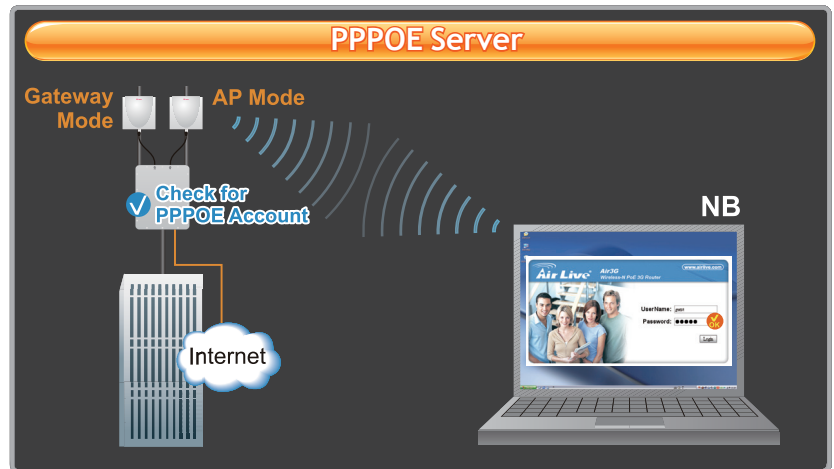


There are too many so-called outdoor products that use indoor graded components which might have low upfront cost, but expensive to maintain and service over the long run. Take one look at the rock solid construction of AirMax DUO, there is no question it is built to last. The IP67 design elements can be found in its waterproof connectors that allow the use of normal Ethernet cable, and the ultra bright waterproof LEDs which display RSSI signal status that can be seen far away. Inside the case is the outdoor graded PCBA that can operate from -20 to 60 degree Celsius. It is the true outdoor graded device that you can install and forget.

## PPPoE Authentication Server

The AirMax DUO is equipped with PPPoE authentication server. WISP operators can use the built-in local accounts or use a remote radius server for account management.

The AirMax DUO combines authentication, backbone, and base station into one single device.

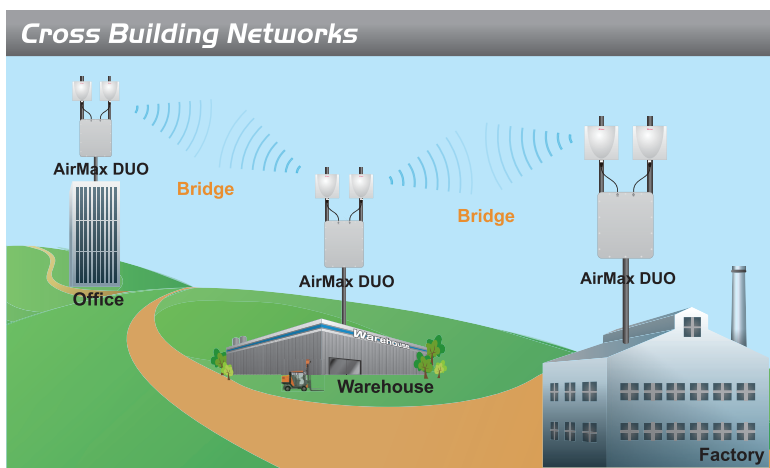


## Variable Channel Width and Super Channel Support

The AirMax DUO's channel width is adjustable between 5/10/20/40MHz. So you can optimize your network according to the interference and bandwidth conditions.

For service providers that have license to operate in the 4.9GHz or 6GHz spectrum, the AirMax DUO has built-in Super Channels support. It opens up more than 140 channels for you to choose from. Best yet, you do not need to pay extra for software license.

## Perfect for Long Distance Bridge Application



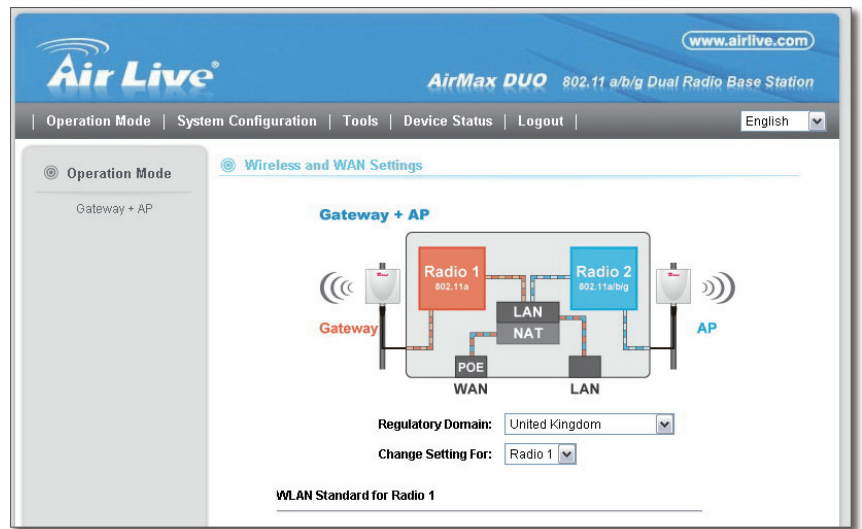
The AirMax DUO is not just for WISP, it is also built for bridge applications to connect 2 building's network wirelessly. For short distance bridge, the built-in Duplex mode can bind 2 wireless radios together to maximize the link speed. For long distance Bridge application, simply turn off one radio and get up to 25km distance. The availability of WDS Pure MAC mode and Super-A/Turbo-A modes means high throughput over long distance.

