

# AirPro AP-WLC7000 Series Wireless Access Controllers

## PRODUCT OVERVIEW

AirPro AP-WLC7008 series wireless AC is the next-generation enterprise class wireless network controller that delivers a secure, robust, highly scalable wireless solution at unbeatable total cost of ownership. Seamless integrated with AirPro WIS in the cloud that provides one stop wireless solution for entire wireless deployment lifecycle. With WIS, you can now enjoy a Built-in preplanning wireless site survey tool. Wi-Fi deployment validation by smartphone APP, Machine learning based Wi-Fi optimization (One-click Optimization) AirPro VAC cutting edge technology helps to increase the services availability and ensure the business continuity. The AirPro WLC7008 series is also providing a cost-effective way of enabling highly secured Guest Wi-Fi by using Virtual AP deployment approach. Typical high-density Wi-Fi environment tends to have degraded wireless network performance due to several reasons like RF interference, mixture of client, sharing of limited wireless spectrum and etc. With AirPro industry leading feature, Pre-AX, Correct Link and Air Reorder technology, it helps you to solve most of the common problem in high density Wi-Fi deployment automatically. PPSK is also one of the new built-in security feature offered by AirPro AP-WLC7008 series wireless AC for small and medium enterprise to provide a secure but simple staff authentication experience.



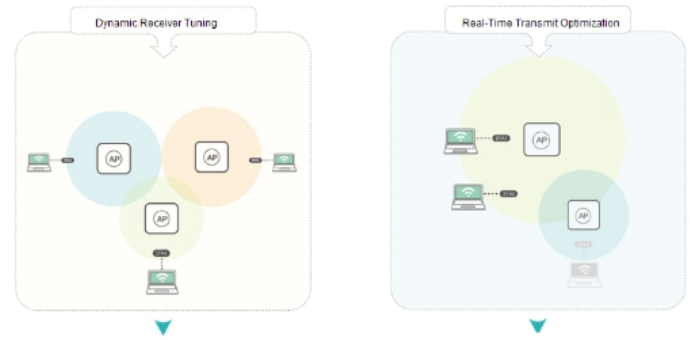
## FEATURES

- Wi-Fi 6 Ready.
- Scalable up to 2,560 APs and 80K Clients.
- High-availability Virtual AC Technology.
- Secured Guest WiFi by Virtual AP.
- PPSK Enterprise Authentication.
- Pre-AX, Correct Link & Air Reorder Feature for High-density WiFi Optimization.
- AI Wireless Optimization Cloud Services (Free Service).

## KEY FEATURES AND HIGHLIGHTS

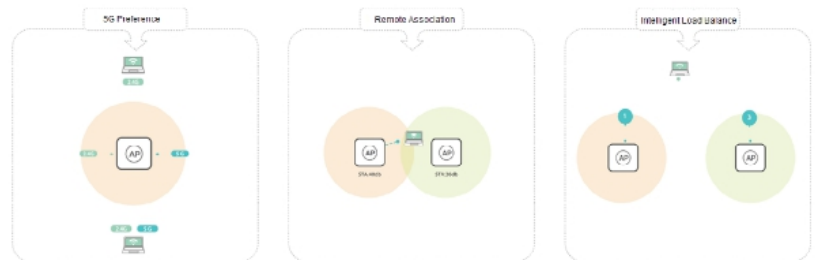
### Pre-AX, Minimizes Co-channel & Other Interferences-

Pre-AX is adopted from 802.11ax technology to dynamically fine tune RSSI threshold to maximize the utilizable spectrum and allow more data to be transmitted. Each AP optimize the RF channel and power according to each client.



### Correct Link, Improves Traffic Load Balancing & Client Roaming-

Correct Link technology is designed to analyse the latency, jitter and the signal strength of each client. It also correlates with additional information like wireless channel utilization and throughput to optimize the best user experience for wireless client.



### Air Reorder, Smart Air time Scheduling Technology-

The fundamental of Air Reorder is to allocate the equal time slot to ensure that each terminal can get the fairness of RF resources as possible. This can prevent lower data rate client to degrade entire network performance by occupying the limited shared medium.



