

High-Performance Intelligent Wireless Controller

PRODUCT OVERVIEW

AP-WLC7036 is a multiple-service wireless controller, which integrates authentication, network management and wireless access point control, featuring easy management, convenient maintenance, large capacity and high performance. It is customized for small and medium sized network, can manage up to 512 access points (Aps). With the brand-new desktop operation interface and design style, WLC 7036 is simple to operate and easy to maintain and deploy, which can well satisfy customer requirements for simple and easy WLAN network management. Besides RF management it can also provide the capabilities of organization management, user management, user authentication, data statistics and equipment management.

KEY FEATURES AND HIGHLIGHTS

MULTIPLE SERVICE AND HIGH PERFORMANCE

Integrating authentication and Network management

AP-WLC7036 is a multiple-service controller that integrates authentication, network management, and wireless control. It can implement network wireless equipment management, organization management, user account management and authorization, data collection, and real-time control of RF as well as carry out various network strategies.

High performance

Based on the high-efficient dual-core operating system and multi-core CPU platform, AP-WLC7036 can offer high-performance service, can manage up to 512 Aps and AP-WLC7036 concurrent users, being able to satisfy the needs of the small or medium-sized network.

FRIENDLY MAN-MACHINE INTERACTION

Intuitive interface operation

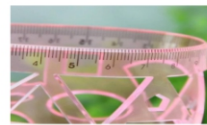
With an intuitive web interface design, AP-WLC7036 can assist an administrator in user management, organization structure management, equipment management, administrator management, authentication setting, and network configuration.

Function modularization

Function modules are scientifically designed and have high independence with each other, easy for users to understand and operate.

Windows-style design

Function modules are scientifically designed and have high independence with each other, easy for users to understand and operate. The operation interface is a Windows-style one which is easy for operating. With densely packed functions, it is easy to understand and operate, facilitating users with fast installation and convenient use.



Multiple services: authentication, Access control and management



Detail statistic report



EASY-TO-MANAGE WIRELESS NETWORK

AP plug-and-play

When used with the WLC7036, AirPro smart Aps support plug-and-play, and zero configuration. WLC7036 undertakes all the management, control, and configuration of the APs. Network administrators do not need to separately manage or maintain a huge number of wireless Aps.

FLEXIBLE USER AUTHENTICATION

Multiple flexible and safe authentication modes

It supports Portal, SMS, WeChat, QR Code, Pre-shared Key, MAC, and other authentication modes.

Terminal intelligent identification

AP-WLC7036 can identify the OS of a terminal, such as Apple iOS, Android, and windows, the size of a terminal, and the type of a terminal, such as mobile phone, laptop, and PC. Basing on these identifications, AP-WLC7036 can implement dynamic policies for different types of terminal and present a corresponding-sized authentication page.

The built-in authentication server, easily realizing WEB authentication

WLC7036 has the built-in Portal Server and user ac-counts, so it doesn't need an external Portal Server and Radius Server to do the WEB authentication, resulting in both simplified network deployment and reduced network construction cost.

PEAP user authentication

Protected Extensible Authentication Protocol (PEAP) authentication can provide a better user experience. The user needs to manually enter the username and passwords only during the first-time certification, the second time, the subsequent certifications are performed automatically.

Flexible visitor management

The perfect built-in visitor management system has fully taken the industry demand of users into account and customized rich, convenient, and safe visitor management mechanisms accordingly:

- Authentication of Authorized QR Code for visitors.
- Authentication of Meeting QR Code for the meeting participants.
- SMS Authentication for the mobile population to open a temporary account.

INTELLIGENT CONTROL OF WIRELESS NETWORK

Intelligent RF management

AP-WLC 7036 provides an automatic power and channel adjustment function. It employs particular RF detection and management algorithms to attain a better RF coverage effect. When the signals of an AP are interfered with by strong external signals, the AP may

automatically switch to an appropriate operating channel under the control of the AC to avoid such interference. It also supports the blackhole compensation mechanism. Which adjusts the AP power to cover the blind area resulted from the crashing of some Aps.

Intelligent control of terminals based on airtime fairness

This function makes sure that both the low-rate and the high-rate clients get relatively the same accessing time, which can avoid the low-rate clients to affect the AP overall performance by taking up too much accessing time.

OPERATION AND MAINTENANCE STATISTICS

It can provide detailed statistic reports about device status, online users, terminal bands, terminal types, network usage, and network status.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AP-WLC7036	
Basic Parameters	Maximum manageable AP number (set)	512
	Basic manageable AP number (set)	16
	AP License step size	16, 32, 128
	Built-in Local authentication account number	1536
	Maximum concurrent user number	1536
Physical Parameters	Service port	6 gigabit Ethernet ports
	Management port	1 Console port (RJ-45); 2 USB 2.0 ports
	Product dimension	Standard 1U, with rack
Power Source Parameter	Power input	Maximum voltage range: 90V-264V AC; 47- 63Hz 75W
Other Parameters	Hardware disk	64G SSD
	Memory	DDR4 4G
Environment	Operating temperature	0°C-55°C
	Storage temperature	-40°C -70°C
	Operating humidity	5%-90% no condensation
Software Specifications		
Wireless Protocol Specification	802.11, 802.11a, 802.11b,802.11g,802.11n,802.11d,802.11h,802.11i,802.11e,802.11k	
CAPWAP Protocol	Support L2/L3 network topology between AP and AC AP can discover accessible AC automatically AP can update software version from AC automatically AP can download the configuration from AC automatically	
User Roaming Switch Time	Less than 30ms	
High Reliability	Support N+1 backup	
	Support N+N backup	
RF Management	Support country code setting	
	Support manual/auto setting of transmitted power	
	Support manual/auto setting of a working channel	
	Support auto adjustment of transmission rate	
	Support blind area detection and repair	
	Support RF environment scanning, AP scanning surrounding RF environment information upon working	
	Support wireless RF interference monitoring and evading	
	Support 11n preferred RF strategy	
	Support hiding SSID setting	
	Support 20MHz and 40MHz channel bandwidth configuration	
	Support air interface time protection under the circumstance of 11bg and 11n terminal hybrid access	
	Fair scheduling of terminal-based air interface time	
	Support RF analysis	
	Terminal positioning, supporting AC built-in terminal positioning algorithm	
	Frequency spectrum navigation (5G preferred)	
	Support 11n only	
	SSID and Radio-based user number limit	
User online detection		
Auto-aging with no user traffic		
Inhibit client access to weak signal		
Support remote probe analysis		

