IP-COM

World Wide Wireless

AC3000

Multi-service Controller

AC3000

Multi-service Controller

Product Description

IP-COM Multi-service Controller AC3000 is a high-performance network management device designed for large networks. It supports AP management and IP routing, and can be used as a LAN router to provide all-in-one solutions for wireless and wired networks.

The portal server and authentication server built in the controller support WEB authorization, Facebook authorization and login without a password. It can display different authentication pages to different types of clients, including wireless and wired clients. It supports automatic bandwidth control, bandwidth control based on account and IP address, as well as access control list (ACL) created based on source IP address, destination IP address, ports and protocols.

It supports local forwarding and central forwarding. Users could set the forwarding modes by SSID according to actual business and networking requirements. AC3000 integrates multiple management modules, including user access control, smart RF management, custom portal webpage pushing, layer-2 and layer-3 fast routing, user analysis and statistics collection, 7 x 24 dayparting management and bandwidth control and so on, realizing the precision management of clients and APs. It supports networking on both layer 2 and 3, and can be connected to APs with different NATs, allowing multi-node remote deployment for various networking scenarios.

01

Key Features

● Support IP routing, multi-WAN bandwidth combination and load balancing.

● Support WEB authorization and Facebook authorization.

● Support local forwarding and central forwarding.

● Support visual management .Support AP map and Network Diagram .

● Support load balancing.

● Support fast roaming.

Product Features

Multiple-service controller supporting IP routing

AC3000 supports IP routing. In this mode, it can provide all-in-one solutions for enterprises, such as multi-WAN ports load balancing, automatic bandwidth control, bandwidth control based on accounts, and customization of authorization pages for wireless and wired clients.

Intelligent wireless management system

It supports load balancing based on the number of connected clients and traffic, automatic channel adjustment, automatic power adjustment, fast roaming, wireless air interface scheduler and so on, offering users high stability and high quality network experience.

Visual management

AP map and network topology management. Users could import floor plans or Google map to generate an AP map, through which users could deploy and configure APs. In addition, user could also monitor all network links through network topology management.
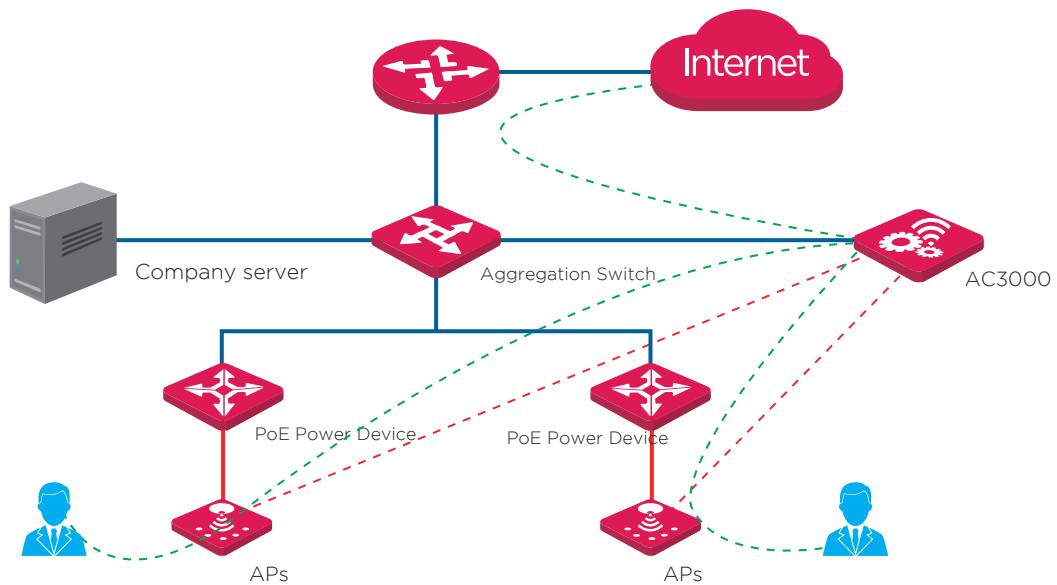
Marketing management system

