

AC-1004 WIRELESS LAN CONTROLLER DATASHEET

Wireless LAN Controller with 64 AP License



Overview

The AC-1004 is a wireless controller product for next-generation high-speed wireless networks. They are mainly used in small and medium-sized wireless LANs, providing powerful WLAN access control and RF management functions, managing up to 64 access points to achieve integrated access to wired and wireless users.

The AC-1004 can break through the three-layer network to maintain communication with the AP. It can be deployed in any layer 2 and layer 3 network structure. And it can achieve seamless roaming of wireless users in the process of crossing different areas of the entire network to meet the security and session integrity of mobile roaming.

Benefits

- Up to 64 APs, 1000 Clients, and 5-Gbps Throughput
- Integrated Multi-Service Functions, No Gateway/Router/PoE Switch Required, Easy Networking
- L2 and L3 Roaming Enable Optimal Performance for Seamless Mobility
- Triple Intelligent Control Ensures Optimal and Fair Bandwidth Allocation
- Support Centralized Management by Airware Cloud
- Secures Your Network with WPA3, WEP, TKIP and AES Encryption
- Easy to Use Web Interface and Straightforward Configuration
- Compact and Fanless Design for Virtually Anywhere

Key Features

Smart Wireless Experience

- **Intelligent Load Balancing**

The Wireless Controller Series intelligently distributes users among different APs according to the number of users and data traffic in real-time on a high-density wireless LAN. This feature balances the load pressure on each AP and improves the average bandwidth and Quality of Service (QoS), offering higher network availability.

- **Automatic RF/SSID Switching**

The AC-1004 supports regular switching of wireless RF and SSID signals. It enables the AC-1004 to automatically turn on or off wireless RF and SSID signals according to the set time. So it can switch on and off wireless network functions on its own at regular intervals without the involvement of an administrator in its daily work.

High Performance and Reliability

- **Seamless Roaming Across the Network**

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 easily handle all the AP data exchange management.

Flexible and Complete Security Policy

- **User Data Encryption Security**

The AC-1004 supports a complete data security mechanism, supports WPA, WPA-PSK, WPA2, WPA2-PSK, WPA3 four authentication methods, can support TKIP, and AES encryption technology to ensure the security of wireless network data transmission.

- **Standard Communication Protocols**

The international standard protocol CAPWAP is used for encrypted communication between AC-1004 and AP, which realizes the isolation from the wired network and ensures the confidentiality of real-time communication. At the same time, the use of the standard CAPWAP protocol can support the control of third-party vendor APs in the future, facilitating the expansion of user networks and protecting user investments to a greater extent.

- **Support to Turn Off SSID Broadcast**

With the support of the SSID broadcast mechanism, AC-1004 can control the AP to turn off SSID broadcast, thus blocking illegal wireless clients from searching for SSID signal attacks and cracking passwords in the local area.

- **User Black and White List**

The AC-1004 supports a global black and white list, supports SSID-based user black and white list, without permission users can not be associated to the AC-1004 wireless network, and can better control the scope of the wireless network role, to avoid illegal users wantonly crack, association.

Rich and Comprehensive Management and Maintenance

- **Various Management Methods and Unified Management Platform**

The AC-1004 supports various management methods such as the command line and can also implement centralized, effective, and low-cost planning, deployment, monitoring, and management of APs across the network.

Key Features

Rich and Comprehensive Management and Maintenance

- **Web Interface Management**

AC-1004 provides the Web management interface of AC, which can easily handle wireless configuration and operate the wireless network as a whole. The Web interface of AC can manage APs and manage users connected under APs, limiting the speed and restricting users from connecting to the network, which is convenient for operation and maintenance personnel to plan and operate and maintain wireless.

- **Remote Logging**

The AC-1004 has rich Log information, supports system log display, and can send system logs to the server for recording so that you can know the detailed operation of the wireless network without worrying about the lack of Log-log information.

Converged Gateway Features

- **Support to Turn Off SSID Broadcast**

With complex networking and the high cost of single-point networks for small and medium networks, AC-1004 converges essential gateway capability. It supports NAT, PPPOE, and other essential gateway functions.