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AP-WLC7036
Safety Features	<p>Mandatory roaming of weak signal in the client terminal</p> <p>Supports 64/128 WEP, dynamic WEP, TKIP, CCMP, SMS encryption mode</p> <p>Support 802.11i safety authentication, support 802.1x and PSK mode, namely WPA Enterprise = IEEE 802.1x/EAP + TKIP/CCMP</p> <p>WPA2 Enterprise = IEEE 802.1x/EAP + pre-authorization</p> <p>WPA2 Enterprise = IEEE 802.1x + EAP Sim authentication</p> <p>Hotspot 2.0 / Passpoint support</p> <p>Enterprise and Personal version</p> <p>Support WAPI encryption and authentication</p> <p>Support LDAP authentication</p> <p>Support MAC address authentication</p> <p>Support Portal authentication, with built-in Portal, external Portal, and customized Portal</p> <p>Support User-perception-free authentication</p> <p>Support safety control of frame filtering, as well as of transmitting white list, static blacklist, and dynamic blacklist</p> <p>Support user isolation</p> <p>Radio, SSID timing switch on/off control</p> <p>Free Resource access control</p> <p>Support wireless terminal safety access control</p> <p>Support ACL access control of MAC, IPv4, and IPv6 message</p> <p>Support mac authentication, password authentication, digital certificate authentication, and other safety access modes for AP equipment between AP and AC</p> <p>Support radius Client</p> <p>Support backup authentication server</p> <p>Support wireless SAVI</p> <p>User access control of AP-based position</p> <p>Support WIDS/WIPS (wireless intrusion detection and wireless intrusion protection)</p> <p>Anti-wireless flooding attack</p> <p>Anti-spoof attack</p>
Forward Features	<p>Support IPv6 access and forward function: construct IPv6 WLAN access service in IPv4 network; provide IPv4 WLAN access service in IPv6 network; construct private IPv6 WLAN network service in IPv6 network;</p> <p>Support layer-2 and layer-3 fast roaming under different APs in the same AC;</p> <p>Support layer-2 and layer-3 fast roaming under different APs among ACs;</p> <p>Support IPv4 and IPv6 multicast forwarding;</p> <p>Support WDS AP;</p>
Service Features	<p>Support 802.11e (WMM); Support 4-level priority queue, guarantee traffic priority of sensitive application for voice, video, and other live effects</p> <p>Support Ethernet 802.1P recognition and marking</p> <p>Support mapping from wireless priority to wired priority</p> <p>Support different SSID/VLAN mapping and different QoS strategies</p> <p>Support matching data flow of different message fields and mapping different QoS strategies</p> <p>Support ALC access control of MAC, IPv4, IPv6 messages</p> <p>Support user number-based load balance;</p> <p>Support user flow-based load balance;</p> <p>Support frequency band-based load balance;</p> <p>Support user number-based CAC (Call Admission Control);</p> <p>Support the AP-based bandwidth limit;</p> <p>Support SSID-based bandwidth limit;</p> <p>Support the terminal-based bandwidth limit;</p> <p>Support specific data flow-based bandwidth limit;</p> <p>Support power-saving mode;</p> <p>Support multicast-to-unicast mechanism;</p> <p>Support AP automatic escape mechanism</p> <p>Support intelligent terminal identification</p>
Management Features	<p>Support WEB management</p> <p>Support Console port configuration</p> <p>SNMP v1/v2c/v3</p> <p>Maintenance mode, supporting local maintenance and remote maintenance</p> <p>Journal function, supporting local journal, Syslog, journal file export</p> <p>Support alarm function</p> <p>Support fault detection</p> <p>Support statistical information</p> <p>Support Telnet login</p> <p>Support SSH login</p> <p>Support Dual image backup mechanism, namely dual OS backup</p> <p>Support hardware Watchdog monitoring function</p> <p>Support AC cluster management; support automatic information synchronization among ACs in the cluster and configure auto or manual pushing</p> <p>SSID-based user decentralization management mechanism</p>

ORDER INFORMATION

Product	Description	Remarks
AP-WLC7036	AirPro Access Controller, default with 16 units AP license, support controlling max. 512 units AP and 1536 concurrent users, 6*10/100/1000MBase-T ports, 1 console port, 2 USB ports	Mandatory
AP-L16	Upgrade license of the AirPro wired/wireless integrated smart AC (for upgrading 16 Aps, a minimum number of upgrade step is 16 Aps)	Optional
AP-L32	Specialized upgrading license of AirPro wired-wireless integrated intelligent controller (including 32-set AP upgrading license)	Optional
AP-L128	Specialized upgrading license of AirPro wired-wireless integrated intelligent controller (including 128-set AP upgrading license)	Optional

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