With built-in portal server and authorization server, it supports multiple advertisement templates, allowing users to customize their advertisements; it also supports multiple authorization modes, user analysis and statistics, and report export. Users could control access, identify different client types,and push advertisements based on client types (IOS, androids, PC etc.).
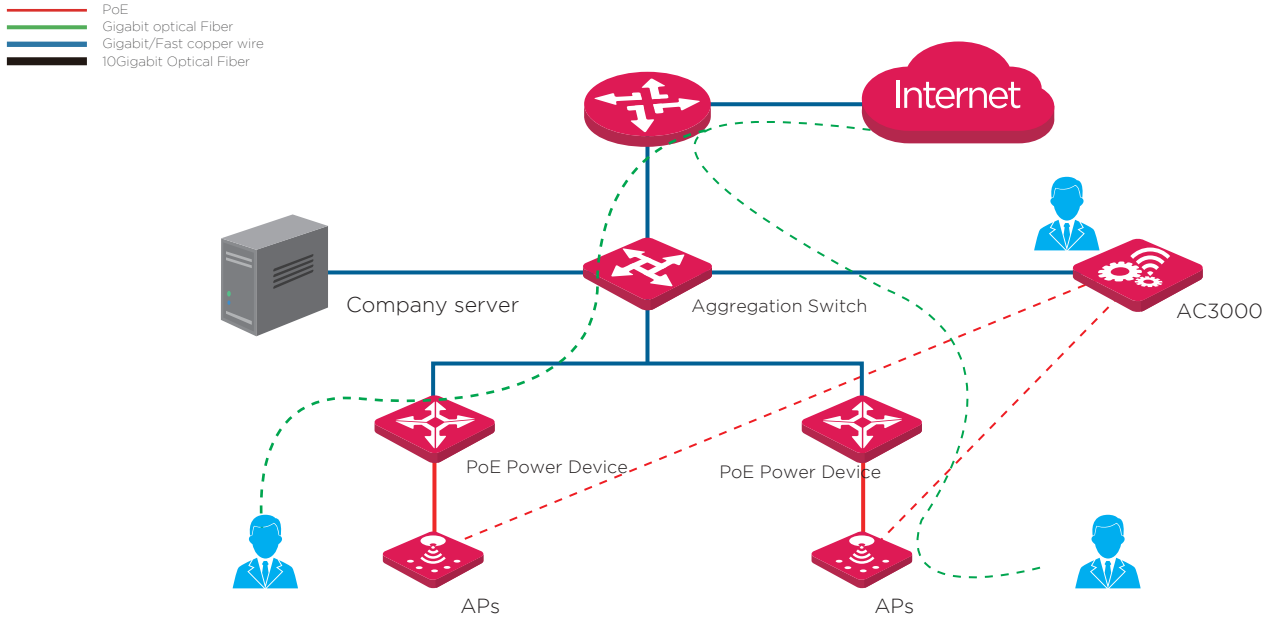
Application Scenarios

IP-COM multi-service controller supports IP routing, which could be used as a LAN router, greatly decreasing the cost for users to deploy networking. Easy deployment and high extensibility bring users with excellent network experience. APs can be connected at different to AC3000 using different NATs, allowing remote management based on private cloud. It supports automatic channel adjustment, automatic power adjustment, load balancing, wireless air interface scheduler, automatic wireless network optimization to improve the quality of wireless networks. Fast roaming ensures highly-reliable wireless network service. Visual management based on AP map and network topology allows users to deploy and maintain networks more intuitively. The built-in marketing management system can push advertisements based on SSID or VLAN, and collect and analyze traffic.