### Wi-Fi 6 Equipment For All Scenarios:

#### Always One Option Fit For You

AirPro is one of the leading enterprise networking suppliers worldwide and committed to providing the best Wi-Fi experience to our stakeholders. We are the first supplier to provide full-scenario Wi-Fi 6 access point solution in the market, ranging from indoor, wall plate to outdoor access points, guaranteeing perfect wireless experience in various situations.

### AI Wireless Optimization-

With advent of AirPro Cloud AI Engine, this is an Lifetime Free service for all AirPro Enterprise AP for WiFi optimization on the cloud. Not just the Cloud Managed AP, AirPro Cloud also seamlessly integrated with AirPro hardware Wireless Access Controller (AC) on premise, it helps to streamline Wi-Fi maintenance and operation support. With AirPro Cloud AI Wireless Optimization you can achieve:

- 1-click Analysis and Wireless Optimization
- Scheduling Task for Optimization
- Smart mobile apps for optimization
- Report for optimization improvement
- and it is FREE!

As part of the AirPro Cloud solution, AirPro Cloud App is a mobile App designed to carry out AirPro managed device management at your fingertips. Comprehensive monitoring, configuration and troubleshooting tools including Network Inspection, 1-click Optimization, Device Topo, etc. are available in the AirPro Cloud App, which can be freely downloaded from the iOS App Store and Google Play.

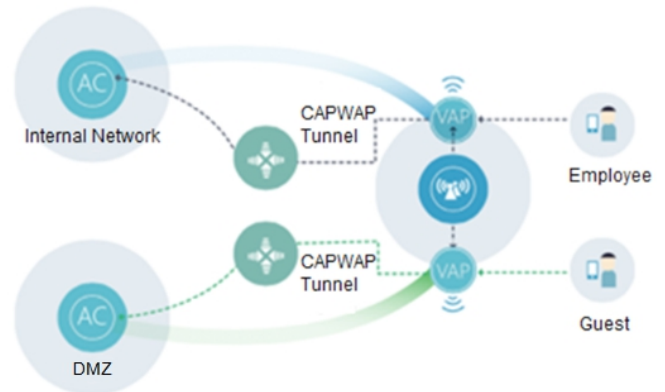
**Virtual AP Technology-**

In most of the enterprise today, providing a Guest WiFi to visitor is an essential. However, Guest WiFi might become another entry point for network intrusion either it is intended or not. AirPro AP Virtualization technology allows to virtualize a physical AP into multiple virtual APs to handle different services. Different VAP can connect to the isolated AC to ensure the only authorized user access to right resource.

With VAP, you can now enjoy its benefits of:

- Resource isolation
- Flexible authentication
- Minimize RF interference
- Cost effective & secured

With the dual GE uplink design of Ap740, two different CAPWAP tunnel separating employee WiFi and guest WiFi traffic into two different physical uplinks further enhanced the security.



**Virtual AC Technology-**

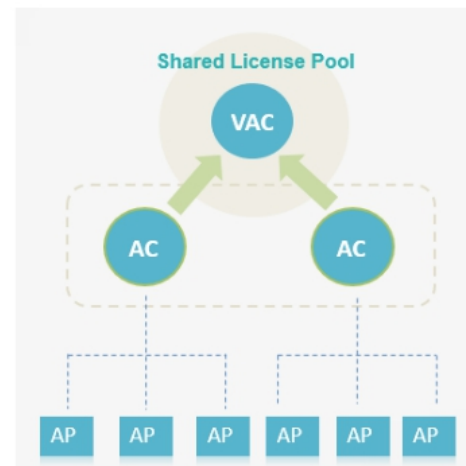
AirPro Network AC Virtualization technology help to virtualize multiple AC into single logical AC regardless of module or appliance-based AC. It supports up to 8 members of hardware AC in single high availability cluster. AP license is shared from the license pool regardless of the number of AC in the cluster. Its high availability feature ensures no business downtime in the event of one of AC fails. The failover mechanism is fully automated and completed within milliseconds, WiFi services resumed immediately in backup AC.

With the centralized management and distributed processing capability, it increases the scalability and resilience of entire Wireless Network. Simplified management streamlines the Itoperation as well.