- **Airware Cloud Management**

The AP supports cloud delivery, cloud operations, cloud inspection, and cloud diagnosis.

Technical Specification

Wireless LAN Controller comes with advanced hardware architecture design. Here’s a look at the details.

CHARACTERISTICS

	AC-1004
AC Chip	BCM6756
DDR-SDRAM	1 GB
Flash Memory	512 MB
Ports	
Service Port	5x 10/100/1000BASE-T ports
Console Port	1
USB Port	1
Key Components	
Status Indicators	5 x RJ45 status indicators, PoE light, power light, system light
Reset Button	1
Power	
Power Supply	54V/1.48A DC
Power Consumption	≤64.2W (PoE≤56W)
Physical and Environmental	
MTBF (Hours)	250000
Dimensions (HxWxD)	7.87"x4.33"x0.98"(200x110x25mm)
Operating Temperature	-10°C to 40°C
Storage Temperature	-40°C to 70°C
Operating Humidity	10% to 90% (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Warranty	
Warranty	3 Years

FEATURES

Item	Description
Performance	Number of Base Manageable APs: 64
	Maximum Number of Configurable APs: 256
	Maximum Number of Clients: 1000
	VLAN: 4K
	ACL: 64K
	MAC Address Table: 32K
	ARP Table: 32K
	Inter-AC Roaming Switch Time: ≤50ms
WLAN	802.11 LAN Protocols
	802.11, 802.11b, 802.11a, 802.11g, 802.11i, 802.11e, 802.11n, 802.11ac, 802.11ax
	CAPWAP Protocols
	- 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 - Support AP distributed update software version - Enable an AP to automatically download configurations from an AC - Network Address Translation (NAT) traversal
	Management
	- Control the AP to reboot the whole machine at regular intervals - Support password, certificate, MAC, serial number way to AP registration - Support MTU setting and slicing
	Roaming
	Support Layer 2 roaming within AC
	Forwarding
	Support MTU setting and slicing
	User Management
	- Access control based on the number of AP users - Access control based on the number of SSID users - Load balancing access control based on the number of AP users

Item	Description
WLAN	User Management
	•Load balancing access control based on AP traffic
	• Global black and white list
	• SSID-based black-and-white list
	•User access RSSI thresholds
	Configure STA RSSI Threshold
	• 0~100
	Configure STA Idle Timeout
	• 60 to 86400 (precision: seconds)
	Configure STA Average Rate Threshold
Security	• 8 to 261120KBps
	Adjust Beacon and Probe Answer Transmit Power
	• Support
	RF Management
	• Support 5G user priority access
	• Support radio frequency timing switch
	802.11 Security and Encryption
	• Support for multiple SSIDs
	• Support for hidden SSIDs
	• Support 802.11i standard PSK authentication
IP Protocol	• Support WPA, WPA2, WPA3 standard
	IPv4 Protocol
	• Ping, Traceroute
	• DHCP Server
	• DHCP Client
	• DNS Client
	• SNTP
	• Telnet
	• TFTP Client

Item	Description
IP Protocol	IPv4 Routing • Static routing
	Network Management Platform • Support WEB management (Smart WEB) • Support Airware cloud management
Management	User Access Management • Support Telnet login Support
	Wireless Access Point • AP-W6D2400C • AP-W6T3267C • AP-W6T6817C • AP-W6T10000C • AP-W6D1775C • AP-N505 • AP-N515 • AP-T565 • AP-T567 • AP-N515H

Accessories



Power Adapter x1



Power Cord x1



Screw Anchor x2

Ordering Information

ID	Description
149659	Wireless LAN Controller with 64 AP License
108705	2400Mbps 2x2 MU-MIMO Dual Radios Gigabit Access Point
149657	2400Mbps 2x2 MU-MIMO Dual Radios Gigabit Outdoor Access Point
149658	2400Mbps 2x2 MU-MIMO Dual Radios Gigabit Outdoor Access Point
149656	3000Mbps 2x2 MU-MIMO Dual Radios Gigabit Access Point
162394	5375Mbps 4x4 MU-MIMO Dual Radios Gigabit Access Point