Centralized Forwarding Mode

—— PoE
—— Gigabit optical Fiber
—— Gigabit/Fast copper wire
—— 10Gigabit Optical Fiber

Internet

Company server

Aggregation Switch

AC3000

PoE Power Device

PoE Power Device

APs

APs

Distributed Forwarding Mode

- PoE
- Gigabit optical Fiber
- Gigabit/Fast copper wire
- 10Gigabit Optical Fiber

Internet

Company server

Aggregation Switch

AC3000

PoE Power Device

PoE Power Device

APs

APs

Related Products

	AP255	300 Mbps 11N in-wall wireless access point
	AP340	300 Mbps indoor coverage access point
	AP355	1200 Mbps indoor high capacity access point
	AP365	1750 Mbps indoor high capacity access point

	G3224P	• 24 Gigabit RJ45 ports & 2 SFP ports
		• Switching capacity up to 56 Gbps
		• Forwarding rate up to 38.69 Mpps
		• Maximum PoE power consumption up to 370W
		• Supports POE+ IEEE 802.3at/af
		• Rackmountable

04

Product Specification

Product Info

Model	AC3000-32	AC3000-64	AC3000
Installation mode	19 inch rack installation	19 inch rack installation	19 inch rack installation
Dimensions	430 x 300 x 44 (mm)	430 x 380 x 44 (mm)	430 x 380 x 45 (mm)
Package Dimension	545 x 435 x 170 (mm)	580 x 560 x 192 (mm)	580 x 560 x 192 (mm)

Hardware Specification

	AC3000-32	AC3000-64	AC3000
Maximum Number of managed APs	512	1024	3000
Maximum Number of APs for Central Forwarding	32	64	512
Maximum Number of VLAN for Central Forwarding	512	512	512
Maximum Number of VLAN for Local Forwarding	4094	4094	4094
Maximum Number of Authorized Users	2000	5000	50000
Number of new connection per second	13500	16000	21000
Number of concurrent connection	140000	200000	500000
Packet forwarding speed	90 Kpps	560 Kpps	2 Mpps
Recommended number of devices connected at Router mode	500	1000	5000
Storage Capacity	500 GB	500 GB	500 GB
Port	4 * GE 1 * Console（RJ45) 2 * USB2.0	4 * GE (Extendible GE/10GE) 1 * Console（RJ45) 2 * USB2.0	4 * GE (Extendible GE/10GE) 1 * Console（RJ45) 4 * USB2.0
Power supply	AC100-240V 50/60 Hz	AC100-240V 50/60 Hz	AC100-240V 50/60 Hz
Operating temperature	-10℃ - 70℃	-10℃ - 70℃	-10℃ - 60℃
Operating humidity	0%—90%RH (non-condensing)	0%—90%RH (non-condensing)	0%—90%RH (non-condensing)
Storage temperature	-30℃ - 70℃	-30℃ - 70℃	-30℃ - 70℃
Storage humidity	0%—90%RH (non-condensing)	0%—90%RH (non-condensing)	0%—90%RH (non-condensing)
Default management address	https://192.168.10.1	https://192.168.10.1	https://192.168.10.1
Default user name	admin	admin	admin
Default password	admin	admin	admin

Product Specification

Software Specification	
IP protocol	
IPv4 protocol	Supported
NAT	Supported
IP routing	
WAN connection mode	PPPOE, dynamic IP, staticIP
Multi-WAN	Custom number of WAN ports
Load balancing for WAN ports	Automatic load balancing and custom rule
Custom NAT rule	Supported
AP detection by AC	
AP Detection by AC	DHCP, Broadcast discover, Beacon AP, Static IP
AP-AC traversal using NAT	Supported
Forwarding mode	
Local forwarding	Support local forwarding based on SSID+VLAN
Central forwarding	Supported
WLAN comprehensive application	
Wireless client isolation	Layer-2 isolation based on AP/SSID
Online users detection	Supported
Automatic aging/disconnection	Supported
User quantity limitation	Support to limit the user quantity based on SSID and Radio.
Real-time spectrum analysis	Supported
Fair scheduling mechanism for packet distribution	Supported
Channel reuse adjustment among APs	Supported
Algorithm for adjusting the RF interface transmit rate	Supported
Denial of connection attempts of clients with weak signals	Supported
Wireless resource management	
Automatic switchover between 20 MHz and 40 MHz	Supported
Hiding SSID	Supported
Multiple SSID (each RF interface)	16
Lock country code	Supported
Static channel and power settings	Supported
Dynamic channel and power settings	Supported
Dynamic speed rate adjustment	Supported
Air interface black hole detection and compensation	Supported
Load balancing	Supported. Based on traffic, user and frequency band (dual-band)
Wall penetration capacity of AP	Support capacity-orientated deployment
AP deployment mode configuration	Support default,capacity-oriented and coverage-orientated deployment
Prioritizing the 5 GHz network	Support (dual-band AP)