**Exclusive PPSK Authentication-**

Traditional Pre-shared keys (PSK) are shared by all users on a WLAN, giving it potential risk of PSK leak-out. AirPro Per-user PSK (PPSK) is an easy setup wireless authentication method with enterprise-class security level. Credentials can be created and revoked individually. Each PPSK can also be tied to a unique user/machine. With PPSK, you can enjoy its benefit of:

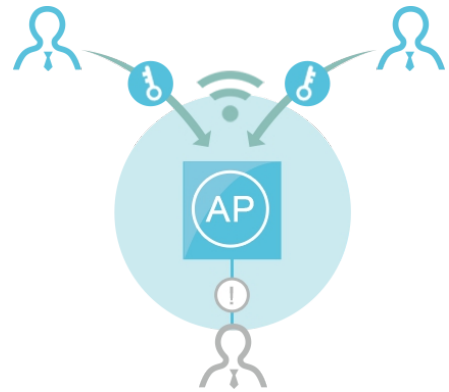
- High security by using different passwords for each user and device at individual SSID.
- Simple deployment, allows for batch account creation.
- Ease of use and offers the same experience as WPA/WPA-2PSK.
- Out-of-box feature in AC controller.
- No additional AAArequired.



**Remote Intelligent Perception Technology (RIPT)-**

In the traditional network architecture where FIT APs are centrally managed by a wireless controller, packets received by the AP must be transmitted to the controller before being forwarded. When the wireless controller becomes faulty, the APs will fail to work properly causing whole network breakdown.

AirPro’s latest RIPT provides you a complete disaster recovery solution and enables the Wireless Controller Series to implement intelligent link perception. Once the faulty controller is detected, the APs will quickly switch to the intelligent mode to continue data forwarding, ensuring the high availability of the wireless network and keeping wireless users always online.



**Centralized or Distributed Intelligent Switching-**

The Wireless Controller Series can be deployed at Layer 2 or Layer 3 level without modifying the original network architecture. Forming an integrated switching framework with the APs, the controllers handle all the AP data exchange management with ease.

With the industry-leading local forwarding technology, the Wireless Controller Series eliminates traffic bottlenecks that alternatives in the market have been struggling with. The local forwarding technology allows flexible deployment of AP data forwarding. In other words, the AP can determine whether to forward all data via the controller based on Service Set ID (SSID) and user VLAN, or to send the data directly to a wired network for local data exchange.

The local forwarding technology enables large-scale, delay-sensitive, and real-time data transmission via the wired network. With the high throughput of 802.11ac and 802.11ax, it greatly alleviates the traffic pressure on the controller. The feature also makes the wireless controllers more adaptive to heavy traffic demand applications such as high definition Video on Demand (VoD) and Voice over Wireless LAN (VoWLAN) in the future.

**Intuitive Web Management-**

The Wireless Controller Series supports a web management interface, which provides simplified wireless configuration and high visibility for the whole network operation. With the AC web interface, the controllers manage not only the APs, but also the associated AP users. The feature achieves control on user bandwidth control and network access. Network administrator can hence plan, operate and maintain the wireless network with ease.

**PRODUCT SPECIFICATIONS**

**Hardware Specifications**

Item	AP-WLC7008
Service Ports	6 1000BASE-T ports 2 1000BASE-T/1000BASE-X ports (combo)
Management Ports	1 console port 2 USB ports
<b>Performance:</b>	
Default Number of Manageable Aps	32
Maximum Number of Manageable Aps	224 APs or 448 wall APs (with license upgrade)
Maximum Number of Configurable Aps	2,048
Maximum Number of Clients	6,400
802.11 Performance	8Gbps
Maximum Number of Clients Supported by the Built-in Portal	1,500
ACL	64K
Number of Wireless Users	6,400
MAC Address Table	16K
Local Authentication	300 wireless clients
ARP Table	12K
IPv6 Neighbor Table	10K
Inter-AC Roaming Switch Time	≤50ms
<b>LAN</b>	
802.1Q VLAN	Support
ACL	Standard IP ACL, Extended IP ACL, MAC-extended ACL, Expert ACL