## Dual Band or 2.4GHz only

The AirMax DUO works in Dual Band mode by default. But if you only need the 11g/b function, you can choose the "2.4GHz" only mode and the AirMax DUO will turn into a simple 2.4GHz Outdoor AP instantly. In addition to standard 11g/b mode, Super-G and Turbo-G functions are also available to double the speed of the connection.

## AirLogic System Architecture

The AirMax DUO software system is built upon the new AirLogic software architecture. The underlying system core is our legendary wireless engine that offers superior performance and rich set of functions. It features firmware recovery system, 14 wireless modes, virtual AP, Tag VLAN, bandwidth control, and over 100 other features that make AirLive wireless products famous in the industry. The AirLogic Web Interface integrates all these powerful functions into an extremely easy to use multi-language interface that can change language instantly at any page.



## One Choice for All Outdoor Applications

If your application require IP-67 weatherproof standard; but you don't know which outdoor device to choose, AirMax DUO is the choice for you. With 14 wireless operation modes and hundreds of feature, you cannot go wrong with the AirMax DUO. In addition, it uses the same software interface as our AirMax2 and AirMax5 CPEs. Together, they form the most powerful and cost effective wireless outdoor solution.

### Specifications

#### Feature

- 1 x 108Mbps 11a Radio + 1 x 108Mbps 11a/b/g Radio
- Atheros Super A and Super G Support.
- High Output Power in 11a(28dB peak) and 11g/b Mode (23dB in America, 20dB in EU)
- Up to 14 Wireless Operation Modes
- 2 LAN Ports
- 2 N-Type Antenna connectors
- PPPoE Server
- Super Channels Support
- 5, 10, 20, 40 Channel Width
- HTTPS, WEB, Telnet, SNMP, and SSH managements
- WDS Site Survey and RSSI Signal Survey
- Multi-SSID, VLAN, SNMP
- Bandwidth Control, TOS, and WMM

#### Hardware

- 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
- IP-67 Water Proof Metal Housing

#### Antenna

- 2 x N-Type antenna connectors

#### Frequency Range

- WLAN1(Radio 1)
  - 802.11a : 4.9 to 6.1GHz
- WLAN2 (Radio 2)
  - 802.11b/g:2.412~2.472GHz
  - 802.11a : 4.9 to 6.1 GHz

### Frequency Channel

- WLAN1(Radio 1)
  - 802.11a
    - USA (FCC) : 12
    - Europe (ETSI) : 19
    - All Channels: 140
- WLAN2(Radio 2)
  - 802.11b/g
    - USA (FCC) : 11
    - Europe (ETSI) : 13
  - 802.11a
    - USA (FCC) : 12
    - Europe (ETSI) : 19

### Power Supply

- 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

- Average:
  - 23dBm, 200mW
- Peak:
  - 28dBm, 600mW

### RSSI

- 802.11a
  - 6Mbps @ -92 dBm
  - 9Mbps @ -89 dBm
  - 12Mbps @ -88 dBm
  - 18Mbps @ -86 dBm
  - 24Mbps @ -82 dBm
  - 36Mbps @ -79 dBm
  - 48Mbps @ -73 dBm
  - 54Mbps @ -71 dBm

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

### Software

- Wi-Fi, WPA, WPA2, WMM compatible interoperability
- WPA-PSK, WPA2-PSK, and Radius Support
- 8 WDS Entries, Bridge Infrastructure Mode, 802.1d Spanning
- 14 Operation Modes
- SNMP v1/v2 support
- SSH, SSH2, HTTPS, Telnet, and Web Managements
- Support adjustable output power
- Client Isolation supported, Hide SSIDree
- Distance and ACK Timeout setting
- User Limitation (Static Load Balancing)
- Ping Watchdog, DFS Control, 802.11d Global Roaming
- PPPoE Server, Access Control List
- Multiple SSID, VLAN, TOS
- 5/10/20/40MHz Channel Width
- Every 5MHz Channel in 5GHz band
- Device Status: Memory Usage, CPU Consumption, ARP Table
- Traffic Status: Transmit/Receive/Error Packets, Wireless Client Table
- 152-bit WEP support (Atheros Proprietary)
- Super A/G mode support (Atheros Proprietary)
- Turbo A/G mode support (Atheros Proprietary)
- Multiple DMZ, Virtual Server, Special Application(Trigger Port), IP Filtering
- Site Survey and Signal Survey connection wizard
- Disable NAT, RIP, Static Route
- Bandwidth Control by IP, IP Group, MAC Address, and P2P(router mode)
- DDNS, NTP Server, UPnP, Syslog
- Ping and Tracerouter utilities
- Bootloader Protection and Emergency Firmware Upload Code in bootloader
- Firmware Upgrade and Configuration Backup/Restore

### Operation Modes

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

### Certificate

- FCC, CE, IP-67

### Product Weight (g)

- 1105 g (without antennas)

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

- 225 x 122 x 225 mm

### Ordering Information:

**AirLive AirMax DUO** 802.11a/b/g Dual Radio Base Station