Product Specification

Software Specification	AC3000
Eco-friendly and energy conservative	
AP RF interface schedule	Supported
Wireless service schedule	Supported
Packet power control (PPC)	Supported
Security	
Dynamic blacklist	Supported
Rogue AP detection	Supported
Roaming	
Fast roaming among APs	Supported
QoS	
Bandwidth control	Supported
802.11e/WMM	Supported
Based on client type	Supported
Bandwidth algorithm based on each SSID	Supported
Bandwidth algorithm based on each user	Supported
Automatic bandwidth control	Supported
Bandwidth control based on IP	Supported
Bandwidth control based on authorized accounts	Supported
Access Control	
WPA and WPA2	Supported
TKIP	Supported
CCMP	Supported (Recommend 11n)
SSH	Supported
WPA/WPA2-Enterprise encryption	Supported
Wireless EAD (client access control)	Supported
MAC address blacklist	Supported
MAC address whitelist	Supported
Local authentication	Support Portal and MAC address authentication
Anti-attack	Support dynamic blacklist
URL policy	Blacklist and whitelist based on URL key words
Access control policy (ACL)	Access control based on source IP, destination IP, port type, and port number
Authentication Management	
Authentication mode	Portal authentication, login without password, and Facebook authentication
Authentication based on blacklist and whitelist	Terminal MAC address whitelist
Account management	Portal account addition, binding between accounts and MAC addresses, limit on maximum number of account users, validity period control through portal authorization

Product Specification

Software Specification	
Management and Configuration	
System time	Time zone configuration, automatic time synchronization, manual configuration of time
System logs	Support system running logs, access point logs, operation logs, as well as log file management
Configuration and Maintenance	Support separation of service configuration from system configuration, as well as configuration backup and import
AP Upgrade	Support manual upgrade, automatic upgrade, and automatic firmware upgrade detection
Automatic AP maintenance	Scheduled AP maintenance and cyclical AP maintenance
Permission	Support permission configuration for three types of user, including guest, administrator and super administrator
Management mode	WEB (https), SNMP v1/v2, and SSH
Configuration mode	WEB (https)
Troubleshooting Tools	
Network Diagnosis	Support ping and traceroute tools
Packet analysis	Support tcpdump, which obtains and downloads interface packets to local computer for analysis
AP failure diagnosis	Support automatic failure diagnosis
AC failure diagnosis tool	Support diagnosis on bridge, interface and data tunnel information
Automatic Alarm	
Alarm mode	Support Email alarm and SNMP trap
AP alarm management	Support management of alarms including AP connection, AP disconnection, AP clients exceedance, AP traffic, AP memory utilization and AP CPU utilization
AC alarm management	Support management of alarms including AC reboot, AC shutdown, AC service reboot, AC's IP pool exhaustion, AC's CPU utilization recuperation, and AC's memory utilization
Portal push	
Portal authentication	Supported
Portal page push	Based on SSID, VLAN and client type
Customized portal page	Customized menu, logo, pictures, text description, links, and so on
Portal page template	Support multiple templates
Portal pass through proxy	Supported
Based on connection duration	Repeated push based on connection duration
User statistics collection and analysis	
User statistics collection	Support collection of statistics about total download traffic, first login time, uplink, session time, and advertisement click rate
Data export	Support data export for backup
Visual Management	
Status display	Use icons to show AP status, AP position, number of connected clients, real-time traffic, power, channel,and working mode
Floor plan import	Support manual import of floor plan, floors distribution plan, and flexible AP placement
Baidu map	Support AP management based on Baidu map
Topology	Support manual generation network topology, automatic alignment of icons and magnet URI scheme

IP-COM
World Wide Wireless

IP-COM NETWORKS CO.,LTD.

Tower E3, No.1001, Zhongshanyuan Road,
Nanshan District, Shenzhen, China. 518052
Service: info@ip-com.com.cn
Inquiry: marketing@ip-com.com.cn
Tel: +86-755-27653089