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### Hardware Specifications

Item	AP-WLC7008
<b>WLAN:</b>	
LAN Protocols	ARP, VLAN, 802.1p, 802.1q, 802.1d, 802.1w, 802.1s
802.11 LAN Protocols	802.11, 802.11b, 802.11a, 802.11g, 802.11d, 802.11h, 802.11w, 802.11k, 802.11r, 802.11i, 802.11e, 802.11n, 802.11ac, 802.11ax
Pre-AX	Support
CorrectLink	Support
AirReorder	Support
CAPWAP	Layer 2/Layer 3 network topology between an AP and AC Enable an AP to automatically discover an accessible AC Enable an AP to automatically upgrade software version from an AC Enable an AP to automatically download configurations from an AC Network Address Translation (NAT) traversal
Roaming	Intra-AC roaming, Inter-AC roaming
Forwarding	Local forwarding, Centralized forwarding
Wireless QoS	AP-based bandwidth control, WLAN-based bandwidth control, User-based static and smart speed control, Fair balancing
User Isolation	AC-based user isolation AP-based user isolation WLAN-based user isolation
Reliability	Fast switching between 2 ACs, Multiple ACs redundancy (1:1 A/A and A/S, N:1), Multiple Acs clustering (N:N), Remote Intelligent Perception Technology (RIPT), Service upgrade
STA Management	AP-based STA access control, SSID-based STA access control, AP-based load balancing, AP traffic-based load balancing, 5G priority access, RSSI threshold
STA RSSI Threshold	0 to 100
STA Idle Timeout	60 to 86,400 seconds
STA Average Data Rate Threshold	8 to 819,200 with the accuracy of 8Kbps
Adjusting Transmit Power of Beacon and Probe Response	Support
Offline Syslog	Support
<b>SECURITY:</b>	
Pv4/v6 Security	Web authentication, 802.1x authentication (EAP-PEAP, EAP-SIM, EAP-MD5, EAP-TLS, EAP-TTLS, PEAP-MSCHAPv2, EAP-FAST, EAP-AKA), MAC address authentication
PPSK	Support
Virtual AP	Support
Virtual AC	Support
802.11 Security and Encryption	Multiple SSIDs, SSID hiding, 802.11i-compliant PSK authentication, WPA and WPA2, WEP (WEP/WEP128), WAPI, TKIP, CCMP, Protection against ARP spoofing
AAA	IEEE 802.1X
CPP	Support
NFPP	Support
WIDS/WIPS	Support
Ipv4 Protocols	Ping, Traceroute, DHCP Server, DHCP Client, DHCP Relay, DHCP Snooping, DNS Client, NTP, Telnet, TFTP Client
<b>INTERNET PROTOCOLS:</b>	
Ipv6 Protocols	DNSv6 Client, DHCPv6 Relay, DHCPv6 Server, TFTPv6 Client, FTPv6 Server, FTPv6 Client, IPv6 CAPWAP, ICMPv6, IPv6 Ping, IPv6 Traceroute, Manual tunnel, automatic tunnel Manual configuration address, automatic local address
Ipv4 Routing	Static routing, OSPF
IPv4 Routing Table Capacity	8K
IPv4 Static Routing Table Cap.	1K
IPv6 Routing Table Capacity	1K
IPv6 Static Routing Table Cap.	1K
<b>MANAGEMENT:</b>	
Network Management	SNMP v1/v2c/v3, Web management, Syslog
Network Management Platform	Web management (Smart-web)
WIS Integration	Support
User Access Management	Login via console port Login via Telnet Login via SSH Upload to FTP

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### Hardware Specifications

Item	AP-WLC7008
Dimensions (W × D × H) (mm)	440 × 200 × 43.6
Rack Height	1RU
Weight	2Kg
Installation Mode	19-inch rack
Power Supply	Fixed power supply 100VAC to 240VAC, 50Hz to 60Hz
Power Consumption	<40W
EMC Standard	GB9254, EN301 489
Security Standard	GB4943, EN/IEC 60950-1
Temperature	Operating Temperature: 0°C to 45°C Storage Temperature: -40°C to 70°C
Humidity	Operating Humidity: 10% to 90%RH (non-condensing) Storage Humidity: 5% to 95%RH (non-condensing)
Operating Altitude	0 to 3,000m

## ORDER INFORMATION

Product	Description
AP-WLC7008	Wireless Controller, 6 1000BASE-T ports, 2 1000BASE-T/1000BASE-X ports (combo), 32 APs License by default, maximum 224 APs or 448 Wall APs License



[www.airpro.in](http://www.airpro.in)